AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON , 1997
REGISTRATION NO.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM SB-2
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

ANTIVIRALS INC.
(Name of small business issuer as specified in its charter)

OREGON	2834	93-0797222
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(IRS Employer Identification Number)

ONE SW COLUMBIA, SUITE 1105
PORTLAND, OREGON 97201
(503) 227-0554

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

DENIS R. BURGER, PH.D.
CHIEF EXECUTIVE OFFICER
ANTIVIRALS INC.
ONE S.W. COLUMBIA, SUITE 1105
PORTLAND, OREGON 97258
(503) 227-0554

(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:
As soon as practicable after this Registration Statement becomes effective.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following. /X/

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER UNIT(1)
(a) Units (2) each consisting of: (i) One share of Common Stock, $.0001 par value, and (ii) Warrant to Purchase One Share of Common Stock	1,725,000	$10.00
(b) Units (3) each consisting of: (i) One share of Common Stock, $.0001 par value, and (ii) Warrant to Purchase One Share of Common Stock	150,000	12.00
(c) Common Stock, $.0001 par value (4)	1,725,000	15.00
(d) Common Stock, $.0001 par value (5)	150,000	15.00
Total		

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE
(a) Units (2) each consisting of: (i) One share of Common Stock, $.0001 par value, and (ii) Warrant to Purchase One Share of Common Stock	$17,250,000	$5,948.28
(b) Units (3) each consisting of: (i) One share of Common Stock, $.0001 par value, and (ii) Warrant to Purchase One Share of Common Stock	1,800,000	620.69
(c) Common Stock, $.0001 par value (4)	25,875,000	8,922.42
(d) Common Stock, $.0001 par value (5)	2,250,000	775.87
Total	$47,175,000	$16,267.26

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457.

(2) Includes 225,000 Units that the Underwriters have the option to purchase to cover overallotments, if any.

(3) Issuable upon exercise of a warrant to be granted to the representative of the Underwriters to purchase up to 10% of the Units sold in the Offering, excluding any overallotments, at 120% of the Unit Offering Price.

(4) Issuable upon exercise of the Common Stock Purchase Warrants registered hereby at 150% of the Unit Offering Price. The exercise price of such Common Stock Warrants is estimated solely for the purpose of determining the registration fee. An indeterminate number of additional shares of Common Stock are registered hereunder that may be issued, as provided in the Common Stock Purchase Warrants, if provisions in such warrants against dilution become operative. No additional registration fee is included for such shares.

(5) Issuable upon exercise of the Common Stock Purchase Warrants which are issuable upon exercise of the warrant to be granted to the representative of the Underwriters to purchase up to 10% of the Units sold in the Offering, excluding any overallotments, at 120% of the Unit Offering Price.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL HEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

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INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED JANUARY ,1997

PROSPECTUS

1,500,000 UNITS

[LOGO]

EACH UNIT CONSISTING OF ONE SHARE OF COMMON STOCK AND ONE COMMON STOCK PURCHASE WARRANT

ANTIVIRALS INC. ("ANTIVIRALS" or the "Company") is hereby offering 1,500,000 units ("Units"), each Unit consisting of one share (the "Shares") of the Company's common stock, $.0001 par value (the "Common Stock"), and one warrant to purchase one share of Common Stock (the "Warrants"). The Units will separate immediately upon issuance, and Common Stock and Warrants that make up the Units will trade only as separate securities. Each Warrant initially entitles the holder thereof to purchase one share of Common Stock at a price of $ per share (150% of the initial public offering price of the Units), subject to adjustment under certain circumstances. The Warrants are exercisable at any time, unless previously redeemed, until the fifth anniversary of this Prospectus, subject to certain conditions. The Company may redeem the Warrants, in whole or in part, at any time upon at least 30 days prior written notice to the registered holders thereof, at a price of $.25 per Warrant, provided that the closing bid price of the Common Stock has been at least 200% of the then-current Warrant exercise price for each of the 20 consecutive trading days immediately preceding the date of the notice of redemption.

Prior to this offering, there has been no public market for the Units, Common Stock or Warrants, and there can be no assurance that an active trading market will develop or be maintained following the offering. See "Underwriting" for the factors to be considered in determining the initial public offering price. It currently is anticipated that the initial public offering price will be between $8.00 and $10.00 per Unit. The initial public offering price of the Units will be determined by negotiation between the Company and Paulson Investment Company, Inc., the representative of several Underwriters (the "Representative").

Application has been made to have the Common Stock and Warrants approved for quotation on the Nasdaq National Market under the symbols "AVII" and "AVIIW," respectively.

THE SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING AT PAGE 6.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PRICE TO PUBLIC	UNDERWRITING DISCOUNT (1)	PROCEEDS TO COMPANY (2)
Per Unit.....	$	$	$
Total (3).....	$	$	$

(SEE ACCOMPANYING FOOTNOTES ON NEXT PAGE)

The Units offered by this Prospectus are offered by the several Underwriters subject to prior sale, when and if delivered to and accepted by the Underwriters, and subject to the right to reject any order in

whole or in part and to certain other conditions. It is expected that delivery of the Units will be made in New York, New York on or about , 1997.

PAULSON INVESTMENT COMPANY, INC.

THE DATE OF THIS PROSPECTUS IS , 1997.

(FOOTNOTES CONTINUED FROM FRONT COVER PAGE)

(1) Excludes a non-accountable expense allowance equal to 2.5% of the gross proceeds of this offering payable to the Representative, and the value of the five-year warrant (the "Representative's Warrant") entitling the Representative to purchase up to 150,000 Units at a price of $ per Unit (120% of the initial public offering price of the Units). The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). See "Underwriting."

(2) Before deducting estimated expenses payable by the Company estimated at $812,500, including the Representative's non-accountable expense allowance.

(3) The Company has granted the Underwriters a 45-day option (the "Overallotment Option") to purchase up to 225,000 additional Units on the same terms as set forth above to cover overallotments, if any. If the Underwriters exercise such option in full, the total Price to Public, Underwriting Discount and Proceeds to Company will be $, $ and $, respectively. See "Underwriting."

The Company has not previously been subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Company intends to furnish its shareholders with annual reports containing financial statements audited by its independent auditors and quarterly reports containing unaudited financial information for each of the first three quarters of each fiscal year.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK OR WARRANTS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NASDAQ NATIONAL MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

This prospectus includes trademarks and registered trademarks of the Company, including NEU-GENE-REGISTERED TRADEMARK- and CYTOPORTER-TM-, and trademarks and registered trademarks of other companies.

PROSPECTUS SUMMARY

THE FOLLOWING SUMMARY IS QUALIFIED IN ITS ENTIRETY BY, AND SHOULD BE READ IN CONJUNCTION WITH THE MORE DETAILED INFORMATION AND THE FINANCIAL STATEMENTS AND

NOTES THERETO APPEARING ELSEWHERE IN THIS PROSPECTUS. EXCEPT AS OTHERWISE NOTED, ALL INFORMATION IN THIS PROSPECTUS ASSUMES (I) NO EXERCISE OF THE OVERALLOTMENT OPTION, THE WARRANTS OR THE REPRESENTATIVE'S WARRANT, (II) A 1-FOR-3 REVERSE SPLIT OF THE COMMON STOCK WHICH WAS COMPLETED ON NOVEMBER 4, 1996 AND (III) EXCEPT AS OTHERWISE INDICATED, NO SHARES OF COMMON STOCK WILL BE TENDERED TO THE COMPANY IN CONNECTION WITH THE RESCISSION OFFERING TO BE UNDERTAKEN BY THE COMPANY IMMEDIATELY PRIOR TO THIS OFFERING. SEE "RISK FACTORS--POTENTIAL LIABILITY ARISING FROM RESCISSION RIGHTS OF CERTAIN SHAREHOLDERS," "DESCRIPTION OF SECURITIES" AND "UNDERWRITING."

THIS PROSPECTUS CONTAINS, IN ADDITION TO HISTORICAL INFORMATION, FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES. THE COMPANY'S ACTUAL RESULTS OR EXPERIENCE COULD DIFFER SIGNIFICANTLY FROM THOSE DISCUSSED IN THE FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE, BUT ARE NOT LIMITED TO, THOSE DISCUSSED IN "RISK FACTORS" AS WELL AS THOSE ELSEWHERE IN THIS PROSPECTUS.

THE COMPANY

ANTIVIRALS is a pioneer company in the field of gene-inactivating technology referred to as antisense and has developed a patented class of antisense compounds which may be useful in the treatment of a wide range of human diseases. The Company also has developed new drug delivery technology which may be useful with many FDA-approved drugs as well as with its antisense compounds. The Company's drug development program has two areas of near-term focus:

- NEU-GENE antisense compounds for selected applications, and

- CYTOPORTER drug delivery engines for enhanced delivery of FDA-approved drugs with delivery problems.

The Company's long-term product development program combines its NEU-GENE and CYTOPORTER technologies to produce combination drugs with potential applications for many human diseases. The Company has 19 issued patents and several patent applications covering the basic compositions of matter, methods of synthesis, and medical uses of NEU-GENE and CYTOPORTER compounds.

Antisense technology has the potential to provide safe and effective treatment for a broad range of diseases that previously have been difficult to address, including viral and host diseases. The Company's new approach uses synthetic compounds designed to inactivate selected genetic sequences that underlie the disease process and thereby halt the disease. Targeting genetic sequences with antisense compounds provides the selectivity that is not available in conventional drug development which typically targets proteins directly. The antisense approach specifically inhibits the mechanisms which underlie the production of disease-producing proteins.

To reach their therapeutic targets, many drugs must cross tissue and cellular barriers. Drugs that have an intracellular site of action must cross the lipid (fat-like) barrier of cellular membranes to move from the aqueous environment in blood into the interior of target cells. Therefore, these drugs must achieve solubility in both water and lipids. Since few compounds have these solubility characteristics, many drug candidates are a compromise between inherent solubility and effective delivery. This trade-off reduces efficacy and may significantly heighten toxicity of many drug candidates, as well as many FDA-approved drugs.

The Company has developed two distinct technologies to address the critical issues in drug development: selectivity for the target and delivery to the target. The Company's NEU-GENE antisense technology addresses the issue of drug selectivity and its CYTOPORTER drug delivery technology addresses delivery problems with FDA-approved drugs and antisense compounds. The patented structure of the Company's NEU-GENE compounds distinguishes its antisense technology from competing technologies and provides

the selectivity for a single disease target that is the hallmark of antisense

drug development. The Company's molecular engine, CYTOPORTER, is designed to transport drugs with delivery problems across the lipid barrier of cellular membranes into the interior of cells to reach their targets.

The first application of the Company's NEU-GENE antisense technology is designed to treat restenosis, a cardiovascular disease. The Company is currently in pre-clinical development with this compound and expects to file an IND to begin clinical trials in 1997. The Company's first planned drug delivery products combine its CYTOPORTER delivery engine with two FDA-approved drugs that have delivery problems. These drugs, paclitaxel (Taxol-Registered Trademark-) and cyclosporin, will both be off patent by late 1997 and could have much broader usage if their delivery problems were reduced. The Company expects to file an IND to begin clinical trials with its enhanced form of paclitaxel and to initiate pre-clinical studies with its enhanced form of cyclosporin in 1997.

The Company plans to market its initial products through marketing agreements or other licensing arrangements with large pharmaceutical companies. The Company intends to retain manufacturing rights to all products incorporating its technology, whether such products are marketed directly by the Company or through collaborative agreements with industry partners.

The Company's principal executive office is located at One S.W. Columbia, Suite 1105, Portland, Oregon 97258, where the telephone number is (503) 227-0554.

THE OFFERING

Securities offered.....	1,500,000 Units, each consisting of one share of Common Stock and one Warrant to purchase one share of Common Stock. The Common Stock and Warrants will be separately tradeable immediately following this offering. See "Description of Securities."
Common Stock to be outstanding after this offering.....	10,279,763 shares(1)
Use of proceeds.....	To fund research and development, and for working capital, and other general corporate purposes. See "Use of Proceeds".
Proposed Nasdaq National Market symbols.....	Common Stock--AVII Warrants--AVIIW

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(1) Excludes an aggregate of 1,126,886 shares of Common Stock issuable upon exercise of stock options outstanding at December 31, 1996, and an aggregate of 432,498 shares of Common Stock issuable upon exercise of outstanding warrants as of December 31, 1996. An additional 206,447 shares are reserved for issuance under the Company's Stock Incentive Plan. See "Capitalization and Management--Stock Incentive Plan."

SUMMARY FINANCIAL DATA

	YEARS ENDED DECEMBER 31,		NINE MONTHS ENDED SEPTEMBER 30,		PERIOD FROM JULY 22, 1980 (INCEPTION) THROUGH
	1994	1995	1995	1996	

					SEPTEMBER 30, 1996
			(UNAUDITED)	(UNAUDITED)	(UNAUDITED)
STATEMENTS OF OPERATIONS DATA:					
Revenues, from grants and research contracts	$ --	$ 82,500	$ 82,500	$ 16,827	$679,097
Operating expenses:					
Research and development	1,631,130	2,097,796	1,640,906	1,177,157	8,459,177
General and administrative	678,705	609,723	437,159	432,252	4,368,023
Total operating expenses	2,309,835	2,707,519	2,078,065	1,609,409	12,827,200
Other income	63,563	68,133	54,888	177,616	395,016
Net loss	$(2,246,272)	$(2,556,886)	$(1,940,677)	$(1,414,966)	$(11,753,087)
Net loss per share(1)	$ (0.33)	$ (0.37)	$ (0.28)	$ (0.18)	
Shares used in per share calculation(1)	6,726,625	6,982,459	6,966,583	8,051,477	

	DECEMBER 31, 1995	SEPTEMBER 30, 1996	
		ACTUAL	AS ADJUSTED(2)
		(UNAUDITED)	(UNAUDITED)
BALANCE SHEET DATA:			
Working capital	$646,814	$3,455,651	15$,063,151
Total assets	2,324,736	4,788,878	16,396,378
Common stock subject to rescission	3,121,965	3,121,965	3,121,965
Deficit accumulated during the development stage	(10,338,121)	(11,753,087)	(11,753,087)
Total shareholders' equity (deficit)	(1,051,293)	1,465,290	13,072,790

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(1) See Note 2 of Notes to Financial Statements for an explanation of the determination of the number of shares used in computing net loss per share.

(2) Adjusted to give effect to the application of the estimated net proceeds of this offering based upon an assumed initial public offering price of $9.00 per Unit. See "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

RISK FACTORS

IN EVALUATING THE COMPANY AND ITS BUSINESS, PROSPECTIVE INVESTORS SHOULD CAREFULLY CONSIDER THE FOLLOWING RISKS IN ADDITION TO THE OTHER INFORMATION CONTAINED ELSEWHERE HEREIN. BECAUSE ANY INVESTMENT IN THE COMPANY'S CAPITAL STOCK INVOLVES A HIGH DEGREE OF RISK, ONLY INVESTORS WHO CAN ACCOMMODATE SUCH RISKS, INCLUDING A COMPLETE LOSS OF THEIR INVESTMENT, SHOULD PURCHASE THE UNITS.

DEVELOPMENT STAGE COMPANY; HISTORY OF OPERATING LOSSES. The Company is a development stage biotechnology company. Since its inception in 1980 through September 30, 1996, the Company had incurred losses of $11,753,087, substantially all of which resulted from expenditures related to research and development and general and administrative expenses. The Company has not generated any material revenues from product sales to date, and there can be no assurance that material revenues from product sales will ever be achieved. Moreover, even if the Company does realize revenues from product sales, the Company nevertheless expects to incur significant operating losses over the next several years. The financial statements accompanying this Prospectus have been

prepared assuming that the Company will continue as a going concern. The Company's ability to achieve a profitable level of operations in the future will depend in large part on the completion of product development of its antisense and/or drug delivery products, obtaining regulatory approvals for such products and bringing several of these products to market. The likelihood of the long-term success of the Company must be considered in light of the expenses, difficulties and delays frequently encountered in the development and commercialization of new pharmaceutical products, competitive factors in the marketplace as well as the burdensome regulatory environment in which the Company operates. There can be no assurance that the Company will ever achieve significant revenues or profitable operations. See "Selected Financial Data" and "Management's Discussion and Analysis of Results of Operations and Financial Condition."

TECHNOLOGICAL UNCERTAINTY; EARLY STAGE OF PRODUCT DEVELOPMENT; NO ASSURANCE OF REGULATORY APPROVALS. The Company's proposed products are in the pre-clinical stage of development and will require significant further research, development, clinical testing and regulatory clearances. The Company has no products available for sale other than research reagents and does not expect to have any products resulting from its research efforts commercially available for at least several years. None of the Company's proposed products has been tested in humans, nor has the Company filed an Investigational New Drug Application ("IND") with the United States Food and Drug Administration ("FDA") on any of its products currently under research and development. The Company's proposed products are subject to the risks of failure inherent in the development of products based on innovative technologies. These risks include the possibilities that some or all of the proposed products could be found to be ineffective or toxic, or otherwise fail to receive necessary regulatory clearances; that the proposed products, although effective, will be uneconomical to manufacture or market; that third parties may now or in the future hold proprietary rights that preclude the Company from marketing its products; or that third parties will develop and market a superior or equivalent products. Accordingly, the Company is unable to predict whether its research and development activities will result in any commercially viable products or applications. Furthermore, due to the extended testing and regulatory review process required before marketing clearance can be obtained, the Company does not expect to be able to commercialize any therapeutic drug for at least several years, either directly or through any potential corporate partners or licensees. Although the Company and others have demonstrated the effectiveness of antisense compounds in living cells and, in some cases, in animal models, none of the Company's proposed products has been tested in humans and there can be no assurance that the Company's proposed products will prove to be safe or effective in humans or will receive the regulatory approvals that are required for commercial sale.

NEED FOR ADDITIONAL FUNDING; UNCERTAINTY OF ACCESS TO CAPITAL. The Company will require substantial funds for further development of its potential products and to commercialize any products that may be developed. The Company's capital requirements depend on numerous factors, including the progress of its research and development programs, the progress of pre-clinical and clinical testing, the time and cost

involved in obtaining regulatory approvals, the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights, competing technological and market developments and the ability of the Company to establish collaborative arrangements. The Company has no current anticipated sources of funding beyond the proceeds from this offering. The Company believes that its existing capital resources, including the estimated net proceeds of this offering, will be sufficient to satisfy its current and projected funding requirements for at least 24 months from the date of this Prospectus. The Company anticipates that after 24 months, it will require substantial additional capital. Moreover, if the Company experiences unanticipated cash requirements during the next 24 months, the Company could require additional capital to fund its operations, continue research and development programs and to continue the pre-clinical and clinical testing of its potential products and to commercialize any products that may be developed. The Company may seek such additional funding through public or private financings, collaborative arrangements, or other

arrangements with third parties. There can be no assurance that additional funds will be available on acceptable terms, if at all. The Company may receive additional funds upon the exercise from time to time of the Warrants and other outstanding warrants and stock options, but there can be no assurance that any such warrants or stock options will be exercised or that the amounts received will be sufficient for the Company's purposes. If additional funds are raised by issuing equity securities, further substantial dilution to existing shareholders, including purchasers of the Units offered hereby, may result. If adequate funds are not available, the Company may be required to delay, scale back or eliminate one or more of its development programs, or to obtain funds by entering into arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its products or technologies that the Company would not otherwise relinquish. See "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

LACK OF OPERATING EXPERIENCE. To date, the Company has engaged exclusively in the development of pharmaceutical technology. Although members of the Company's management have experience in biotechnology company operations, the Company has no experience in manufacturing or procuring products in commercial quantities or selling pharmaceutical products and has only limited experience in negotiating, setting up and maintaining strategic relationships, conducting clinical trials and other later-stage phases of the regulatory approval process. There can be no assurance that the Company will successfully engage in any of these activities. See "Management."

MANUFACTURING. The Company intends to undertake the manufacture of its products through the clinical development phase. The Company has not previously manufactured pharmaceutical products of any kind, nor has it manufactured antisense or drug delivery compounds in commercial quantities. Establishing manufacturing facilities will require the retention of experienced personnel and compliance with complex regulations relating to the manufacture of pharmaceutical products. There is no assurance that the Company will be successful in establishing and operating a manufacturing facility. See "Business-- Manufacturing."

DEPENDENCE ON THIRD PARTIES FOR CLINICAL TESTING, MANUFACTURING AND MARKETING. The Company does not have the resources and does not currently intend to conduct later-stage human clinical trials itself or to manufacture all of its proposed products for commercial sale. The Company therefore intends to seek larger pharmaceutical company partners to conduct such activities for most or all of its proposed products and to contract with third parties for the manufacture of its proposed products for commercial sale. In connection with its efforts to secure corporate partners, the Company will seek to retain certain co-marketing rights to certain of its proposed products, so that it may promote such products to selected medical specialists while its corporate partner promotes these products to the general medical market. There can be no assurance that the Company will be able to enter into any such partnering arrangements on this or any other basis. In addition, there can be no assurance that either the Company or its prospective corporate partners can successfully introduce its proposed products, that they will achieve acceptance by patients, health care providers and insurance companies, or that they can be manufactured and marketed at prices that would permit the Company to operate profitably. With respect to the

Company's products, the Company may seek to enter into joint venture, sublicense or other marketing arrangements with another party that has an established marketing capability. There can be no assurance that the Company will be able to enter into any such marketing arrangements with third parties, or that such marketing arrangements would be successful. Failure to market its products successfully would have a material adverse effect on the Company's business and results of operations. In addition, the Company has no current joint venture, strategic partnering or other similar agreements with pharmaceutical companies, and there can be no assurance that the Company could negotiate any such arrangements, on an acceptable basis or at all, if it chose to do so. Accordingly, the commercial viability of the Company's proposed products has not

been independently evaluated by any independent pharmaceutical company. See "Business--Manufacturing" and "--Marketing Strategy."

NEED TO COMPLY WITH GOVERNMENTAL REGULATION AND TO OBTAIN PRODUCT APPROVALS. The testing, manufacturing, labeling, distribution, marketing and advertising of products such as the Company's proposed products and its ongoing research and development activities are subject to extensive regulation by governmental regulatory authorities in the United States and other countries. The FDA and comparable agencies in foreign countries impose substantial requirements on the introduction of new pharmaceutical products through lengthy and detailed clinical testing procedures and other costly and time-consuming compliance procedures. The Company's compounds require substantial clinical trials and FDA review as new drugs. The Company cannot predict with certainty when it might submit its products currently under development for regulatory review. Once the Company submits its potential products for review, there can be no assurance that FDA or other regulatory approvals for any pharmaceutical products developed by the Company will be granted on a timely basis or at all. A delay in obtaining or failure to obtain such approvals would have a material adverse effect on the Company's business and results of operations. Failure to comply with regulatory requirements could subject the Company to regulatory or judicial enforcement actions, including, but not limited to, product recalls or seizures, injunctions, civil penalties, criminal prosecution, refusals to approve new products and withdrawal of existing approvals, as well as potentially enhanced product liability exposure. Sales of the Company's products outside the United States will be subject to regulatory requirements governing clinical trials and marketing approval. These requirements vary widely from country to country and could delay introduction of the Company's products in those countries. See "Business--Drug Approval Process and Other Government Regulation."

DEPENDENCE ON KEY PERSONNEL. The success of the Company's business will depend to a large extent on the abilities and continued participation of certain key employees, including Drs. Denis Burger, James Summerton, and Dwight Weller, upon each of whom the Company holds key man life insurance. The loss of any of these persons or of other key employees could significantly delay the achievement of the Company's planned development objectives. Competition for qualified personnel among pharmaceutical companies is intense, and the loss of key personnel, or the inability to attract and retain the additional, highly skilled personnel required for the expansion of the Company's activities, could have a material adverse effect on the Company's business and results of operations. See "Management."

COMPETITION. Competition in the area of pharmaceutical products is intense. There are many companies, both public and private, including well-known pharmaceutical companies, that are engaged in the development of products for certain of the applications being pursued by the Company. The Company's probable competitors in the antisense and drug delivery fields include Glaxo Ltd. ("Glaxo"), Boehringer Ingelheim Inc. ("Boehringer Ingelheim"), Gilead Sciences Inc. ("Gilead"), Hybridon Inc. ("Hybridon"), ISIS Pharmaceuticals, Inc. ("ISIS"), Lynx Therapeutics Inc. ("Lynx"), Cygnus, Inc. ("Cygnus"), Biovail Corporation International ("Biovail"), and Noven Pharmaceuticals, Inc. ("Noven"), among others. Most of these companies have substantially greater financial, research and development, manufacturing and marketing experience, and resources than the Company does and represent substantial long-term competition for the Company. Such companies may succeed in developing pharmaceutical products that are more effective or less costly than any that may be developed by the Company.

Factors affecting competition in the pharmaceutical industry vary depending on the extent to which the competitor is able to achieve a competitive advantage based on patented or proprietary technology. If the Company is able to establish and maintain a significant patent position with respect to its antisense compounds and drug delivery technology, its competition will likely depend primarily on the effectiveness of the products and the number, gravity and severity of unwanted side effects, if any, with its products as compared with alternative products.

The industry in which the Company competes is characterized by extensive research and development efforts and rapid technological progress. Although the Company believes that its patent position may give it a competitive advantage with respect to its proposed antisense compounds and drug delivery products, new developments are expected to continue and there can be no assurance that discoveries by others will not render the Company's potential products noncompetitive. The Company's competitive position also depends on its ability to attract and retain qualified scientific and other personnel, develop effective products, implement development and marketing plans, obtain patent protection, and secure adequate capital resources. See "Business--Competition."

PATENTS AND PROPRIETARY RIGHTS. The Company believes that its ultimate success will depend in part on the strength of its existing patents and additional patents that it files in the future. Patent applications have been filed covering the basic compositions of matter, methods of synthesis and medical uses of NEU-GENES. These applications were filed in the United States, Canada, Europe, Australia, and Japan. Certain of the Company's patents were issued in the United States from 1991 through the present. Additionally, patents on NEU-GENE chemistry and CYTOPORTER drug delivery systems have recently been filed or are near filing. There can be no assurance, however, that any additional patents will ultimately issue. Although the Company believes that its technology is adequately protected, there is no assurance that any existing or future patents will survive a challenge or will otherwise provide meaningful protection from competition. There is also no assurance that the Company will have the financial resources to provide a vigorous defense of its patent position, if challenged, or that the practice of its patented and proprietary technology will not infringe third-party patents. If an actual infringement were instituted against the Company, there can be no assurance that the Company would have the financial ability to defend the action or that the action would not have an adverse effect on the Company. The Company's success will also depend on its ability to avoid infringement of patent or other proprietary rights of others or that it will be able to obtain any technology licenses it may require in the future. See "Business--Patent and Proprietary Rights."

RISK OF PRODUCT LIABILITY. Clinical trials or marketing of any of the Company's potential pharmaceutical products may expose the Company to liability claims from the use of these products. The Company currently intends to obtain product liability insurance at the appropriate time; however, there can be no assurance that the Company will be able to obtain or maintain insurance on acceptable terms for its clinical and commercial activities or that such insurance would be sufficient to cover any potential product liability claim or recall. Failure to have sufficient coverage could have a material adverse effect on the Company's business and results of operations.

ANTI-TAKEOVER EFFECTS OF CERTAIN CHARTER PROVISIONS AND OREGON LAW. Certain provisions of the Company's Second Restated Articles of Incorporation and Bylaws could discourage potential acquisition proposals, could delay or prevent a change in control of the Company and could make removal of management more difficult. Such provisions could diminish the opportunities for a shareholder to participate in tender offers, including tender offers that are priced above the then-current market value of the Common Stock. The provisions may also inhibit increases in the market price of the Common Stock and Warrants that could result from takeover attempts. For example, the Board of Directors of the Company, without further shareholder approval, may issue up to 2,000,000 shares of Preferred Stock, in one or more series, with such terms as the Board of Directors may determine, including rights such as voting, dividend and conversion rights which could adversely affect the voting power and other rights of the holders of Common Stock. Preferred Stock thus may be issued quickly with terms calculated to delay or

prevent a change in control of the Company or make removal of management more difficult. Additionally, the issuance of Preferred Stock may have the effect of decreasing the market price of the Common Stock. The Oregon Control Share Act and Business Combination Act limit the ability of parties who acquire a significant amount of voting stock to exercise control over the Company. These

provisions may have the effect of lengthening the time required for a person to acquire control of the Company through a proxy contest or the election of a majority of the Board of Directors and may deter efforts to obtain control of the Company. Finally, the Company's Board of Directors is divided into two classes, each of which serves for a staggered two-year term, which may make it more difficult for a third party to gain control of the Company's Board of Directors. See "Description of Securities."

CONTROL BY EXISTING SHAREHOLDERS. Upon the closing of this offering, the Company's officers, directors and five-percent shareholders and their affiliates will beneficially own approximately 38% of the Company's outstanding shares of Common Stock. The Company's existing shareholders will own approximately 85% of the Company's outstanding shares of Common Stock. Accordingly, these shareholders, if they were to act as a group, may be able to elect all of the Company's directors and otherwise control matters requiring approval by the shareholders of the Company, including approval of significant corporate transactions. Such concentration of ownership may also have the effect of delaying or preventing a change in control of the Company. See "Principal Shareholders."

NO PRIOR PUBLIC MARKET; POSSIBLE VOLATILITY OF COMMON STOCK PRICE. Prior to this offering, there has been no public market for the Company's Common Stock or Warrants. There can be no assurance that an active public market for the Common Stock or Warrants will develop or be sustained after this offering. The initial public offering price of the Units has been determined by negotiations between the Company and the Representative and may not be indicative of future market prices. The trading price of the Company's Common Stock and Warrants could be subject to significant fluctuations in response to such factors as variations in the Company's anticipated or actual results of operations, announcements of new products or technological innovations by the Company or its competitors, FDA and foreign regulatory actions, developments with respect to patents and proprietary rights, public concern as to the safety of products developed by the Company or others, changes in health care policy in the United States and in foreign countries, changes in stock market analyst recommendations regarding the Company, the pharmaceutical industry in general and overall market conditions. Moreover, the stock market has from time to time experienced extreme price and volume fluctuations which have particularly affected the market prices for emerging growth companies and which have often been unrelated to the operating performance of such companies. These broad market fluctuations may adversely affect the market price of the Company's Common Stock and Warrants. In the past, following periods of volatility in the market price of a company's common stock, securities class action litigations have occurred against the issuing company. There can be no assurance that such litigation will not occur in the future with respect to the Company. Such litigation could result in substantial costs and a diversion of management's attention and resources, which could have a material adverse effect on the Company's business and results of operations. Any adverse determination in such litigation could also subject the Company to significant liabilities. See "Management--Stock Incentive Plan" and "Underwriting."

ADVERSE EFFECT ON MARKET PRICE DUE TO SHARES ELIGIBLE FOR FUTURE SALE. Sales of a substantial number of shares of the Common Stock in the public market following this offering could adversely affect the market price of the Common Stock and the Company's ability to raise capital in the future in the equity markets. Upon completion of this offering, there will be 10,279,763 shares of Common Stock outstanding, assuming no exercise of the Overallotment Option or of outstanding warrants or outstanding options under the Company's Stock Incentive Plan after the date of this Prospectus. In addition to the 1,500,000 shares of Common Stock sold in this offering, approximately shares not subject to lock-up agreements will be eligible for immediate resale without restriction under Rule 144(k) of the Securities Act. An additional shares held for more than two but less than three years by shareholders who are not affiliates of the Company and who are not subject to lock-up agreements are eligible for sale under

Rule 144 of the Securities Act, subject to the volume and other limitations thereunder. Upon expiration of lock-up agreements three months after the date of

this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements six months after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements nine months after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements one year after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). As of the date of this Prospectus, options to purchase shares of Common Stock have been granted under the Stock Incentive Plan, which shares, if acquired pursuant to the exercise of options, are subject to lock-up agreements which expire one year after the date of this Prospectus (or earlier with the consent of the Representative). See "Management--Stock Incentive Plan," "Underwriting," "Description of Securities" and "Shares Eligible for Future Sale."

REDEMPTION OF WARRANTS. As described in greater detail elsewhere in this Prospectus, the Warrants are subject to redemption at $.25 per Warrant on 30 days written notice provided that the closing bid price of the Common Stock for each of the 20 consecutive trading days immediately preceding the date of the notice of redemption equals or exceeds 200% of the then-current warrant exercise price. If the Company exercises the right to redeem the Warrants, a holder would be forced either to exercise the Warrant or accept the redemption price. See "Description of Securities--Warrants."

CURRENT PROSPECTUS AND STATE BLUE SKY REGISTRATION REQUIRED TO EXERCISE THE WARRANTS. Purchasers of Units will be able to exercise the Warrants included therein only if a current prospectus relating to the Common Stock underlying the Warrants is then in effect, and only if the Common Stock is qualified for sale or exempt from qualification under applicable state securities law of the state in which such holders of the Warrants reside. Although the Company has undertaken to maintain the effectiveness of a current prospectus covering the Common Stock underlying the Warrants, there can be no assurance that the Company will be able to do so. The value of the Warrants may be impaired if a current prospectus covering the Common Stock issuable upon exercise of the Warrants is not kept effective, or if such Common Stock is not qualified or exempt from qualification in the states in which the holders of Warrants reside.

The Warrants are separately transferable immediately upon issuance. Although the Units will not knowingly be sold to purchasers in jurisdictions in which the Units are not registered or otherwise qualified for sale, purchasers may buy Warrants in the after market in, or may move to, jurisdictions in which the shares underlying the Warrants are not so registered or qualified during the period that the Warrants are exercisable. In this event, the Company would be unable to issue shares to those persons desiring to exercise their warrants, and holders of Warrants would have no choice but to attempt to sell the Warrants in a jurisdiction where such sale is permissible or allow them to expire unexercised. See "Description of Securities--Warrants."

DILUTION. Investors acquiring shares of Common Stock included in the Units offered hereby will incur immediate and substantial net tangible value dilution of $7.47 per share, assuming no value is attributed to the Warrant included in a Unit. To the extent that currently outstanding options and warrants to purchase the Company's Common Stock are exercised, there will be further dilution. See "Dilution."

ABSENCE OF DIVIDENDS. The Company has never paid cash dividends on its Common Stock and does not anticipate paying cash dividends in the foreseeable future. See "Dividend Policy."

BROAD DISCRETION OF MANAGEMENT TO ALLOCATE OFFERING PROCEEDS. The Company expects that the proceeds of this offering will be used for the construction of a Good Manufacturing Practices ("GMP") facility, research and development, including clinical development of the Company's near-term therapeutic products, for working capital and general corporate purposes. The Company is not currently able to estimate precisely the allocation of the proceeds among such uses, and the timing and amount of expenditures will vary, depending upon numerous factors. The Company's management will have broad discretion to allocate the proceeds of this offering and to determine the timing of expenditures. See "Use of Proceeds."

POTENTIAL LIABILITY ARISING FROM RESCISSION RIGHTS OF CERTAIN SHAREHOLDERS. Throughout its existence, the Company has financed its activities through periodic offerings of equity securities. During 1992, the Company's management conducted a review of its past operations, including capital-raising activities. At that time, although management did not identify any specific, material failures to comply with obligations imposed on the Company by applicable federal and state securities laws, management concluded that the record with respect to such activities was sufficiently incomplete that a conclusion could not be drawn with substantial certainty that such obligations were complied with in all material respects. Although the Company believes that, as of the date of this Prospectus, any potential rescission liability to shareholders for failure to comply with these obligations has been effectively eliminated by the running of applicable statutes of limitation, a review of the Company's securities offering documents prepared in connection with certain sales of Common Stock during 1991, 1992, 1993 and 1994 and an exchange offering during 1993 indicated that the Company had omitted to disclose or provided only limited disclosure with respect to its then potential rescission liability to prospective purchasers of its Common Stock. As a result of this omission or limited disclosure, the Company has been unable to conclude that sales of the Company's Common Stock made in accordance with those offering documents complied in all material respects with federal and state securities laws.

Immediately prior to this offering, as a condition to this offering, the Company intends to offer to each holder of 1,292,973 shares of its Common Stock and who reside in the states of Alabama, Colorado, Illinois, Massachusetts, Montana, New Jersey, Ohio, Oregon, Texas, Utah, Washington and Wisconsin the right to rescind the holder's purchase of shares of the Company's Common Stock. If all such offerees elect to rescind their purchases, the Company will be required to pay these holders $3,121,965 and 568.67 units of limited partnership interest in the Anti-Gene Development Group, plus approximately $2,129,000 in statutory interest.

The Company believes that its potential liability to shareholders who receive the rescission offer for possible violations of federal law and the laws of the states of Alabama, Colorado, Illinois, Massachusetts, Montana, New Jersey, Ohio, Oregon, Texas, Utah, Washington and Wisconsin will be effectively eliminated as a result of the rescission offer or the running of applicable statutes of limitation. The Securities and Exchange Commission, however, takes the position that liabilities under the federal securities laws are not terminated by the making of a rescission offer.

In addition, the rescission offer will not be made to holders of 22,021 shares of the Company's Common Stock who reside in Florida, the laws of which do not permit rescission offerings to cure omissions in securities offering documents. These holders of 22,021 shares of Common Stock originally purchased such shares from the Company at prices ranging from $4.56 to $4.95 per share or through the exchange of one unit of limited partnership interest in the Anti-Gene Development Group. There can be no assurance that claims asserting violations of federal or state securities laws will not be asserted by any of these shareholders against the Company or that certain holders will not prevail against the Company in the assertion of such claims, thereby compelling the Company to repurchase their shares. If all of the holders of the 22,021 shares successfully asserted claims against the Company, the Company would be required to pay these holders $100,000, plus one unit of limited partnership interest in Anti-Gene Development Group, plus approximately $44,000 in statutory interest.

The rescission offer also will not be made to holders of 192,603 shares of the Company's Common Stock who reside in the states of California and

Nevada because the Company believes that its potential liability to these shareholders has been eliminated by the running of applicable statutes of limitation. There can be no assurance, however, that claims asserting violations of federal or state securities laws will not be asserted by any of those shareholders or that certain holders will not prevail against the Company in the assertion of such claims, compelling the Company to repurchase their shares. If all of the holders of the 192,603 shares successfully asserted claims against the Company, the Company would be required to pay these holders $218,450, plus 54 units of limited partnership interest in the Anti-Gene Development Group, plus approximately $193,000 in statutory interest. Even if the Company were successful in defending any securities laws claims, the assertion of such claims against the Company additionally could result in costly litigation and significant diversions of effort by the Company's management.

USE OF PROCEEDS

The net proceeds to the Company from the sale of the Units offered hereby, based on an assumed initial public offering price of $9.00 per Unit, are estimated to be $11,607,500 ($13,419,875 if the Overallotment Option is exercised in full) after deducting the estimated underwriting discount and offering expenses and assuming no exercise of the Warrants.

The Company expects to apply up to $5 million of the net proceeds of this offering to fund the construction of a Good Manufacturing Practices ("GMP") manufacturing facility for the manufacture of its compounds required for the pre-clinical and clinical trial phases. The Company expects to use approximately $5 million to fund future research and development, of which approximately $2 million will be expended for the clinical development of the Company's near-term therapeutic products. The balance of the net proceeds of this offering will be used for working capital and general corporate purposes. Where appropriate, proceeds of this offering also may be used to acquire products or technologies that complement the Company's business, although there are no present understandings, agreements or commitments with respect to any such acquisitions. The cost, timing and amount of funds required for such uses by the Company will be based on the timing of regulatory approvals, the results of clinical testing and trials, and the results of the Company's research and development programs. The amounts actually expended on any particular project may vary significantly from the Company's current plans, particularly given the Company's early stage of development and the uncertainty of the drug development process.

Pending application of the net proceeds as described above, the Company intends to invest the net proceeds in short-term, interest-bearing securities, including government obligations and money market instruments.

DIVIDEND POLICY

The Company has not declared or paid cash dividends on its Common Stock. The Company currently intends to retain all future earnings to fund the operation of its business and, therefore, does not anticipate paying dividends in the foreseeable future. Future cash dividends, if any, will be determined by the Board of Directors.

CAPITALIZATION

The following table sets forth the capitalization of the Company as of September 30, 1996 (i) on an actual basis and (ii) as adjusted to reflect the receipt and application of the estimated net proceeds from the sale of the 1,500,000 Units offered hereby at an assumed initial offering price of $9.00 per Unit.

	SEPTEMBER 30, 1996	
	ACTUAL	AS ADJUSTED
	(UNAUDITED)	(UNAUDITED)
Common stock subject to rescission, $.0001 par value: 1,292,973 issued and outstanding	$ 3,121,965	$ 3,121,965
Shareholders' equity:		
Preferred Stock, $.0001 par value: 2,000,000 shares authorized; no shares issued and outstanding, actual and as adjusted(1)	--	--
Common Stock, $.0001 par value: 50,000,000 shares authorized; 7,486,790 shares issued and outstanding, actual; 8,986,790 shares issued and outstanding, as adjusted(2)	749	899
Additional paid-in capital	13,217,628	24,824,978
Deficit accumulated during the development stage	(11,753,087)	(11,753,087)
Total shareholders' equity	1,465,290	13,072,790
Total capitalization	$ 1,465,290	$ 13,072,790

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(1) Reflects an amendment to the Company's Articles of Incorporation that was effective November 4, 1996, authorizing the issuance of up to 2,000,000 shares of Preferred Stock.

(2) Excludes 1,559,384 shares of Common Stock issuable upon exercise of stock options and warrants outstanding as of September 30, 1996, at a weighted average exercise price of $4.63 per share. Also excludes 206,447 shares reserved for future issuance pursuant to the Company's Stock Incentive Plan. See "Management--Stock Incentive Plan" and Note 3 of Notes to Financial Statements.

DILUTION

The net tangible book value of the Company as of September 30, 1996, was $4,116,087 or $0.47 per share of Common Stock. Net tangible book value per share is determined by dividing the net tangible book value of the Company (total tangible assets less total liabilities) by the total number of outstanding shares of Common Stock. After giving effect to the sale of the 1,500,000 Units offered by the Company hereby and the receipt of the estimated net proceeds therefrom (after deducting the estimated underwriting discount and other estimated expenses of the offering and attributing no portion of the value of a Unit to the Warrant), the net tangible book value of the Company at September 30, 1996, would have been $15,723,587 or $1.53 per share. This represents an immediate increase in the net tangible book value of $11,607,500 or $1.06 per share to existing holders of Common Stock and an immediate dilution (i.e., the difference between the initial public offering price and the net tangible book value after the offering) to new investors purchasing Units in this offering of $7.47 per share. The following table illustrates the per share dilution to new investors purchasing Units in this offering:

Initial public offering price per share		$ 9.00
Net tangible book value per share at September 30, 1996	$ 0.47	
Increase per share attributable to new investors	1.06	
Pro forma net tangible book value per share after this offering		1.53
Net tangible book value dilution per share to new investors		$ 7.47

The following table summarizes on a pro forma basis as of September 30,

1996, the number of shares of Common Stock purchased, the percentage of total cash consideration paid, and the average price per share (i) paid by present shareholders and (ii) paid by investors purchasing Units in this offering. The calculation in this table with respect to shares of Common Stock to be purchased by new investors in this offering excludes shares of Common Stock issuable upon exercise of the Warrants (after deducting the estimated underwriting discount and other estimated expenses of this offering payable by the Company and ascribing no portion of the value of a Unit to the Warrant).

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing Shareholders.....	8,779,763	85%	16,340,342	55%	$ 1.86
New Investors.....	1,500,000	15%	13,500,000	45%	$ 9.00
Total.....	10,279,763	100%	29,840,342	100%	

The above computations assume no exercise of outstanding options or warrants. As of September 30, 1996, there were options and warrants outstanding to purchase a total of 1,559,384 shares of Common Stock at a weighted average exercise price of $4.63 per share. The exercise of such options or warrants will result in further dilution to new investors. See "Capitalization."

SELECTED FINANCIAL DATA

The Selected Financial Data set forth below for the years ended December 31, 1995 and 1994 and with respect to the Balance Sheet Data at December 31, 1995 are derived from, and are qualified by reference to, the audited Financial Statements and related Notes thereto included elsewhere in this Prospectus and should be read in conjunction with those audited Financial Statements and Notes thereto. The Statements of Operations Data with respect to the nine-month periods ended September 30, 1995 and September 30, 1996 and the period from July 22, 1980 (inception) through September 30, 1996, and the Balance Sheet Data at September 30, 1996 are unaudited, but have been prepared on the same basis as the audited financial statements and in the opinion of management contain all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the information set forth therein. The Selected Financial Data set forth below are qualified by reference to, and should be read in conjunction with, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and Notes thereto included elsewhere in this Prospectus.

	YEARS ENDED DECEMBER 31,		NINE MONTHS ENDED SEPTEMBER 30,		PERIOD FROM JULY 22, 1980 (INCEPTION) THROUGH SEPTEMBER 30, 1996
	1994	1995	1995	1996	
			(UNAUDITED)	(UNAUDITED)	(UNAUDITED)
STATEMENTS OF OPERATIONS DATA:					
Revenues, from grants and research contracts.....	$ --	$ 82,500	$ 82,500	$ 16,827	$ 679,097
Operating expenses:					
Research and development.....	1,631,130	2,097,796	1,640,906	1,177,157	8,459,177
General and administrative.....	678,705	609,723	437,159	432,252	4,368,023

Total operating expenses.....	2,309,835	2,707,519	2,078,065	1,609,409	12,827,200
Other income.....	63,563	68,133	54,888	177,616	395,016
Net loss.....	$(2,246,272)	$(2,556,886)	$(1,940,677)	$(1,414,966)	$(11,753,087)
Net loss per share(1).....	$ (0.33)	$ (0.37)	$ (0.28)	$ (0.18)	
Shares used in per share calculation(1).....	6,726,625	6,982,459	6,966,583	8,051,477	

	DECEMBER 31, 1995	SEPTEMBER 30, 1996	
		ACTUAL	AS ADJUSTED(2)
		(UNAUDITED)	(UNAUDITED)
BALANCE SHEET DATA:			
Working capital.....	$646,814	$3,455,651	15$,063,151
Total assets.....	2,324,736	4,788,878	16,396,378
Common stock subject to rescission.....	3,121,965	3,121,965	3,121,965
Deficit accumulated during the development stage.....	(10,338,121)	(11,753,087)	(11,753,087)
Total shareholders' equity (deficit).....	(1,051,293)	1,465,290	13,072,790

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(1) See Note 2 of Notes to Financial Statements for an explanation of the determination of the number of shares used in computing net loss per share.

(2) Adjusted to give effect to the application of the estimated net proceeds of this offering based upon an assumed initial public offering price of $9.00 per Unit. See "Use of Proceeds" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

From its inception in July 1980, the Company has devoted its resources primarily to fund its research and development efforts. The Company has been unprofitable since inception and, other than limited interest and grant revenues, has had no revenues from the sale of products or other sources. The Company does not expect material revenues in the near term and expects to continue to incur losses for the foreseeable future as it expands its research and development efforts. As of September 30, 1996, the Company's accumulated deficit was $11,753,087.

The Company intends to use the net proceeds of this offering to expand its research and administrative operations. See "Use of Proceeds." The Company plans to build a GMP pilot manufacturing facility and is exploring all available options with regard to building, leasing or contracting for this facility. The Company intends to increase its research staff as it prepares to initiate pre-clinical studies and file INDs for Resten-NG and Paclitaxol-CP. The Company's administrative staff will be supplemented as needed to support the research and development activities, to assure compliance with governmental regulatory requirements, and to develop and establish strategic pharmaceutical alliances.

RESULTS OF OPERATIONS

NINE MONTHS ENDED SEPTEMBER 30, 1996, COMPARED WITH NINE MONTHS ENDED SEPTEMBER 30, 1995. The Company had revenues from grants and research contracts of $16,827 and $82,500 for the nine months ended September 30, 1996 and September 30, 1995, respectively. Revenues for both periods were derived from research collaborations with outside organizations, and the decrease between the current and prior periods was due primarily to the completion of a collaborative research program. Operating expenses were $1,609,409 and $2,078,065 for the nine months ended September 30, 1996 and September 30, 1995, respectively. The decrease in operating expenses was due to a reduction in staff and other efficiencies that resulted from a shift in focus of the Company's research. General and administrative expenses remained relatively constant at $432,252 and $437,159 over the 1996 and 1995 comparable nine-month periods, respectively. Other income increased to $177,616 from $54,888 for the nine-month periods ended September 30, 1996, and September 30, 1995, respectively, primarily due to realized gains on the sale of short-term investments in 1996.

YEAR ENDED DECEMBER 31, 1995 COMPARED WITH YEAR ENDED DECEMBER 31, 1994. Revenues from grants and research contracts of $82,500 for 1995 were derived from a research contract. The Company did not have research contracts or grants in 1994. Operating expenses increased to $2,707,519 in 1995 from $2,309,835 in 1994, primarily due to increased use of contract research and additional personnel and supplies associated with the development of the CYTOPORTER drug delivery engine. General and administrative expenses declined to $609,723 in 1995 from $678,705 in 1994 principally due to a reduction in personnel. Other income, consisting primarily of interest income, was $68,133 in 1995 and $63,563 in 1994.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations since inception primarily through private equity sales totaling $16,340,342 and revenues from grants and contract research totaling $679,097. The Company's cash and cash equivalents were $3,614,724 at September 30, 1996 and $680,892 at December 31, 1995. The increase of $2,933,832 from December 31, 1995 to September 30, 1996 was principally due to the use of $1,168,026 for operations offset by net proceeds from the sale of the Company's Common Stock of $4,028,299.

The Company's future expenditures and capital requirements will depend on numerous factors, including, without limitation, the progress of its research and development programs, the progress of its

preclinical and clinical trials, the time and costs involved in obtaining regulatory approvals, the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, competing technological and market developments, the ability of the Company to establish collaborative arrangements and the terms of any such arrangements, and the costs associated with commercialization of its products. The Company's cash requirements are expected to continue to increase significantly each year as it expands its activities and operations. There can be no assurance, however, that the Company will ever be able to generate product revenues or achieve or sustain profitability. See "Risk Factors."

The proceeds of this offering are the only source of capital currently available to the Company, other than its existing cash and cash equivalents. See "Use of Proceeds." The Company believes that the estimated net proceeds from this offering, and existing cash and cash equivalents will satisfy its budgeted cash requirements for at least the next 24 months based upon the Company's current operating plan. The Company's current operating plan shows that, at the end of the 24-month period, the Company will require substantial additional capital. Moreover, if the Company experiences unanticipated cash requirements during the 24-month period, including without limitation cash required to pay the holders of a significant number of shares of Common Stock in connection with the Company's proposed rescission offering, the Company could require additional capital to fund operations, continue research and development programs, pre-clinical and clinical testing of its potential antisense and drug delivery compounds, and commercialize any products that may be developed. See "Risk

Factors--Potential Liability Arising from Rescission Rights of Certain Shareholders." The Company may seek such additional funding through public or private financings or collaborative or other arrangements with third parties. There can be no assurance, however, that additional funds will be available on acceptable terms, if at all. See "Risk Factors--Additional Financing Requirements."

BUSINESS

GENERAL OVERVIEW

ANTIVIRALS is a pioneer in the field of the gene-inactivating technology referred to as ANTISENSE and has developed a patented class of antisense compounds which may be useful in the treatment of a wide range of human diseases. The Company also has developed new drug delivery technology which may be useful with many FDA-approved drugs as well as with its antisense compounds. The Company's drug development program has two areas of near-term focus:

- NEU-GENE antisense compounds for selected applications, and
- CYTOPORTER drug delivery engines for enhanced delivery of FDA-approved drugs with delivery problems.

The Company's long-term product development program combines its NEU-GENE and CYTOPORTER technologies to produce combination drugs with potential applications for many diseases. The Company has 19 issued patents and several patent filings covering the basic compositions of matter, methods of synthesis and medical uses of its NEU-GENE and CYTOPORTER technology.

The first application of the Company's antisense technology is designed to treat restenosis, a cardiovascular disease. The Company is currently in pre-clinical development with this compound and expects to file an IND to begin clinical trials in 1997. The Company's first planned drug delivery products combine its CYTOPORTER delivery engine with two FDA-approved drugs that have delivery problems. These drugs, paclitaxel (Taxolr) and cyclosporin, will both be off patent by late 1997 and could have much wider use if their delivery problems are reduced. The Company expects to file an IND to begin clinical trials with its enhanced form of paclitaxel and to initiate pre-clinical studies with its enhanced form of cyclosporin in 1997. See "Drug Approval Process and Other Government Regulations."

DRUG DESIGN AND DEVELOPMENT. Most conventional drugs are chemicals designed to induce or inhibit the function of a target protein molecule with as few side effects as possible. Conventional drugs are not available for many diseases due to their low level of selectivity for the specific disease target or because they are difficult to deliver to their targets. These two issues, lack of selectivity and poor delivery, may contribute to poor efficacy, unwanted side effects or high toxicity, even at a suboptimal dosages. Moreover, the development of conventional drugs is usually time consuming and expensive, since thousands of compounds must be produced and analyzed to find one with an acceptable balance between efficacy and toxicity. Safe and effective therapeutics for viral and host diseases have been particularly difficult to develop because these diseases use the patient's own cellular machinery and therefore provide few specific targets for therapeutic intervention that will not prove toxic to the patient.

Antisense technology has the potential to provide safe and effective treatment for a wide range of diseases, including viral and host diseases. This new approach uses synthetic compounds, or polymers, designed to inactivate selected genetic sequences, thereby halting the disease process. Targeting these genetic sequences provides the selectivity that is not available in conventional drug development which typically targets proteins directly. The antisense approach inhibits at the genetic level the mechanisms which underlie the production of disease-producing proteins.

To reach their therapeutic targets, many drugs must cross tissue and

cellular barriers. Drugs that have an intracellular site of action must cross the lipid barrier of cellular membranes to move from the aqueous environment in blood into the interior of target cells. Therefore, these drugs must achieve solubility in both water and lipids. Since few compounds have these solubility characteristics, many drug candidates are a compromise between inherent solubility and effective delivery. This trade-off greatly reduces efficacy and may significantly heighten toxicity of many drug candidates as well as many FDA-approved drugs.

The Company has developed two distinct technologies designed to address the critical issues in drug development. The Company's NEU-GENE antisense technology addresses the issue of drug selectivity, and

its CYTOPORTER drug delivery technology addresses delivery problems with both FDA-approved drugs and antisense compounds. The characteristics of the patented structure of the Company's NEU-GENE compounds distinguish its antisense technology from competing technologies and provide the selectivity for a single disease target that is the hallmark of all antisense technology. The Company's molecular engine, CYTOPORTER, is designed to transport certain drugs with poor delivery characteristics across the lipid barrier of cellular membranes into the interior of cells to reach their targets.

NEAR-TERM PRODUCT DEVELOPMENT SUMMARY

The first application of the Company's antisense technology is designed to treat restenosis. The Company's first planned drug delivery products combine its CYTOPORTER delivery engine with two FDA-approved drugs, paclitaxel (Taxol) and cyclosporin, each of which the Company believes could have much broader usage if their delivery problems are reduced.

COMPOUND	DRUG	POTENTIAL INDICATION	DEVELOPMENT STATUS
AVI-2221 NEU-GENE.....	Resten-NG	Restenosis	Pre-clinical studies and IND filing expected in 1997
AVI-2301 CYTOPORTER.....	Paclitaxel-CP	Cancer	IND filing expected in 1997
AVI-2401 CYTOPORTER.....	Cyclosporin-CP	Transplantation	Pre-clinical studies expected in 1997

ANTISENSE--NEU-GENE

TECHNICAL OVERVIEW

GENETIC STRUCTURE AND FUNCTION. All life forms contain genetic information in molecules called DNA and RNA which comprise the operating instructions for all life processes. The specific instructions are called genes, which are long chains or strands of the four genetic bases: adenine, cytosine, guanine and thymine, represented by the letters, A, C, G and T, respectively. The molecular structures of these letters are complementary, such that A pairs with T, and C pairs with G. Consequently, each genetic strand has the unique ability to bind specifically to its complementary strand to form a duplex.

The information encoded in the DNA by its sequence of genetic letters is used to make proteins. To accomplish this, one strand (called the template strand) of the duplex DNA is copied to make a new complementary strand, referred to as messenger RNA. This messenger RNA is referred to as the SENSE strand because it carries the information used to assemble a specific protein. See "Figure 1" below. An ANTISENSE compound is a synthetic strand that is complementary to a small portion of the messenger RNA. Antisense compounds pair with their complementary messenger RNA sense strand to form a duplex, preventing the message from initiating protein assembly. See "Figure 2" below.

FIGURE 1--GENETIC FUNCTION

[Genetic Function Diagram]

GENE-TARGETED THERAPEUTICS. Most human diseases arise from the function or dysfunction of genes within the body, either those of pathogens, such as viruses, or of one's own genes. New techniques in molecular biology have led to the identification of the genes associated with most of the major human diseases and to the determination of the sequence of their genetic letters. Using modern methods of chemical synthesis, a genetic compound can be prepared that is complementary to a critical SENSE sequence in a pathogen or pathogenic process. When this complementary ANTISENSE compound binds tightly to the disease-causing sequence, the selected protein is inhibited, and thus the pathogen or pathogenic process is disabled. See "Figure 2" below.

FIGURE 2--ANTISENSE INHIBITION OF GENETIC FUNCTION

[Antisense Inhibition Diagram]

Antisense compounds are composed of repeating structures or subunits that are linked together forming a polymer, referred to as the antisense BACKBONE. Each subunit carries a genetic letter (A, C, G, or T) that pairs with its corresponding letter in the genetic target. Although the genetic letters are a feature

common to all antisense compounds, the structure of the subunits and the linkage groups that string them together may differ greatly. These differences in the subunits and the linkages define the different types of antisense backbones and their corresponding physical and biological properties. The Company is distinguished from all other antisense companies by the characteristics of its patented antisense backbone. The subunits which carry the genetic letters on the Company's backbone are synthetic products rather than modified natural materials. In addition, the linkages used to string the subunits together carry no charge in the Company's backbone. The Company believes these differences may provide pharmaceutical advantages that are critical for antisense drug development to meet the challenges of broad clinical utility.

FIRST-GENERATION COMPOUNDS. The first gene-inactivating compounds had backbones composed of natural genetic materials and linkages. Development of these compounds began in the late 1960s. As work continued in this new field, it became increasingly clear that there were significant problems with these structures. These natural compounds were degraded or broken down by enzymes in the blood and within cells and had difficulty crossing cellular membranes to enter the cells that contained their genetic target.

SECOND-GENERATION COMPOUNDS. To overcome these problems of degradation and permeability, several research groups developed modified backbones in the late 1970s which were designed to resist degradation by enzymes and to enter tissues and cells more efficiently. The most common of these types, the phosphorothioate backbones used by ISIS Pharmaceuticals and Hybridon, use natural DNA subunits linked together by a sulfur-containing, charged linkage. The Company was also extensively involved in developing second-generation backbones through the mid-1980s. After extensive investigation, however, the Company concluded that even after optimization, these second-generation compounds might lack the combination of properties desirable for broad clinical utility. For this reason, the Company abandoned development of second-generation backbones in the mid-1980s and started development of third-generation backbones designed to address these drawbacks. Today, in spite of extensive progress in the field, the Company believes that there remain serious limitations to second-generation compounds due to problems with the stability, specificity, cost effectiveness, and delivery of these compounds.

NEU-GENE THIRD-GENERATION TECHNOLOGY. By the mid-1980s, the limitations of the second-generation compounds led the Company to pursue the development of antisense technology with improved pharmaceutical properties which could be produced in a cost-effective manner. This effort culminated in the Company's development of a new class of compounds having a backbone of synthetic subunits

carrying each genetic letter, with each subunit linked together by a patented uncharged linkage group. The synthetic subunits and linkages are not found in nature, but rather were designed and synthesized to meet specific pharmaceutical parameters. These patented third-generation agents, known as NEU-GENE compounds, display advantageous pharmaceutical properties (stability, neutral charge, high binding affinity and specificity). Moreover, they are made from less expensive, more abundant materials, and the Company believes that they will cost significantly less to produce than second-generation compounds.

The Company and others have shown in cell culture and animal studies that NEU-GENE compounds inhibit targeted genetic sequences. With these scientific benchmarks in place, the Company's objective is to develop its third-generation antisense compounds into effective and affordable therapeutics for major infectious and host diseases.

PHARMACEUTICAL PROPERTIES OF ANTISENSE COMPOUNDS. If antisense compounds are to become widely applicable pharmaceutical compounds, the following challenges must be addressed.

- Stability: resistance to enzymatic degradation both in blood and inside cells

- Efficacy: ability to inhibit expression of the target gene

- Specificity: binding restricted to the selected target, reducing toxicity

- Cost effectiveness: manufacturing efficiency which allows a broad range of applications

- Delivery: ability to cross tissue and cellular barriers in order to reach targeted genetic sequences

The Company's core technology differentiates it from others developing gene-inactivating compounds. The Company believes its principal competitive advantage in the antisense area is the chemical structure of the NEU-GENE backbone which was developed to address all of the above parameters.

STABILITY. Biological stability is principally determined by the degree of resistance to enzymatic degradation. Because the NEU-GENE backbone is a unique synthetic structure, the Company believes that there are no enzymes found in man to degrade it. The Company has conducted studies indicating that these agents are stable in blood and are stable to a broad range of degradative enzymes.

EFFICACY AND SPECIFICITY. Efficacy refers to the efficiency with which the antisense compounds block selected protein production. In a direct comparison with second-generation compounds conducted by the Company, its NEU-GENE compounds exhibited significantly better binding to both RNA and DNA, as well as substantially greater inhibition of the activity of targeted genetic sequences. Specificity can be assessed by comparing target inactivation of perfectly paired sequences and mispaired sequences. In the Company's direct comparison studies, NEU-GENE compounds exhibited substantially greater specificity than all other backbone types tested.

COST EFFECTIVENESS. The difficulty of synthesizing antisense compounds has been a concern in the field since its inception. The cost of producing gene-inactivating polymers depends to a considerable extent on the cost of the subunits from which they are constructed. The Company believes that because of abundant, low-cost materials, simpler production techniques and higher yields, the subunits used for NEU-GENE synthesis will cost substantially less than those used in the synthesis of second-generation backbones. After the genetic subunits are prepared, they must be assembled in a defined order to form the desired gene-inactivating polymer. The Company believes that the total cost of production of commercial quantities of NEU-GENES will be significantly less than that of gene-inactivating compounds prepared from natural or modified subunits by competitors.

DELIVERY. To reach their targets, antisense compounds must cross tissue and cellular barriers, including cellular and nuclear membranes. Preliminary research indicates that antisense compounds, including those of the Company, may face delivery problems when addressing many diseases. Accordingly, the Company has devoted substantial research effort to develop technology for delivering NEU-GENES to the interior of the cell. See "Drug Delivery--CYTOPORTER."

NEAR-TERM ANTISENSE PRODUCT DEVELOPMENT--RESTENOSIS

The first application of the Company's antisense technology is designed to treat restenosis, a cardiovascular disease. Restenosis results from the failure of balloon angioplasty due to a rapid growth of smooth muscle cells leading to a second blockage of a coronary artery. There are approximately 400,000 balloon angioplasties done in the United States each year with a failure rate of approximately 30% - 40%. Although balloon angioplasty may avoid expensive bypass surgery if successful, restenosis may ultimately require the patient to undergo bypass surgery. The Company has selected restenosis as its first antisense product opportunity because the Company believes that delivery of NEU-GENE compounds is achievable in this disease setting, NEU-GENE compounds have the combination of properties to address this disease, and because the restenosis market is estimated at more than $1 billion annually in the United States.

When a patient has a blocked coronary artery, a procedure called balloon angioplasty is frequently used to remove the blockage. In this procedure a balloon catheter is inserted in the artery up to the blockage and the balloon is inflated to open the artery. The balloon scrapes away the blockage as it interfaces with the blocked portion of the artery. During this process, vascular cells, including smooth muscle cells which underlie the blockage, may be damaged. This process may result in rapid cell division leading to closure of the artery a second time. Restenosis occurs in approximately 30% - 40% of these procedures and cannot be predicted from patient to patient. The precise mechanisms which cause this reaction are not known. However, scientific evidence suggests that, if the smooth muscle cells can be

prevented from dividing for a few days until the integrity of the artery is reestablished, restenosis could be prevented in a significant number of cases. Although there are a few new clinical approaches that attempt to prevent restenosis, none is very effective and all have significant risks associated with them.

There is scientific evidence that antisense compounds readily enter scrape-damaged artery cells, and the Company has demonstrated that its NEU-GENE antisense compounds readily enter and function in scraped cells in the laboratory. The Company has selected target genetic sequences, has produced drug candidates, and has demonstrated that its NEU-GENE compounds inhibit cell division in laboratory models for this disease. Compound AVI-2221, Resten-NG, is now in pre-clinical development for restenosis, and the Company expects to file an IND to begin clinical trials in 1997. See "Drug Approval Process and Other Government Regulations." The Company intends to co-develop its NEU-GENE restenosis compound with a pharmaceutical partner. There can be no assurance, however, that the Company will be able to enter into any partnerships or establish any such relationship on favorable terms.

DRUG DELIVERY--CYTOPORTER

Since NEU-GENES are large molecules that do not readily make their way into cells, the Company has been developing a delivery mechanism that would allow NEU-GENES, as well as other drugs, to be transported directly into their intercellular site of action. The Company has developed and has filed a patent for a molecular engine, called CYTOPORTER, to transport drugs across the lipid layers of cellular and endosomal membranes into the interior of cells. This engine is powered by the acidic differential (pH gradient) across the endosomal membrane, does not disrupt the membrane, and is disassembled into harmless byproducts after carrying out its transport function.

TECHNICAL OVERVIEW

The body has protective barriers that shield it from penetration by foreign agents. Two of these barriers, cell membranes and the outermost layer of the skin, are composed of lipid layers (fat-like substances). The lipid composition of these barriers prevents aqueous or water-soluble agents from the environment or in the blood from penetrating into the interior of cells and interfering with critical cellular functions. These lipid layers are the principal barriers to effective drug delivery for many drugs that have an intracellular site of action.

For optimal delivery, a drug should penetrate readily into both the aqueous compartments of the body (body fluids and the interior of cells) and into the lipid layers which enclose those compartments. This is rarely achieved because when lipid solubility is increased, water solubility is decreased, and vice versa. In the past, to achieve delivery, the structure of a selected drug candidate was chemically adjusted to produce a compromise in the solubility profile (i.e., less than ideal water solubility in order to achieve some level of lipid solubility). This trade-off has been successful with many drugs, but markedly less successful for many others. Currently, about one-third of all FDA-approved drugs have delivery problems, and many others never make it into clinical development due to delivery problems.

Small substances of low polarity can usually pass directly through the lipid layers of cell membranes. This appears to be the principal route of entry for most drugs without delivery problems. In contrast, substances with greater polarity and/or larger molecular size generally enter cells by being taken up and sequestered in a closed cellular compartment, or endosome, in a process called endocytosis. In this process, the interior of the endosome is acidified and the contents are exposed to degradative enzymes resulting in their breakdown. This is a natural cellular mechanism that protects the interior of the cell from exposure to foreign material.

Drugs that are polar in nature or are of a larger molecular size must cross the lipid membrane of the endosome before being degraded in order to gain entry into the interior of the cell. Many drugs in this category fail to achieve entry rapidly enough to be practical for pharmaceutical purposes.

CYTOPORTER DRUG DELIVERY SOLUTION. The Company believes it has developed an effective drug delivery engine, called CYTOPORTER, to facilitate the transport of polar and larger size drugs across the lipid barriers of the skin, cell membranes, and endosomes into the interior of cells at a rate that is practical to achieve pharmaceutical results. When drugs in this category are taken up by cells, they are sequestered within an endosome surrounded by a lipid barrier. The Company's CYTOPORTER drug delivery engine is designed to transport these problem drugs from the endosome into the interior of cells without disruption of the lipid membrane that traps them. CYTOPORTER is a synthetic peptide containing specifically positioned acidic groups along its structure. In neutral conditions, CYTOPORTER exists as a water-soluble random form with its acidic groups exposed and hydrated. On acidification in the endosome, CYTOPORTER undergoes a transition to a lipid-soluble, needle-like form where the acidic groups are masked by associating as mated pairs, and other polar groups are shielded from the environment. As the engine becomes lipid soluble, it penetrates across the surrounding lipid membrane. As it enters into the interior of the cell, it encounters a neutral environment which induces a transition back to a water-soluble form resulting in movement of the engine and drug into the interior of the cell. See "Figure 3" below.

FIGURE 3--CYTOPORTER DRUG DELIVERY AT THE CELLULAR LEVEL

CYTOPORTER DRUG TRANSPORT MECHANISM. In preparation for enhanced drug delivery, the selected drug is chemically linked to the CYTOPORTER engine. This process will be unique for each drug and must take into account each drug's mode and site of action. Several steps are involved in the transport of the selected drug from the blood or body fluids across lipid barriers into the interior of

target cells. After the drug is taken up by endocytosis, the endosome is acidified as the cell attempts to degrade its contents. As this acidification takes place, the engine converts from a water-soluble random form into a lipophilic, needle-like form. As the engine converts to its lipophilic form, it is PUSHED into the lipid membrane. Because the engine is longer than the membrane is thick, continued entry pushes the leading end of the engine into the interior of the cell. As the engine enters the neutral environment of the interior of the cell, it reverts automatically to its random, water-soluble form. This provides the motive force to PULL more of the engine across the membrane. Finally, ionization and solvation of the engine as it enters the interior pull the attached drug into the interior of the cell. The interior of the cell contains enzymes which rapidly break down the engine into harmless by-products. This is a natural process that results in freeing the drug to react with its intracellular target.

The Company believes that its CYTOPORTER delivery engine can be chemically adjusted to accommodate a range of delivery challenges. The transition from water to lipid solubility can be manipulated to afford a wide range of transitions to accommodate various endosome characteristics. Moreover, the Company believes that its CYTOPORTER can be adjusted to accommodate various drug loads from modest polar drugs to the more challenging large polymers like uncharged antisense compounds.

CYTOPORTER APPLICATIONS. The Company believes its CYTOPORTER molecular engines may provide improved pharmaceutical properties for a wide variety of drugs, including:

- Improved aqueous solubility for lipophilic drugs, such as Taxol.

- Improved transport of peptides from endosomes into the interior of cells (e.g., Cyclosporin) and transport of antisense polymers, particularly non-charged types such as NEU-GENES.

- Protection of polymer drugs from degradation by virtue of transport out of endosomes prior to the start of the degradation process.

- Improved transport of drugs into cells of the brain by specialized CYTOPORTER engines designed to provide both transport across the blood/brain barrier and subsequent entry into the interior of the brain.

- Delivery of highly cytotoxic drugs into bacteria living in an acidic environment, specifically H. PYLORI, a major cause of ulcers in the stomach.

- Transdermal delivery of lipophilic drugs.

TRANSDERMAL DRUG DELIVERY. The Company believes that its CYTOPORTER drug delivery engine may have the potential for transdermal delivery of selected substances. Placing an acidic, lipid-soluble form of the engine with an attached drug in contact with the surface of the skin results in the diffusion of the drug-engine through the lipid layers of the outer barrier of the skin (the extracellular matrix of the stratum corneum). Upon contact with the aqueous compartment underlying the stratum corneum, the drug-engine is drawn actively into this compartment through progressive ionization and solvation of the engine in the neutral conditions of this environment. This results in delivery of the attached drug into the underlying tissues, with subsequent distribution throughout the body.

NEAR-TERM DRUG DELIVERY PRODUCTS

The Company has selected paclitaxel (Taxol) and cyclosporin as the initial drugs to be combined with its CYTOPORTER delivery engine for its enhanced drug products. Additionally, the Company plans to apply its drug delivery technology to current drugs used to treat inflammation, pain, and infectious diseases. The Company plans to work with pharmaceutical collaborators to bring its drug delivery technology to the market in a timely fashion. The Company has not,

however, entered into any arrangements with pharmaceutical collaborators, and there can be no assurance that the Company will be able to do so or that, if entered into, the arrangements will be successful in bringing the technology to the market in a timely fashion.

PACLITAXEL-CP. Taxol is a Bristol-Myers Squibb drug whose patent life expires in 1997. It is the largest selling cancer therapeutic worldwide, with an estimated market size of $1 billion. However, severe solubility and delivery problems greatly limit its use and effectiveness.

Paclitaxel is indicated to treat ovarian cancer and is being used experimentally to treat numerous cancers including breast cancer. The current paclitaxel formulation is not readily soluble in aqueous solutions, requiring the use of the solvent Cremophor-Registered Trademark-EL. Injection of the drug/solvent combination causes hypersensitivity reactions, leaching of plasticizer from PVC infusion bags, haziness of diluted solutions and the need for in-line filters. The Company believes that combining its CYTOPORTER delivery engine with paclitaxel (Paclitaxel-CP) could eliminate the need for solvent in the formulation, thereby eliminating solvent-associated problems. This development could result in more optimized dosing, a reduction in side effects, and broader usage. The Company expects to file an IND to begin clinical trials of Paclitaxel-CP in 1997. There can be no assurance that the Company will be able to file or obtain approval for an IND in 1997 or at all.

CYCLOSPORIN-CP. Cyclosporin is a drug marketed by Sandoz AG whose patent life expired in 1996. It is the transplantation anti-rejection drug of choice worldwide, with an estimated market size of $1 billion. Difficulties with delivery prevent broader systemic use and topical applications.

Cyclosporin is an immunosuppressive drug that inhibits the function of lymphocytes involved in mounting a rejection response in patients undergoing organ transplantation. It has both poor solubility and poor delivery to its site of action. Consequently, larger doses of the drug are required in order to achieve a clinical level of effectiveness than if the drug readily reached its site of action. These higher dosages lead to renal toxicity and other problems that limit broader use. The Company believes that combining its CYTOPORTER drug delivery engine with cyclosporin (Cyclosporin-CP) potentially would eliminate these delivery difficulties, resulting in lower dosages, fewer side effects, and broader usage.

LONG-TERM PRODUCT DEVELOPMENT PROGRAM--NEU-GENE/CYTOPORTER DRUG COMBINATIONS

The following table summarizes the Company's broader drug development program. These programs combine the Company's NEU-GENE antisense technology with its CYTOPORTER drug delivery technology. For each indication, NEU-GENES have been designed to target the disease process at the genetic level. The Company has designed CYTOPORTER to deliver the NEU-GENE drugs to their intracellular site of action. Although NEU-GENES may display clinical efficacy on their own, the Company believes that broad use of NEU-GENES and other antisense compounds will require a drug delivery strategy. CYTOPORTER drug delivery engines were developed to facilitate the delivery of the NEU-GENE backbone and are currently being optimized for that purpose.

All of the development programs listed below are in the research or lead compound stage. Disease targets have been identified and NEU-GENE compounds have been produced and tested in laboratory and/ or animal models. In some cases, lead compounds have been produced which are undergoing optimization prior to pre-clinical development. The Company believes that several of these compounds may move into pre-clinical development in the next two years.

INFECTIOUS DISEASE TARGETS		HOST DISEASE TARGETS	
DEVELOPMENT PROGRAM	POTENTIAL INDICATIONS	DEVELOPMENT PROGRAM	POTENTIAL INDICATIONS

HIV	AIDS, HIV-I infection	TNF Alpha	Inflammation
Hepatitis B, C	Hepatitis, Liver Cancer	ICAM-I	Inflammation
Herpes Simplex Virus	Ocular, Genital Herpes	Telomerase	Cancer
Cytomegalovirus	Retinitis		

INFECTIOUS DISEASE TARGETS

HUMAN IMMUNODEFICIENCY VIRUS ("HIV"). The Company has initiated a program to produce and evaluate NEU-GENE agents directed at HIV targets. The Centers for Disease Control ("CDC") estimated that, by the end of 1995, there were one million HIV-infected persons in the United States and the cumulative number of diagnosed AIDS cases approximated 500,000. The World Health Organization ("WHO") estimated that worldwide there were approximately 20 million individuals infected with HIV by the end of 1995. Currently, there are few FDA-approved therapies for the treatment of HIV-infected individuals and drugs that are available have significant toxic side effects.

HEPATITIS B ("HBV"). The Company has initiated a program to produce and evaluate NEU-GENE compounds directed at HBV targets. HBV is a major health problem throughout the world, with epidemic infection levels in certain less developed countries. HBV was estimated in 1995 to be the second leading cause of death in the world. There are an estimated 200,000 to 300,000 new hepatitis infections in the United States each year and approximately one million people with chronic infection. Although there are

effective vaccines against HBV, there are currently no FDA-approved therapies for the treatment of chronic or acute HBV infection.

HEPATITIS C ("HCV"). The Company has initiated a program to produce and evaluate NEU-GENE compounds directed at HCV targets. HCV is a major health problem in many parts of the world, including the United States where there are approximately 150,000 new infections each year (about 40% of all acute hepatitis cases). The mechanism of transmission may involve the exchange of blood, although the route of transmission in many cases is obscure. There are no FDA-approved vaccines or therapeutic drugs for the treatment of HCV.

HERPES SIMPLEX VIRUS ("HSV"). The Company is developing HSV NEU-GENE compounds for the treatment of HSV type I and type II. Primary herpes infections are usually severe and may involve skin, mucous membranes, conjunctivae or the central nervous system. After remission of the initial infection, the virus establishes a latent phase which is interrupted periodically by outbreaks or herpetic lesions. Newborns can be infected at birth, which results in 50% mortality, and survivors may suffer from permanent neurological damage. Approximately 500,000 new cases each of genital herpes and oral herpes infection occur annually in the United States. It is estimated that approximately 10 million Americans suffer from some form of primary or recurrent herpes infection each year, and about 100 million people are chronically infected with type I and 25 million with type II.

CYTOMEGALOVIRUS ("CMV"). The Company is developing NEU-GENE compounds for the treatment of CMV infections. CMV is a member of the herpes family of viruses and is the most common cause of intrauterine and congenital infections in newborns of infected mothers. CMV retinitis is a severe problem in transplant patients and patients with immunosuppression (e.g., AIDS), often leading to blindness and pneumonitis, one of the most lethal viral syndromes. Current FDA-approved treatments for CMV retinitis suffer from dose-limiting side effects and have been associated with the emergence of drug-resistant CMV strains.

HOST DISEASE TARGETS

The Company is evaluating NEU-GENES for the treatment of inflammatory diseases and cancer, two major host diseases. Inflammation is a crucial component of a number of acute and chronic diseases. Although inflammation is a

key part of the normal physiological response to injury, alterations to the normal inflammatory process often lead to inflammatory diseases. These inflammatory disorders can affect practically every organ system in the body. The interactions at the molecular level that cause inflammation are becoming better understood and provide targets for intervention by antisense approaches. Two families of potential targets include cellular mediators (TNF alpha) and cellular adhesion molecules (ICAM-I), which are proteins involved in various stages of the inflammatory process. The Company believes that by targeting messenger RNA with NEU-GENE compounds, control of these mediators of inflammation may be possible.

TNF ALPHA. TNF alpha has been implicated as a significant factor in psoriasis, arthritis and other inflammatory disorders. Psoriasis is a serious chronic, recurring skin disease that involves proliferation of keratinocytes within the epidermal layer of the skin. Approximately four million individuals in the United States are afflicted by psoriasis and approximately 200,000 new cases are diagnosed annually. Current psoriasis therapies are varied but offer limited results. The Company has demonstrated that its NEU-GENE compounds are effective in inhibiting TNF alpha in laboratory and animal models of inflammation.

ICAM-I. ICAM-1 facilitates the migration of immune cells involved in both acute and chronic inflammation. Over-production of ICAM-1 is specifically implicated in a wide variety of inflammatory disorders, such as rheumatoid arthritis, asthma, psoriasis, organ transplant rejection, and inflammatory bowel disease. The Company has targeted NEU-GENES against the adhesion molecule ICAM-I and is testing these compounds in models of inflammation.

TELOMERASE. Telomerase is an enzyme found in cancer cells but rarely in normal cells and the Company believes that inhibiting it may provide a broad general approach to treat most cancers. There are approximately one million new cases of cancer of all types reported in the United States annually. This leads to about 500,000 deaths in the United States attributed to cancer each year, making it the country's second leading cause of death. The Company has developed NEU-GENE compounds that block telomerase activity in model systems in the laboratory.

COLLABORATIVE AGREEMENTS

The Company believes that antisense and drug delivery technologies are broadly applicable for the potential development of pharmaceutical products in many therapeutic areas. To exploit its core technologies as fully as possible, the Company's strategy is to enter into collaborative research agreements with major pharmaceutical companies directed at specific molecular targets. It is anticipated that collaborative research agreements may provide the Company with funding for programs conducted by the Company aimed at discovering and developing antisense compounds to inhibit the production of individual molecular targets. Partners may be granted options to obtain licenses to co-develop and to market drug candidates resulting from its collaborative research programs. The Company intends to retain manufacturing rights to its antisense products. There can be no assurance, however, it will be able to enter into collaborative research agreements with large pharmaceutical companies on terms and conditions satisfactory to the Company.

MANUFACTURING

The Company believes that it has developed significant proprietary manufacturing techniques which will allow large-scale, low-cost synthesis and purification of NEU-GENES. Because the Company's NEU-GENE compounds are based upon a malleable backbone chemistry, the Company believes that NEU-GENE synthesis will be more cost-effective than those of competing technologies. The Company has established sufficient manufacturing capacity to meet immediate research and development needs.

The Company currently intends to retain manufacturing rights to all products incorporating its proprietary and patented technology, whether such products are

sold directly by the Company or through collaborative agreements with industry partners. The Company's current production capacity is insufficient for the requirements of human clinical studies. Consequently, the Company intends to construct, or contract for, a GMP manufacturing facility beginning in 1997 at an estimated cost for construction of $5 million. The Company expects to finance this facility using proceeds of this offering and possibly funds from collaborative agreements, commercial debt and/or leasing arrangements. See "Use of Proceeds." Before a production facility is built, and to satisfy the need for compounds for clinical trials, the Company intends to work with contract manufacturing firms to provide GMP-quality NEU-GENE and CYTOPORTER compounds. There is no assurance, however, that the Company's plans will not change as a result of unforeseen contingencies, nor is there any assurance that the Company will have a need for a manufacturing facility, that such a facility can be built at a cost and on a schedule as described above, or that financing will be available on acceptable terms for such a project.

In March 1993, the Company moved to its present laboratory facility. This facility and the laboratory procedures followed by the Company have not been formally inspected by the FDA and will have to be approved as products move from the research phase through the clinical testing phase to commercialization. The Company will need to comply with FDA requirements for GMP in connection with human clinical trials and commercial production. See "Drug Approval Process and Other Government Regulations."

MARKETING STRATEGY

The Company plans to market the initial products for which it obtains regulatory approval, through marketing arrangements or other licensing arrangements with large pharmaceutical companies. Implementation of this strategy will depend on many factors, including the market potential of any products the Company develops and the Company's financial resources. The Company does not expect to establish a direct sales capability for therapeutic compounds for at least the next several years. To market products that will serve a large, geographically diverse patient population, the Company expects to enter into licensing, distribution, or partnering agreements with pharmaceutical companies that have large, established sales organizations. See "Risk Factors--Dependence on Third Parties for Clinical Testing, Manufacturing and Marketing."

PATENTS AND PROPRIETARY RIGHTS

The proprietary nature of, and protection for, the Company's product candidates, processes and know-how are important to its business. The Company plans to prosecute and defend aggressively its patents and proprietary technology. The Company's policy is to patent the technology, inventions, and improvements that are considered important to the development of its business. The Company also relies upon trade secrets, know-how, and continuing technological innovation to develop and maintain its competitive position.

The Company has 19 issued patents and several patent applications covering the basic compositions of matter, methods of synthesis and medical uses of NEU-GENES and CYTOPORTER compounds. These applications were filed in the United States, Canada, Europe, Australia, and Japan. Certain of the Company's patents were issued in the United States from 1991 through the present. Additional applications have been filed to cover numerous improvements and advances in these technologies. The Company feels that its patent protection is broad in scope and expects to continue to protect its proprietary technology with additional filings as appropriate.

There can be no assurance that any patents applied for will be granted or that patents held by the Company will be valid or sufficiently broad to protect the Company's technology or provide a significant competitive advantage, nor can the Company provide assurance that practice of the Company's patents or proprietary technology will not infringe third-party patents.

Although the Company believes that it has independently developed its technology and attempts to ensure that its technology does not infringe the

proprietary rights of others, if infringement were alleged and proven, there can be no assurance that the Company could obtain necessary licenses on terms and conditions that would not have an adverse effect on the Company. The Company is not aware of any asserted or unasserted claims that its technology violates the proprietary rights of any person. See "Risk Factors--Patents and Proprietary Rights."

DRUG APPROVAL PROCESS AND OTHER GOVERNMENT REGULATION

The production and marketing of the Company's products and its research and development activities are subject to regulation for safety, efficacy and quality by numerous governmental authorities in the United States and other countries. In the United States, drugs are subject to rigorous regulation. The Federal Food, Drug and Cosmetics Act, as amended, and the regulations promulgated thereunder, as well as other federal and state statutes and regulations, govern, among other things, the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of the Company's proposed products. Product development and approval within this regulatory framework take a number of years and involve the expenditure of substantial resources. In addition to obtaining FDA approval for each product, each drug manufacturing establishment must be registered with, and approved by the FDA. Domestic manufacturing establishments are subject to regular inspections by the FDA and must comply with GMP. To supply products for use in the United States, foreign manufacturing establishments must also

comply with GMP and are subject to periodic inspection by the FDA or by regulatory authorities in certain of such countries under reciprocal agreement with the FDA.

NEW DRUG DEVELOPMENT AND APPROVAL. The United States system of new drug approval is the most rigorous in the world. According to a February 1993 report by the Congressional Office of Technology Assessment, it cost an average of $359 million and took an average of 15 years from discovery of a compound to bring a single new pharmaceutical product to market. Approximately one in 1,000 compounds that enter the pre-clinical testing stage eventually makes it to human testing and only one-fifth of those are ultimately approved for commercialization. In recent years, societal and governmental pressures have created the expectation that drug discovery and development costs can be reduced without sacrificing safety, efficacy and innovation. The need to significantly improve or provide alternative strategies for successful pharmaceutical discovery, research and development remains a major health care industry challenge.

DRUG DISCOVERY. In the initial stages of drug discovery, before a compound reaches the laboratory, typically tens of thousands of potential compounds are randomly screened for activity in an assay assumed to be predictive of a particular disease process. This drug discovery process can take several years. Once a "screening lead" or starting point for drug development is found, isolation and structural determination are initiated. Numerous chemical modifications are made to the screening lead (called "rational synthesis") in an attempt to improve the drug properties of the lead. After a compound emerges from the above process, it is subjected to further studies on the mechanism of action and further IN VITRO animal screening. If the compound passes these evaluation points, animal toxicology is performed to begin to analyze the toxic effect of the compound, and if the results indicate acceptable toxicity findings, the compound emerges from the basic research mode and moves into the pre-clinical phase.

PRE-CLINICAL TESTING. During the pre-clinical testing stage, laboratory and animal studies are conducted to show biological activity of the compound against the targeted disease, and the compound is evaluated for safety. These tests can take up to three years or more to complete.

INVESTIGATIONAL NEW DRUG APPLICATION. After pre-clinical testing, an IND is filed with the FDA to begin human testing of the drug. The IND becomes effective if the FDA does not reject it within 30 days. The IND must indicate the results

of previous experiments, how, where and by whom the new studies will be conducted, how the chemical compound is manufactured, the method by which it is believed to work in the human body, and any toxic effects of the compound found in the animal studies. In addition, the IND must be reviewed and approved by an Institutional Review Board consisting of physicians at the hospital or clinic where the proposed studies will be conducted. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA.

PHASE I CLINICAL TRIALS. After an IND becomes effective, Phase I human clinical trials can begin. These studies, involving usually between 20 and 80 healthy volunteers, can take up to one year or more to complete. The studies determine a drug's safety profile, including the safe dosage range. The Phase I clinical studies also determine how a drug is absorbed, distributed, metabolized and excreted by the body, as well as the duration of its action.

PHASE II CLINICAL TRIALS. In Phase II clinical trials, controlled studies of approximately 100 to 300 volunteer patients with the targeted disease assess the drug's effectiveness. These studies are designed primarily to evaluate the effectiveness of the drug on the volunteer patients as well as to determine if there are any side effects on these patients. These studies can take up to two years or more and may be conducted concurrently with Phase I clinical trials. In addition, Phase I/II clinical trials may be conducted that evaluate not only the efficacy but also the safety of the drug on the patient population.

PHASE III CLINICAL TRIALS. This phase typically lasts up to three years or more and usually involves 1,000 to 3,000 patients with the targeted disease. During the Phase III clinical trials, physicians monitor the

patients to determine efficacy and to observe and report any adverse reactions that may result from long-term use of the drug.

NEW DRUG APPLICATION ("NDA"). After the completion of all three clinical trial phases, the data are analyzed and if the data indicate that the drug is safe and effective an NDA is filed with the FDA. The NDA must contain all of the information on the drug that has been gathered to date, including data from the clinical trials. NDAs are often over 100,000 pages in length. The average NDA review time for new pharmaceuticals approved in 1995 was approximately 19 months.

FAST TRACK REVIEW. In December 1992, the FDA formalized procedures for accelerating the approval of drugs to be marketed for the treatment of certain serious diseases for which no satisfactory alternative treatment exists, such as Alzheimer's disease and AIDS. If it is demonstrated that the drug has a positive effect on survival or irreversible morbidity during Phase II clinical trials, then the FDA may approve the drug for marketing without completion of Phase III testing.

APPROVAL. If the FDA approves the NDA, the drug becomes available for physicians to prescribe. The Company must continue to submit periodic reports to the FDA, including descriptions of any adverse reactions reported. For certain drugs which are administered on a long-term basis, the FDA may request additional clinical studies (Phase IV) after the drug has begun to be marketed to evaluate long-term effects.

In addition to regulations enforced by the FDA, the Company also is subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and future federal, state or local regulations. The Company's research and development activities involve the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standard prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result, and any such liability could exceed the resources of the Company.

For marketing outside the United States, the Company or its prospective licensees will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs and devices. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country.

COMPETITION

Several companies are pursuing the development of antisense technology, including Glaxo, Boehringer Ingelheim, Gilead, Hybridon, ISIS, and Lynx. All of these companies are in development stages, and, in some cases, are in human trials with antisense compounds generally similar to the Company's NEU-GENE compounds. While the Company believes that none of these companies is likely to introduce an antisense compound into the commercial market in the immediate future, many pharmaceutical and biotechnology companies, including all of those listed above, have financial and technical resources greater than those currently available to the Company and have more established collaborative relationships with industry partners than does the Company. Lynx has recently announced that it plans to begin clinical trials with an antisense compound for restenosis and that it will co-develop this potential application with Schwarz Pharma AG. The Company believes that the combination of pharmaceutical properties of its NEU-GENE compounds for restenosis afford it competitive advantages when compared to the antisense compounds of competitors. Many companies are pursuing drug delivery technology, including Biovail, Cellegy Pharmaceuticals, Cygnus, and Noven, among others. If the Company's antisense and drug delivery technologies attain regulatory and commercial acceptance as the basis for the commercial pharmaceutical products, it is to be expected that additional companies, including large, multinational pharmaceutical

companies, will choose to compete in the Company's markets, either directly or through collaborative arrangements.

The Company can also expect to compete with other companies exploiting alternative technologies that address the same therapeutic needs as does the Company's technology. The biopharmaceutical market is subject to rapid technological change, and it can be expected that competing technologies will emerge and will present a competitive challenge to the Company.

FACILITIES

The Company occupies 18,400 square feet of leased laboratory and office space at 4575 S.W. Research Way, Suite 200, Corvallis, Oregon 97333. The Company's executive office is located in 2,400 square feet of leased space at One S.W. Columbia, Suite 1105, Portland, Oregon 97258.

EMPLOYEES

As of December 31, 1996, the Company had 28 employees, 14 of whom hold advanced degrees. Twenty-three employees are engaged directly in research and development activities, and five are in administration. None of the Company's employees is covered by collective bargaining agreements, and management considers relations with its employees to be good.

LEGAL MATTERS

The Company is not currently involved in any litigation or legal proceedings and is not aware of any litigation or proceedings threatened against it.

MANAGEMENT

DIRECTORS AND EXECUTIVE OFFICERS

The directors and officers of the Company and their ages are as follows:

NAME	AGE	POSITION
John A. Beaulieu(1,2).....	61	Chairman of the Board
Denis R. Burger, Ph.D.(1).....	53	Chief Executive Officer, Director
James E. Summerton, Ph.D.(1).....	52	President, Chief Scientific Officer, Director
Alan P. Timmins.....	37	Chief Operating Officer, Chief Financial Officer
Dwight D. Weller, Ph.D.....	45	Vice President of Research and Development, Director
Nick Bunick.....	59	Director
Donald R. Johnson, Ph.D.(1).....	67	Director
James E. Reinmuth, Ph.D.(2).....	56	Director
Joseph Rubinfeld, Ph.D.(2).....	64	Director

(1) Member of the Executive Committee

(2) Member of the Compensation and Audit Committees

JOHN A. BEAULIEU has served as a director at the Company since 1991 and was elected Chairman in January 1996. He is the Managing Partner of Cascadia Pacific Management, LLC. ("CPM"). CPM is the contract manager for the Oregon Resource and Technology Development Fund, a state-funded venture capital fund. Mr. Beaulieu is also a general partner in Seed Management, a Vancouver B.C.-based venture capital firm. Mr. Beaulieu is a director of TCC Communications, Biozyme Inc., Virtual Corp., EPC Inc., and Purphonics LLC. Mr. Beaulieu received his BS&C degree in Accounting and an M.B.A. from the University of Santa Clara.

DENIS R. BURGER, PH.D. has served as Chief Executive Officer of the Company since January 1996 and as a director of the Company since 1991. From 1992 to 1995, he was President and Chief Operating Officer of the Company. He co-founded Epitope, Inc., a biotechnology company, and served as Chairman from 1981 to 1990. Dr. Burger has also been a member of Sovereign Ventures, LLC, a biotechnology consulting and merchant banking venture since 1991. Dr. Burger is a member of the Board of Directors of Cellegy Pharmaceuticals, Inc., an emerging pharmaceutical company focused on drug delivery, SuperGen, Inc., a pharmaceutical company focused on life-threatening diseases, and Trinity Biotech, plc., an Irish diagnostics company. Dr. Burger held the positions of Assistant Professor, Associate Professor and Professor at the Oregon Health Sciences University ("OHSU") from 1969 to 1986. Dr. Burger received a B.A. in Bacteriology and Immunology from the University of California, Berkeley, and his M.S. and Ph.D. degrees in Microbiology and Immunology from the University of Arizona.

JAMES E. SUMMERTON, PH.D. has been President and Chief Scientific Officer since January 1996. He founded the Company in 1980 and was its Chairman and Chief Executive Officer until January 1996. He held the position of assistant professor of Biochemistry-Biophysics at Oregon State University from 1978 to 1980. He is the inventor or co-inventor on all of the Company's patents and pending applications. Dr. Summerton received a B.S. in Chemistry from Northern Arizona University and a Ph.D. from the University of Arizona. Dr. Summerton first conceived of the concept of sequence-specific gene-inactivation in 1969.

ALAN P. TIMMINS has served as Chief Operating Officer and Chief Financial Officer of the Company since October 1996 and Executive Vice President and Chief Financial Officer since 1992. From 1981 to 1991, he served in a variety of positions at the firm of Price Waterhouse, LLP, most recently as a Senior

Manager specializing in high technology and emerging growth companies. Mr. Timmins received a B.B.A. in Accounting and Management from the University of Portland and an M.B.A. from Stanford University. He is a Certified Public

Accountant.

DWIGHT D. WELLER, PH.D. has served as Vice President of Research and Development of the Company since 1992 and as a director of the Company since 1991. He joined the faculty of Oregon State University in 1978 as Assistant Professor and was an Associate Professor in the Chemistry Department from 1984 to 1992. He is co-inventor on all but one of the Company's issued patents and patent applications. Dr. Weller received a B.S. in Chemistry from Lafayette College and a Ph.D. in Chemistry from the University of California at Berkeley, followed by postdoctoral work in Bio-organic Chemistry at the University of Illinois.

NICK BUNICK has served as a director of the Company since 1992. Mr. Bunick is the President and Chairman of the Board of three real estate development companies and one investment management company. From 1987 to 1990, he was a Vice President of In-Focus Systems, Inc., a company that specializes in the design and manufacturing of flat panel display products. Mr. Bunick received a B.S. in Business Administration and Marketing from the University of Florida.

DONALD R. JOHNSON, PH.D. has served as a director of the Company since 1991. He founded Technology Conversion, a research and new product development consulting firm in 1986, and has served as its President since that time. Dr. Johnson was Director, New Technology Research, Diagnostic and Bioresearch Products at E. I. du Pont de Nemours and Company, Inc. from 1983 to 1986. Dr. Johnson received a B.A. in Chemistry from the University of Minnesota and a Ph.D. in Analytical Chemistry from the University of Wisconsin.

JAMES E. REINMUTH, PH.D. has served as a director of the Company since 1991. He was Dean of the College of Business Administration at the University of Oregon from 1976 to 1994 and since 1995 has been the Charles H. Lundquist Distinguished Professor of Business at University of Oregon. Dr. Reinmuth is the Chairman of the Board of Directors and Chief Executive Officer of Athena Medical Corp., a feminine health care company. He is also the President and Chief Executive Officer of Fuji Advanced Filtration, Inc. Dr. Reinmuth is a general partner in Rubicon Asset Management Corp. Dr. Reinmuth received a B.S. in Mathematics from the University of Washington and his M.S. and Ph.D. degrees in Statistics from Oregon State University.

JOSEPH RUBINFELD, PH.D. has served as a director of the Company since 1996. He has served as Chief Executive Officer, President, Chief Scientific Officer and a director of SuperGen, Inc. since its inception in 1991. Dr. Rubinfeld was one of the four initial founders of Amgen, Inc. in 1980 and served as Vice President and Chief of Operations until 1983. From 1987 to 1990, he was Senior Director at Cetus Corporation. From 1968 to 1980, Dr. Rubinfeld was employed at Bristol-Myers Squibb (formerly Bristol-Myers International Corporation) in a variety of positions, most recently as Vice President and Director of Research and Development. He received his B.S. in Chemistry from C.C.N.Y., and his M.A. and Ph.D. degrees in Chemistry from Columbia University.

DIRECTOR COMPENSATION

Directors who are not employees of the Company receive a non-qualified option to purchase 33,333 shares of Common Stock at an exercise price equal to the fair market value of the Common Stock on the date of the grant pursuant to the Company's Stock Incentive Plan, which vest over four years. See "Stock Incentive Plan." Drs. Johnson and Rubinfeld are reimbursed for expenses for attendance at board meetings.

SCIENTIFIC ADVISORY COMMITTEE

The Company has established relationships with a group of scientific advisors with expertise in their respective fields that complement the Company's product research and development. The following individuals serve on the Scientific Advisory Committee to the Company's Board of Directors:

CHRISTOPHER K. MATHEWS, PH.D. is Chairman of the Scientific Advisory

Committee. He is the Chairman of the Biochemistry-Biophysics Department at Oregon State University. Dr. Mathews received a B.A. from Reed College and a Ph.D. in Biochemistry from the University of Washington. He performed postdoctoral work in Biochemistry at the University of Pennsylvania. Dr. Mathews joined the Scientific Advisory Committee in 1994 and was a director of the Company from 1991 to 1994.

STEVEN H. HEFENEIDER, PH.D. has been a staff immunologist at the Veterans Administration Medical Center in Portland, Oregon since 1985 and Research Associate Professor in the Department of Medicine at OHSU since 1987. He received a B.S. in biology from the University of Oregon, an M.S. in genetics from the University of Minnesota and a Ph.D. in Microbiology and Immunology from OHSU in 1981.

DAVID J. HINRICHS, PH.D. is a Research Scientist at the Veterans Administration Medical Center in Portland, Oregon and a Professor of Microbiology and Immunology at OHSU. From 1976 to 1985 he was a Professor of Microbiology at Washington State University. He received a Ph.D. in Microbiology from the University of Arizona in 1967.

JEFFREY D. HOSENPUD, M.D. has been Chief of Cardiology and a Professor of Medicine at the Medical College of Wisconsin in Milwaukee since 1994. Dr. Hosenpud was Professor of Medicine and Head of the Cardiac Transplant Medicine at OHSU from 1980 to 1994, and Medcal Director for the Registry of the International Society for Heart & Lung Transplantation since 1993. Dr. Hosenpud completed his M.D. at the University of California, Los Angeles.

EXECUTIVE COMPENSATION

SUMMARY COMPENSATION TABLE. The following table sets forth compensation received in the fiscal year ended December 31, 1995, certain summary information concerning compensation of the Company's Chief Executive Officer (the "Named Officer"). No other executive officer received compensation exceeding $100,000.

SUMMARY COMPENSATION TABLE

		ANNUAL COMPENSATION		LONG-TERM COMPENSATION	
	YEAR	SALARY	BONUS	SECURITIES UNDERLYING OPTIONS	ALL OTHER COMPENSATION
James E. Summerton, Ph.D., Chairman and Chief Executive Officer	1995	$ 90,400	--	--	--

AGGREGATE OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION VALUES

The following table sets forth information concerning the value of unexercised options as of December 31, 1995, held by the Named Officer. No options were exercised by the Named Officer during the year ended December 31, 1995.

	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1995 (#)		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1995 ($)(1)	
NAME	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
James E. Summerton, Ph.D.(2)	132,220	93,334	144,502	125,418

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(1) Based upon the difference between the fair market value of the securities

underlying the options at December 31, 1995 ($6.00 per share as determined by the Board of Directors) and the exercise price of the options.

(2) Dr. Summerton resigned as the Chairman and Chief Executive Officer in February 1996 and is now the Company's President and Chief Scientific Officer.

EMPLOYMENT AGREEMENTS

The Company has entered into employment contracts with Drs. Burger and Summerton that provide for annual base salaries for Drs. Burger and Summerton of $120,000 and $90,000, respectively, that increase to $225,000 and $150,000, respectively, on January 1, 1997. The employment agreements also provide for the payment to Drs. Burger and Summerton of one additional year of base salary and the immediate and full vesting of all options granted to them under the Company's Stock Incentive Plan in the event of the termination of their respective employment for reasons, other than cause, or upon their voluntary termination upon a change in control of the Company. In addition, the employment agreements prevent Drs. Burger and Summerton from competing with the Company for a period of two years following termination of their employment for any reason. Dr. Summerton's agreement also provides that the Company shall engage him as a consultant for a term of one year following the termination of his employment at the rate of $75,000 per year and grants the Company the option to engage him as a consultant on the same terms for a second year. Drs. Burger and Summerton are deferring their January 1, 1997, salary increases until completion of the Company's initial public offering.

STOCK INCENTIVE PLAN

The Stock Incentive Plan was adopted by the Board of Directors and was approved by the shareholders in 1992. The purposes of the Stock Incentive Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to the employees and consultants of the Company and to promote the success of the Company's business.

The Stock Incentive Plan is administered by the Compensation Committee (the "Committee"). Transactions under the Stock Incentive Plan are intended to comply with all applicable conditions of Rule 16b-3 promulgated under the Securities Exchange Act of 1934. In addition to determining who will be granted options, the Committee has the authority and discretion to determine when options will be granted and the number of options to be granted. The Committee may determine which options may be intended to qualify ("Incentive Stock Options") for special treatment under the Internal Revenue Code of 1986, as amended from time to time (the "Code"), or whether options are Non-Qualified Options ("Non-Qualified Stock Options") which are not intended to so qualify. The Committee also may determine the time or times when each option becomes exercisable, the duration of the exercise period for options and the form or forms of the instruments evidencing options granted under the Stock Incentive Plan. The Committee may adopt, amend and rescind such rules and regulations as in its opinion may be advisable for the administration of the Stock Incentive Plan. The Committee also may construe the Stock Incentive Plan and

the provisions in the instruments evidencing option granted under Stock Incentive Plan to employee and officer participants and is empowered to make all other determinations deemed necessary or advisable for the administration of the Stock Incentive Plan.

The Stock Incentive Plan contains provisions for proportionate adjustment of the number of shares for outstanding options and the option price per share in the event of stock dividends, recapitalizations resulting in stock splits or combinations or exchanges of shares. In addition, the Stock Incentive Plan provides for adjustments in the purchase price and exercise period by the Committee in the event of a proposed dissolution or liquidation of the Company, or any corporate separation or division, including, but not limited to, split-up, split-off or spin-off, or a merger or consolidation of the Company with another corporation, or in the event there is a change in constitution of

the Common Stock of the Company.

Participants in the Stock Incentive Plan may be selected by the Committee from employees, officers, directors and consultants of the Company. In determining the persons to whom options will be granted and the number of shares to be covered by each option, the Committee will take into account the duties of the respective persons, their present and potential contributions to the success of the Company and such other factors as the Committee deems relevant to accomplish the purposes of the Stock Incentive Plan.

Only employees of the Company as the term "employees" is defined for the purposes of Code will be entitled to receive Incentive Stock Options. Incentive Stock Options granted under the Stock Incentive Plan are intended to satisfy all requirements for incentive stock options under Section 422 of the Code and the Treasury Regulations thereunder.

Each option granted under the Stock Incentive Plan will be evidenced by a written option agreement between the Company and the optionee. The option price of any Incentive Stock Option may be not less than 100% of the fair market value per share on the date of grant of the option; provided, however, that any Incentive Stock Option granted under the Stock Incentive Plan to a person owning more than 10% of the total combined voting power of the Common Stock will have an option price of not less than 110% of the fair market value per share on the date of grant of the Incentive Stock Option. Each Non-Qualified Stock Option granted under the Stock Incentive Plan will be at an exercise price as determined by the Board of Directors. Fair market value on the date of grant is defined as a value determined in the discretion of the Board; provided, however, that where there is a public market for the Common Stock, the fair market value per share shall be the closing price of the Common Stock for the date of grant or authorization of sale, as reported in THE WALL STREET JOURNAL.

The exercise period of Incentive Stock Options granted under the Stock Incentive Plan generally may not exceed 10 years from the date of grant thereof. Incentive Stock Options granted to a person owning more than 10 percent of the total combined voting power of the Common Stock of the Company will be for no more than five years. The Committee will have the authority to accelerate or extend the exercisability of any outstanding option at such time and under such circumstances as it, in its sole discretion, deems appropriate. However, no exercise period may be extended to increase the term of an Incentive Stock Option beyond 10 years from the date of grant.

To exercise an option, the optionee must pay the full exercise price in whole or in part consisting of cash or transfer to the Company of shares having a fair market value at the time of such exercise equal to the option exercise price.

An option may not be exercised unless the optionee then is an employee, officer, director or consultant of the Company, and unless the optionee has remained continuously as an employee, officer, director or consultant of the Company since the date of grant of the option. If the optionee ceases to be an employee, officer, director or consultant of the Company, all options which are not vested under the Stock Incentive Plan by the time of death, disability, retirement or termination of employment, immediately terminate. All options granted to such optionee that are fully vested to such optionee but not yet exercised, will terminate (i) 12 months after the date the optionee ceases to be an employee, officer or director of the

Company by reason of death or disability; or (ii) 30 days after termination of employment for any other reason.

If an optionee dies while an employee, officer, director or consultant, or is terminated by reason of disability, all options theretofore granted to such optionee, unless earlier terminated in accordance with their terms, may be exercised at any time within one year after the date of death or disability of said optionee, by the optionee or by the optionee's estate or by a person who acquired the right to exercise such options by request or inheritance, but only

to the extent of the right to exercise as of the date of death or disability.

Options granted under the Stock Incentive Plan are not transferable other than by will or by the laws of descent and distribution. Options may be exercised during the lifetime of the optionee only by the optionee. An optionee has no rights as a shareholder with respect to any shares covered by an option until the option has been exercised.

The Company, to the extent permitted by law, may deduct a sufficient number of shares due to the optionee upon exercise of the option to allow the Company to pay federal, state and local taxes of any kind required by law to be withheld upon the exercise otherwise due to the optionee. The Company is not obligated to advise any optionee of the existence of any tax or the amount which the Company will be required to withhold.

As of the date of this Prospectus, options to purchase 1,126,886 shares of the Company's Common Stock have been granted and are outstanding under the Stock Incentive Plan, at a weighted average exercise price of $4.73 per share, and 206,447 shares were available for future grants.

LIMITATION OF LIABILITY AND INDEMNIFICATION

The Company's Third Restated Articles of Incorporation eliminate, to the fullest extent permitted by Oregon law, liability of a director to the Company or its shareholders for monetary damages for conduct as a director. While liability for monetary damages has been eliminated, equitable remedies such as injunctive relief or rescission remain available. In addition, a director is not relieved of his or her responsibilities under any other law, including the federal securities laws.

The Company's Third Restated Articles of Incorporation require the Company to indemnify its directors to the fullest extent not prohibited by law. The Company believes that the limitation of liability provisions in its Third Restated Articles may enhance the Company's ability to attract and retain qualified individuals to serve as directors.

CERTAIN TRANSACTIONS

James E. Summerton, Ph.D., the President, Chief Scientific Officer, and a director of the Company, is the general partner of Anti-Gene Development Group ("AGDG"), and was the general partner of NEU-GENE Development Group ("NGDG"). AGDG was founded in 1981 and NGDG was founded in 1984 to own and fund the Company's development of gene-targeted therapeutics and NEU-GENE technology. NGDG and AGDG were combined in 1989, with AGDG as the surviving entity. The Company entered into numerous research and development contracts with AGDG and NGDG, all of which were completed or were superseded by the Technology Transfer Agreement described below.

On February 9, 1993, the Company and AGDG entered into a Technology Transfer Agreement wherein effective May 19, 1993, AGDG conveyed all intellectual property in its control related to antisense technology (the "Intellectual Property") to the Company. As part of the conveyance, the Company tendered to AGDG for liquidation all partnership units received pursuant to an exchange offer and received a 49.37% undivided interest in the intellectual property. The Company then purchased the remaining undivided interest in the Intellectual Property in consideration of payments of 4.05% of gross revenues in excess of $200 million, if any, sales of products by the Company which would, in the absence of the Technology Transfer Agreement, infringe a valid claim under any patent transferred to the Company (the "Technology Fees"). The Company's obligation to make payments of the Technology Fees with respect to a particular product terminates upon the expiration of all patents transferred to the Company pursuant to the Technology Transfer Agreement related to that product.

Pursuant to a License and Option Agreement by and between AGDG and the Company dated February 9, 1993 (the "License Agreement"), the Company granted to AGDG a royalty-free non-exclusive license to use the Intellectual Property for

internal research and development and to sell small quantities of products incorporating the Intellectual Property. In addition, if AGDG develops any specific prototype products which incorporate any of the Intellectual Property, the Company has the right to commercialize and market such products in consideration of payments of 4.05% of gross revenues, in excess of the $200 million exemption for all products utilizing the Intellectual Property, to AGDG. If the Company elects not to commercialize the proposed AGDG product or fails to meet certain product development milestones, the Company is required to grant AGDG a license to develop and market the proposed product (an "AGDG License"). The Company is entitled to payments for the AGDG License but only if the proposed product incorporates patented improvements developed by the Company to the Intellectual Property. The amount of the license fee payable to the Company by AGDG pursuant to an AGDG License, if any, is equal to the percentage payable to AGDG for products sold by the Company and covered by the Technology Transfer Agreement. AGDG also has the right to obtain an exclusive royalty-free license to use, develop, make, sell, distribute and sublicense products utilizing the Intellectual Property at such time as the Company has less than 10 full-time employees engaged in developing, testing or marketing products based upon the Intellectual Property for a period of at least 180 consecutive days.

On January 20, 1997, AGDG and the Company amended the Technology Transfer Agreement to reduce the Technology Fees arising from the sale of diagnostic products from 4.05% to 2% and to remove the $200 million exemption with respect to sales of such diagnostic products. The Company also granted to AGDG royalty-bearing licenses to make, use and sell certain quantities of product derived from the Intellectual Property.

Pursuant to an August 4, 1992 restatement of earlier agreements between Oregon Resource and Technology Development Fund ("ORTDF"), the Company, AGDG and Dr. Summerton, warrants to purchase 600,000 shares of the Company's Common Stock were issued to ORTDF. John A. Beaulieu was president of ORTDF and a director of the Company at that time. In connection with this issuance to ORTDF, they acquired certain rights to register such shares under the Securities Act. See "Description of Securities--Registration Rights." In May 1993, ORTDF acquired warrants to purchase an additional 357,500 shares in exchange for 325 partnership units in AGDG conveyed to the Company. Such warrants

carry no registration rights. In March 1996, ORTDF exercised its warrants in a cashless exercise for which ORTDF acquired 957,452 shares of the Company's Common Stock.

Effective July 1, 1992, the Company entered into a consulting arrangement with a former director of the Company, pursuant to which the Company agreed to pay $3,500 per month for 24 months, and agreed to issue 11,000 shares of Common Stock of the Company for no additional consideration. Under this arrangement, and for services rendered prior to such date, the former director received $10,500 in 1994, $52,500 in 1993 (including a $10,500 advance on 1994 payments), and $69,500 in 1992.

Donald R. Johnson, Ph.D., a director of the Company, performed consulting services and incurred reimbursable expenses for the Company for which he was paid approximately $7,000 in 1995, $13,500 in 1994, and $6,500 in 1993.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of the Company's Common Stock as of February 28, 1997, and as adjusted to give effect to the sale by the Company of the shares of Common Stock offered (assuming no exercise of the Overallotment Option or the Warrants) by (i) each person (or group of affiliated persons) who is known by the Company to own beneficially 5% or more of the Common Stock, (ii) each of the Company's directors, (iii) the Named Officer, and (iv) all executive officers and directors of the Company as a group. The information as to each person or entity has been furnished by such person or entity, and unless otherwise indicated, the

persons named in the table have sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable.

NAME AND ADDRESS OF BENEFICIAL OWNER(1)	SHARES BENEFICIALLY OWNED(1)	PERCENT OF SHARES OUTSTANDING BEFORE OFFERING	PERCENT OF SHARES OUTSTANDING AFTER OFFERING(1)
James E. Summerton, Ph.D.(2) ANTIVIRALS INC. 4575 S.W. Research Way, Suite 200 Corvallis, OR 97333	2,553,473	24.8%	21.6%
John A. Beaulieu(3) 4370 N.E. Halsey, Suite 233 Portland, OR 97213	990,785	9.7%	8.5%
Oregon Resource and Technology(4) Development Fund 4370 N.E. Halsey, Suite 233 Portland, OR 97213	990,785	9.7%	8.5%
Denis R. Burger, Ph.D.(5) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	406,886	3.9%	3.4%
Dwight D. Weller, Ph.D(6) ANTIVIRALS INC. 4575 S.W. Research Way, Suite 200 Corvallis, OR 97333	370,178	3.6%	3.1%
Nick Bunick(7) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	200,733	2.0%	1.7%
Alan P. Timmins(8) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	68,825	*	*
Donald R. Johnson, Ph.D.(9) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	64,333	*	*

NAME AND ADDRESS OF BENEFICIAL OWNER(1)	SHARES BENEFICIALLY OWNED(1)	PERCENT OF SHARES OUTSTANDING BEFORE OFFERING	PERCENT OF SHARES OUTSTANDING AFTER OFFERING(1)
James E. Reinmuth, Ph.D.(10) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	51,817	*	*
Joseph Rubinfeld, Ph.D.(11) ANTIVIRALS INC. 1 S.W. Columbia, Suite 1105 Portland, OR 97258	8,334	*	*
All executive officers and directors as a group (10 persons)	4,715,365	53.7%	45.9%

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* Less than 1%.

(1) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of Common Stock subject to options and warrants currently exercisable or convertible, or exercisable or convertible within 60 days of February 28, 1997, are deemed beneficially owned and outstanding for computing the percentage of the person holding such securities, but are not considered outstanding for computing the percentage of any other person.

(2) Includes 158,886 shares subject to options exercisable as of February 28,

1997, and 727,154 shares held jointly or by others over which Dr. Summerton exercises voting and investment power. Does not include 66,667 shares subject to options exercisable after February 28, 1997.

(3) Includes 33,334 shares subject to options exercisable as of February 28, 1997, of which Mr. Beaulieu is the record owner. ORTDF is the beneficial owner of all of the 33,334 options for which Mr. Beaulieu is the record owner. Includes 957,452 shares of common stock issued to Cascadia Pacific Management, LLC for the benefit of ORTDF.

(4) Includes 33,334 shares subject to options held of record by Mr. Beaulieu and exercisable as of February 28, 1997 and 957,452 shares issued to Cascadia Pacific Management, LLC for the benefit of ORTDF. See Note 3 above.

(5) Includes 34,434 shares held by Sovereign Ventures, LLC, a limited liability company in which Dr. Burger is a general partner. Also includes 365,735 shares subject to options exercisable as of February 28, 1997.

(6) Includes 247,634 shares held jointly or by others over which Dr. Weller exercises voting and investment power, 94,018 shares subject to options exercisable by Dr. Weller and 1,860 shares subject to options exercisable by Dr. Weller's spouse as of February 28, 1997, and 25,000 shares subject to warrants exercisable as of February 28, 1997. Does not include 25,000 shares subject to warrants exercisable after February 28, 1997.

(7) Includes 50,667 shares held jointly or by others over which Mr. Bunick exercises voting and investment power. Includes 33,334 shares subject to options exercisable as of February 28, 1997.

(8) Includes 68,825 shares subject to options exercisable as of February 28, 1997. Does not include 38,333 shares subject to options exercisable after February 28, 1997.

(9) Includes 33,334 shares subject to options and 16,667 shares subject to warrants exercisable as of February 28, 1997.

(10) Includes 33,334 shares subject to options exercisable as of February 28, 1997. Also includes 5,051 shares held jointly with others over which Dr. Reinmuth exercises voting and investment power.

(11) Includes 8,334 shares subject to options exercisable as of February 28, 1997. Does not include 25,000 shares subject to options exercisable after February 28, 1997.

DESCRIPTION OF SECURITIES

The authorized capital stock of the Company consists of 50,000,000 shares of Common Stock and 2,000,000 shares of Preferred Stock.

UNITS

Each Unit consists of one share of Common Stock and one redeemable Warrant. The Units will separate immediately upon issuance, and the Common Stock and Warrants that comprise the Units will trade as separate securities.

COMMON STOCK

The Company is authorized to issue 50,000,000 shares of Common Stock. As of December 31, 1996, 8,779,763 shares of Common Stock were outstanding, held of record by 881 shareholders. The holders of Common Stock are entitled to one vote for each share held of record on all matters submitted to a vote of shareholders (and do not have any cumulative voting rights). Subject to preferences that may be applicable to outstanding shares of Preferred Stock, if any, the holders of Common Stock are entitled to receive ratably such dividends as may be declared by the Company's Board of Directors out of funds legally available therefor. Holders of Common Stock have no preemptive, subscription or redemption rights,

and there are no redemption, conversion or similar rights with respect to such shares. In the event of a liquidation, dissolution or winding up of the Company, holders of the Common Stock are entitled to share equally and ratably in the assets of the Company, if any, remaining after the payment of all liabilities of the Company and the liquidation preference of any outstanding class or series of Preferred Stock. The outstanding shares of Common Stock are fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to any series of Preferred Stock that the Company may issue in the future, as described below.

PREFERRED STOCK

The Company is authorized to issue up to 2,000,000 shares of undesignated Preferred Stock. No shares of Preferred Stock have been issued. The Board of Directors has the authority to issue the undesignated Preferred Stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued shares of undesignated Preferred Stock, as well as to fix the number of shares constituting any series and the designation of such series, without any further vote or action by the shareholders. The Board of Directors, without shareholder approval, may issue Preferred Stock with voting and conversion rights which could materially adversely affect the voting power of the holders of Common Stock. The issuance of Preferred Stock could also decrease the amount of earnings and assets available for distribution to holders of Common Stock. In addition, the issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company. At present, the Company has no plans to issue any shares of Preferred Stock. See "Risk Factors--Anti-Takeover Effects of Certain Charter Provisions and Oregon Law" and "Certain Provisions of the Company's Articles of Incorporation and Bylaws."

WARRANTS

REPRESENTATIVE'S WARRANT. In connection with this offering, the Company has authorized the issuance of the Representative's Warrant and has reserved 300,000 shares of Common Stock for issuance upon exercise of such warrant (including the warrants issuable upon exercise of the Representative's Warrant). The Representative's Warrant will entitle the holder to acquire up to 150,000 Units at an exercise price of $ per Unit (120% of the initial public offering price for the Units). The Representative's Warrant will be exercisable at any time from the first anniversary of the date of this Prospectus until the fifth anniversary of the date of this Prospectus.

THE WARRANTS. Each Warrant will entitle the holder to purchase one share of Common Stock at a price of $ per share (150% of the initial public offering price for the Units). The Warrants will, subject to certain conditions, be exercisable at any time until the fifth anniversary of the date of this Prospectus, unless earlier redeemed. The Warrants are redeemable by the Company at $.25 per Warrant, upon 30 days written notice, if the closing bid price (as defined in the Warrant Agreement described below) per share of the Common Stock for each of the 20 consecutive trading days immediately preceding the date notice of redemption is given equals or exceeds 200% of the then-current Warrant exercise price. If the Company gives notice of its intention to redeem, a holder would be forced either to exercise his or her Warrant before the date specified in the redemption notice or accept the redemption price.

The Warrants will be issued in registered form under a Warrant Agreement (the "Warrant Agreement") between the Company and , as warrant agent (the "Warrant Agent"). The shares of Common Stock underlying the Warrants, when issued upon exercise of a Warrant, will be fully paid and nonassessable, and the Company will pay any transfer tax incurred as a result of the issuance of Common Stock to the holder upon its exercise.

The Warrants and the Representative's Warrant contain provisions that protect the holders against dilution by adjustment of the number of shares that may be purchased by the holders. Such adjustments will occur in the event, among others, that the Company makes certain distributions to holders of its Common

Stock. The Company is not required to issue fractional shares upon the exercise of a Warrant or Representative's Warrant. The holder of a Warrant or Representative's Warrant will not possess any rights as a shareholder of the Company until such holder exercises the Warrant or Representative's Warrant.

A Warrant may be exercised upon surrender of the Warrant Certificate on or before the expiration date of the Warrant at the offices of the Warrant Agent, with the form of "Election To Purchase" on the reverse side of the Warrant Certificate completed and executed as indicated, accompanied by payment of the exercise price (by certified or bank check payable to the order of the Company or by wire transfer of good funds) for the number of shares with respect to which the Warrant is being exercised.

For a holder to exercise the Warrants, there must be a current registration statement in effect with the Commission and qualification in effect under applicable state securities laws (or applicable exemptions from state qualification requirements) with respect to the issuance of shares or other securities underlying the Warrants. The Company has agreed to use all commercially reasonable efforts to cause a registration statement with respect to such securities under the Securities Act to be filed and to become and remain effective in anticipation of and prior to the exercise of the Warrants and to take such other actions under the laws of various states as may be required to cause the sale of Common Stock (or other securities) issuable upon exercise of Warrants to be lawful. If a current registration statement is not in effect at the time a Warrant is exercised, the Company may at its option redeem the Warrant by paying to the holder cash equal to the difference between the market price of the Common Stock on the exercise date and the exercise price of the Warrant. The Company will not be required to honor the exercise of Warrants if, in the opinion of the Company's Board of Directors upon advice of counsel, the sale of securities upon exercise would be unlawful.

The foregoing discussion of certain terms and provisions of the Warrants and Representative's Warrant is qualified in its entirety by reference to the detailed provisions of the Warrant Agreement and Representative's Warrant Certificate, the form of each of which has been filed as an exhibit to the Registration Statement of which this Prospectus is a part.

For the life of the Warrants and Representative's Warrant, the holders thereof have the opportunity to profit from a rise in the market price of the Common Stock without assuming the risk of ownership of the shares of Common Stock issuable upon the exercise of the warrants. The warrant holders may be expected to exercise their warrants at a time when the Company would, in all likelihood, be able to obtain any needed capital by an offering of Common Stock on terms more favorable than those provided for by the

warrants. Further, the terms on which the Company could obtain additional capital during the life of the warrants may be adversely affected.

OTHER WARRANTS. The Company has outstanding certain warrants to purchase 147,902 shares of Common Stock, of which warrants to purchase 25,000 shares are not presently exercisable. Of these warrants, 38,001 are exercisable through the period ending 90 days after the expiration of lock-up agreements entered into in connection with this offering, of which 27,001 are exercisable at a price of $0.0003 per share and 11,000 are exercisable at a price of $1.14 per share. Warrants to purchase 14,467 shares are exercisable through July 17, 1997, at an exercise price of $0.0003 per share. Warrants to purchase 25,000 shares are exercisable through December 31, 1997, at an exercise price of $0.0003 per share. Warrants to purchase 1,100 shares are exercisable through August 8, 2001, at an exercise price of $4.56 per share. Warrants to purchase 44,334 shares are currently exercisable and do not have a termination date; warrants to purchase 11,000 of these shares are exercisable at a price of $1.14 per share and warrants to purchase 33,334 of these shares are exercisable at $0.0003 per share.

The Company also has outstanding a warrant to purchase 219,331 shares of Common Stock, exercisable through May 14, 2002, at an exercise price of $4.56

per share. The exercise price is subject to adjustment to make the price paid by the warrant holder equivalent to the price paid by certain independent third-party purchasers buying after the issue date of the warrant. The Company has agreed to register the shares underlying this warrant under certain circumstances. See "Registration Rights."

The Company additionally has outstanding warrants to purchase 60,200 shares of Common Stock at an exercise price of $9.00 per share. These warrants are exercisable through the earlier of August 30, 2001 or three years from the date of closing by the Company of an initial public offering.

CERTAIN FEDERAL INCOME TAX CONSIDERATIONS

The following discussion sets forth certain federal income tax consequences, under current law, relating to the purchase and ownership of the Units and the Common Stock and Warrants constituting the Units. The discussion is a summary and does not purport to deal with all aspects of federal taxation that may be applicable to an investor, nor does it consider specific facts and circumstances that may be relevant to a particular investor's tax position. Certain holders (such as dealers in securities, insurance companies, tax exempt organizations, foreign persons and those holding Common Stock or Warrants as part of a straddle or hedge transaction) may be subject to special rules that are not addressed in this discussion. This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, and on administrative and judicial interpretations as of the date hereof, all of which are subject to change. ALL INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE SPECIFIC TAX CONSEQUENCES TO THEM OF THIS OFFERING, INCLUDING THE APPLICABILITY OF FEDERAL, STATE, LOCAL AND FOREIGN TAX LAWS.

ALLOCATION OF PURCHASE PRICE. Each Unit as a whole will have a tax basis equal to the cost of the Unit. The measure of income or loss from certain transactions described below depends upon the tax basis in each of the Warrants and the Common Stock comprising the Unit. The tax basis for each of the Warrants and the Common Stock will be determined by allocating the cost of the Unit among the securities which comprise the Unit in proportion to the relative fair market values of those elements at the time of acquisition.

U.S. HOLDERS OF COMMON STOCK OR WARRANTS. The following discussion concerns the material U.S. federal income tax consequences of the ownership and disposition of Common Stock or Warrants applicable to a U.S. Holder of such Common Stock or Warrants. In general, a "U.S. Holder" is (i) a citizen or resident of the U.S., (ii) a corporation or partnership created or organized in the U.S. or under the laws of the U.S. or any state, or (iii) an estate or trust whose income is includable in gross income for U.S. federal income tax purposes regardless of its source.

DIVIDENDS. Dividends, if any, paid to a U.S. Holder generally will be includable in the gross income of such U.S. Holder as ordinary income to the extent of such U.S. Holder's share of the Company's current or accumulated earnings and profits. See "Dividend Policy."

SALE OF COMMON STOCK. The sale of Common Stock should generally result in the recognition of gain or loss to a U.S. Holder thereof in an amount equal to the difference between the amount realized and such U.S. Holder's tax basis in the Common Stock. If the Common Stock constitutes a capital asset in the hands of a U.S. Holder, gain or loss upon the sale of the Common Stock will be characterized as long-term or short-term capital gain or loss, depending on whether the Common Stock has been held for more than one year.

EXERCISE AND SALE OF WARRANTS. No gain or loss will be recognized by a U.S. Holder of a Warrant on the purchase of shares of Common Stock for cash pursuant to an exercise of a Warrant (except that gain will be recognized to the extent cash is received in lieu of fractional shares). The tax basis of Common Stock received upon the exercise of a Warrant will equal the sum of the U.S. Holder's tax basis for the exercised Warrant and the exercise price. The holding period of the Common Stock acquired upon the exercise of the Warrant will begin on the

date the Warrant is exercised and the Common Stock is purchased (i.e., it does not include the period during which the Warrant was held).

Gain or loss from the sale or other disposition of a Warrant (or loss in the event that the Warrant expires unexercised as discussed below), other than pursuant to a redemption by the Company, will be capital gain or loss to its U.S. Holder if the Common Stock to which the Warrant relates would have been a capital asset in the hands of such holder. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder has held the Warrant for more than one year at the time of the sale, disposition or lapse. It is unclear whether the redemption of a Warrant by the Company would generate ordinary or capital income or loss.

EXPIRATION OF WARRANTS WITHOUT EXERCISE. If a holder of a Warrant allows it to expire without exercise, the expiration will be treated as a sale or exchange of the Warrant on the expiration date. The U.S. Holder will have a taxable loss equal to the amount of such U.S. Holder's tax basis in the lapsed Warrant. If the Warrant constitutes a capital asset in the hands of the U.S. Holder, such taxable loss will be characterized as long-term or short-term capital loss depending upon whether the Warrant was held for the required long-term holding period.

BACKUP WITHHOLDING. A shareholder who is a U.S. Holder may be subject to backup withholding at the rate of 31% in connection with distributions received with respect to his or her shares, unless the shareholder (i) is a corporation or comes within certain other exempt categories and, when required, demonstrates this fact or (ii) provides a correct taxpayer identification number, certifies as to no loss of exemption for backup withholding and otherwise complies with applicable requirements of the backup withholding rules. Any amount paid as backup withholding will be creditable against such shareholder's income tax liability. The Company will report to the shareholders and the I.R.S. the amount of any "reportable payments" distributed and the amount of tax withheld, if any, with respect to the shares.

NON-U.S. HOLDERS OF COMMON STOCK OR WARRANTS. The following discussion concerns the material U.S. federal income and estate tax consequences of the ownership and disposition of shares of Common Stock or Warrants applicable to Non-U.S. Holders of such shares of Common Stock or Warrants. In general, a "Non-U.S. Holder" is any holder other than a U.S. Holder, as defined in the preceding section.

DIVIDENDS. Dividends, if any, paid to a Non-U.S. Holder generally will be subject to U.S. with holding tax at a 30% rate (or a lower rate as may be prescribed by an applicable tax treaty) unless the dividends are effectively connected with a trade or business of the Non-U.S. Holder within the United States. See "Dividend Policy." Dividends effectively connected with such a trade or business will generally not be subject to withholding (if the Non-U.S. Holder properly files an executed IRS Form 4224 with the payor of the dividend) and generally will be subject to federal income tax on a net income basis at regular graduated

rates. In the case of a Non-U.S. Holder which is a corporation, such effectively connected income also may be subject to the branch profits tax (which is generally imposed on a foreign corporation on the repatriation from the U.S. of effectively connected earnings and profits). The branch profits tax may not apply if the recipient is a qualified resident of certain countries with which the U.S. has an income tax treaty. To determine the applicability of a tax treaty providing for a lower rate of withholding, dividends paid to an address in a foreign country are presumed, under the current I.R.S. position, to be paid to a resident of that country, unless the payor had definite knowledge that such presumption is not warranted or an applicable tax treaty (or U.S. Treasury Regulations thereunder) requires some other method for determining a Non-U.S. Holder's treaty status. The Company must report annually to the I.R.S. and to each Non-U.S. Holder the amount of dividends paid to, and the tax withheld with respect to, each Non-U.S. Holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated by an applicable tax treaty.

Copies of these information returns also may be made available under the provisions of a specific treaty or agreement to the tax authorities in the country in which the Non-U.S. Holder resides.

SALE OF COMMON STOCK. Generally, a Non-U.S. Holder will not be subject to federal income tax on any gain realized upon the disposition of such holder's shares of Common Stock unless (i) the gain is effectively connected with a trade or business carried on by the Non-U.S. Holder within the U.S. (in which case the branch profits tax may apply); (ii) the Non-U.S. Holder is an individual who holds the shares of Common Stock as a capital asset and is present in the U.S. for 183 days or more in the taxable year of the disposition and to whom such gain is U.S. source; (iii) the Non-U.S. Holder is subject to tax pursuant to the provisions of U.S. tax law applicable to certain former U.S. citizens or residents; or (iv) the Company is or has been a "U.S. real property holding corporation" for federal income tax purposes (which the Company does not believe that it is or is likely to become) at any time during the five-year period ending on the date of disposition (or such shorter period that such shares were held) and, subject to certain exceptions, the Non-U.S. Holder held, directly or indirectly, more than 5% of the Common Stock.

EXERCISE AND SALE OF WARRANTS. Generally, a Non-U.S. Holder who recognizes capital gain from the sale of a Warrant, other than pursuant to a redemption by the Company, will not be subject to U.S. federal income tax unless (i) the gain is effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States (in which case the branch profits tax may apply); (ii) the Non-U.S. Holder is an individual who is present in the U.S. for 183 days or more in the taxable year of sale and to whom the gain is U.S. source; (iii) the Non-U.S. Holder is subject to tax pursuant to the provisions of U.S. law applicable to certain former U.S. citizens or residents; or (iv) the Company is or has been a "U.S. real property holding corporation" for federal income tax purposes (which the Company does not believe it is or is likely to become) at any time during the five-year period ending on the date of sale (or such shorter period such Warrants were held) and, subject to certain exceptions, the Non-U.S. Holder held, directly or indirectly, more than 5% of the Warrants.

ESTATE TAX. Shares of Common Stock and Warrants owned or treated as owned by an individual who is not a citizen or resident (as specially defined for U.S. federal estate tax purposes) of the U.S. at the time of death will be includable in the individual's gross estate for U.S. federal estate tax purposes, unless an applicable tax treaty provides otherwise, and may be subject to U.S. federal estate tax.

BACKUP WITHHOLDING AND INFORMATION REPORTING. Under current U.S. federal income tax law, backup withholding tax (which generally is a withholding tax imposed at the rate of 31% on certain payments to persons that fail to furnish certain required information) and information reporting apply to payments of dividends (actual and constructive) made to certain non-corporate U.S. persons. The backup withholding tax and information reporting requirements applicable to U.S. persons will generally not apply to dividends paid on Common Stock to a Non-U.S. Holder at an address outside the U.S., although dividends paid to Non-U.S. Holders will be reported and taxed as described above under "Dividends."

The payment of the proceeds.from the disposition of shares of Common Stock or Warrants through the U.S. office of a broker will be subject to information reporting and backup withholding unless the holder, under penalties of perjury, certifies, among other things, its status as a Non-U.S. Holder or otherwise establishes an exemption. Generally, the payment of the proceeds from the disposition of shares of Common Stock or Warrants to or through a non-U.S. office of a broker will not be subject to backup withholding and will not be subject to information reporting. In the case of the payment of proceeds from the disposition of shares of Common Stock or Warrants through a non-U.S. office of a broker that is a U.S. person or a "U.S.-related person," existing regulations require information reporting (but not backup withholding) on the payment unless the broker receives a statement from the owner, signed under penalties of perjury, certifying, among other things, its status as a non-U.S.

Holder or the broker has documentary evidence in its files that the owner is a Non-U.S. Holder and the broker has no actual knowledge to the contrary. For this purpose, a "U.S.-related person" is (i) a "controlled foreign corporation" for U.S. federal income tax purposes or (ii) a foreign person 50% or more of whose gross income from all sources for the three-year period ending with the close of its taxable year preceding the payment (or for such part of the period that the broker has been in existence) is derived from activities that are effectively connected with the conduct of a U.S. trade or business.

Any amounts withheld from a payment to a Non-U.S. Holder under the backup withholding rules will be allowed as a credit against such holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is furnished to the I.R.S. Non-U.S. Holders should consult their tax advisors regarding the application of these rules to their particular situations, the availability of an exemption therefrom and the procedure for obtaining such an exemption, if available.

REGISTRATION RIGHTS

REPRESENTATIVE'S WARRANT. The Representative's Warrant provides certain rights with respect to the registration under the Securities Act of the 300,000 shares issuable upon exercise thereof (including shares of Common Stock issuable upon the exercise of the Warrants included therein). The Company has agreed that during the entire period between the first anniversary and fifth anniversary after the date of this Prospectus it will register the issuance of such shares upon the exercise of the Representative's Warrant (and, if necessary, their resale) so as to permit their public resale without restriction. These registration rights could result in substantial future expense to the Company and could adversely affect the Company's ability to complete future equity or debt financings. Furthermore, the registration and sale of Common Stock of the Company held by or issuable to the holders of registration rights, or even the potential of such sales, could have an adverse effect on the market price of the securities offered hereby.

OTHER REGISTRATION RIGHTS. Holders of 834,568 shares of Common Stock, or their transferees, are entitled to certain rights with respect to the registration of such shares under the Securities Act. Under the terms of an Agreement to Purchase Limited Partnership Interests dated as of August 4, 1992 among AGDG, the Company and ORTDF, if the Company proposes to register any of its Common Stock for sale to the public, ORTDF may require the Company to include in such registration any shares of Common Stock issued or issuable upon the exercise of certain warrants to purchase Common Stock of the Company held by ORTDF subject to certain conditions and limitations. As of the date of this Prospectus, ORTDF held 599,970 shares of Common Stock which enjoy registration rights. ORTDF will not participate in this offering.

Under the terms of a Registration Rights Agreement dated as of May 20, 1992 between the Company and Ice Bear, Inc., an Alaska corporation ("Ice Bear"), if the Company proposes to register any of its stock or other securities under the Act in connection with a public offering of those securities for cash, Ice Bear may require the Company to include in such registration any shares of Common Stock held or issued or issuable upon the exercise of certain warrants to purchase Common Stock of the Company held by Ice Bear subject to certain conditions and limitations. As of the date of this Prospectus, Ice Bear holds 21,930

shares of Common Stock and warrants to purchase 219,334 shares of Common Stock, all of which enjoy registration rights. Ice Bear will not participate in this offering.

CERTAIN PROVISIONS OF THE COMPANY'S ARTICLES OF INCORPORATION AND BYLAWS

Certain provisions of the Company's Third Restated Articles of Incorporation and Bylaws could make more difficult the acquisition of the Company by means of a tender offer, a proxy contest or otherwise and the removal of incumbent officers and directors. These provisions include authorization of the issuance

of up to 2,000,000 shares of Preferred Stock, with such characteristics, and potential effects on the acquisition of the Company, as are described in "Preferred Stock" above. This provision is expected to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of the Company to negotiate first with the Company. The Company believes that the benefits of increased protection of the Company's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure the Company outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms. See "Risk Factors--Anti-Takeover Effects of Certain Charter Provisions and Oregon Law."

OREGON CONTROL SHARE AND BUSINESS COMBINATION STATUTES

Upon completion of this offering, the Company will become subject to the Oregon Control Share Act (the "Control Share Act"). The Control Share Act generally provides that a person (the "Acquiring Person") who acquires voting stock of an Oregon corporation in a transaction that results in the Acquiring Person holding more than 20%, 33 1/3% or 50% of the total voting power of the corporation (a "Control Share Acquisition") cannot vote the shares it acquires in the Control Share Acquisition ("control shares") unless voting rights are accorded to the control shares by (i) a majority of each voting group entitled to vote and (ii) the holders of a majority of the outstanding voting shares, excluding the control shares held by the Acquiring Person and shares held by the Company's officers and inside directors. The term "Acquiring Person" is broadly defined to include persons acting as a group.

The Acquiring Person may, but is not required to, submit to the Company a statement setting forth certain information about the Acquiring Person and its plans with respect to the Company. The statement may also request that the Company call a special meeting of shareholders to determine whether voting rights will be accorded to the control shares. If the Acquiring Person does not request a special meeting of shareholders, the issue of voting rights of control shares will be considered at the next annual meeting or special meeting of shareholders. If the Acquiring Person's control shares are accorded voting rights and represent a majority or more of all voting power, shareholders who do not vote in favor of voting rights for the control shares will have the right to receive the appraised "fair value" of their shares which may not be less than the highest price paid per share by the Acquiring Person for the control shares.

Upon completion of this offering, the Company will become subject to certain provision of the Oregon Business Corporation Act that govern business combinations between corporations and interested shareholders (the "Business Combination Act"). The Business Combination Act generally provides that if a person or entity acquires 15% or more of the voting stock of an Oregon corporation (an "Interested Shareholder"), the corporation and the Interested Shareholder, or any affiliated entity of the Interested Shareholder, may not engage in certain business combination transactions for three years following the date the person became an Interested Shareholder. Business combination transactions for this purpose include (a) a merger or plan of share exchange, (b) any sales, lease, mortgage or other disposition of 10% or more of the assets of the corporation and (c) certain transactions that result in the issuance of capital stock of the corporation to the Interested Shareholder. These restrictions do not apply if (i) the Interested Shareholder, as a result of the transaction in which such person became an Interested Shareholder, owns at least 85% of the outstanding voting stock of the corporation (disregarding shares owned by directors who are also officers and certain employee benefit plans), (ii) the board of directors approves the share

acquisition or business combination before the Interested Shareholder acquires 15% or more of the corporation's outstanding voting stock or (iii) the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation (disregarding shares owned by the Interested Shareholder) approve the transaction after the Interested Shareholder acquires 15% or more of the corporation's voting stock. See "Risk Factors--Anti-Takeover Effects of

Certain Charter Provisions and Oregon Law."

TRANSFER AGENT AND REGISTRAR

The Transfer Agent and Registrar for the Company's securities is ChaseMellon Shareholder Services.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for the Units, Common Stock or Warrants. No prediction can be made of the effect, if any, that future market sales of shares of Common Stock or the availability of such shares for sale will have on the prevailing market price of the Common Stock following this offering. Nevertheless, sales of substantial amounts of such shares in the open market following this offering could adversely affect the prevailing market price of the Common Stock.

Upon completion of this offering and assuming no exercise of outstanding options and warrants to purchase Common Stock after December 31, 1996, the Company will have 10,279,763 outstanding shares of Common Stock. See "Description of Securities." The 1,500,000 shares of Common Stock which are included in the Units and sold in this offering (or 1,725,000 shares if the Overallotment Option is exercised in full) by the Company and, subject to certain conditions, up to 1,725,000 shares of Common Stock issuable upon exercise of the Warrants (including Warrants subject to the Overallotment Option, and, commencing approximately 12 months after the date of this Prospectus, up to 300,000 shares of Common Stock that are issuable upon exercise of the Representative's Warrant (including the Warrants included therein), will, subject to any applicable state law restrictions on secondary trading (see "Risk Factors-- Possible Illiquidity of Trading Market"), be freely tradeable without restriction under the Securities Act, except that any shares purchased by an "affiliate" of the Company (as that term is defined in Rule 144 under the Securities Act) will be subject to the resale limitations of Rule 144.

The remaining 8,779,763 shares of Common Stock are "restricted" shares within the meaning of Rule 144 under the Securities Act (the "Restricted Shares"). Of this number, approximately shares not subject to lock-up agreements will be eligible for immediate resale without restriction under Rule 144(k) of the Securities Act. An additional shares held for more than two but less than three years by shareholders who are not affiliates of the Company and who are not subject to lock-up agreements are eligible for sale under Rule 144 of the Securities Act, subject to the volume and other limitations thereunder. Upon expiration of lock-up agreements with the Representative three months after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements with the Representative six months after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements with the Representative nine months after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). Upon expiration of lock-up agreements with the Representative one year after the date of this Prospectus (or earlier with the consent of the Representative), shares will be eligible for immediate resale subject to the limitations of Rule 144 and shares will be eligible for resale immediately without restriction pursuant to Rule 144(k). As of the date of this Prospectus, options to purchase shares of Common Stock have been granted

under the Stock Incentive Plan, which shares, if acquired pursuant to the exercise of options, are subject to lock-up agreements which expire one year

after the date of this Prospectus (or earlier with the consent of the Representative).

In general, under Rule 144, as currently in effect, any person (or persons whose shares are aggregated) who has beneficially owned Restricted Shares for at least two years, is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of (i) 1% of the then outstanding shares of the Company's Common Stock (approximately 102,798 shares immediately after this offering) or (ii) the average weekly trading volume of the Company's Common Stock in the Nasdaq National Market during the four calendar weeks immediately preceding the date on which notice of the sale is filed with the Securities and Exchange Commission. Sales pursuant to Rule 144 are also subject to certain requirements relating to manner of sale, notice and availability of current public information about the Company. A person who is not deemed to have been an affiliate of the Company at any time during the 90 days immediately preceding the sale and whose Restricted Shares have been fully-paid for three years since the later of the date they were acquired from the Company or the date they were acquired from an affiliate of the Company may sell such Restricted Shares under Rule 144(k) without regard to the limitations and requirements described above. Under Rule 701, shares privately issued under certain compensatory stock-based plans, such as the Stock Incentive Plan, may be resold under Rule 144 by non-affiliates, subject only to the manner of sale requirements, and by affiliates without regard to the two-year holding period requirement, commencing 90 days after the Company becomes subject to certain periodic reporting requirements.

Shortly after this offering, the Company intends to file a registration statement under the Securities Act covering shares of Common Stock reserved for issuance under the Company's outstanding stock options and Stock Incentive Plan (other than shares issued upon the exercise of options prior to the effective date of such registration statement). Based on the number of options outstanding and options and shares reserved for issuance, such registration statement would cover approximately 1,333,333 shares. Such registration statement will automatically become effective upon filing. All shares issuable under the Company's Stock Incentive Plan are subject to a six-month lock-up period following the date of this Prospectus.

Prior to this offering, there has been no established public market for the Common Stock. No prediction can be made of the effect, if any, that sales of shares under Rule 144 or the availability of shares for sale will have on the market price of the Common Stock prevailing from time to time after the offering. The Company is unable to estimate the number of shares that may be sold in the public market under Rule 144, because such amount will depend on the trading volume in, and market price for, the Common Stock and other factors. Nevertheless, sales of substantial amounts of shares in the public market, or the perception that such sales could occur, could adversely affect the market price of the Common Stock of the Company. See "Underwriting."

UNDERWRITING

The underwriters named below (the "Underwriters"), for whom Paulson Investment Company, Inc. is acting as representative, have severally agreed subject to the terms and conditions of the Underwriting Agreement between the Company and the several Underwriters (the "Underwriting Agreement"), to purchase from the Company, and the Company has agreed to sell to the Underwriters, the number of Units set forth in the table below at the price set forth on the cover page of this Prospectus.

UNDERWRITER	NUMBER OF UNITS
Paulson Investment Company, Inc.	
Total	1,500,000

The Underwriting Agreement provides that the obligations of the Underwriters to purchase such Units are subject to certain conditions. The Underwriters are committed to purchase all the 1,500,000 Units offered by this Prospectus, but not the 225,000 Units subject to the Overallotment Option, if any are purchased.

The Representative has advised the Company that the Underwriters propose to offer the Units to the public at the initial public offering price set forth on the cover page of this Prospectus and to selected dealers at such price less a concession within the discretion of the Representative, and that the Underwriters and such dealers may reallow a concession to other dealers, including the Underwriters, within the discretion of the Representative. After the initial public offering of the Units, the public offering price, the concessions to selected dealers and the reallowance to other dealers may be changed by the Representative.

The Company has granted the Underwriters the Overallotment Option, expiring at the close of business 45 days after the date of this Prospectus, to purchase up to 225,000 additional Units from the Company on the same terms as apply to the sale of the Units set forth above. The Underwriters may exercise the Overallotment Option only to cover overallotments, if any, incurred in the sale of Units.

The Company has agreed that if it elects to redeem the Warrants at any time commencing one year after the date of this Prospectus, it will retain the Representative as the Company's solicitation agent ("Warrant Solicitation Agent"). The Company has agreed to pay the Warrant Solicitation Agent for its services a solicitation fee equal 2% of the total amount paid by the holders of the Warrants whom the Warrant Solicitation Agent solicited to exercise the Warrants. The exercise will be presumed to be unsolicited unless the customer states in writing that the transaction was solicited by the Warrant Solicitation Agent and designates in writing the registered representative at the Warrant Solicitation Agent entitled to receive compensation for the exercise. The fee is not payable for the exercise of any Warrant held by a Warrant Solicitation Agent in a discretionary account at the time of exercise, unless the Warrant Solicitation Agent receives from the customer prior specific written approval of such exercise.

The Representative has informed the Company that it does not expect the Underwriters to confirm sales of Units offered by this Prospectus to any account on a discretionary basis.

The Underwriting Agreement provides for indemnification between the Company and the Underwriters against certain liabilities, including liabilities under the Securities Act, and for contribution by the Company and the Underwriters to payments that may be required to be made in respect thereof.

The Company has agreed to pay the Representative a nonaccountable expense allowance equal to 2.5% of the gross proceeds from the sale of Units offered hereby, of which $35,000 has already been paid.

The Company has agreed to issue to the Representative the Representative's Warrant to purchase from the Company up to 150,000 Units at an exercise price per Unit equal to $ (120% of the initial offering price of the Units). The Representative's Warrant is exercisable for a period of four years beginning one year from the date of this Prospectus, and is not transferable for a period of one year from the date of this Prospectus except to one of the Underwriters or to any individual who is either a partner or an officer of an Underwriter, or by will or by the laws of descent and distribution. The Representative's Warrant is not redeemable by the Company. The Company has agreed to maintain an effective registration statement with respect to the issuance of securities underlying the Representative's Warrant (and, if necessary, to allow their public resale without restriction) at all times during the period in which the Representative's Warrant is exercisable. Such securities are being registered on

the Registration Statement of which this Prospectus is a part.

The Company has agreed that, for a period of 1 year following the closing of this offering, it will not, subject to certain exceptions, offer, sell, contract to sell, grant any option for the sale or otherwise dispose of any securities of the Company without the Representative's consent. The Company's officers and directors and certain other shareholders have agreed that for a period of one year following the closing of this offering, they will not offer, sell, contract to sell, grant any option for the sale or otherwise dispose of any securities of the Company (other than intra-family transfer or transfers to trusts for estate planning purposes), without the Representative's consent. See "Shares Eligible For Future Sale."

Prior to this offering, there has been no public market for the Units, Common Stock or Warrants. Accordingly, the initial public offering price has been determined by negotiations between the Company and the Representative. Among the factors considered in determining the initial public offering price were the history and the prospects of the Company and the industry in which it operates, the status and development prospects for the Company's proposed products and the trends of such results, the experience and qualifications of the Company's executive officers and the general condition of the securities markets at the time of this offering.

LEGAL MATTERS

The validity of the Units offered hereby will be passed upon for the Company by Ater Wynne Hewitt Dodson & Skerritt, LLP, Portland, Oregon. Certain legal matters with respect to patents and proprietary rights of the Company, as described in this Prospectus, are being passed upon for the Company by Peter Dehlinger & Associates, Palo Alto, California, patent counsel to the Company. Certain legal matters relating to this offering will be passed upon for the Underwriters by Weiss, Jensen, Ellis & Howard, P.C., Portland, Oregon.

EXPERTS

The financial statements of the Company as of December 31, 1995 and for each of the two years in the period ended December 31, 1995 appearing in this Prospectus have been audited by Arthur Andersen LLP, independent auditors, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

The information contained in "Risk Factors--Patents and Proprietary Rights" and in "Business-- Patents and Proprietary Rights" have been reviewed and approved by Peter Dehlinger & Associates, Palo Alto, California, patent counsel to the Company, as experts in such matters, and are included in reliance upon their review and approval.

ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission (the "Commission") a Registration Statement on Form SB-2 under the Securities Act with respect to the Units offered hereby, of which this Prospectus forms a part. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and the Units, Common Stock and Warrants, reference is made to the Registration Statement and such exhibits and schedules. Statements contained in this Prospectus as to the contents of any contract or other documents referred to are not necessarily complete and, in each instance, if such contract or document is filed as an exhibit to the Registration Statement, reference is made to the copy of such contract or document filed as an exhibit, each such statement being qualified in all respects by such reference to such exhibit. The Registration Statement and the exhibits and schedules thereto may be inspected without charge at the Commission's principal office in Washington, D.C., and copies of all or any part thereof may be obtained from the Public Reference Section of the Commission, 450

Fifth Street, N.W., Washington, D.C. 20549, upon payment of certain fees prescribed by the Commission. The Commission also maintains a site on the World Wide Web that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The address of such site is http://www.sec.gov.

ANTIVIRALS INC.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Shareholders of
ANTIVIRALS INC.

We have audited the accompanying balance sheets of ANTIVIRALS INC. (an Oregon corporation in the development stage) as of December 31, 1995 and 1994, and the related statements of operations, shareholders' equity and cash flows for the years ended December 31, 1995 and 1994 and for the period from inception (July 22, 1980) to December 31, 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of ANTIVIRALS INC. as of December 31, 1995 and 1994, and the results of its operations and its cash flows for the years ended December 31, 1995 and 1994 and for the period from inception (July 22, 1980) to December 31, 1995, in conformity with generally accepted accounting principles.

Portland, Oregon,
March 22, 1996 (except with respect to
the matters discussed in Note 7 as
to
which the date is January 13, 1997)

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

BALANCE SHEETS
ASSETS

	DECEMBER 31, 1994	DECEMBER 31, 1995	SEPTEMBER 30, 1996 (UNAUDITED)
CURRENT ASSETS:			
Cash and cash equivalents	$ 1,850,369	$ 680,892	$ 3,614,724
Short-term securities--available-for-sale	192,000	212,750	30,000
Other current assets	15,881	7,236	12,550
Total current assets	2,058,250	900,878	3,657,274
PROPERTY AND EQUIPMENT, at cost:			
Laboratory equipment	587,935	677,728	719,349
Office equipment	181,003	181,803	182,459
Leasehold improvements	1,464,603	1,464,603	1,464,603
	2,233,541	2,324,134	2,366,411
Less--Accumulated depreciation and amortization	(926,587)	(1,379,377)	(1,735,822)
	1,306,954	944,757	630,589
PATENT COSTS, net	321,814	449,254	471,168
OTHER ASSETS	29,847	29,847	29,847
	$ 3,716,865	$ 2,324,736	$ 4,788,878
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Accounts payable	$ 52,061	$ 85,298	$ 100,684
Accrued payroll	123,586	149,715	81,888
Deferred payments	20,225	19,051	19,051
Deferred rent	4,874	--	--
Total current liabilities	200,746	254,064	201,623
COMMON STOCK SUBJECT TO RESCISSION, $.0001 par value, 1,292,973 issued and outstanding	3,121,965	3,121,965	3,121,965
SHAREHOLDERS' EQUITY:			
Preferred stock, $.0001 par value, 2,000,000 shares authorized; none issued and outstanding	--	--	--
Common stock, $.0001 par value, 50,000,000 shares authorized; 5,670,655, 5,816,838 and 7,486,790 shares issued and outstanding, respectively	567	582	749
Additional paid-in capital	8,113,822	9,189,496	13,217,628
Unrealized gain on available-for-sale securities	61,000	96,750	--
Deficit accumulated during the development stage	(7,781,235)	(10,338,121)	(11,753,087)
Total shareholders' equity (deficit)	394,154	(1,051,293)	1,465,290
	$ 3,716,865	$ 2,324,736	$ 4,788,878

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF OPERATIONS

	YEAR ENDED DECEMBER 31, 1994	YEAR ENDED DECEMBER 31, 1995	JULY 22, 1980 (INCEPTION) TO DECEMBER 31, 1995	NINE MONTHS ENDED SEPTEMBER 30, 1995 (UNAUDITED)	NINE MONTHS ENDED SEPTEMBER 30, 1996 (UNAUDITED)	JULY 22, 1980 (INCEPTION) TO SEPTEMBER 30, 1996 (UNAUDITED)
REVENUES, from grants and research contracts	$ --	$ 82,500	$ 662,270	$ 82,500	$ 16,827	$ 679,097
OPERATING EXPENSES:						
Research and development	1,631,130	2,097,796	7,282,020	1,640,906	1,177,157	8,459,177
General and administrative	678,705	609,723	3,935,771	437,159	432,252	4,368,023
Total operating expenses	2,309,835	2,707,519	11,217,791	2,078,065	1,609,409	12,827,200

OTHER INCOME	63,563	68,133	217,400	54,888	177,616	395,016
NET LOSS	$ (2,246,272)	$ (2,556,886)	$ (10,338,121)	$ (1,940,677)	$ (1,414,966)	$ (11,753,087)
NET LOSS PER SHARE	$ (0.33)	$ (0.37)		$ (0.28)	$ (0.18)	
SHARES USED IN PER SHARE CALCULATION	6,726,625	6,982,459		6,966,583	8,051,477	

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF SHAREHOLDERS' EQUITY

	PARTNERSHIP UNITS	COMMON STOCK SHARES	COMMON STOCK AMOUNT	ADDITIONAL PAID-IN CAPITAL	UNREALIZED GAIN ON AVAILABLE-FOR-SALE SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL SHAREHOLDERS' EQUITY
BALANCE AT JULY 22, 1980 (inception)	--	--	$ --	$ --	$ --	$ --	
No activity							
BALANCE AT OCTOBER 31, 1980	--	--	--	--	--	--	
Issuance of partnership units and common stock in October 1981 for equipment and supplies valued at $3,500 and technology	1,000	1,666,667	167	3,333	--	--	
Issuance of partnership units and common stock for cash, $500 per unit	150	250,000	25	75,055	--	--	
Issuance of partnership units for consulting services, $500 per unit	10	--	--	5,000	--	--	
Issuance of common stock in connection with financing agreement	--	33,333	3	7	--	--	
Net loss	--	--	--	--	--	(9,224)	
BALANCE AT OCTOBER 31, 1981	1,160	1,950,000	195	83,395	--	(9,224)	
Issuance of common stock for consulting services	--	54,600	5	11	--	--	
Net loss	--	--	--	--	--	(57,962)	
BALANCE AT OCTOBER 31, 1982	1,160	2,004,600	200	83,406	--	(67,186)	
Issuance of partnership units and common stock for cash, $550 per unit	60	100,000	10	33,020	--	--	
Issuance of common stock for consulting services	--	21,733	2	5	--	--	
Net loss	--	--	--	--	--	(27,475)	
BALANCE AT OCTOBER 31, 1983	1,220	2,126,333	212	116,431	--	(94,661)	
Issuance of partnership units and common stock for cash, $600 per unit	10	16,667	2	6,003	--	--	
Issuance of partnership units and common stock forconsulting services and $1,000 cash, $550 to $600 per unit	20	16,667	2	11,503	--	--	
Issuance of common stock for consulting services	--	2,533	--	1	--	--	
Issuance of common stock for donation to charitable organizations	--	100,000	10	20	--	--	
Net loss	--	--	--	--	--	(21,463)	
BALANCE AT OCTOBER 31, 1984	1,250	2,262,200	226	133,958	--	(116,124)	
Issuance of partnership units and common stock in December 1984 for technology	1,000	166,667	16	(16)	--	--	
Issuance of partnership units and common stock for cash, $50 to $100 per unit	460	78,333	8	23,515	--	--	
Issuance of partnership units for cash, $50 to $550 per unit	140	--	--	17,000	--	--	
Issuance of common stock for consulting services	--	6,733	1	1	--	--	
Net loss	--	--	--	--	--	(8,469)	
BALANCE AT OCTOBER 31, 1985	2,850	2,513,933	251	174,458	--	(124,593)	
Issuance of partnership units and common stock for cash, $50 to $500 per unit	90	105,000	11	31,521	--	--	
Issuance of common stock forconsulting services	--	8,500	1	1	--	--	
Net loss	--	--	--	--	--	(32,353)	
BALANCE AT OCTOBER 31, 1986	2,940	2,627,433	263	205,980	--	(156,946)	
Issuance of partnership units and common stock for cash, $500 per unit	20	33,333	3	10,007	--	--	
Issuance of partnership units and warrants to purchase 400,000 shares of common stock forcash, $500 to $2,500 per unit	80	--	--	100,000	--	--	
Issuance of common stock forconsulting services	--	28,533	3	6	--	--	
Net loss	--	--	--	--	--	(71,616)	
BALANCE AT OCTOBER 31, 1987	3,040	2,689,299	269	315,993	--	(228,562)	

BALANCE AT JULY 22, 1980 (inception)	$ --
No activity	
BALANCE AT OCTOBER 31, 1980	--
Issuance of partnership units and common stock in October 1981 for equipment and supplies valued at $3,500 and technology	3,500
Issuance of partnership units and common stock for cash, $500 per unit	75,080
Issuance of partnership units for consulting services, $500 per unit	5,000
Issuance of common stock in connection with financing agreement	10
Net loss	(9,224)
BALANCE AT OCTOBER 31, 1981	74,366
Issuance of common stock for consulting services	16
Net loss	(57,962)
BALANCE AT OCTOBER 31, 1982	16,420
Issuance of partnership units and common stock for cash, $550 per unit	33,030
Issuance of common stock for consulting services	7
Net loss	(27,475)
BALANCE AT OCTOBER 31, 1983	21,982
Issuance of partnership units and common stock for cash, $600 per unit	6,005
Issuance of partnership units and common stock forconsulting services and $1,000 cash, $550 to $600 per unit	11,505
Issuance of common stock for consulting services	1
Issuance of common stock for donation to charitable organizations	30
Net loss	(21,463)
BALANCE AT OCTOBER 31, 1984	18,060
Issuance of partnership units and common stock in December 1984 for technology	--
Issuance of partnership units and common stock for cash, $50 to $100 per unit	23,523
Issuance of partnership units for cash, $50 to $550 per unit	17,000
Issuance of common stock for consulting services	2
Net loss	(8,469)
BALANCE AT OCTOBER 31, 1985	50,116
Issuance of partnership units and common stock for cash, $50 to $500 per unit	31,532
Issuance of common stock forconsulting services	2
Net loss	(32,353)
BALANCE AT OCTOBER 31, 1986	49,297
Issuance of partnership units and common stock for cash, $500 per unit	10,010
Issuance of partnership units and warrants to purchase 400,000 shares of common stock forcash, $500 to $2,500 per unit	100,000
Issuance of common stock forconsulting services	9
Net loss	(71,616)
BALANCE AT OCTOBER 31, 1987	87,700

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF SHAREHOLDERS' EQUITY (CONTINUED)

	PARTNERSHIP UNITS	COMMON STOCK SHARES	COMMON STOCK AMOUNT	ADDITIONAL PAID-IN CAPITAL	UNREALIZED GAIN ON AVAILABLE-FOR-SALE SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE
BALANCE AT OCTOBER 31, 1987	3,040	2,689,299	$ 269	$ 315,993	$ --	$(228,562)
Issuance of partnership units and common stock for cash, $500 per unit	100	166,667	17	50,033	--	--
Issuance of partnership units and common stock for cash, $1,250 per unit	20	33,333	3	25,007	--	--
Issuance of partnership units for cash, $50 per unit	20	--	--	1,000	--	--
Issuance of partnership units and warrants to purchase 400,000 shares of common for cash, $1,250 per unit	80	--	--	100,000	--	--
Compensation expense related to issuance of warrants forpartnership units	--	--	--	10,000	--	--
Issuance of common stock for consulting services and employee compensation	--	47,014	5	9	--	--
Net loss	--	--	--	--	--	(266,194)
BALANCE AT OCTOBER 31, 1988	3,260	2,936,313	$ 294	$ 502,042	$ --	$(494,756)
Exercise of warrants for common stock	--	141,667	14	28	--	--

Issuance of partnership units and common stock for cash, $1,250 per unit	10	16,667	1	12,504	--	--
Issuance of partnership units and warrants to purchase 800,000 shares of common stock for cash, $1,250 per unit	160	--	--	200,000	--	--
Issuance of common stock for consulting services and employee compensation	--	17,733	2	4	--	--
Compensation expense related to issuance of warrants forpartnership units	--	--	--	2,500	--	--
Net loss	--	--	--	--	--	(243,926)
BALANCE AT OCTOBER 31, 1989	3,430	3,112,380	311	717,078	--	(738,682)
Exercise of warrants forcommon stock	--	33,333	3	7	--	--
Issuance of partnership units and common stock for cash, $1,250 per unit	74	123,334	12	92,525	--	--
Issuance of partnership unitfor cash, $5,000 per unit	1	--	--	5,000	--	--
Issuance of common stock for cash, $4.56 per share	--	1,100	--	5,000	--	--
Issuance of partnership units and warrants to purchase 200,000 shares of common stock for cash, $1,250 per unit	40	--	--	50,000	--	--
Issuance of common stock for consulting services and employee compensation	--	11,400	2	51,678	--	--
Compensation expense related to issuance of warrants for partnership units	--	--	--	40,000	--	--
Exercise of warrant for partnership units	10	--	--	12,500	--	--
Net loss	--	--	--	--	--	(351,772)
BALANCE AT OCTOBER 31, 1990	3,555	3,281,547	328	973,788	--	(1,090,454)
Issuance of partnership units for cash, $5,000 per unit	23.5	--	--	117,500	--	--
Exercise of warrants for partnership unit and common stock	1	1,100	--	1,250	--	--
Issuance of common stock for cash, $4.56 per share	--	24,750	3	112,505	--	--
Compensation expense related to issuance of warrants for common stock	--	--	--	1,520	--	--
Issuance of common stock for consulting services, $4.56 per share	--	1,657	--	7,547	--	--
Common stock subject to rescission	--	(7,127)	(1)	(32,499)	--	--
Net loss	--	--	--	--	--	(274,844)
BALANCE AT OCTOBER 31, 1991	3,579.5	3,301,927	330	1,181,611	--	(1,365,298)

	TOTAL SHAREHOLDERS' EQUITY
BALANCE AT OCTOBER 31, 1987	$ 87,700
Issuance of partnership units and common stock for cash, $500 per unit	50,050
Issuance of partnership units and common stock for cash, $1,250 per unit	25,010
Issuance of partnership units for cash, $50 per unit	1,000
Issuance of partnership units and warrants to purchase 400,000 shares of common for cash, $1,250 per unit	100,000
Compensation expense related to issuance of warrants forpartnership units	10,000
Issuance of common stock for consulting services and employee compensation	14
Net loss	(266,194)
BALANCE AT OCTOBER 31, 1988	$ 7,580
Exercise of warrants for common stock	42
Issuance of partnership units and common stock for cash, $1,250 per unit	12,505
Issuance of partnership units and warrants to purchase 800,000 shares of common stock for cash, $1,250 per unit	200,000
Issuance of common stock for consulting services and employee compensation	6
Compensation expense related to issuance of warrants forpartnership units	2,500
Net loss	(243,926)
BALANCE AT OCTOBER 31, 1989	(21,293)
Exercise of warrants forcommon stock	10
Issuance of partnership units and common stock for cash, $1,250 per unit	92,537
Issuance of partnership unitfor cash, $5,000 per unit	5,000
Issuance of common stock for cash, $4.56 per share	5,000
Issuance of partnership units and warrants to purchase 200,000 shares of common stock for cash, $1,250 per unit	50,000
Issuance of common stock for consulting services and employee compensation	51,680
Compensation expense related to issuance of warrants for partnership units	40,000
Exercise of warrant for partnership units	12,500
Net loss	(351,772)
BALANCE AT OCTOBER 31, 1990	(116,338)
Issuance of partnership units for cash, $5,000 per unit	117,500

Exercise of warrants for partnership unit and common stock	1,250
Issuance of common stock for cash, $4.56 per share	112,508
Compensation expense related to issuance of warrants for common stock	1,520
Issuance of common stock for consulting services, $4.56 per share	7,547
Common stock subject to rescission	(32,500)
Net loss	(274,844)
BALANCE AT OCTOBER 31, 1991	(183,357)

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF SHAREHOLDERS' EQUITY (CONTINUED)

	PARTNERSHIP UNITS	COMMON STOCK SHARES	COMMON STOCK AMOUNT	ADDITIONAL PAID-IN CAPITAL	UNREALIZED GAIN ON AVAILABLE-FOR-SALE SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE
BALANCE AT OCTOBER 31, 1991	3,579.5	3,301,927	$ 330	$1,181,611	$ --	($1,365,298)
Issuance of partnership units for cash, $5,000 per unit	15.5	--	--	77,500	--	--
Issuance of common stock for cash, $4.56 per share	--	17,050	2	77,498	--	--
Compensation expense related to issuance of warrants forcommon stock	--	--	--	7,500	--	--
Common stock subject to rescission	--	(32,486)	(3)	(148,135)	--	--
Net loss	--	--	--	--	--	(91,588)
BALANCE AT DECEMBER 31, 1991	3,595	3,286,491	329	1,195,974	--	(1,456,886)
Issuance of partnership units for cash, $5,000 per unit	30.5	--	--	152,500	--	--
Exercise of warrants for partnership units and common stock	22	2,200	--	28,750	--	--
Conversion of debt into common stock and partnership units	9	9,634	1	87,859	--	--
Issuance of common stock for cash, $4.56 per share	--	868,906	87	3,954,625	--	--
Issuance of common stock for consulting services, $4.56 per share	--	22,872	2	104,167	--	--
Compensation expense related to issuance of warrants for common stock and partnership units	--	--	--	262,833	--	--
Common stock subject to rescission	--	(410,099)	(41)	(1,870,008)	--	--
Net loss	--	--	--	--	--	(1,731,138)
BALANCE AT DECEMBER 31, 1992	3,656.5	3,780,004	378	3,916,700	--	(3,188,024)
Exercise of warrants for partnership units	9	--	--	4,500	--	--
Issuance of common stock in exchange for partnership units	(1,809.5)	1,632,950	163	(163)	--	--
Withdrawal of partnership net assets upon conveyance of technology	(1,856)	--	--	(176,642)	--	--
Issuance of common stock for cash and short-term investments, $4.95 per share	--	507,084	50	2,510,014	--	--
Exercise of warrants for common stock	--	3,844	1	9,999	--	--
Common stock subject to rescission	--	(808,902)	(81)	(901,119)	--	--
Net loss	--	--	--	--	--	(2,346,939)
BALANCE AT DECEMBER 31, 1993	--	5,114,980	$ 511	$5,363,289	$ --	($5,534,963)
Issuance of common stock for cash, $4.95 per share	--	565,216	57	2,797,761	--	--
Exercise of warrants for common stock	--	24,667	2	122,098	--	--
Issuance of common stock for consulting services, $4.95 per share	--	151	--	749	--	--
Unrealized gain on available-for-sale securities	--	--	--	--	61,000	--
Common stock subject to rescission	--	(34,359)	(3)	(170,075)	--	--
Net loss	--	--	--	--	--	(2,246,272)
BALANCE AT DECEMBER 31, 1994	--	5,670,655	567	8,113,822	61,000	(7,781,235)
Issuance of common stock for cash, $6.00 per share	--	146,183	15	862,674	--	--
Compensation expense related to issuance of warrants for common stock	--	--	--	213,000	--	--
Unrealized gain on available-for-sale securities	--	--	--	--	35,750	--
Net loss	--	--	--	--	--	(2,556,886)
BALANCE AT DECEMBER 31, 1995	--	5,816,838	582	9,189,496	96,750	(10,338,121)
Exercise of warrants for common stock	--	957,452	96	(96)	--	--
Issuance of common stock for cash, $6.00 per share (net of commission)	--	712,500	71	4,028,228	--	--

Liquidation of available-for-sale securities	--	--	--	--	(96,750)	--	
Net loss	--	--	--	--	--	(1,414,966)	
BALANCE AT SEPTEMBER 30, 1996 (UNAUDITED)	--	7,486,790	749	13,217,628	--	(11,753,087)	

	TOTAL SHAREHOLDERS' EQUITY
BALANCE AT OCTOBER 31, 1991	$ (183,357)
Issuance of partnership units for cash, $5,000 per unit	77,500
Issuance of common stock for cash, $4.56 per share	77,500
Compensation expense related to issuance of warrants forcommon stock	7,500
Common stock subject to rescission	(148,138)
Net loss	(91,588)
BALANCE AT DECEMBER 31, 1991	(260,583)
Issuance of partnership units for cash, $5,000 per unit	152,500
Exercise of warrants for partnership units and common stock	28,750
Conversion of debt into common stock and partnership units	87,860
Issuance of common stock for cash, $4.56 per share	3,954,712
Issuance of common stock for consulting services, $4.56 per share	104,169
Compensation expense related to issuance of warrants for common stock and partnership units	262,833
Common stock subject to rescission	(1,870,049)
Net loss	(1,731,138)
BALANCE AT DECEMBER 31, 1992	729,054
Exercise of warrants for partnership units	4,500
Issuance of common stock in exchange for partnership units	--
Withdrawal of partnership net assets upon conveyance of technology	(176,642)
Issuance of common stock for cash and short-term investments, $4.95 per share	2,510,064
Exercise of warrants for common stock	10,000
Common stock subject to rescission	(901,200)
Net loss	(2,346,939)
BALANCE AT DECEMBER 31, 1993	$ (171,163)
Issuance of common stock for cash, $4.95 per share	2,797,818
Exercise of warrants for common stock	122,100
Issuance of common stock for consulting services, $4.95 per share	749
Unrealized gain on available-for-sale securities	61,000
Common stock subject to rescission	(170,078)
Net loss	(2,246,272)
BALANCE AT DECEMBER 31, 1994	394,154
Issuance of common stock for cash, $6.00 per share	862,689
Compensation expense related to issuance of warrants for common stock	213,000
Unrealized gain on available-for-sale securities	35,750
Net loss	(2,556,886)
BALANCE AT DECEMBER 31, 1995	(1,051,293)
Exercise of warrants for common stock	--
Issuance of common stock for cash, $6.00 per share (net of commission)	4,028,299
Liquidation of available-for-sale securities	(96,750)
Net loss	(1,414,966)
BALANCE AT SEPTEMBER 30, 1996 (UNAUDITED)	1,465,290

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF CASH FLOWS

FOR THE PERIOD FOR THE PERIOD

	YEAR ENDED DECEMBER 31,		JULY 22, 1980 (INCEPTION) TO DECEMBER 31,	NINE MONTHS ENDED SEPTEMBER 30,		JULY 22, 1980 (INCEPTION) TO SEPTEMBER 30,
	1994	1995	1995	1995	1996	1996
				(UNAUDITED)		(UNAUDITED)
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net loss	$(2,246,272)	$(2,556,886)	$(10,338,121)	$(1,940,677)	$(1,414,966)	$(11,753,087)
Adjustments to reconcile net loss to net cash used in operating activities--						
Depreciation and amortization	539,122	503,340	1,541,138	355,939	401,445	1,942,583
Realized gain on sale of short-term investments available for sale	--	--	--	--	(96,750)	(96,750)
Compensation expense on issuance of common stock and partnership units	--	--	182,392	--	--	182,392
Compensation expense on issuance of warrants to purchase common stock or partnership units	--	213,000	562,353	--	--	562,353
Conversion of interest accrued to common stock	--	--	7,860	--	--	7,860
Changes in operating assets and liabilities:						
Decrease (increase) in other current assets	10,814	8,645	(7,236)	(5,511)	(5,314)	(12,550)
Increase in other assets	--	--	(45,191)	--	--	(45,191)
Net (decrease) increase in accounts payable, accrued payroll, deferred payments and deferred rent	(35,562)	53,318	257,827	254,892	(52,441)	205,673
Net cash used in operating activities	(1,731,898)	(1,778,583)	(7,838,978)	(1,335,357)	(1,168,026)	(9,006,717)
CASH FLOWS FROM INVESTING ACTIVITIES:						
Proceeds from sale or redemption of short-- term investments	20,000	15,000	35,000	15,000	182,750	217,750
Purchase of property and equipment	(73,442)	(90,594)	(2,347,479)	(74,108)	(42,277)	(2,389,756)
Patent costs	(110,763)	(177,989)	(576,089)	(111,377)	(66,914)	(643,003)
Net cash (used in) provided by investing activities	(164,205)	(253,583)	(2,888,568)	(170,485)	73,559	(2,815,009)
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from sale of common stock and partnership units	2,920,667	862,689	11,505,080	--	4,028,299	15,533,092
Withdrawal of partnership net assets	--	--	(176,642)	--	--	(176,642)
Issuance of convertible debt	--	--	80,000	--	--	80,000
Net cash provided by financing activities	2,920,667	862,689	11,408,438	--	4,028,299	15,436,450
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	1,024,564	(1,169,477)	680,892	(1,505,842)	2,933,832	3,614,724
CASH AND CASH EQUIVALENTS:						
Beginning of period	825,805	1,850,369	--	1,850,369	680,892	--
End of period	$1,850,369	$ 680,892	$ 680,892	$ 344,527	$3,614,724	$ 3,614,724

See accompanying notes.

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO FINANCIAL STATEMENTS

1. ORGANIZATION AND NATURE OF BUSINESS:

ANTIVIRALS INC. (the Company) was incorporated in the State of Oregon on July 22, 1980. The mission of the Company is to develop and commercialize improved therapeutic products based upon antisense and drug delivery technology.

Through May 1993, the financial statements include the combined accounts of the Company and ANTI-GENE DEVELOPMENT GROUP, a limited partnership (AGDG or the Partnership) founded in 1981 and registered in the State of Oregon. Substantially all income generated and proceeds from the Partnership unit sales have been paid to the Company under the terms of research and development contracts entered into by the Partnership and the Company. Significant transactions between the Company and the Partnership have been eliminated.

In March 1993, the Company offered to all partners in the Partnership the opportunity to exchange their partnership units or warrants to purchase partnership units (unit warrants) for common stock or warrants to purchase common stock. Under the terms of the offer, which was completed May 1, 1993, each partner could elect to exchange each unit held or unit warrant held for 1,100 shares of common stock or warrants to purchase 1,100 shares of common stock of the Company, respectively. One partner exchanged 325 partnership units for warrants to purchase 357,500 shares of common stock. Total shares and

warrants to purchase shares issued in the exchange offer were 1,632,950 and 381,700, respectively.

Effective May 19, 1993, the Company and the Partnership entered into a Technology Transfer Agreement wherein the Partnership conveyed all intellectual property in its control to the Company. As part of the conveyance, the Company tendered to the Partnership for liquidation all partnership units received pursuant to the exchange offer and received a 49.37 percent undivided interest in the intellectual property. The Company then purchased the remaining undivided interest in the intellectual property for rights to payments of 4.05 percent of gross revenues in excess of $200 million, from sales of products which would, in the absence of the Technology Transfer Agreement, infringe a valid claim under any patent transferred to the Company.

The remaining net assets of the Partnership, $176,642 of cash, were no longer combined with those of the Company in May 1993. Under the terms of the Technology Transfer Agreement, the Partnership ceased active sales of partnership units and income generating activities and no longer will enter into research and development contracts with the Company. The Partnership currently exists primarily for the purpose of collecting potential future payments from the Company as called for in the Technology Transfer Agreement.

Beginning in 1991, the Company changed its fiscal year from a fiscal year ending on October 31, to a calendar year. The new fiscal year was adopted prospectively.

The Company is in the development stage. Since its inception in 1980 through September 30, 1996, the Company has incurred significant losses of approximately $11.8 million, substantially all of which resulted from expenditures related to research and development and general and administrative expenses. The Company has not generated any material revenue from product sales to date, and there can be no assurance that revenues from product sales will be achieved. Moreover, even if the Company does achieve revenues from product sales, the Company nevertheless expects to incur significant operating losses over the next several years. The financial statements have been prepared assuming that the Company will continue as a going concern. The Company's ability to achieve a profitable level of operations in the future will depend in large part on its completing product development of its antisense and/or drug delivery

1. ORGANIZATION AND NATURE OF BUSINESS: (CONTINUED)
products, obtaining regulatory approvals for such products and bringing several of these products to market. During the period required to develop these products, the Company will require substantial financing. There is no assurance that such financing will be available when needed or that the Company's planned products will be commercially successful. If necessary, the Company's management will curtail expenditures in an effort to conserve operating funds. The likelihood of the long-term success of the Company must be considered in light of the expenses, difficulties and delays frequently encountered in the development and commercialization of new pharmaceutical products, competitive factors in the marketplace as well as the burdensome regulatory environment in which the Company operates. There can be no assurance that the Company will ever achieve significant revenues or profitable operations.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial

statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

CASH AND CASH EQUIVALENTS

For purposes of the statements of cash flows, the Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

SHORT-TERM SECURITIES--AVAILABLE-FOR-SALE

In January 1994, the Company adopted Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities" (SFAS 115). In accordance with SFAS 115, the Company has classified its investment securities as available-for-sale and, accordingly, such investment securities are stated on the balance sheet at their fair market value, which exceeds cost by $96,750. The unrealized difference between the cost and the fair market value of these securities has been reflected as a separate component of shareholders' equity. These short-term securities included common stock with a fair value of $147,000 and $182,750 and state government obligations with a cost, which approximated fair market value, of $45,000 and $30,000 at December 31, 1994 and 1995, respectively.

PROPERTY AND EQUIPMENT

Property and equipment is stated at cost and depreciated over the estimated useful lives of the assets, generally five years, using the straight-line method. Leasehold improvements are amortized over the shorter of the lease term or life of the asset.

PATENT COSTS

Patent costs consist primarily of legal and filing fees incurred to file patents on proprietary technology developed by the Company. Patent costs are amortized on a straight-line basis over the shorter of the

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)
estimated economic lives or the legal lives of the patents, generally 17 years. Total accumulated amortization at December 31, 1994 and 1995 was $76,286 and $126,835, respectively.

RESEARCH AND DEVELOPMENT

Research and development costs are expensed as incurred.

INCOME TAXES

The Company accounts for income taxes, in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (SFAS 109). Under SFAS 109, deferred tax assets and liabilities are recorded based on the tax effected difference between the tax bases of assets and liabilities and their carrying amount for financial reporting purposes, referred to as temporary differences, using enacted marginal income tax rates.

NET LOSS PER SHARE

Net loss per share is calculated using the weighted average number of shares outstanding, including common stock subject to rescission. Common equivalent shares (stock options and warrants) are excluded from the computation as their effect is antidilutive, except that, pursuant to the Securities and Exchange Commission ("SEC") Staff Accounting Bulletins, common and common equivalent

shares issued during the period commencing 12 months prior to the initial filing of a proposed public offering at prices below the public offering price have been considered in the calculation as if they were outstanding for all periods presented (using the treasury stock method for stock options and warrants at the estimated initial public offering price).

NEW PRONOUNCEMENTS

In March 1995, the Financial Accounting Standards Board issued SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long Lived Assets to be Disposed of," which requires the Company to review for impairment of its long-lived assets and certain identifiable intangibles whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. The Statement is effective for the Company in 1996. The Company believes that adoption of this statement will not have a material effect on the Company's financial position.

Effective January 1, 1996, the Company is required to adopt SFAS No. 123, "Accounting for Stock-Based Compensation." The statement requires, at a minimum, new disclosures on an annual basis regarding employee and nonemployee stock-based compensation plans. The Company intends to continue using the measurement prescribed by the former standard and, accordingly, this pronouncement will not have a material effect on the Company's financial position or results of operations.

UNAUDITED INTERIM FINANCIAL INFORMATION

The unaudited financial statements have been prepared pursuant to the rules and regulations of the SEC. Certain information and note disclosures normally included in annual financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to those rules and regulations, although the Company believes that the disclosures made are adequate to

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)
make the information presented not misleading. These unaudited financial statements reflect, in the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to fairly present the results of operations, changes in cash flows and financial position as of and for the periods presented. These unaudited financial statement should be read in conjunction with the audited financial statements and related notes thereto, appearing elsewhere herein. The results for the interim periods presented are not necessarily indicative of results to be expected for a full year.

3. SHAREHOLDERS' EQUITY:

STOCK INCENTIVE PLAN

During 1992, the Company adopted the 1992 Stock Incentive Plan (the Plan) which provides for the issuance of incentive stock options to its employees and nonqualified stock options, stock appreciation rights and bonus rights to employees, directors of the Company and consultants. The Company has reserved 1,333,333 shares of common stock for issuance under the Plan. Options issued under the Plan generally vest ratably over four years or upon achievement of certain financial or scientific goals, and expire five to ten years from the date of grant. At December 31, 1995, options for 804,181 shares were exercisable and 223,505 shares were available for future grant. At September 30, 1996, options for 871,879 shares were exercisable and 206,447 shares were available for future grant (unaudited). Activity within the Plan was as follows:

	SHARES	PRICE PER SHARE
Balance at December 31, 1992	911,428	$4.56 - $5.01
Granted	43,103	4.95
Canceled	(10,331)	4.56
Balance at December 31, 1993	944,200	4.56 - 5.01
Granted	43,166	4.95
Canceled	(10,219)	4.65 - 4.95
Balance at December 31, 1994	977,147	4.56 - 5.01
Granted	137,400	4.95 - 6.00
Canceled	(4,719)	4.95 - 6.00
Balance at December 31, 1995	1,109,828	4.56 - 6.00
Granted	40,000	6.00
Canceled	(22,942)	6.00
Balance at September 30, 1996 (unaudited)	1,126,886	

ANTIVIRALS INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

3. SHAREHOLDERS' EQUITY: (CONTINUED)
WARRANTS

The Company has issued warrants for the purchase of common stock in conjunction with financing and compensation arrangements. Outstanding warrants for the purchase of common stock at December 31, 1992 and warrant activity through September 30, 1996 are as follows:

	NUMBER OF SHARES	EXERCISE PRICE PER SHARE	EXPIRATION DATE
Outstanding at December 31, 1992	946,877	$.0003 - $4.56	633,333 - None 313,545 - Various through 2002
Issued in exchange for partnership units	381,700	.0003	357,500 - None 24,200 - Various through 2001
Granted	40,000	4.95	Various through 2001
Exercised	(3,844)	.0003 - 4.56	
Outstanding at December 31, 1993	1,364,733	.0003 - 4.95	
Granted	18,000	4.95	1994
Exercised	(24,667)	4.56	
Expired	(33,333)	4.56	
Outstanding at December 31, 1994	1,324,733	.0003 - 4.95	
Granted	38,000	.0003 - 1.14	Various
Expired	(38,000)	.0003 - 1.14	
Outstanding at December 31, 1995	1,324,733	.0003 - 4.95	
Granted	60,200	9.00	
Exercised	(957,500)	.0003	
Outstanding at September 30, 1996 (unaudited)	427,433	$.0003 - $9.00	
Exercisable at December 31, 1995	1,299,733		

Exercisable at September 30, 1996 (unaudited)	407,450

4. INCOME TAXES:

At December 31, 1994 and 1995, the Company had federal and state tax net operating loss carryforwards of approximately $5,504,000 and $7,731,000, respectively. The difference between the operating loss carryforwards on a tax basis and a book basis is due principally to differences in depreciation and amortization. The federal and state carryforwards will begin to expire in 1997 and 2008, respectively, if not otherwise used. The Internal Revenue Code rules under Section 382 could limit the future use of these losses based on ownership changes in the value of the Company's stock. The Company believes, however, that such a limitation would not have a material impact on the utilization of its carryforwards.

4. INCOME TAXES: (CONTINUED)

The Company had a net deferred tax asset of $2,613,000 and $3,808,000 at years ended December 31, 1994 and 1995, primarily from net operating loss carryforwards. A valuation allowance was recorded to reduce the net deferred tax asset to zero. The net change in the valuation allowance for deferred tax assets was an increase of approximately $913,000 and $1,195,000 for the years ended December 31, 1994 and 1995, respectively, mainly due to the increase in the net operating loss carryforwards.

An analysis of the deferred tax assets and liabilities as of December 31, 1995, is as follows:

	DEFERRED TAX ASSET	DEFERRED TAX LIABILITY	TOTAL
Net operating loss carryforwards	$3,092,000	$ --	$ 3,092,000
Accrued expenses	108,000	--	108,000
Depreciation	298,000	--	298,000
Research and development tax credit	490,000	--	490,000
Patent costs	--	(180,000)	(180,000)
	$3,988,000	$ (180,000)	3,808,000
Valuation allowance			(3,808,000)
			$ --

An analysis of the deferred tax assets and liabilities as of December 31, 1994, is as follows:

	DEFERRED TAX ASSET	DEFERRED TAX LIABILITY	TOTAL
Net operating loss carryforwards	$2,202,000	$ --	$ 2,202,000
Accrued expenses	24,000	--	24,000
Depreciation	136,000	--	136,000
Research and development tax credit	380,000	--	380,000
Patent costs	--	(129,000)	(129,000)

	$2,742,000	$ (129,000)	2,613,000
Valuation allowance.....			(2,613,000)
			$ --

5. LEASE OBLIGATIONS:

The Company leases office and laboratory facilities under various noncancelable operating leases through December 1997. Rent expense under these leases was $179,000 and $168,000 for the years ended December 31, 1994 and 1995, respectively, and $642,000 for the period from July 22, 1980 through December 31, 1995.

In September 1996, the Company leased additional laboratory facilities and extended the lease on its existing laboratory facilities through 2004. At September 30, 1996, the aggregate noncancelable future minimum payments under these leases were $269,000, $254,000, $242,000, $249,000 and $257,000 for the

5. LEASE OBLIGATIONS: (CONTINUED)
years ended December 31, 1997, 1998, 1999, 2000 and 2001, respectively, and $817,000 thereafter (unaudited).

6. RELATED PARTY TRANSACTIONS:

The Company paid $25,200, $8,000 and $220,800 to certain nonemployee directors for financial consulting, scientific research services and reimbursement for out-of-pocket costs of attending Board of Director meetings during the years ended December 31, 1994 and 1995, and the period from July 22, 1980 through December 31, 1995, respectively.

7. SUBSEQUENT EVENTS:

PRIVATE PLACEMENT

In March 1996, the Company commenced a private offering wherein 712,500 shares of common stock were sold for net proceeds of $4,028,299, which included warrants to purchase 65,217 shares of common stock at $9.00 per share. These warrants are exercisable through the earlier of five years from issuance or three years from the filing for an initial public offering.

INITIAL PUBLIC OFFERING

On October 3, 1996, the Board of Directors authorized management of the Company to file a registration statement with the SEC offering to the public 1,500,000 units (the Units), each unit consisting of one share of the Company's common stock, and one warrant to purchase one share of common stock. The Units will separate immediately following issuance and thereafter the common stock and warrants that make up the Units will trade only as separate securities.

REVERSE STOCK SPLIT

On October 3, 1996, the Board of Directors authorized, subject to shareholder approval, a reverse split of the Company's outstanding Common Stock on the basis of one share for each three shares of the then outstanding common stock. The share information in the accompanying financial statements has been retroactively restated to reflect the split. The Common Stock will continue to have $.0001 par value. The Board of Directors also approved, subject to shareholder confirmation, the authorization of a new class of preferred stock

which includes 2,000,000 shares of $0.0001 par value preferred stock.

AMENDMENT TO TECHNOLOGY TRANSFER AGREEMENT

On January 20, 1997, AGDG and the Company amended the Technology Transfer Agreement to reduce the Technology Fees arising from the sale of diagnostic products from 4.05% to 2% and to remove the $200 million exemption with respect to sales of such diagnostic products. The Company also granted to AGDG a royalty-bearing license to make, use and sell small quantities of product derived from the Intellectual Property for research purposes only.

7. SUBSEQUENT EVENTS: (CONTINUED)

COMMON STOCK RESCISSION OFFER

In 1997, as a condition to its planned initial public offering, the Company intends to offer to holders of 1,292,973 shares of its common stock, the right to rescind their purchase of shares of the Company's common stock. If all such offerees elect to rescind their purchases, the Company will be required to pay these shareholders $3,121,965 and 568.67 units of limited partnership interests in AGDG, plus statutory interest. To the extent these shareholders accept the rescission offer, the Company will use up to $1,500,000 of its cash resources to repurchase the shares. If any additional consideration is required to repurchase the shares, the Company will issue unsecured promissory notes to the shareholders on a pro rata basis. Such notes will bear interest at 9% per annum and mature between 18 and 36 months. The Company believes that its potential exposure to litigation for possible violations of securities laws will be effectively eliminated by this rescission offer. All periods presented have been restated to reflect the amount of common stock subject to the rescission offer outside of shareholders' equity.

The Company estimates that the total amount of its obligation for interest to rescinding shareholders could aggregate approximately $2,129,000 if all eligible shareholders accepted the rescission offer. Because of the contingent nature of such liability and because the ultimate amount to be refunded is not presently known, the potential interest liability has not been accrued but will be recorded as an expense of the Company if and when the amount becomes an actual liability.

The rescission offer will not be made to holders of 22,021 shares of common stock in Florida as state securities laws do not permit such offerings. The rescission offer will also not be made to holders of 192,603 shares of common stock who reside in California and Nevada because the Company believes its potential liability to these holders has been eliminated by the running of applicable statute of limitations. If all of the shareholders in Florida, Nevada and California were to successfully assert claims against the Company, the Company would be required to pay these holders approximately $318,000 and 55 units of limited partnership interests in AGDG, plus $237,000 in statutory interest. Since no rescission offer has been made to these shareholders and because of the contingent nature of such obligations, the potential liability has not been reflected in the accompanying financial statements.

The Company's cash flow and its financial position could be materially affected by the results of the rescission offer. The financial statements do not include any adjustments that might result from the outcome of the rescission offer.

NO DEALER, SALESPERSON OR OTHER PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS NOT CONTAINED IN THIS PROSPECTUS IN CONNECTION WITH THE OFFERING COVERED BY THIS PROSPECTUS. IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY OR ANY UNDERWRITER. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF ANY OFFER TO BUY, UNITS IN ANY JURISDICTION TO ANY PERSON TO WHOM IT IS UNLAWFUL TO MAKE SUCH AN OFFER OR SOLICITATION IN SUCH JURISDICTION. SUBJECT TO ANY DUTIES AND OBLIGATIONS UNDER APPLICABLE SECURITIES LAWS TO UPDATE INFORMATION CONTAINED HEREIN OR INCORPORATED BY REFERENCE HEREIN, NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCES, CREATE ANY IMPLICATION THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO THE DATE HEREOF OR THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY SINCE THE DATE HEREOF.

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UNTIL , 1997 (25 DAYS AFTER THE DATE OF THIS PROSPECTUS), ALL DEALERS EFFECTING TRANSACTIONS IN THE UNITS, COMMON STOCK OR THE WARRANTS, WHETHER OR NOT PARTICIPATING IN THIS DISTRIBUTION, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN addition TO THE OBLIGATIONS OF DEALERS TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

1,500,000 UNITS

PROSPECTUS

PAULSON INVESTMENT

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 24. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

As an Oregon corporation the Company is subject to the Oregon Business Corporation Act ("OBCA") and the exculpation from liability and indemnification provisions contained therein. Pursuant to Section 60.047(2)(d) of the OBCA, Article VI of the Company's Third Restated Articles of Incorporation (the "Articles") eliminates the liability of the Company's directors to the Company or its stockholders, except for any liability related to breach of the duty of loyalty, actions not in good faith and certain other liabilities.

Section 60.387 et seq. of the OBCA allows corporations to indemnify their directors and officers against liability where the director or officer has acted in good faith and with a reasonable belief that actions taken were in the best interests of the corporation or at least not adverse to the corporation's best interests and, if in a criminal proceeding, the individual had no reasonable cause to believe the conduct in question was unlawful. Under the OBCA, corporations may not indemnify against liability in connection with a claim by or in the right of the corporation but may indemnify against the reasonable expenses associated with such claims unless the party is adjusted liable to the corporation. Corporations may not indemnify if the party is adjudged liable for receiving improper personal benefit. The OBCA provides for mandatory indemnification of directors against all reasonable expenses incurred in the successful defense of any claim made or threatened whether or not such claim was by or in the right of the corporation. Finally, a court may order indemnification if it determines that the director or officer is fairly and reasonably entitled to indemnification in view of all the relevant circumstances whether or not the director or officer met the good faith and reasonable belief standards of conduct set out in the statute.

The OBCA also provides that the statutory indemnification provisions are not deemed exclusive of any other rights to which directors or officers may be entitled under a corporation's articles of incorporation or bylaws, any agreement, general or specific action of the board of directors, vote of stockholders or otherwise.

Article VII of the Articles requires the Company to indemnify its directors and officers to the fullest extent not prohibited by law. The Bylaws of the Company also permit the Company to indemnify its directors and officers to the fullest extent permitted by the OBCA.

ITEM 25. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, expected to be incurred by the Registrant in connection with the offering described in this Registration Statement. All amounts, except the SEC registration fee, the NASD filing fee and the NASDAQ National Market System listing fee, are estimates.

SEC Registration Fee	$ 16,267
NASD Filing Fee	5,218
NASDAQ Listing Fee	50,000
Printing and Engraving Expenses	65,000

Accounting Fees and Expenses	40,000
Legal Fees and Expenses	200,000
Blue Sky Fees and Expenses (including fees of Counsel)	50,000
Transfer Agent and Registrar Fees	13,500
Miscellaneous Expenses	35,015
Total	$ 475,000

ITEM 26. RECENT SALES OF UNREGISTERED SECURITIES.

Within the last three years, the Company has sold securities without registration under the Securities Act of 1933, as amended (the "Act"), in the transactions and in reliance on the exemptions from registration described below.

1. Between November 1995 and October 1996, the Company sold an aggregate of 2,598,516 shares of its Common Stock at $2.00 per share to 208 purchasers. The sale of these shares was exempt from registration pursuant to Section 4(2) of the Securities Act.

2. On March 15, 1996, the Company issued 2,852,356 shares of its Common Stock pursuant to the exercise of warrants that were issued to Oregon Resource and Technology Development Corporation. The issuance of the Common Stock upon the exercise of the Warrants was exempt from registration, pursuant to Section 4(2) of the Securities Act.

3. Between January 1994 and April 1995, the Company sold an aggregate of 2,258,914 shares of its Common Stock at $1.65 per share to 145 purchasers. The sale of these shares was exempt from registration, pursuant to Section 4(2) of the Securities Act.

ITEM 27. EXHIBITS.

(a) Exhibits

NUMBER	DESCRIPTION
1.0	Form of Underwriting Agreement
3.1	Third Restated Articles of Incorporation of AntiVirals, Inc.
3.2	Bylaws of AntiVirals, Inc.
4.1	Form of Specimen Certificate for Common Stock*
4.2	Form of Warrant for Purchase of Common Stock
4.3	Form of Warrant Agreement
4.4	Form of Representative's Warrant
4.5	Registration Rights Agreement between AntiVirals Inc. and Ice Bear, Inc., dated May 20, 1992.
4.6	Purchase Warrants between AntiVirals Inc. and ORTDF, dated August 4, 1992.
5.0	Opinion of Ater Wynne Hewitt Dodson & Skerritt, LLP as to the legality of the securities being registered*
10.1	1992 Stock Incentive Plan
10.2	Employment Agreement with Denis R. Burger, Ph.D. dated November 4, 1996
10.3	Employment Agreement with James Summerton, Ph.D. dated November 4, 1996
10.4	Employment Agreement with Alan P. Timmins dated November 4, 1996
10.5	Employment Agreement with Dwight Weller, Ph.D. dated November 4, 1996
10.6	Technology Transfer Agreement between Anti-Gene Development Group and AntiVirals Inc., dated February 9, 1992.
10.7	Amendment to Technology Transfer Agreement between Anti-Gene Development Group and AntiVirals Inc. dated January 20, 1996.
10.8	License and Option Agreement between Anti-Gene Development Group and AntiVirals Inc., dated

NUMBER	DESCRIPTION
10.9	Commercial Lease between Research Way Investments, Landlord, and AntiVirals Inc., Tenant, dated June 15, 1992.
10.10	Lease between Benjamin Franklin Plaza, Inc., Landlord, and AntiVirals Inc., Tenant, dated June 17, 1992.
10.11	First Amendment to Lease between Benjamin Franklin Plaza, Inc., Landlord, and AntiVirals Inc., Tenant, dated July 24, 1995.
23.1	Consent of Ater Wynne Hewitt Dodson & Skerritt, LLP (included in legal opinion filed as Exhibit 5.0)*
23.2	Consent of Arthur Andersen LLP
23.3	Consent of Peter Dehlinger & Associates.*
25.0	Powers of Attorney (included in signature page in Part II of the Registration Statement)

* To be filed by amendment.

(b) Financial Statement Schedules

ITEM 28. UNDERTAKINGS.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 24, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

1. To file, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:

(i) include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information set forth in the registration statement; and

(iii) include any additional or changed material information on the plan of distribution.

2. That, for determining liability under the Securities Act, it will treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.

3. To file a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

4. That, for determining any liability under the Securities Act, it will

treat the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Company pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act as part of this registration statement as of the time it was declared effective.

5. That, for determining any liability under the Securities Act, it will treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered therein, and the offering of the securities at that time as the initial bona fide offering thereof.

SIGNATURES

In accordance with the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form SB-2 and authorized this registration statement to be signed on its behalf by the undersigned in the city of Portland, state of Oregon, on January 22, 1997.

ANTIVIRALS INC.

By: /s/ DENIS R. BURGER

Denis R. Burger,
CHIEF EXECUTIVE OFFICER

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Denis R. Burger and Alan P. Timmins and each of them singly, as true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents and full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his substitute, may lawfully do or cause to be done by virtue hereof.

Witness our hands on the date set forth below.

In accordance with the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacity stated on January 22, 1997.

SIGNATURE	TITLE
/s/ DENIS R. BURGER Denis R. Burger	Chief Executive Officer and Director (Principal Executive Officer)
/s/ JAMES E. SUMMERTON	President, Chief

James E. Summerton	Scientific Officer and Director
/s/ ALAN P. TIMMINS Alan P. Timmins	Chief Operating Officer and Chief Financial Officer (Principal Financial and Accounting Officer)

SIGNATURE	TITLE
/s/ DWIGHT D. WELLER Dwight D. Weller	Vice President of Research and Development and Director
/s/ JOHN A. BEAULIEU John A. Beaulieu	Chairman of the Board
/s/ NICK BUNICK Nick Bunick	Director
/s/ DONALD R. JOHNSON Donald R. Johnson	Director
/s/ JAMES E. REINMUTH James E. Reinmuth	Director
/s/ JOSEPH RUBINFELD Joseph Rubinfeld	Director

1,500,000 UNITS

ANTIVIRALS INC.

UNDERWRITING AGREEMENT

_____, 1997

Paulson Investment Company, Inc.
As Representative of the
Several Underwriters
811 SW Front Avenue
Portland, Oregon 97204

Gentlemen:

AntiVirals Inc., an Oregon corporation (the "Company"), proposes to sell to the several underwriters (the "Underwriters") named in Schedule I hereto for whom you are acting as Representative (the "Representative") an aggregate of 1,500,000 Units (the "Firm Units"). Each Units will consist of one share of the Company's Common Stock, $.0001 par value ("Common Stock"), and one Common Stock Purchase Warrant substantially in the form filed as an exhibit to the Registration Statement (hereinafter defined) (the "Warrants"). The respective amounts of the Firm Units to be so purchased by the several Underwriters are set forth opposite their names in Schedule I hereto. The Company also proposes to grant to the Underwriters an option to purchase in the aggregate up to 225,000 additional Units (the "Option Units"), identical to the Firm Units, as set forth below. The offer and sale of the Firm Units and the Option Units pursuant to this Agreement is referred to as the "Offering."

As the Representative, you have advised the Company (a) that you are authorized to enter into this Agreement for yourself as Representative and on behalf of the several Underwriters, and (b) that the several Underwriters are willing, acting severally and not jointly, to purchase the numbers of Firm Units set forth opposite their respective names in Schedule I. The Firm Units and the Option Units (to the extent the aforementioned option is exercised) are herein collectively called the "Units."

In consideration of the mutual agreements contained herein and of the interests of the parties in the transactions contemplated hereby, the parties hereto agree as follows:

1. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each of the Underwriters as follows:

(a) A registration statement on Form SB-2 (File No. _____) with respect to the Units has been carefully prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the "Act"), and the Rules and Regulations (the "Rules and Regulations") of the Securities and Exchange Commission (the "Commission") thereunder and has been filed with the Commission. Copies of such registration statement, including any amendments thereto, the preliminary prospectuses (meeting the requirements of the Rules and Regulations) contained therein and the exhibits, financial statements and schedules, as finally amended and revised, have heretofore been delivered by the Company to you. Such registration statement, together with any

registration statement filed by the Company pursuant to Rule 462(b) of the Act, herein referred to as the "Registration Statement," which shall be deemed to include all information omitted therefrom in reliance upon Rule 430A and contained in the Prospectus referred to below, has become effective under the Act and no post-effective amendment to the Registration Statement has been filed as of the date of this Agreement. "Prospectus" means (a) the form of prospectus first filed with the Commission pursuant to Rule 424(b) or (b) the last preliminary prospectus included in the Registration Statement filed prior to the time it becomes effective or filed pursuant to Rule 424(a) under the Act that is delivered by the Company to the Underwriters for delivery to purchasers of the Units, together with the term sheet or abbreviated term sheet filed with the Commission pursuant to Rule 424(b)(7) under the Act. Each preliminary prospectus included in the Registration Statement prior to the time it becomes effective is herein referred to as a "Preliminary Prospectus."

(b) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the state of Oregon, with corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement. Except as described in the Prospectus, the Company does not own and never has owned a controlling interest in any corporation or other business entity that has or ever has had any material assets, liabilities or operations. The Company is duly qualified to transact business in all jurisdictions in which the conduct of its business requires such qualification.

(c) The outstanding shares of Common Stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable and have been issued and sold by the Company in compliance in all material respects with applicable securities laws; the Common Stock and Warrants to be included in the Units have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable; and no preemptive rights of stockholders exist with respect to any security of the Company or the issue and sale thereof. Neither the filing of the Registration Statement nor the offering or sale of the Units as contemplated by this Agreement gives rise to any rights, other than those which have been waived or satisfied, for or relating to the registration of any shares of Common Stock or other securities of the Company.

(d) The information set forth under the caption "Capitalization" in the Prospectus is true and correct. The Common Stock and the Warrants conform to the description thereof contained in the Registration Statement. The forms of certificates for the Common Stock and Warrants conform to the corporate law of the jurisdiction of the Company's incorporation.

(e) The Commission has not issued an order preventing or suspending the use of any Prospectus relating to the proposed offering of the Units and has not instituted proceedings for that purpose. The Registration Statement contains, and the Prospectus and any amendments or supplements thereto will contain, all statements which are required to be stated therein by, and will conform, to the requirements of the Act and the Rules and Regulations. The Registration Statement and any amendment thereto do not contain, and will not contain, any untrue statement of a material fact and do not omit, and will not omit, to state any material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus and any amendments and supplements thereto do not contain, and will not contain, any untrue statement of material fact; and do not omit, and will not omit, to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from the Registration Statement or the Prospectus, or any such amendment or supplement, in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through the Representative, specifically for use in the preparation thereof.

(f) The financial statements of the Company, together with related notes and schedules as set forth in the Registration Statement, present fairly the financial position and the results of operations and cash flows of the Company at the indicated dates and for the indicated periods. Such financial statements and related schedules have been prepared in accordance with generally accepted principles of accounting, consistently applied throughout the periods involved, except as disclosed herein, and all adjustments necessary for a fair presentation of results for such periods have been made. The summary financial and statistical data of the Company included in the Registration Statement present fairly the information shown therein and such data have been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company.

(g) Arthur Andersen LLP, who have audited certain of the financial statements filed with the Commission as part of the Registration Statement, are independent public accountants as required by the Act and the Rules and Regulations.

(h) There is no action, suit, claim or proceeding pending or, to the knowledge of the Company, threatened against the Company before any court or administrative agency or otherwise which if determined adversely to the Company might result in any material adverse change in the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise) or prospects of the Company or

to prevent the consummation of the transactions contemplated hereby, except as set forth in the Registration Statement.

(i) The Company has good and marketable title to all of the properties and assets reflected in the financial statements (or as described in the Registration Statement) hereinabove described, subject to no lien, mortgage, pledge, charge or encumbrance of any kind except those reflected in such financial statements (or as described in the Registration Statement) or which are not material in amount. The Company occupies its leased properties under valid and binding leases conforming in all material respects to the description thereof set forth in the Registration Statement.

(j) The Company has filed all federal, state, local and foreign income tax returns which have been required to be filed and has paid all taxes indicated by said returns and all assessments received by it to the extent that such taxes have become due and are not being contested in good faith. All tax liabilities have been adequately provided for in the financial statements of the Company.

(k) Since the respective dates as of which information is given in the Registration Statement, as it may be amended or supplemented, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise), or prospects of the Company, whether or not occurring in the ordinary course of business, and there has not been any material transaction entered into or any material transaction that is probable of being entered into by the Company, other than transactions in the ordinary course of business and changes and transactions described in the Registration Statement, as it may be amended or supplemented. The Company has no material contingent obligations which are not disclosed in the Company's financial statements included in the Registration Statement or elsewhere in the Prospectus.

(l) The Company is not, nor, with the giving of notice or lapse of time or both, will it be, in violation of or in default under its articles of incorporation or bylaws or under any agreement, lease, contract, indenture or other instrument or obligation to which it is a party or by which it, or any of its properties, is bound and which default is of material significance in

respect of the condition, financial or otherwise of the Company or the business, management, properties, assets, rights, operations, condition (financial or otherwise) or prospects of the Company. The execution and delivery of this Agreement and the consummation of the transactions herein contemplated and the fulfillment of the terms hereof will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company is a party, or of the articles of incorporation or bylaws of the Company or any order, rule or regulation applicable to the Company of any court or of any regulatory body or administrative agency or other governmental body having jurisdiction.

(m) Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in

connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions herein contemplated (except such additional steps as may be required by the Commission, the National Association of Securities Dealers, Inc. (the "NASD") or such additional steps as may be necessary to qualify the Units for public offering by the Underwriters under state securities or Blue Sky laws) has been obtained or made and is in full force and effect.

(n) The Company holds all material patents, patent rights trademarks, trade names, copyrights, trade secrets and licenses of any of the foregoing (collectively, "Intellectual Property Rights") that are necessary to the conduct of its business; there is no claim pending or, to the best knowledge of the Company, threatened against the Company alleging any infringement of Intellectual Property Rights, or any violation of the terms of any license relating to Intellectual Property Rights, nor does the Company know of any basis for any such claim. The Company knows of no material infringement by others of Intellectual Property Rights owned by or licensed to the Company. The Company has obtained, is in compliance in all material respects with and maintains in full force and effect all material licenses, certificates, permits, orders or other, similar authorizations granted or issued by any governmental agency (collectively, "Government Permits") required to conduct its business as it is presently conducted. All applications for additional Government Permits described in the Prospectus as having been made by the Company have been properly and effectively made in accordance with the applicable laws and regulations with respect thereto and such applications constitute, in the best judgment of the Company's management, those reasonably required to have been made in order to carry out the Company's business plan as described in the Prospectus. No proceeding to revoke, limit or otherwise materially change any Government Permit has been commenced or, to the Company's best knowledge, is threatened against the Company or any supplier to the Company with respect to materials supplied to the Company, and the Company has no reason to anticipate that any such proceeding will be commenced against the Company or any such supplier. Except as disclosed or contemplated in the Prospectus, the Company has no reason to believe that any pending application for a Government Permit will be denied or limited in a manner inconsistent with the Company's business plan as described in the Prospectus.

(o) The Company is in all material respects in compliance with all applicable Environmental Laws. The Company has no knowledge of any past, present or, as anticipated by the Company, future events, conditions, activities, investigation, studies, plans or proposals that (i) would interfere with or prevent compliance with any Environmental Law by the Company or (ii) could reasonably be expected to give rise to any common law or other liability, or otherwise form the basis of a claim, action, suit, proceeding, hearing or investigation, involving the Company and related in any way to Hazardous Substances or Environmental Laws. Except for the prudent and safe use and management of Hazardous Substances in the ordinary course of the Company's business, (i) no Hazardous Substance is or has been used, treated, stored,

generated, manufactured or otherwise handled on or at any Facility and (ii) to the Company's best knowledge, no Hazardous Substance has otherwise come to be located in, on or under any Facility. No Hazardous Substances are stored at any Facility except in quantities necessary to satisfy the reasonably anticipated use or consumption

by the Company. No litigation, claim, proceeding or governmental investigation is pending regarding any environmental matter for which the Company has been served or otherwise notified or, to the knowledge of the Company threatened or asserted against the Company, or the officers or directors of the Company in their capacities as such, or any Facility or the Company's business. There are no orders, judgments or decrees of any court or of any governmental agency or instrumentality under any Environmental Law which specifically apply to the Company, any Facility or any of the Company's operations. The Company has not received from a governmental authority or other person (i) any notice that it is a potentially responsible person for any Contaminated site or (ii) any request for information about a site alleged to be Contaminated or regarding the disposal of Hazardous Substances. There is no litigation or proceeding against any other person by the Company regarding any environmental matter. The Company has disclosed in the Prospectus or made available to the Underwriters and their counsel true, complete and correct copies of any reports, studies, investigations, audits, analysis, tests or monitoring in the possession of or initiated by the Company pertaining to any environmental matter relating to the Company, its past or present operations or any Facility.

For the purposes of the foregoing paragraph, "Environmental Laws" means any applicable federal, state or local statute, regulation, code, rule, ordinance, order, judgment, decree, injunction or common law pertaining in any way to the protection of human health or the environment, including without limitation, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Toxic Substances Control Act, the Clean Air Act, the Federal Water Pollution Control Act and any similar or comparable state or local law; "Hazardous Substance" means any hazardous, toxic, radioactive or infectious substance, material or waste as defined, listed or regulated under any Environmental Law; "Contaminated" means the actual existence on or under any real property of Hazardous Substances, if the existence of such Hazardous Substances triggers a requirement to perform any investigatory, remedial, removal or other response action under any Environmental Laws or if such response action legally could be required by any governmental authority; "Facility" means any property currently owned, leased or occupied by the Company.

(p) Neither the Company, nor to the Company's best knowledge, any of its affiliates, has taken or intends to take, directly or indirectly, any action designed to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the shares of Common Stock to facilitate the sale or resale of the Units.

(q) The Company is not an "investment company" within the meaning of such term under the Investment Company Act of 1940, as amended (the "1940 Act"), and the rules and regulations of the Commission thereunder.

(r) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as

necessary to permit preparation of financial statements in conformity with

generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(s) The Company carries, or is covered by, insurance in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar industries.

(t) The Company is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company would have any liability; the Company has not incurred and does not expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (ii) Section 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "Code"); and each "pension plan" for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.

(u) The Company confirms as of the date hereof that it is in compliance with all provisions of Section 1 of Laws of Florida, Chapter 92-198, AN ACT RELATING TO DISCLOSURE OF DOING BUSINESS WITH CUBA, and the Company further agrees that if it commences engaging in business with the government of Cuba or with any person or affiliate located in Cuba after the date the Registration Statement becomes or has become effective with the Commission or with the Florida Department of Banking and Finance (the "Department"), whichever date is later, or if the information reported or incorporated by reference in the Prospectus, if any, concerning the Company's business with Cuba or with any person or affiliate located in Cuba changes in any material way, the Company will provide the Department notice of such business or change, as appropriate, in a form acceptable to the Department.

(v) The Company is in material compliance with all laws, rules, regulations, orders of any court or administrative agency, operating licenses or other requirements imposed by any governmental body applicable to it, including, without limitation, all applicable laws, rules, regulations, licenses or other governmental standards applicable to the industry in which the Company operates; and the conduct of the business of the Company, as described in the Prospectus, will not cause the Company to be in violation of any such requirements.

(w) The Warrants have been authorized for issuance to the various purchasers of the Units and will, when issued, possess rights, privileges, and characteristics

as represented in the most recent form of Warrants filed as an exhibit to the Registration Statement; the securities to be issued upon exercise of the Warrants, when issued and delivered against payment therefor in accordance with the terms of the Warrants, will be duly and validly issued, fully paid, nonassessable and free of preemptive rights, and all corporate action required to be taken for the authorization and issuance of the Warrants, and the securities to be issued upon their exercise, has validly and sufficiently taken.

(x) The Representative's Warrants (as defined in Paragraph (d) of Section 2 hereof) have been authorized for issuance to the Representative and will, when issued, possess rights, privileges, and characteristics as represented in the most recent form of Representative's Warrants filed as an

exhibit to the Registration Statement; the securities to be issued upon exercise of the Representative's Warrants, when issued and delivered against payment therefor in accordance with the terms of the Representative's Warrants, will be duly and validly issued, fully paid, nonassessable and free of preemptive rights, and all corporate action required to be taken for the authorization and issuance of the Representative's Warrants, and the securities to be issued upon their exercise, have been validly and sufficiently taken.

(y) Except as disclosed in the Prospectus, neither the Company nor any of its officers, directors or affiliates have caused any person, other than the Underwriters, to be entitled to reimbursement of any kind, including, without limitation, any compensation that would be includable as underwriter compensation under the NASD's Corporate Financing Rule with respect to the offering of the Units, as a result of the consummation of such offering based on any activity of such person as a finder, agent, broker, investment adviser or other financial service provider.

2. PURCHASE, SALE AND DELIVERY OF THE UNITS.

(a) On the basis of the representations, warranties and covenants herein contained, and subject to the conditions herein set forth, the Company agrees to sell to the Underwriters and each Underwriter agrees, severally and not jointly, to purchase, at a price of $_____ per Unit, the number of Firm Units set forth opposite the name of each Underwriter in Schedule I hereof, subject to adjustments in accordance with Section 9 hereof.

(b) Payment for the Firm Units to be sold hereunder is to be made in New York Clearing House funds and, at the option of the Representative, by certified or bank cashier's checks drawn to the order of the Company or bank wire to an account specified by the Company against either uncertificated delivery of Firm Units or of certificates therefor (which delivery, if certificated, shall take place in such location in New York, New York as may be specified by the Representative) to the Representative for the several accounts of the Underwriters. Such payment is to be made at the offices of the Representative at the address set forth on the first page of this Agreement, or at such other place as you and the Company shall designate, at 7:00 a.m., Pacific time, on the third business day after the date of this Agreement or at such other time and date not later than five business days after as you and the Company shall agree upon, such time and date being herein referred to as the "Closing

Date." (As used herein, "business day" means a day on which the New York Stock Exchange is open for trading and on which banks in New York are open for business and not permitted by law or executive order to be closed.) Except to the extent uncertificated Firm Units are delivered at closing, the certificates for the Firm Units will be delivered in such denominations and in such registrations as the Representative request in writing not later than the second full business day prior to the Closing Date, and will be made available for inspection by the Representative at least one business day prior to the Closing Date.

(c) In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Representative to purchase the Option Units at the price per Unit as set forth in the first paragraph of this Section 2. The option granted hereby may be exercised in whole or in part by giving written notice (i) at any time before the Closing Date and (ii) only once thereafter within 45 days after the date of this Agreement, by the Representative to the Company setting forth the number of Option Units as to which the Representative is exercising the option, the names and denominations in which the Option Units are to be registered and the time and date at which certificate representing such Units are to be delivered. The time and date at which certificates for Option Units are to be delivered shall be determined by the Representative but shall not be earlier than three nor later than 10 full

business days after the exercise of such option, nor in any event prior to the Closing Date (such time and date being herein referred to as the "Option Closing Date"). If the date of exercise of the option is three or more days before the Closing Date, the notice of exercise shall set the Closing Date as the Option Closing Date. The option with respect to the Option Units granted hereunder may be exercised only to cover over-allotments in the sale of the Firm Units by the Underwriters. The Representative may cancel such option at any time prior to its expiration by giving written notice of such cancellation to the Company. To the extent, if any, that the option is exercised, payment for the Option Units shall be made on the Option Closing Date in New York Clearing House funds and, at the option of the Representative, by certified or bank cashier's check drawn to the order of the Company for the Option Units to be sold by the Company or bank wire to an account specified by the Company against delivery of certificates therefor at the offices of Paulson Investment Company, Inc. set forth on the first page of this Agreement.

(d) In addition to the sums payable to the Representative as provided elsewhere herein, the Representative shall be entitled to receive at the Closing, for itself alone and not as Representative of the Underwriters, as additional compensation for its services, a purchase warrant (the "Representative's Warrant") for the purchase of up to _____ Units at a price of $_____ per Unit, upon the terms and subject to adjustment and conversion as described in the form of Representative's Warrant filed as an exhibit to the Registration Statement.

3. OFFERING BY THE UNDERWRITERS.

It is understood that the several Underwriters are to make a public offering of the Firm Units as soon as the Representative deems it advisable to do so. The Firm Units

are to be initially offered to the public at the initial public offering price set forth in the Prospectus. The Representative may from time to time thereafter change the public offering price and other selling terms. To the extent, if at all, that any Option Units are purchased pursuant to Section 2 hereof, the Representative will offer them to the public on the foregoing terms.

It is further understood that you will act as the Representative for the Underwriters in the offering and sale of the Units in accordance with an Agreement Among Underwriters entered into by you and the several other Underwriters.

4. COVENANTS OF THE COMPANY.

The Company covenants and agrees with the several Underwriters that:

(a) The Company will (i) use its best efforts to cause the Registration Statement to become effective or, if the procedure in Rule 430A of the Rules and Regulations is followed, to prepare and timely file with the Commission under Rule 424(b) of the Rules and Regulations a Prospectus in a form approved by the Representative containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A of the Rules and Regulations, and (ii) not file any amendment to the Registration Statement or supplement to the Prospectus of which the Representative shall not previously have been advised and furnished with a copy or to which the Representative shall have reasonably objected in writing or which is not in compliance with the Rules and Regulations.

(b) The Company will advise the Representative promptly (i) when the Registration Statement or any post-effective amendment thereto shall have become effective, (ii) of receipt of any comments from the Commission, (iii) of any request of the Commission for amendment of the Registration Statement or for supplement to the Prospectus or for any additional information, and (iv) of the

issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the use of the Prospectus or of the institution of any proceedings for that purpose. The Company will use its best efforts to prevent the issuance of any such stop order preventing or suspending the use of the Prospectus and to obtain as soon as possible the lifting thereof, if issued.

(c) The Company will cooperate with the Representative in endeavoring to qualify the Units for sale under the securities laws of such jurisdictions as the Representative may reasonably have designated in writing and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, provided the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent. The Company will, from time to time, prepare and file such statements, reports, and other documents, as are or may be required to continue such qualifications in effect for so long a period as the Representative may reasonably request for distribution of the Units.

(d) The Company will deliver to, or upon the order of, the Representative, from time to time, as many copies of any Preliminary Prospectus as the Representative may reasonably request. The Company will deliver to, or upon the order of, the Representative during the period when delivery of a Prospectus is required under the Act, as many copies of the Prospectus in final form, or as thereafter amended or supplemented, as the Representative may reasonably request. The Company will deliver to the Representative at or before the Closing Date, four signed copies of the Registration Statement and all amendments thereto including all exhibits filed therewith, and will deliver to the Representative such number of copies of the Registration Statement (including such number of copies of the exhibits filed therewith that may reasonably be requested), and of all amendments thereto, as the Representative may reasonably request.

(e) The Company will comply with the Act and the Rules and Regulations, and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Commission thereunder, so as to permit the completion of the distribution of the Units as contemplated in this Agreement and the Prospectus. If during the period in which a prospectus is required by law to be delivered by an Underwriter or dealer, any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, it becomes necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading, or, if it is necessary at any time to amend or supplement the Prospectus to comply with any law, the Company promptly will prepare and file with the Commission an appropriate amendment to the Registration Statement or supplement to the Prospectus so that the Prospectus as so amended or supplemented will not, in the light of the circumstances when it is so delivered, be misleading, or so that the Prospectus will comply with the law.

(f) The Company will make generally available to its security holders, as soon as it is practicable to do so, but in any event not later than 15 months after the effective date of the Registration Statement, an earnings statement (which need not be audited) in reasonable detail, covering a period of at least 12 consecutive months beginning after the effective date of the Registration Statement, which earnings statement shall satisfy the requirements of Section 11(a) of the Act and Rule 158 of the Rules and Regulations and will advise you in writing when such statement has been so made available.

(g) The Company will, for a period of five years from the Closing Date, deliver to the Representative copies of annual reports and copies of all other documents, reports and information furnished by the Company to its stockholders or filed with any securities exchange pursuant to the requirements of such exchange or with the Commission pursuant to the Act or the Exchange Act. The Company will deliver to the Representative similar

reports with respect to significant subsidiaries, as that term is defined in the Rules and Regulations, which are not consolidated in the Company's financial statements.

(h) No offering, sale, short sale or other disposition of any shares of Common Stock of the Company or other securities convertible into or exchangeable or

exercisable for shares of Common Stock or derivative of Common Stock (or agreement for such) will be made for a period of one year after the date of this Agreement, directly or indirectly, by the Company otherwise than hereunder or with the prior written consent of the Representative, which consent will not be unreasonably withheld.

(i) The Company will use its best efforts to list the Common Stock and the Warrants, subject to notice of their issuance, on The Nasdaq Stock Market.

(j) The Company has caused each officer and director and each person who owns, beneficially or of record, 1% or more of the Common Stock outstanding immediately prior to this offering (the "Insiders") to furnish to you, on or prior to the date of this Agreement, a letter or letters, in form and substance satisfactory to the Underwriters (the "Insider Lockup Agreements"), pursuant to which each Insider shall agree not to offer to sell, sell, contract to sell, sell short or otherwise dispose of any shares of Common Stock or other capital stock of the Company, or any other securities convertible, exchangeable or exercisable for Common Stock or derivatives of Common Stock owned by such Insider, or request the registration for the offer or sale of any of the foregoing (or as to which such Insider has the right to direct the disposition of), for a period of one year after the date of this Agreement, directly or indirectly, except with the prior written consent of the Representative, which consent shall not be unreasonably withheld. In addition, the Company has caused persons (the "Non-insiders") who own in the aggregate at least 85% of the Common Stock outstanding immediately prior to this offering remaining after subtracting the shares owned by those who have executed Insider Lockup Agreements to enter into a letter or letters, in form and substance satisfactory to the Underwriters (the "Other Lockup Agreements"), pursuant to which each such Non-insider shall agree not to offer to sell, sell, contract to sell, sell short or otherwise dispose of any shares of Common Stock or other capital stock of the Company, or any other securities convertible, exchangeable or exercisable for Common Stock or derivatives of Common Stock owned by such Non-insider, or request the registration for the offer or sale of any of the foregoing (or as to which such Non-insider has the right, to direct the disposition of) for a period of one year after the date of this Agreement, directly or indirectly, except with the prior written consent of the Representative, which consent shall not be unreasonably withheld, provided, however, that notwithstanding the foregoing, a Non-insider may sell or otherwise dispose of up to 50% of the shares of Common Stock or other capital stock of the Company held by such person during the period beginning six months and ending one year after the date of this Agreement. The Insider Lockup Agreements and the Other Lockup Agreements shall also provide that the holder shall give the Representative prior notice with respect to any offers to sell, sales, contracts to sell, short sales or other dispositions of Common Stock pursuant to Rule 144 under the Act or any similar provisions enacted subsequent to the date of this Agreement, for as long as you are a market maker in the Common Stock or for a period of five years from the date of this Agreement, whichever period is shorter.

(k) The Company shall apply the net proceeds of its sale of the Units as set forth in the Prospectus and shall file such reports with the Commission with respect to the

sale of the Units and the application of the proceeds therefrom as may be required in accordance with Rule 463 under the Act.

(l) The Company shall not invest, or otherwise use the proceeds received by the Company from its sale of the Units in such a manner as would require the Company or any of the subsidiaries to register as an investment company under the 1940 Act.

(m) The Company will maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock.

(n) The Company will not take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of any securities of the Company.

5. COSTS AND EXPENSES.

(a) The Representative shall be entitled to receive from the Company, for itself alone and not as Representative of the Underwriters, a nonaccountable expense allowance equal to 2.5% of the aggregate public offering price of Units sold to the Underwriters in connection with the Offering. The Representative shall be entitled to withhold this allowance on the Closing Date (less the $35,000 advance against such amount that has been paid by the Company) with respect to Units delivered on the Closing Date and to require the Company to make payment of this allowance on the Option Closing Date with respect to Units delivered on the Option Closing Date.

(b) In addition to the payment described in Paragraph (a) of this Section 5, the Company will pay all costs, expenses and fees incident to the performance of the obligations of the Company under this Agreement, including, without limiting the generality of the foregoing, the following: accounting fees of the Company; the fees and disbursements of counsel for the Company; the cost of printing and delivering to, or as requested by, the Underwriters copies of the Registration Statement, Preliminary Prospectuses, the Prospectus, this Agreement, the Underwriters' Selling Memorandum, the Underwriters' Invitation Letter, the Listing Application, the Blue Sky Survey and any supplements or amendments thereto; the filing fees of the Commission; the filing fees incident to securing any required review by the NASD of the terms of the sale of the Units; the Listing Fee of The Nasdaq Stock Market; reasonable costs of a due diligence investigation of the principals of the Company by a firm acceptable to the Representative; and the expenses, including the fees and disbursements of counsel for the Underwriters, incurred in connection with the qualification of the Units under state securities or Blue Sky laws. Any transfer taxes imposed on the sale of the Units to the several Underwriters will be paid by the Company. The Company agrees to pay all costs and expenses of the Underwriters, including the fees and disbursements of counsel for the Underwriters, incident to the offer and sale of directed shares of the Common Stock by the Underwriters to employees and persons having business relationships with the Company. The Company shall not, however, be required to pay for any of the Underwriters' expenses (other than those related to qualification under NASD regulation and state securities or Blue Sky

laws) except that, if this Agreement shall not be consummated, then the Company shall reimburse the several Underwriters for reasonable accountable out-of-pocket expenses, including fees and disbursements of counsel, reasonably incurred in connection with investigating, marketing and proposing to market the Units or in contemplation of performing their obligations hereunder (less the $35,000 advance that has been paid by the Company); but the Company shall not in any event be liable to any of the several Underwriters for damages on account of loss of anticipated profits from the sale by them of the Units.

(c) In the event the Company elects to redeem the Warrants at any time commencing one year after the date of this Agreement, the Company shall retain the Representative as the Company's solicitation agent (the "Warrant Solicitation Agent"). The Company shall pay to the Warrant Solicitation Agent for its services a solicitation fee equal to 2% of the total amount paid by the holders of the Warrants whom the Warrant Solicitation Agent solicits to exercise the Warrants. The exercise will be presumed to be unsolicitated unless the customer states in writing that the transaction was solicited by the Warrant Solicitation Agent and designates in writing the registered representative of the Warrant Solicitation Agent entitled to receive compensation for the exercise. The fee shall not be payable for the exercise of any Warrant held by the Warrant Solicitation Agent in a discretionary account at the time of exercise, unless the Warrant Solicitation Agent receives from the customer prior specific written approval of such exercise.

6. CONDITIONS OF OBLIGATIONS OF THE UNDERWRITERS.

The several obligations of the Underwriters to purchase the Firm Units on the Closing Date and the Option Units, if any, on the Option Closing Date are subject to the accuracy, as of the Closing Date or the Option Closing Date, as the case may be, of the representations and warranties of the Company contained herein, and to the performance by the Company of their covenants and obligations hereunder and to the following additional conditions:

(a) The Registration Statement and all post-effective amendments thereto shall have become effective and any and all filings required by Rule 424 and Rule 430A of the Rules and Regulations shall have been made, and any request of the Commission for additional information (to be included in the Registration Statement or otherwise) shall have been disclosed to the Representative and complied with to its reasonable satisfaction. No stop order suspending the effectiveness of the Registration Statement, as amended from time to time, shall have been issued and no proceedings for that purpose shall have been taken or, to the knowledge of the Company, shall be contemplated by the Commission and no injunction, restraining order, or order of any nature by a federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance of the Units.

(b) The Representative shall have received on the Closing Date or the Option Closing Date, as the case may be, the opinion of Ater Wynne Hewitt Dodson & Skerritt, counsel for the Company, dated the Closing Date or the Option Closing Date, as the

case may be, addressed to the Underwriters (and stating that it may be relied upon by counsel to the Underwriters) to the effect that:

(i) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the state of Oregon, with corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement; the Company is duly qualified to transact business in all jurisdictions in which the conduct of its business requires such qualification, or in which the failure to qualify would have a materially adverse effect upon the business of the Company.

(ii) The Company has authorized and outstanding capital stock as set forth under the caption "Capitalization" in the Prospectus; the authorized shares of the Company's Common Stock have been duly authorized; the outstanding shares of the Company's Common Stock have been duly authorized and validly issued and are fully paid and non-assessable; all of the securities of the Company conform to the description thereof contained in the Prospectus; the certificates for the Common Stock and Warrants, assuming they are in the form filed with the Commission, are in due and proper form; the shares of Common Stock to be sold by the Company pursuant to this Agreement, including shares of Common Stock to be sold as a part of the Option Units have been duly authorized

and, upon issuance and delivery thereof as contemplated in this Agreement and the Registration Statement, will be validly issued, fully paid and non-assessable; no preemptive rights of stockholders exist with respect to any of the Common Stock of the Company or the issuance or sale thereof pursuant to any applicable statute or the provisions of the Company's charter documents or, to such counsel's best knowledge, pursuant to any contractual obligation. The Warrants and the Representative's Warrants have been authorized for issuance to the purchasers of Units or the Representative, as the case may be, and will, when issued, possess rights, privileges, and characteristics as represented in the most recent form of Warrants or Representative's Warrants, as the case may be, filed as an exhibit to the Registration Statement; the securities to be issued upon exercise of the Representative's Warrants, when issued and delivered against payment therefor in accordance with the terms of the Representative's Warrants, will be duly and validly issued, fully paid, nonassessable and free of preemptive rights, and all corporate action required to be taken for the authorization and issuance of the Warrants, the Representative's Warrants, and the securities to be issued upon their exercise, has been validly and sufficiently taken.

(iii) Except as described in or contemplated by the Prospectus, to the knowledge of such counsel, there are no outstanding securities of the Company convertible or exchangeable into or evidencing the right to purchase or subscribe for any shares of capital stock of the Company and there are no outstanding or authorized options, warrants or rights of any character obligating the Company to issue any shares of its capital stock or any securities convertible or exchangeable into or evidencing the right to purchase or subscribe for any shares of such stock; and except as described in the Prospectus, to the knowledge of such counsel, no holder of any securities of the Company or any other person has the right, contractual or otherwise, which has not been satisfied or effectively waived, to cause the Company to sell or otherwise issue to them, or to permit them to underwrite the sale of, any

of the Units or the right to have any Common Stock or other securities of the Company included in the Registration Statement or the right, as a result of the filing of the Registration Statement, to require registration under the Act of any shares of Common Stock or other securities of the Company.

(iv) The Registration Statement has become effective under the Act and, to the best of the knowledge of such counsel, no stop order proceedings with respect thereto have been instituted or are pending or threatened under the Act.

(v) The Registration Statement, the Prospectus and each amendment or supplement thereto comply as to form in all material respects with the requirements of the Act and the applicable rules and regulations thereunder (except that such counsel need express no opinion as to the financial statements and related schedules therein).

(vi) The statements under the captions "Shares Eligible for Future Sale" and "Description of Securities" in the Prospectus and in Item 24 of the Registration Statement, insofar as such statements constitute a summary of documents referred to therein or matters of law, fairly summarize in all material respects the information called for with respect to such documents and matters.

(vii) Such counsel does not know of any contracts or documents required to be filed as exhibits to the Registration Statement or described in the Registration Statement or the Prospectus which are not so filed or described as required, and such contracts and documents as are summarized in the Registration Statement or the Prospectus are fairly summarized in all material respects.

(viii) Such counsel knows of no material legal or governmental proceedings pending or threatened against the Company.

(ix) The execution and delivery of this Agreement and the consummation of the transactions herein contemplated do not and will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, the articles of incorporation or bylaws of the Company, or any agreement or instrument known to such counsel to which the Company is a party or by which the Company may be bound.

(x) This Agreement has been duly authorized, executed and delivered by the Company.

(xi) No approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body is necessary in connection with the execution and delivery of this Agreement and the consummation of the transactions herein contemplated (other than as may be required by the NASD or as required by state securities and Blue Sky laws as to which such counsel need express no opinion) except such as have been obtained or made, specifying the same.

(xii) The Company is not, and will not become, as a result of the consummation of the transactions contemplated by this Agreement, and application of the net proceeds therefrom as described in the Prospectus, required to register as an investment company under the 1940 Act.

In rendering such opinion, such counsel may rely as to matters governed by the laws of states other than Oregon or federal laws on local counsel in such jurisdictions, provided that in each case such counsel shall state that they believe that they and the Underwriters are justified in relying on such other counsel. In addition to the matters set forth above, the opinion of Ater Wynne Hewitt Dodson & Skerritt shall also include a statement to the effect that nothing has come to the attention of such counsel that has caused them to believe that (i) the Registration Statement, at the time it became effective under the Act (but after giving effect to any modifications incorporated therein pursuant to Rule 430A under the Act) and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (ii) the Prospectus, or any supplement thereto, on the date it was filed pursuant to the Rules and Regulations and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements, in the light of the circumstances under which they are made, not misleading (except that such counsel need express no view as to financial statements, schedules and statistical information therein).

(c) The Representative shall have received from Weiss, Jensen, Ellis & Howard, counsel for the Underwriters, an opinion dated the Closing Date or the Option Closing Date, as the case may be, substantially to the effect specified in subparagraphs (i), (iv) and (v) of Paragraph (b) of this Section 6. In rendering such opinion Weiss, Jensen, Ellis & Howard may rely as to all matters governed other than by the laws of the State of Oregon or federal laws on the opinion of counsel referred to in Paragraph (b) of this Section 6. In addition to the matters set forth above, such opinion shall also include a statement to the effect that nothing has come to the attention of such counsel that has caused them to believe that (i) the Registration Statement, or any amendment thereto, as of the time it became effective under the Act (but after giving effect to any modifications incorporated therein pursuant to Rule 430A under the Act) and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (ii) the Prospectus, or any supplement thereto, on the date it was filed

pursuant to the Rules and Regulations and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact, necessary in order to make the statements, in the light of the circumstances under which they are made, not misleading (except that such counsel need express no view as to financial statements, schedules and statistical information therein). With respect to such statement, Weiss, Jensen,

Ellis & Howard may state that their belief is based upon the procedures set forth therein, but is without independent check and verification.

(d) The Representative shall have received at the Closing Date or the Option Closing Date, as the case may be, the opinion of Peter Dehlinger & Associates, patent counsel to the Company, dated the Closing Date or the Option Closing Date, as the case may be, addressed to the Underwriters (and stating that it may be relied upon by counsel to the Underwriters) related to the Company's patents and substantially in the form attached hereto as Schedule II hereto.

(e) The Representative shall have received at or prior to the Closing Date from Weiss, Jensen, Ellis & Howard a memorandum or summary, in form and substance satisfactory to the Representative, with respect to the qualification for offering and sale by the Underwriters of the Units under the state securities or Blue Sky laws of such jurisdictions as the Representative may reasonably have designated to the Company.

(f) The Representative, on behalf of the several Underwriters, shall have received, on each of the dates hereof, the Closing Date and the Option Closing Date, as the case may be, a letter dated the date hereof, the Closing Date or the Option Closing Date, as the case may be, in form and substance satisfactory to the Representative, of Arthur Andersen LLP confirming that they are independent public accountants within the meaning of the Act and the applicable published Rules and Regulations thereunder and stating that in their opinion the financial statements and schedules examined by them and included in the Registration Statement comply in form in all material respects with the applicable accounting requirements of the Act and the related published Rules and Regulations and containing such other statements and information as are ordinarily included in accountants' "comfort letters" to Underwriters with respect to the financial statements and certain financial and statistical information contained in the Registration Statement and Prospectus.

(g) The Representative shall have received on the Closing Date or the Option Closing Date, as the case may be, a certificate or certificates of the Chief Executive Officer and the Chief Financial Officer of the Company to the effect that, as of the Closing Date or the Option Closing Date, as the case may be, each of them severally represents as follows:

(i) The Registration Statement has become effective under the Act and no stop order suspending the effectiveness of the Registration Statement has been issued, and no proceedings for such purpose have been taken or are, to his knowledge, contemplated by the Commission;

(ii) The representations and warranties of the Company contained in Section 1 hereof are true and correct as of the Closing Date or the Option Closing Date, as the case may be;

(iii) All filings required to have been made pursuant to Rule 424 or Rule 430A under the Act have been made;

(iv) He or she has carefully examined the Registration Statement and the Prospectus and, in his or her opinion, as of the effective date of the Registration Statement, the statements contained in the Registration Statement were true and correct, and such Registration Statement and Prospectus did not omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, and since the effective date of the Registration Statement, no event has occurred which should have been set forth in a supplement to or an amendment of the Prospectus which has not been so set forth in such supplement or amendment; and

(v) Since the respective dates as of which information is given in the Registration Statement and Prospectus, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the condition, financial or otherwise, of the Company or the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise) or prospects of the Company, whether or not arising in the ordinary course of business.

(h) The Company shall have furnished to the Representative such further certificates and documents confirming the representations and warranties, covenants and conditions contained herein and related matters as the Representative may reasonably have requested.

(i) The Common Stock and Warrants have been approved for designation on The Nasdaq Stock Market upon notice of issuance.

(j) The Lockup Agreements described in Section 4(j) are in full force and effect.

(k) The Company shall have fully completed a rescission offer to certain purchasers of the Company's Common Stock offering them the right to rescind their prior acquisition of Common Stock as described in the registration statement filed with the Commission on Form _____ (File No. _____) and declared effective by the Commission on _____, 1997.

The opinions and certificates mentioned in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in all material respects satisfactory to the Representative and to Weiss, Jensen, Ellis & Howard, counsel for the Underwriters.

If any of the conditions hereinabove provided for in this Section 6 shall not have been fulfilled when and as required by this Agreement to be fulfilled, the obligations of the Underwriters hereunder may be terminated by the Representative by notifying the

Company of such termination in writing or by telegram at or prior to the Closing Date or the Option Closing Date, as the case may be.

In such event, the Company and the Underwriters shall not be under any obligation to each other (except to the extent provided in Sections 5 and 8 hereof).

7. CONDITIONS OF THE OBLIGATIONS OF THE COMPANY.

The obligations of the Company to sell and deliver the portion of the Units required to be delivered as and when specified in this Agreement are subject to the conditions that at the Closing Date or the Option Closing Date, as the case may be, no stop order suspending the effectiveness of the Registration Statement shall have been issued and in effect or proceedings therefor initiated or threatened.

8. INDEMNIFICATION.

(a) The Company agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of the Act, against any losses, claims, damages or liabilities to which such Underwriter or any such controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement thereto, or (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; and will reimburse each Underwriter and each such controlling person upon demand for any legal or other expenses reasonably incurred by such Underwriter or such controlling person in connection with investigating or defending any such loss, claim, damage or liability, action or proceeding or in responding to a subpoena or governmental inquiry related to the offering of the Units, whether or not such Underwriter or controlling person is a party to any action or proceeding; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement, or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Prospectus, or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the Representative specifically for use in the preparation thereof. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter severally and not jointly will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement and each person, if any, who controls the Company within the meaning of the Act, against any losses, claims, damages or liabilities to which the Company or any such director, officer or controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in

respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement thereto, or (ii) the omission or the alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; and will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer or controlling person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding; provided, however, that each Underwriter will be liable in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission has been made in the Registration Statement, any Preliminary Prospectus, the Prospectus or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the Representative specifically for use in the preparation thereof. This indemnity agreement will be in addition to any liability which such Underwriter may otherwise have.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to this Section 8, such person (the "indemnified party") shall promptly notify the person against whom such indemnity may be sought (the "indemnifying party") in writing. No indemnification provided for in Section 8(a) or (b) shall be available to any party who shall fail to give notice as provided in this Section 8(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice, but the failure to give such notice shall not relieve the indemnifying party or parties from any liability which it or they may have to

the indemnified party for contribution or otherwise than on account of the provisions of Section 8(a) or (b). In case any such proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party and shall pay as incurred the fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel at its own expense. Notwithstanding the foregoing, the indemnifying party shall pay as incurred (or within 30 days of presentation) the fees and expenses of the counsel retained by the indemnified party in the event (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them or (iii) the indemnifying party shall have failed to assume the defense and employ counsel acceptable to the indemnified party within a reasonable period of time after notice of commencement of the action. It is understood that the indemnifying party shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm for all such indemnified parties. Such firm shall be designated in writing by

you in the case of parties indemnified pursuant to Section 8(a) and by the Company in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, the indemnifying party will not, without the prior written consent of the indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding of which indemnification may be sought hereunder (whether or not any indemnified party is an actual or potential party to such claim, action or proceeding) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action or proceeding.

(d) If the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or (b) above in respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Units. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities, (or actions or proceedings in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bears to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or

alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to above in this Section 8(d) shall be deemed to include any legal or other expenses

reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), (i) no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to the Units purchased by such Underwriter, and (ii) no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this Section 8(d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) In any proceeding relating to the Registration Statement, any Preliminary Prospectus, the Prospectus or any supplement or amendment thereto, each party against whom contribution may be sought under this Section 8 hereby consents to the jurisdiction of any court having jurisdiction over any other contributing party, agrees that process issuing from such court may be served upon him or it by any other contributing party and consents to the service of such process and agrees that any other contributing party may join him or it as an additional defendant in any such proceeding in which such other contributing party is a party.

(f) Any losses, claims, damages, liabilities or expenses for which an indemnified party is entitled to indemnification or contribution under this Section 8 shall be paid by the indemnifying party to the indemnified party as such losses, claims, damages, liabilities or expenses are incurred. The indemnity and contribution agreements contained in this Section 8 and the representations and warranties of the Company set forth in this Agreement shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of any Underwriter or any person controlling any Underwriter, the Company, its directors or officers or any persons controlling the Company, (ii) acceptance of any Units and payment therefor hereunder, and (iii) any termination of this Agreement. A successor to any Underwriter, or to the Company, its directors or officers, or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution and reimbursement agreements contained in this Section 8.

9. DEFAULT BY UNDERWRITERS.

If on the Closing Date or the Option Closing Date, as the case may be, any Underwriter shall fail to purchase and pay for the portion of the Units which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), you, as Representative of the Underwriters, shall use your reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such amounts as may be agreed upon and upon the terms set forth herein, the Firm Units or Option Units, as the case may be, which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours you, as such Representative, shall not have procured such other Underwriters, or any others, to purchase the Firm Units or Option Units, as the

case may be, agreed to be purchased by the defaulting Underwriter or Underwriters, then (a) if the aggregate number of Units with respect to which such default shall occur does not exceed 10% of the Firm

Units or Option Units, as the case may be, covered hereby, the other Underwriters shall be obligated, severally, in proportion to the respective numbers of Firm Units or Option Units, as the case may be, which they are obligated to purchase hereunder, to purchase the Firm Units or Option Units, as the case may be, which such defaulting Underwriter or Underwriters failed to purchase, or (b) if the aggregate number of Firm Units or Option Units, as the case may be, with respect to which such default shall occur equals or exceeds 10% of the Firm Units or Option Units, as the case may be, covered hereby, the Company or you as the Representative of the Underwriters will have the right, by written notice given within the next 36-hour period to the parties to this Agreement, to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company except to the extent provided in Section 8 hereof. In the event of a default by any Underwriter or Underwriters, as set forth in this Section 9, the Closing Date or Option Closing Date, as the case may be, may be postponed for such period, not exceeding seven days, as you, as Representative, may determine in order that the required changes in the Registration Statement or in the Prospectus or in any other documents or arrangements may be effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section 9 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

10. NOTICES.

All communications hereunder shall be in writing and, except as otherwise provided herein, will be mailed, delivered, telecopied or telegraphed and confirmed as follows: if to the Underwriters, to Paulson Investment Company, Inc., 811 SW Front Avenue, Portland, Oregon 97204, Attention: Chester L.F. Paulson; with a copy to Weiss, Jensen, Ellis & Howard, 2300 U.S. Bancorp Tower, 111 Fifth Avenue, Portland, Oregon 97204, Attention: Mark A. von Bergen; if to the Company, to AntiVirals Inc., One S.W. Columbia, Suite 1105, Portland, Oregon 97258, Attention: Denis R. Burger, Ph.D.; with a copy to Ater Wynne Hewitt Dodson & Skerritt, Suite 1800, 222 SW Columbia, Portland, Oregon 97201-6618, Attention: Jack W. Schifferdecker, Jr.

11. TERMINATION.

This Agreement may be terminated by you by notice to the Company as follows:

(a) at any time prior to the earlier of (i) the time the Units are released by you for sale by notice to the Underwriters, or (ii) 11:30 a.m. on the first business day following the date of this Agreement;

(b) at any time prior to the Closing Date if any of the following has occurred: (i) since the respective dates as of which information is given in the Registration Statement and the Prospectus, any material adverse change or any development involving a prospective material adverse change in or affecting the condition, financial or otherwise, of the Company and its subsidiaries taken as a whole or the earnings, business, management,

properties, assets, rights, operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries taken as a whole, whether or not arising in the ordinary course of business, (ii) any outbreak or escalation of hostilities or declaration of war or national emergency or

other national or international calamity or crisis or change in economic or political conditions if the effect of such outbreak, escalation, declaration, emergency, calamity, crisis or change on the financial markets of the United States would, in your reasonable judgment, make it impracticable to market the Units or to enforce contracts for the sale of the Units, (iii) the Dow Jones Industrial Average shall have fallen by 15 percent or more from its closing price on the day immediately preceding the date that the Registration Statement is declared effective by the Commission, (iv) suspension of trading in securities generally on the New York Stock Exchange or the American Stock Exchange or limitation on prices (other than limitations on hours or numbers of days of trading) for securities on either such Exchange, (v) the enactment, publication, decree or other promulgation of any statute, regulation, rule or order of any court or other governmental authority which in your opinion materially and adversely affects or may materially and adversely affect the business or operations of the Company, (vi) declaration of a banking moratorium by United States or New York State authorities, (vii) any downgrading in the rating of the Company's debt securities by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436(g) under the Exchange Act); (viii) the suspension of trading of the Common Stock by the Commission on The Nasdaq Stock Market or (ix) the taking of any action by any governmental body or agency in respect of its monetary or fiscal affairs which in your reasonable opinion has a material adverse effect on the securities markets in the United States; or

(c) as provided in Sections 6 and 9 of this Agreement.

12. SUCCESSORS.

This Agreement has been and is made solely for the benefit of the Underwriters, the Company and their respective successors, executors, administrators, heirs and assigns, and the officers, directors and controlling persons referred to herein, and no other person will have any right or obligation hereunder. No purchaser of any of the Units from any Underwriter shall be deemed a successor or assign merely because of such purchase.

13. INFORMATION PROVIDED BY UNDERWRITERS.

The Company and the Underwriters acknowledge and agree that the only information furnished or to be furnished by any Underwriter to the Company for inclusion in any Prospectus or the Registration Statement consists of the information set forth in the last paragraph on the front cover page (insofar as such information relates to the Underwriters), legends required by Item 502(d) of Regulation S-B under the Act and the information under the caption "Underwriting" in the Prospectus.

14. MISCELLANEOUS.

The reimbursement, indemnification and contribution agreements contained in this Agreement and the representations, warranties and covenants in this Agreement shall remain in full force and effect regardless of (a) any termination of this Agreement, (b) any investigation made by or on behalf of any Underwriter or controlling person thereof, or by or on behalf of the Company or its directors or officers and (c) delivery of and payment for the Units under this Agreement.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

This Agreement shall be governed by, and construed in accordance with, the laws of the state of Oregon. All disputes relating to this Underwriting Agreement shall be adjudicated before a court located in Multnomah County, Oregon to the exclusion of all other courts that might have jurisdiction.

If the foregoing letter is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicates hereof, whereupon it will become a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

ANTIVIRALS INC.

By:

Denis R. Burger, Ph.D.
Chief Executive Officer

The foregoing Underwriting Agreement
is hereby confirmed and accepted
as of the date first above written.

PAULSON INVESTMENT COMPANY, INC.

As Representative of the several
Underwriters listed on Schedule I

By:

Authorized Officer

SCHEDULE I

SCHEDULE OF UNDERWRITERS

UNDERWRITER	NUMBER OF FIRM UNITS TO BE PURCHASED
Paulson Investment Company, Inc.	
Total:	

THIRD RESTATED AND AMENDED ARTICLES OF INCORPORATION
OF
ANTIVIRALS INC.

Pursuant to ORS 60.451, the Board of Directors of Antivirals Inc. (the "Corporation") hereby amends and restates its Second Restated Articles of Incorporation dated November 20, 1992.

ARTICLE I
NAME

The name of the Corporation is Antivirals Inc.

ARTICLE II
SHARES OF STOCK

1. The authorized capital stock of the Corporation consists of 50,000,000 shares of common stock, $0.0001 par value ("Common Stock") and 2,000,000 shares of preferred stock, $0.0001 par value ("Preferred Stock").

2. The Board of Directors shall have the power to issue, from time to time, one or more series of Preferred Shares or special stock in any manner permitted by law and not inconsistent with these Articles or the Bylaws of the Corporation. The Board of Directors shall have the authority to fix and determine, subject to the provisions of these Articles, the rights and preferences of the shares of such additional series, which shall be established by a resolution or resolutions of the Board of Directors providing for the issuance of such series.

3. On the effective date of this Third Restated and Amended Articles of Incorporation, each issued and outstanding share of Common Stock shall be combined and reconstituted as one-third (1/3) share. Any fractional shares resulting from his reverse stock split (after aggregating all shares held by each holder) shall be rounded up to the next whole share.

ARTICLE III
STAGGERED TERMS OF DIRECTORS

1. When there are six or more positions on the Board of Directors, those positions shall be divided into two equal or nearly equal groups, denoted Group I and Group II. Beginning at the 1992 annual shareholders meeting, in even years shareholders will elect directors to fill all Group I positions and in odd years shareholders will elect directors to fill all Group II positions.

2. This Article may not be amended, altered, changed or repealed in any respect unless such action is approved by the affirmative vote of the holders of not less than 66-2/3 percent of the shares then entitled to vote at an election of directors.

ARTICLE IV
NO PREEMPTIVE RIGHTS

The Corporation elects to waive preemptive rights.

ARTICLE V
LIMITATION ON LIABILITY

No director of the Corporation shall be personally liable to the Corporation or its shareholders for monetary damages for conduct as a

director, provided that this Article shall not eliminate the liability of a director for any act or omission for which such elimination of liability is not permitted under the Act. No amendment to the Act that further limits the acts or omissions for which elimination of liability is permitted shall affect the liability of a director for any act or omission which occurs prior to the effective date of the amendment.

ARTICLE VI
INDEMNIFICATION

The Corporation shall indemnify to the fullest extent not prohibited by law any current or former director of the Corporation who is made, or threatened to be made, a party to an action, suit or proceeding, whether civil, criminal, administrative, investigative or other (including an action, suit or proceeding by or in the right of the Corporation), by reason of the fact that such person is or was a director, officer, employee or agent of the Corporation or a fiduciary within the meaning of the Employee Retirement Income Security Act of 1974 with respect to any employee benefit plan of the Corporation, or serves or served at the request of the Corporation as a director, officer, employee or agent, or as a fiduciary of an employee benefit plan, of another corporation, partnership, joint venture, trust or other enterprise. The Corporation shall pay for or reimburse the reasonable expenses incurred by any such current or former director in any such proceeding in advance of the final disposition of the proceeding if the person sets forth in writing (i) the person's good faith belief that the person is entitled to indemnification under this Article and (ii) the person's agreement to repay all advances if it is ultimately determined that the person is not entitled to indemnification under this Article. No amendment to this Article that limits the Corporation's obligation to indemnify any person shall have any effect on such obligation for any act or omission that occurs prior to the later of the effective date of the amendment or the date notice of the amendment is given to the person. This Article shall not be deemed exclusive of any other provisions for indemnification or advancement of expenses of directors, officers, employees, agents and fiduciaries that may be included in any statute, bylaw, agreement, general or specific action of the Board of Directors, vote of shareholders or other document or arrangement.

ARTICLE VII
ADDRESS FOR NOTICES

The mailing address for the Corporation for notices is One SW Columbia, Suite 1105, Portland, OR 97258.

EXECUTED: JANUARY 20, 1997

/s/ John A. Beaulieu
_____
John A. Beaulieu
Chairman of the Board

Registry No. 145980-15

CERTIFICATE ACCOMPANYING
THIRD RESTATED ARTICLES OF INCORPORATION
OF
ANTIVIRALS INC.

The Third Restated Articles of Incorporation to which this certificate is

attached contain amendments to the Restated Articles of Incorporation which require shareholder approval.

Pursuant to ORS 60.451(4), the undersigned Chairman of the Board of Directors of Antivirals Inc. hereby certifies that the Third Restated Articles of Incorporation were approved by the shareholders on November 4, 1996. At that time, 26,319,281 shares of Common Stock, representing 26,319,281 votes, were outstanding and entitled to vote on the amendments and were cast as follows:

1. ARTICLE II - PREFERRED STOCK
   Votes cast in favor: 15,055,737
   Votes cast against: 114,054
   Votes abstaining: 3,030

2. ARTICLE II - STOCK SPLIT
   Votes cast in favor: 15,058,767
   Votes cast against: 114,054
   Votes abstaining: 0

2. ARTICLE IV - CUMULATIVE VOTING REMOVAL
   Votes cast in favor: 15,557,737
   Votes cast against: 190,292
   Votes abstaining: 0

Dated: January 20, 1997

ANTIVIRALS INC.

/s/ John A. Beaulieu
_____
John A. Beaulieu
Chairman of the Board

ADOPTED: NOVEMBER 1, 1991
AMENDED: JULY 20, 1993

BYLAWS
OF
ANTIVIRALS INC.

ARTICLE 1.

STOCKHOLDERS' MEETING

Section 1.01. ANNUAL MEETING: The annual meeting of the stockholders shall be held on the last Thursday in March of each year at a time and place set by the Board of Directors. At such meeting the stockholders entitled to vote shall nominate candidates to fill positions to be vacated by members of the Board of Directors whose terms end March 31 of that year, and to fill any new positions due to expansion of the Board of Directors.

Section 1.02. SPECIAL MEETINGS: Special meetings of the stockholders of this corporation may be held at any time on request of the President, or at the request of a majority of the Board of Directors, or on demand in writing by stockholders of record holding not less than one-tenth of the stock of the corporation entitled to vote.

Section 1.03. VOTING: Each stockholder shall be entitled to one vote, in person or by proxy, for each share of stock entitled to vote outstanding in such stockholder's name on the books of the corporation.

Section 1.04. QUORUM: A majority of the shares entitled to vote, represented in person or by proxy, shall constitute a quorum at any meeting of the stockholders. If a quorum is present, the affirmative vote of the majority of the shares entitled to vote on the subject matter shall be the act of the stockholders, unless the vote of a greater number is required by law, the Articles of Incorporation, or other provision of these Bylaws.

Section 1.05. NOTICE: Written or printed notice stating the place, day and hour of the meeting, and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten nor more than fifty days before the date of the meeting, either personally or by mail, by or at the direction of the President, the Secretary, or the officer or person calling the meeting, to each stockholder of record entitled to vote at such meeting. If mailed, such notice shall be deemed to be delivered when deposited in the United States Mail addressed to the stockholder at his address as it appears on the stock transfer books of the corporation, with postage thereon prepaid.

ARTICLE 2.

BOARD OF DIRECTORS

Section 2.01. NUMBER AND ELECTION OF DIRECTORS: The Board of Directors of this corporation shall be increased to nine (9) members. Elected directors will be those candidates receiving the highest number of votes. Directors elected after 1991 will serve two-year terms beginning at the time of their formal qualification in the year of their election. The number of directors may be subsequently increased or decreased by amendment to the Bylaws if said amendment is stockholder approved by a majority vote of the shares outstanding, but no decrease shall have the effect of shortening the term of any incumbent director. At each annual meeting of stockholders, the stockholders shall elect directors to fill the positions being vacated by

directors whose terms will expire in the year of the meeting, and to fill positions created by any expansion of the Board of Directors.

In the election of directors, each stockholder may cast his or her votes, corresponding to the number of shares owned by that stockholder, for any number of candidates, with any desired proportion of those votes going to any given candidate.

Section 2.02. VACANCIES: Any vacancy occurring in the Board of Directors shall be filled by election at a special meeting of directors. A director so elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office, subject to prior death, resignation or removal.

Section 2.03. ANNUAL MEETING: The Board of Directors shall meet in April (or soon thereafter) of each year at such time and place as the board shall agree upon, and at several other times throughout the year as the Board shall deem necessary or desirable.

Section 2.04. SPECIAL MEETINGS: Special Meetings of the Board of Directors can be called by the President or any member of the Board of Directors upon no less than 5 days notice to each director. Special meetings of the directors may be held at any time when a majority of the members of the Board consent thereto. Special meetings of the directors may be held at any place agreed to by a majority of the Board of Directors, or by means of conference telephone or similar communications equipment by which all participating directors can hear each other at the same time.

Section 2.05. QUORUM: A majority of the number of elected and qualified directors shall constitute a quorum for the transaction of business.

Section 2.06. VOTING: The act of the majority of the directors shall be the act of the Board of Directors, unless the vote of a greater number is required by other provision of these Bylaws.

Section 2.07. REMOVAL OF DIRECTORS: The stockholders at any annual meeting of the stockholders, or at any special meeting of the stockholders called for that purpose, may remover any director from office, with or without cause. Such removal requires an affirmative vote, represented in person or by proxy, of a majority of the shares outstanding.

Section 2.08. POWERS OF DIRECTORS: The Board of Directors shall have sole responsibility for the entire management of the business of the corporation. In the management and control of the property, business and affairs of the corporation, the Board of Directors is hereby vested with all of the powers possessed by the corporation, itself, so far as this delegation of authority is not inconsistent with the Oregon business Corporation Act, with the Articles of Incorporation of the corporation, or with these Bylaws. The Board of Directors shall have power to determine what constitutes net earnings, profits and surplus, respectively; what amount shall be reserved for working capital and for any other purpose and what amount shall be declared as dividends; and such determination by the Board of Directors shall be final and conclusive except as otherwise provided by the Oregon Business Corporation Act and the Articles of Incorporation.

Section 2.09. EXECUTIVE COMMITTEE: The Board of Directors may appoint from among its members an Executive Committee of two or more members. The Executive Committee shall have such powers and shall perform such duties as may be delegated and assigned to the Executive Committee from time to time by the Board of Directors. A majority of the members of the Executive Committee may fix its rules of procedure. All action by the Executive Committee shall be reported to the Board of Directors at the meeting succeeding such action and shall be subject to revision, alteration and approval by the Board of Directors. Meetings of the Executive Committee shall be called, from time to time, at the direction and upon the request of any member thereof. Notice of

such meetings, unless waived, shall in each instance be given to each member of the Committee at his last known business address at least 24 hours before such meeting, either orally or in writing. All actions by the Executive Committee shall be by unanimous written approval, if taken without a meeting, or if taken at a meeting, by a majority of those then serving on the Committee. The Executive Committee shall keep such record of its activities and proceedings as it shall deem appropriate. All meetings shall be held upon consent of all members of the Committee, and may be held at any agreed upon place, or by telephone conference or similar communication equipment by means of which all participating members can hear each other at the same time.

ARTICLE 3.

OFFICERS

Section 3.01. OFFICERS: The elected officers of the Corporation may consist of the Chairman of the Board; Vice Chairman of the Board; Chief Executive Officer; the President; one or more Vice Presidents (who may be designated as "Executive" or "Senior" Vice Presidents or by such other title as the Board of Directors may establish); a Secretary; a Controller; and a Treasurer. If the duties of the Controller and the Treasurer are vested in one individual, that individual shall have the title of Chief Financial Officer.

Section 3.02. POWERS AND DUTIES: The powers and duties of the respective officers of the Corporation (if appointed) are as follows, subject to any specific limitations on such powers and duties that may be effectuated by resolution of the Board of Directors:

a. CHAIRMAN OF THE BOARD: The Chairman of the Board shall call and conduct the Board of Directors meetings, and shall see that resolutions of the Board of Directors are carried into effect. The Chairman shall make reports to the Board of Directors, as well as to the stockholders, and shall perform such further powers as may be assigned to him from time to time by the Board of Directors.

b. VICE CHAIRMAN OF THE BOARD: The Vice Chairman shall, in the absence of the Chairman, or in the event of his inability to act, perform the duties and exercise the powers of the Chairman of the Board described in Section 3.02(a) hereof.

c. CHIEF EXECUTIVE OFFICER: The Chief Executive Officer, subject to the power of the Board of Directors to manage the business and affairs of the Corporation or to delegate such power to other officers or employees, shall have general and active supervision of the business affairs of the corporation and shall see that resolutions of the Board of Directors are carried into effect. The Chief Executive Officer is authorized, subject to such limitations as may be established by resolution of the Board of Directors, to execute certificates, contracts, bonds, mortgages, notes, guaranties and other instruments and documents for and on behalf of the Corporation and under the seal of the Corporation where so required. Subject to such limitations, he shall have authority to cause the employment of such employees of the Corporation, other than officers elected by the Board of Directors, as the conduct of the business of the corporation may require, and, within the limits of his authority as delegated by resolution of the Board of Directors, to fix their compensation and the compensation of all appointed officers of the corporation, except if any are members of the Board of Directors; to remove or suspend any employee who shall not have been appointed by the Board of Directors; and to suspend for cause, pending final action by the Board of Directors, any officer who shall have been appointed by the Board of Directors. The Chief Executive Officer shall make reports to the Board of Directors, as well as the shareholders and shall perform such other duties and exercise such other powers as may be assigned to him from time to time by the Board of Directors.

d. PRESIDENT: The President shall, in the absence of the Chief Executive Officer, or in the event of his inability or refusal to act, perform the duties and exercise the powers of the Chief Executive Officer described in Section 3.02(c) hereof. The President has the same power as the Chief Executive Officer to execute certificates, contracts, bonds, mortgages, notes, guaranties and other instruments and documents for and on behalf of the corporation and under the seal of the corporation where so required, and to act with respect to the employment and compensation of employees. The President shall make reports to the Board of Directors as well as the shareholders and preside over all meetings of the shareholders, and shall perform such other duties as are incident to the office of President or are properly required of the President by the Board of Directors.

e. VICE PRESIDENT: The Vice Presidents shall, to the extent authorized by the President or the Chairman of the Board (which authority may be specific or general in nature), be authorized to execute certificates, contracts, bonds, mortgages, notes, guaranties and other instruments and documents for and on behalf of the Corporation and under the seal of the Corporation. They shall also be authorized to perform all duties that from time to time may be prescribed by the Board of Directors, the Chairman of the Board or the President.

f. CONTROLLER: The Controller shall have the responsibility for supervision and management of all accounting and bookkeeping functions of the Corporation and of all of its subsidiaries; shall keep or cause to be kept, such books or records of all the income, expenses, losses, gains, assets and liabilities of the Corporation; shall have custody of the accounting records of the Corporation; shall render to the Chairman of the Board, the President and the Board of Directors at meetings of the Board of Directors or whenever else it may be required, an account of all transactions and the financial condition of the Corporation, and shall perform all other duties and exercise all other powers usually pertaining to the office of controller of a corporation and shall perform such other duties and exercise such other powers as may be assigned by the Board of Directors, the Chairman of the Board or the President. In the absence of the Controller or in the event of the Controller's inability to act or refusal to act, the duties of the Controller shall be performed by and the powers of the Controller may be exercised by the Treasurer.

g. TREASURER: The Treasurer has custody of the corporate funds and securities and shall deposit all monies and other valuable effects in the name and to the credit of the Corporation in any depositories that are authorized by the Board of Directors; shall disburse the funds of the Corporation as may be directed by the Board of Directors, taking proper vouchers therefor; and shall render to the Chairman of the Board, the President, and the Board of Directors, an account of all such transactions, at meetings of the Board of Directors, or whenever it shall be required. The Treasurer shall perform all other duties incident to the office of Treasurer, and shall have all other duties that may be assigned by the Board of Directors the Chairman of the Board, or the President. The Treasurer may appoint, pursuant to Section 3.02 (with the approval of the Chairman of the Board), one or more assistant treasurers, who shall perform all duties delegated to them by the Treasurer, the President, the Chairman of the Board, or the Board of Directors. In the absence of the Treasurer or in the event of inability or refusal to act, the duties of the Treasurer shall be performed and the powers of the Treasurer may be exercised by such Assistant Treasurer as shall be designated by the Chairman of the Board of Directors.

h. SECRETARY: The Secretary shall attend all meetings of the

shareholders and Board of Directors, and act as clerk thereof, and record all votes and minutes of all proceedings in a book to be kept for that purpose and authenticate records of the Corporation. The Secretary shall give, or cause to be given notice of all meetings of the shareholders and Board of Directors. The Secretary shall keep in safe custody the seal of the Corporation, and when authorized by the Board of Directors or otherwise directed, affix the seal to any instrument requiring it. The Secretary shall perform all other duties that may be assigned by the Board of Directors, the Chairman of the Board, or the President. The Secretary may appoint, pursuant to Section 3.02 (with the approval of the Chairman of the Board) one or more assistant secretaries who shall perform all duties delegated to them by the Secretary, the President, the Chairman of the Board or the Board of Directors. The Secretary and Assistant Secretaries, in addition to their other powers and duties, shall have the authority to execute powers of attorney on behalf of the Corporation. In the absence of the Secretary or in the event of the Secretary's inability or refusal to act, the duties of the Secretary shall be performed and the powers of the Secretary may be exercised by such Assistant Secretary as shall be designated by the Chairman of the Board of Directors. If there shall be a vacancy in the office of Assistant Secretary, such person shall be designated by the Chairman of the Board of Directors and shall perform the duties and exercise the powers of Assistant Secretary.

Section 3.03. APPOINTED OFFICERS: The Chairman of the Board without further approval, and the President and the managers of corporate staff departments and the Secretary may appoint (with the prior approval of the Chairman of the Board), assistant vice presidents, assistant treasurers, assistant secretaries and other appropriate titled officers to assist them in their respective duties. Unless otherwise provided by the officer making the appointment, the powers and duties of the appointed officers shall be those approved by the Chairman of the Board and on file with the Secretary.

ARTICLE 4.

SECURITIES AND REGISTRATION AND TRANSFER THEREOF

Section 4.01. CERTIFICATES: All certificates of stock and other securities of this corporation shall be signed by the President or Executive Vice-President and the Secretary or an Assistant Secretary of the corporation or a facsimile thereof.

Section 4.02. TRANSFER AGENT AND REGISTRAR: The Board of Directors may from time to time appoint one or more Transfer Agents and one or more Registrars for the capital stock and other securities of the corporation. The signatures of the President or Executive Vice President and the Secretary or an Assistant Secretary upon a certificate may be facsimiles if the certificate is countersigned by a Transfer Agent, or registered by a Registrar, other than the corporation itself or an employee of the corporation.

Section 4.03. TRANSFER: Title to a certificate and to the interest in this corporation represented thereby can be transferred only: (a) by delivery of the certificate endorsed either in blank or to a specified person by the person appearing on the certificate to be the owner of the interest represented thereby, or (b) by delivery of the certificate and a separate document containing a written assignment of the certificate or a power of attorney to sell, assign or transfer the same or the interest represented thereby, signed by the person appearing on the certificate to be the owner of the interest represented thereby. Such assignment or power of attorney may be either in blank or to a specified person.

Section 4.04. NECESSITY FOR REGISTRATION: Prior to due presentment for registration upon the books of the corporation of a transfer of a security of

this corporation, the corporation or thus agent for purposes of registering transfers of its securities may treat the registered owner of the security as the person exclusively entitled to vote, to receive any notices, to receive payment of any interest on a security, or of any ordinary, extraordinary, partial liquidating, final liquidating, or other dividend, or of any other distribution, whether paid in cash or in securities or in any other form, or otherwise to exercise or enjoy any or all of the rights and powers of an owner.

Section 4.05. CLOSING TRANSFER BOOKS: For the purpose of determining the registered owners of stock or other securities entitled to notice of or to vote at any meeting of the shareholders or any adjournment thereof, or to receive payment of any interest on a security, or of any ordinary, extraordinary, partial liquidating, final liquidating, or other dividend, or of any other distribution, whether paid in cash or in securities or in any other form, or otherwise to exercise or enjoy any or all of the rights and powers of any owner, or in order to make a determination of registered owners for any other proper purpose, the Board of Directors may provide that the transfer books shall be closed for a period of 30 days. If the transfer books shall be closed to the purpose of determining the registered owners entitled to notice of or to vote at a meeting of the shareholders or an adjournment thereof, such books shall be closed for a period of 30 days immediately preceding such meeting.

Section 4.06. FIXING RECORD DATE: In lieu of closing the transfer books, the Board of Directors may fix in advance a date as record date for any determination of registered owners for which the transfer books might have been closed as provided in Section 4.05 above, such date to be 30 days and, in case of a meeting of shareholders, 30 days prior to the date on which the particular action which requires such date on which the particular action which requires such determination of registered owners is to be taken.

Section 4.07. LOST CERTIFICATES: In case of the loss or destruction of a certificate of stock or other security in this corporation, a duplicate certificated may be issued in its place upon such terms as the Board of Directors shall prescribe.

ARTICLE 5.

WAIVER OF NOTICE

Whenever any notice is required to be given to any shareholder or director of the corporation by these Bylaws or the Articles of Incorporation, or by the corporation laws of the State of Oregon, a waiver thereof in writing, signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the required notice. Presence of a director at any meeting shall constitute a waiver of any notice require for such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened.

ARTICLE 6.

ACTION WITHOUT MEETING

Any action required or permitted to be taken at a meeting of the directors or shareholders of this corporation, or any other action which may be taken at a meeting of the directors or shareholders, may be taken without a meeting if a consent in writing setting forth the action so taken shall be signed by all directors or all shareholders holding stock entitled to vote with respect to the subject matter thereof. Such consent shall have the same force and effect as a majority vote of such directors or shareholders and may be stated as such in any article or document filed with the Corporation Commissioner of the State of Oregon, any other governmental authority, or any person or

entity.

ARTICLE 7.

INDEMNIFICATION AND INSURANCE

Section 7.01. NON-DERIVATIVE ACTIONS: Subject to the provisions of Sections 7.03 and 7.06 below, the Board of Directors may elect to have to corporation indemnify any person who was or is a party or is threatened to be made a party who was or is a party or is threatened to be made party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation) by reason of or arising from the fact that he is or was a director or officer of the corporation or one of its subsidiaries, or is or was serving at the request of the corporation as a director, officer, partner or trustee of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorney fees), judgements, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if (I) he acted in good faith and in a manner he reasonably believed to be in or not apposed to the best interests of the corporation and, with respect to any criminal action or proceeding, he had no reasonable cause to believe his conduct was unlawful, or (ii) his act or omission giving rise to such action, suit or proceeding is ratified, adopted or confirmed by the corporation or one

of its subsidiaries or the benefit thereof received by the corporation or one of its subsidiaries. The termination of any action, suit or proceeding by judgement, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not apposed to the best interests of the corporation and, with respect to any criminal action or proceeding, and no reasonable cause to believe that his conduct was unlawful, and settlement shall not constitute any evidence of any of the foregoing.

Section 7.02. DERIVATIVE ACTIONS: Subject to the provisions of Sections 7.03, 7.05, and 7.06, below, the corporation may, at the discretion of the Board of Directors, indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to produce a judgement in its favor by reason of or arising from the fact that he is or was a director or officer of the corporation of one of its subsidiaries, or is or was serving at the request of the corporation as a director, officer, partner, or trustee of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorney fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he (I) acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, or (ii) his act or omission giving rise to such action or suit is ratified, adopted or confirmed by the corporation or one of its subsidiaries or the benefit thereof received by the corporation or one of its subsidiaries; provided, however, that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for gross negligence or deliberate misconduct in the performance of his duty to the corporation unless and only to the extent that the court in which action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

Section 7.03. DETERMINATION OF RIGHT TO INDEMNIFICATION IN CERTAIN CASES: Subject to the provisions of Sections 7.05 and 7.06 below, at the discretion of the Board of Directors, indemnification under Sections 7.01 and 7.03 of this Article may be made by the corporation unless either the

stockholders of the corporation, or those members of the Board of Directors who were not parties to such action, suit or proceeding expressly determine by majority vote that such indemnification is not proper under the circumstances because the person(s) to be indemnified has (have) not met the applicable standard of conduct set forth in Sections 7.01 or 7.02.

Section 7.04. INDEMNIFICATION OF PERSONS OTHER THAN OFFICERS OR DIRECTORS: In the event any person not included among those referred to in Section 7.01 or 7.02 of this Article was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding of a type referred to in Section 7.01 or 7.02 of this Article by reason of or arising from the fact that he is or was an employee or agent (including attorneys) of the corporation or one of its subsidiaries, or is or was serving at the request of the corporation as an employee or agent (including attorney) of another corporation, partnership, joint venture, trust or other enterprise, the Board of Directors of the corporation by a majority vote (whether

or not such majority consists in whole or in part of directors who were parties to such action, suit or proceeding) or the stockholders of the corporation by a majority vote of the outstanding shares may, but shall not be required to, grant to such person a right of indemnification to the extent described in Section 7.01 or 7.02 of this Article as if he were an officer or director referred to therein, provided that such person meets the applicable standard of conduct set forth in such Sections. Furthermore, the Board of Directors may designate by resolution in advance of any action, suit or proceeding, those employees or agents (including attorneys) who may have rights of indemnification granted to officers and directors under this Article.

Section 7.05. SUCCESSFUL DEFENSE: If the Board of Directors elects to have the corporation provide indemnification, notwithstanding any other provision of Sections 7.01, 7.02, 7.03, or 7.04 of this Article, but subject to the provisions of Section 7.06 below, to the extent a director, officer, employee or agent (including attorneys) is successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Sections 7.01, 7.02 or 7.04 of this Article, or in defense of any claim, issue or matter therein, at the discretion of the Board of Directors, said person may be indemnified against expenses (including attorney fees) actually and reasonably incurred by him in connection therewith.

Section 7.06. CONDITION PRECEDENT TO INDEMNIFICATION UNDER SECTIONS 7.01. 7.02 OR 7.05: Any person who desires to receive the benefits which may be conferred by Sections 7.01, 7.02 or 7.05 of this Article shall promptly notify the corporation that he or she has been named a defendant to an action, suit or proceeding of a type referred to in Sections 7.01 or 7.02 and that said person wisher to receive indemnification under Sections 7.01, 7.02 or 7.05 of the Article. The notice shall be in writing and mailed, via registered or certified mail, return receipt requested, to the President of the corporation at the executive offices of the corporation or, in the event the notice is from the President, to the Secretary of the Corporation.

Section 7.07. UNDERTAKING: At the discretion of the Board of Directors, expenses incurred by a person to be indemnified under this Article in defending a civil, criminal, administrative or investigative action, suit or proceeding (including all appeals) or threat thereof, may be paid by the corporation in advance of the final disposition of such action, suit or proceeding as authorized in Section 7.03 upon receipt of an undertaking by or on behalf of such person to repay such expenses if it shall ultimately be determined that he is not entitled to be indemnified by the corporation.

Section 7.08. INSURANCE: The Board of Directors may direct the corporation to purchase and maintain insurance on behalf of any person who is or was a director or officer of the corporation or one of its subsidiaries or

is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him an any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of this Article or under the Oregon Business Corporation Act.

Section 7.09. PURPOSE AND EXCLUSIVITY: The indemnification referred to in the various Sections of this Article shall be deemed to be in addition to and not in lieu of any other rights to which those indemnified may be entitled under any statute, rule or law or equity, agreement, vote of the stockholders or Board of Directors or otherwise. The purpose of this Article is to augment, pursuant to ORS 57.260(3) the other provisions of ORS 57.255 and 57.260.

Section 7.010. SEVERABILITY: If any part of this Article shall be found, in any action, suit or proceeding, to be invalid or ineffective, the validity and the effect of the remaining parts shall not be affected.

ARTICLE 8.

CORPORATE SEAL

The size and style of the corporate seal is shown by the impression on the margin hereof.

ARTICLE 9.

REIMBURSEMENT OF CERTAIN PAYMENTS

Any payments made to an officer or director of this corporation, including payments made as salary, commission, bonus, interest, rent or travel or entertainment expense incurred by him, which shall be disallowed in whole or in part as a deductible expense by the Internal Revenue Service, shall be reimbursed by such officer or director to this corporation to the full extent of such disallowance. It shall be the duty of the directors, as a Board, to enforce payment of each such amount disallowed. If the Board of Directors shall determine it necessary or desirable, amounts may be withheld from the future compensation payments of an officer or director sufficient to equal the amount of any disallowed payments made to him, in lieu of reimbursement by him of such amounts.

ARTICLE 10.

AMENDMENTS

The Bylaws of this corporation may be altered, amended or repealed by a two-thirds affirmative vote of the directors, or by an affirmative vote of shareholders holding two-thirds of the shares entitled to vote, at any regular meeting or at any special meeting called for that purpose, provided notice of the proposed change is given in the notice of the meeting or notice thereof is waived in writing.

VOID AFTER 5:00 P.M. PACIFIC TIME ON _____, 2002

WARRANTS TO PURCHASE COMMON STOCK

W_____ _____ Warrants

ANTIVIRALS INC.

CUSIP _____

THIS CERTIFIES THAT

or registered assigns, is the registered holder of the number of Warrants ("Warrants") set forth above. Each Warrant entitles the holder thereof to purchase from AntiVirals, Inc., a corporation incorporated under the laws of the State of Oregon ("Company"), subject to the terms and conditions set forth hereinafter and in the Warrant Agreement hereinafter more fully described (the "Warrant Agreement") referred to, one fully paid and non-assessable share of Common Stock, $.0001 par value, of the Company ("Common Stock") upon presentation and surrender of this Warrant Certificate with the instructions for the registration and delivery of Common Stock filled in, at any time prior to 5:00 p.m., Pacific Time, on _____, 2002 or, if such Warrant is redeemed as provided in the Warrant Agreement, at any time prior to the effective time of such redemption, at the stock transfer office in _____, of _____, Warrant Agent of the Company ("Warrant Agent"), or of its successor warrant agent or, if there be no successor warrant agent, at the corporate offices of the Company, and upon payment of the Exercise Price (as defined in the Warrant Agreement) and any applicable taxes paid either in cash, or by certified or official bank check, payable in lawful money of the United States of America to the order of the Company. Each Warrant initially entitles the holder to purchase one share of Common Stock for $_____. The number and kind of securities or other property for which the Warrants are exercisable are subject to further adjustment in certain events, such as mergers, splits, stock dividends, recapitalizations and the like, to prevent dilution. The Company may redeem any or all outstanding and unexercised Warrants at any time if the Daily Price has exceeded $_____ for 20 consecutive trading days immediately preceding the date of notice of such redemption, upon 30 days' notice, at a price equal to $0.25 per Warrant. For the purpose of the foregoing sentence, the term "Daily Price" shall mean, for any relevant day, the closing bid price on that day as reported by the principal exchange or quotation system on which prices for the Common Stock are reported. All Warrants not theretofore exercised or redeemed will expire on _____, 2002.

This Warrant Certificate is subject to all of the terms, provisions and conditions of the Warrant Agreement, dated as of _____, 1997 ("Warrant Agreement"), between the Company and the Warrant Agent, to all of which terms, provisions and conditions the registered holder of this Warrant Certificate consents by acceptance hereof. The Warrant Agreement is incorporated herein by reference and made a part hereof and reference is made to the Warrant Agreement for a full description of the rights, limitations of rights, obligations, duties and immunities of the Warrant Agent, the Company and the holders of the Warrant Certificates. Copies of the Warrant Agreement

are available for inspection at the stock transfer office of the Warrant Agent or may be obtained upon written request addressed to the Company at One S.W. Columbia, Suite 1105, Portland, Oregon 97258, Attention: Chief Executive Officer.

The Company shall not be required upon the exercise of the Warrants evidenced by this Warrant Certificate to issue fractions of Warrants, Common Stock or other securities, but shall make adjustment therefor in cash on the basis of the current market value of any fractional interest as provided in the Warrant Agreement.

In certain cases, the sale of securities by the Company upon exercise of Warrants would violate the securities laws of the United States, certain states thereof or other jurisdictions. The Company has agreed to use its best efforts to cause a registration statement to continue to be effective during the term of the Warrants with respect to such sales under the Securities Act of 1933, as amended, and to take such action under the laws of various states as may be required to cause the sale of securities upon exercise to be lawful. However, the Company will not be required to honor the exercise of Warrants if, in the opinion of the Board of Directors, upon advice of counsel, the sale of securities upon such exercise would be unlawful. In certain cases, the Company may, but is not required to, purchase Warrants submitted for exercise for a cash price equal to the difference between the market price of the securities obtainable upon such exercise and the exercise price of such Warrants.

This Warrant Certificate, with or without other Certificates, upon surrender to the Warrant Agent, any successor warrant agent or, in the absence of any successor warrant agent, at the corporate offices of the Company, may be exchanged for another Warrant Certificate or Certificates evidencing in the aggregate the same number of Warrants as the Warrant Certificate or Certificates so surrendered. If the Warrants evidenced by this Warrant Certificate shall be exercised in part, the holder hereof shall be entitled to receive upon surrender hereof another Warrant Certificate or Certificates evidencing the number of Warrants not so exercised.

No holder of this Warrant Certificate, as such, shall be entitled to vote, receive dividends or be deemed the holder of Common Stock or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose whatever, nor shall anything contained in the Warrant Agreement or herein be construed to confer upon the holder of this Warrant Certificate, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof or give or withhold consent to any corporate action (whether upon any matter submitted to stockholders at any meeting thereof, or give or withhold consent to any merger, recapitalization, issuance of stock, reclassification of stock, change of par value or change of

stock to no par value, consolidation, conveyance or otherwise) or to receive notice of meetings or other actions affecting stockholders (except as provided in the Warrant Agreement) or to receive dividends or subscription rights or otherwise until the Warrants evidenced by this Warrant Certificate shall have been exercised and the Common Stock purchasable upon the exercise thereof shall have become deliverable as provided in the Warrant Agreement.

If this Warrant Certificate shall be surrendered for exercise within any period during which the transfer books for the Company's Common Stock or other class of stock purchasable upon the exercise of the Warrants evidenced by this Warrant Certificate are closed for any purpose, the Company shall not be required to make delivery of certificates for shares purchasable upon such transfer until the date of the reopening of said transfer books.

Every holder of this Warrant Certificate by accepting the same consents and agrees with the Company, the Warrant Agent, and with every other

holder of a Warrant Certificate that:

(a) this Warrant Certificate is transferable on the registry books of the Warrant Agent only upon the terms and conditions set forth in the Warrant Agreement, and

(b) the Company and the Warrant Agent may deem and treat the person in whose name this Warrant Certificate is registered as the absolute owner hereof (notwithstanding any notation of ownership or other writing thereon made by anyone other than the Company or the Warrant Agent) for all purposes whatever and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary.

The Company shall not be required to issue or deliver any certificate for shares of Common Stock or other securities upon the exercise of Warrants evidenced by this Warrant Certificate until any tax which may be payable in respect thereof by the holder of this Warrant Certificate pursuant to the Warrant Agreement shall have been paid, such tax being payable by the holder of this Warrant Certificate at the time of surrender.

This Warrant Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Warrant Agent.

WITNESS the facsimile signatures of the proper officers of the Company and its corporate seal.

Dated: _____, 1997.

ANTIVIRALS INC.

By: _____
Chief Executive Officer

Attest: _____
Secretary

Countersigned

_____

By:_____
Authorized Officer

WARRANT AGREEMENT

between

ANTIVIRALS INC.

and

_____

Dated as of _____, 1997

This Agreement, dated as of _____, 1997, is between AntiVirals Inc., an Oregon corporation (the "Company"), and _____, a _____ (the "Warrant Agent").

The Company, at or about the time that it is entering into this Agreement, proposes to issue and sell to public investors up to 1,500,000 Units ("Units"). Each Unit consists of one share of common stock, $.0001 par value, of the Company ("Common Stock") and one Warrant (collectively, the "Warrants"), each Warrant exercisable to purchase one share of Common Stock for $____, upon the terms and conditions and subject to adjustment in certain circumstances, all as set forth in this Agreement.

The Company proposes to issue to the Representative of the Underwriters in the public offering of Units referred to above warrants to purchase up to 150,000 additional Units.

The Company wishes to retain the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, transfer, exchange and replacement of the certificates evidencing the Warrants to be issued under this Agreement (the "Warrant Certificates") and the exercise of the Warrants;

The Company and the Warrant Agent wish to enter into this Agreement to set forth the terms and conditions of the Warrants and the rights of the holders thereof ("Warrantholders") and to set forth the respective rights and obligations of the Company and the Warrant Agent. Each Warrantholder is an intended beneficiary of this Agreement with respect to the rights of Warrantholders herein.

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein set forth, the parties hereto agree as follows:

Section 1. APPOINTMENT OF WARRANT AGENT

The Company appoints the Warrant Agent to act as agent for the Company in accordance with the instructions in this Agreement and the Warrant Agent accepts such appointment.

Section 2. DATE, DENOMINATION AND EXECUTION OF WARRANT CERTIFICATES

The Warrant Certificates (and the Form of Election to Purchase

and the Form of Assignment to be printed on the reverse thereof) shall be in registered form only and shall be substantially of the tenor and purport recited in Exhibit A hereto, and may have such letters, numbers or other marks of identification or designation and such legends, summaries or

endorsements printed, lithographed or engraved thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any law, or with any rule or regulation made pursuant thereto, or with any rule or regulation of any stock exchange on which the Common Stock or the Warrants may be listed or any automated quotation system, or to conform to usage. Each Warrant Certificate shall entitle the registered holder thereof, subject to the provisions of this Agreement and of the Warrant Certificate, to purchase, on or before the close of business on _____, 2002 (the "Expiration Date"), one fully paid and non-assessable share of Common Stock for each Warrant evidenced by such Warrant Certificate, subject to adjustments as provided in Section 6 hereof, for $_____ (the "Exercise Price"). Each Warrant Certificate issued as a part of a Unit offered to the public as described in the recitals, above, shall be dated _____, 1997; each other Warrant Certificate shall be dated the date on which the Warrant Agent receives valid issuance instructions from the Company or a transferring holder of a Warrant Certificate or, if such instructions specify another date, such other date.

For purposes of this Agreement, the term "close of business" on any given date shall mean 5:00 p.m., Pacific Time, on such date; provided, however, that if such date is not a business day, it shall mean 5:00 p.m., Pacific Time, on the next succeeding business day. For purposes of this Agreement, the term "business day" shall mean any day other than a Saturday, Sunday, or a day on which banking institutions in New York are authorized or obligated by law to be closed.

Each Warrant Certificate shall be executed on behalf of the Company by the Chairman of the Board or its President or a Vice President, either manually or by facsimile signature printed thereon, and have affixed thereto the Company's seal or a facsimile thereof which shall be attested by the Secretary or an Assistant Secretary of the Company, either manually or by facsimile signature. Each Warrant Certificate shall be manually countersigned by the Warrant Agent and shall not be valid for any purpose unless so countersigned. In case any officer of the Company who shall have signed any Warrant Certificate shall cease to be such officer of the Company before countersignature by the Warrant Agent and issue and delivery thereof by the Company, such Warrant Certificate, nevertheless, may be countersigned by the Warrant Agent, issued and delivered with the same force and effect as though the person who signed such Warrant Certificate had not ceased to be such officer of the Company.

Section 3. SUBSEQUENT ISSUE OF WARRANT CERTIFICATES

Subsequent to their original issuance, no Warrant Certificates shall be reissued except (i) Warrant Certificates issued upon transfer thereof in accordance with Section 4 hereof, (ii) Warrant Certificates issued upon any combination, split-up or exchange of Warrant Certificates pursuant to Section 4 hereof, (iii) Warrant Certificates issued in replacement of mutilated, destroyed, lost or stolen Warrant Certificates pursuant to Section 5 hereof, (iv) Warrant Certificates issued upon the partial exercise of Warrant Certificates pursuant to Section 7 hereof, and (v) Warrant Certificates issued to reflect any adjustment or change in the Exercise Price or the number or kind of shares purchasable thereunder pursuant to Section 22 hereof. The Warrant Agent is hereby irrevocably authorized to countersign and deliver, in

accordance with the provisions of said Sections 4, 5, 7 and 22, the new Warrant Certificates required for purposes thereof, and the Company, whenever required by the Warrant Agent, will supply the Warrant Agent with Warrant Certificates duly executed on behalf of the Company for such purposes.

Section 4. TRANSFERS AND EXCHANGES OF WARRANT CERTIFICATES

The Warrant Agent will keep or cause to be kept books for registration of ownership and transfer of the Warrant Certificates issued hereunder. Such registers shall show the names and addresses of the respective holders of the Warrant Certificates and the number of Warrants evidenced by each such Warrant Certificate.

The Warrant Agent shall, from time to time, register the transfer of any outstanding Warrants upon the books to be maintained by the Warrant Agent for that purpose, upon surrender of the Warrant Certificate evidencing such Warrants, with the Form of Assignment duly filled in and executed with such signature guaranteed by a banking institution or NASD member and such supporting documentation as the Warrant Agent or the Company may reasonably require, to the Warrant Agent at its stock transfer office in _____ at any time on or before the Expiration Date, and upon payment to the Warrant Agent for the account of the Company of an amount equal to any applicable transfer tax. Payment of the amount of such tax may be made in cash, or by certified or official bank check, payable in lawful money of the United States of America to the order of the Company.

Upon receipt of a Warrant Certificate, with the Form of Assignment duly filled in and executed, accompanied by payment of an amount equal to any applicable transfer tax, the Warrant Agent shall promptly cancel the surrendered Warrant Certificate and countersign and deliver to the transferee a new Warrant Certificate for the number of full Warrants transferred to such transferee; PROVIDED, HOWEVER, that in case the registered holder of any Warrant Certificate shall elect to transfer fewer than all of the Warrants evidenced by such Warrant Certificate, the Warrant Agent in addition shall promptly countersign and deliver to such registered holder a new Warrant Certificate or Certificates for the number of full Warrants not so transferred.

Any Warrant Certificate or Certificates may be exchanged at the option of the holder thereof for another Warrant Certificate or Certificates of different denominations, of like tenor and representing in the aggregate the same number of Warrants, upon surrender of such Warrant Certificate or Certificates, with the Form of Assignment duly filled in and executed, to the Warrant Agent, at any time or from time to time after the close of business on the date hereof and prior to the close of business on the Expiration Date. The Warrant Agent shall promptly cancel the surrendered Warrant Certificate and deliver the new Warrant Certificate pursuant to the provisions of this Section.

Section 5. MUTILATED, DESTROYED, LOST OR STOLEN WARRANT CERTIFICATES

Upon receipt by the Company and the Warrant Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of any Warrant Certificate, and in the case of loss, theft or destruction, of indemnity or security reasonably satisfactory to them, and reimbursement to them of all reasonable expenses incidental thereto, and, in the case of mutilation, upon surrender and cancellation of the Warrant Certificate, the Warrant Agent shall countersign and deliver a new Warrant Certificate of like tenor for the same number of Warrants.

Section 6. ADJUSTMENTS OF NUMBER AND KIND OF SHARES PURCHASABLE AND EXERCISE

PRICE

The number and kind of securities or other property purchasable upon exercise of a Warrant shall be subject to adjustment from time to time upon the occurrence, after the date hereof, of any of the following events:

A. In case the Company shall (1) pay a dividend in, or make a distribution of, shares of capital stock on its outstanding Common Stock, (2) subdivide its outstanding shares of Common Stock into a greater number of such shares or (3) combine its outstanding shares of Common Stock into a smaller number of such shares, the total number of shares of Common Stock purchasable upon the exercise of each Warrant outstanding immediately prior thereto shall be adjusted so that the holder of any Warrant Certificate thereafter surrendered for exercise shall be entitled to receive at the same aggregate Exercise Price the number of shares of capital stock (of one or more classes) which such holder would have owned or have been entitled to receive immediately following the happening of any of the events described above had such Warrant been exercised in full immediately prior to the record date with respect to such event. Any adjustment made pursuant to this Subsection shall, in the case of a stock dividend or distribution, become effective as of the record date therefor and, in the case of a subdivision or combination, be made as of the effective date thereof. If, as a result of an adjustment made pursuant to this Subsection, the holder of any Warrant Certificate thereafter surrendered for exercise shall become entitled to receive shares of two or more classes of capital stock of the Company, the Board of Directors of the Company (whose determination shall be conclusive and shall be evidenced by a Board resolution filed with the Warrant Agent) shall determine the allocation of the adjusted Exercise Price between or among shares of such classes of capital stock.

B. In the event of a capital reorganization or a reclassification of the Common Stock (except as provided in Subsection A. above or Subsection E. below), any Warrantholder, upon exercise of Warrants, shall be entitled to receive, in substitution for the Common Stock to which he would have become entitled upon exercise immediately prior to such reorganization or reclassification, the shares (of any class or classes) or other securities or property of the Company (or cash) that he would have been entitled to receive at the same aggregate Exercise Price upon such reorganization or reclassification if such Warrants had been exercised immediately prior to the record date with respect to such event; and in any such case, appropriate provision (as determined by the Board of Directors of the Company, whose determination shall be conclusive and shall be evidenced by a certified Board resolution filed

with the Warrant Agent) shall be made for the application of this Section 6 with respect to the rights and interests thereafter of the Warrantholders (including but not limited to the allocation of the Exercise Price between or among shares of classes of capital stock), to the end that this Section 6 (including the adjustments of the number of shares of Common Stock or other securities purchasable and the Exercise Price thereof) shall thereafter be reflected, as nearly as reasonably practicable, in all subsequent exercises of the Warrants for any shares or securities or other property (or cash) thereafter deliverable upon the exercise of the Warrants.

C. Whenever the number of shares of Common Stock or other securities purchasable upon exercise of a Warrant is adjusted as provided in this Section 6, the Company will promptly file with the Warrant Agent a certificate signed by a Chairman or co-Chairman of the Board or the President or a Vice President of the Company and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary of the Company setting forth the number and kind of securities or other property purchasable upon exercise of a Warrant, as so adjusted, stating that such adjustments in the number or kind of shares or other securities or property conform to the requirements of this Section 6, and setting forth a brief statement of the

facts accounting for such adjustments. Promptly after receipt of such certificate, the Company, or the Warrant Agent at the Company's request, will deliver, by first-class, postage prepaid mail, a brief summary thereof (to be supplied by the Company) to the registered holders of the outstanding Warrant Certificates; PROVIDED, HOWEVER, that failure to file or to give any notice required under this Subsection, or any defect therein, shall not affect the legality or validity of any such adjustments under this Section 6; and PROVIDED, FURTHER, that, where appropriate, such notice may be given in advance and included as part of the notice required to be given pursuant to Section 12 hereof.

D. In case of any consolidation of the Company with, or merger of the Company into, another corporation (other than a consolidation or merger which does not result in any reclassification or change of the outstanding Common Stock), or in case of any sale or conveyance to another corporation of the property of the Company as an entirety or substantially as an entirety, the corporation formed by such consolidation or merger or the corporation which shall have acquired such assets, as the case may be, shall execute and deliver to the Warrant Agent a supplemental warrant agreement providing that the holder of each Warrant then outstanding shall have the right thereafter (until the expiration of such Warrant) to receive, upon exercise of such Warrant, solely the kind and amount of shares of stock and other securities and property (or cash) receivable upon such consolidation, merger, sale or transfer by a holder of the number of shares of Common Stock of the Company for which such Warrant might have been exercised immediately prior to such consolidation, merger, sale or transfer. Such supplemental warrant agreement shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided in this Section. The above provision of this Subsection shall similarly apply to successive consolidations, mergers, sales or transfers.

The Warrant Agent shall not be under any responsibility to determine the correctness of any provision contained in any such supplemental warrant agreement relating to either the kind or amount of shares of stock or securities or property (or cash) purchasable by holders of Warrant Certificates upon the exercise of their Warrants after any such consolidation, merger, sale or transfer or of any adjustment to be made with respect thereto, but subject to the

provisions of Section 20 hereof, may accept as conclusive evidence of the correctness of any such provisions, and shall be protected in relying upon, a certificate of a firm of independent certified public accountants (who may be the accountants regularly employed by the Company) with respect thereto.

E. Irrespective of any adjustments in the number or kind of shares issuable upon exercise of Warrants, Warrant Certificates theretofore or thereafter issued may continue to express the same price and number and kind of shares as are stated in the similar Warrant Certificates initially issuable pursuant to this Warrant Agreement.

F. The Company may retain a firm of independent public accountants of recognized standing, which may be the firm regularly retained by the Company, selected by the Board of Directors of the Company or the Executive Committee of said Board, and not disapproved by the Warrant Agent, to make any computation required under this Section, and a certificate signed by such firm shall, in the absence of fraud or gross negligence, be conclusive evidence of the correctness of any computation made under this Section.

G. For the purpose of this Section, the term "Common Stock" shall mean (i) the class of stock designated as Common Stock in the Articles of Incorporation of the Company, as amended, at the date of this Agreement, or (ii) any other class of stock resulting from successive changes or reclassification of such Common Stock consisting solely of changes in par value, or from par value to no par value, or from no par value to par value.

In the event that at any time as a result of an adjustment made pursuant to this Section, the holder of any Warrant thereafter surrendered for exercise shall become entitled to receive any shares of capital stock of the Company other than shares of Common Stock, thereafter the number of such other shares so receivable upon exercise of any Warrant shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Common Stock contained in this Section, and all other provisions of this Agreement, with respect to the Common Stock, shall apply on like terms to any such other shares.

H. The Company may, from time to time and to the extent permitted by law, reduce the exercise price of the Warrants by any amount for a period of not less than 20 days. If the Company so reduces the exercise price of the Warrants, it will give not less than 15 days' notice of such decrease, which notice may be in the form of a press release, and shall take such other steps as may be required under applicable law in connection with any offers or sales of securities at the reduced price.

Section 7. EXERCISE AND REDEMPTION OF WARRANTS

Unless the Warrants have been redeemed as provided in this Section 7, the registered holder of any Warrant Certificate may exercise the Warrants evidenced thereby, in whole at any time or in part from time to time at or prior to the close of business, on the Expiration Date, subject to the provisions of Section 9, at which time the Warrant Certificates shall be and become wholly void and of no value. Warrants may be exercised by their holders or redeemed by the Company as follows:

A. Exercise of Warrants shall be accomplished upon surrender of the Warrant Certificate evidencing such Warrants, with the Form of Election to Purchase on the reverse side thereof duly filled in and executed, to the Warrant Agent at its stock transfer office in _____, together with payment to the Company of the Exercise Price (as of the date of such surrender) of the Warrants then being exercised and an amount equal to any applicable transfer tax and, if requested by the Company, any other taxes or governmental charges which the Company may be required by law to collect in respect of such exercise. Payment of the Exercise Price and other amounts may be made by wire transfer of good funds, or by certified or bank cashier's check, payable in lawful money of the United States of America to the order of the Company. No adjustment shall be made for any cash dividends, whether paid or declared, on any securities issuable upon exercise of a Warrant.

B. Upon receipt of a Warrant Certificate, with the Form of Election to Purchase duly filled in and executed, accompanied by payment of the Exercise Price of the Warrants being exercised (and of an amount equal to any applicable taxes or government charges as aforesaid), the Warrant Agent shall promptly request from the Transfer Agent with respect to the securities to be issued and deliver to or upon the order of the registered holder of such Warrant Certificate, in such name or names as such registered holder may designate, a certificate or certificates for the number of full shares of the securities to be purchased, together with cash made available by the Company pursuant to Section 8 hereof in respect of any fraction of a share of such securities otherwise issuable upon such exercise. If the Warrant is then exercisable to purchase property other than securities, the Warrant Agent shall take appropriate steps to cause such property to be delivered to or upon the order of the registered holder of such Warrant Certificate. In addition, if it is required by law and upon instruction by the Company, the Warrant Agent will deliver to each Warrantholder a prospectus which complies with the provisions of Section 9 of the Securities Act of 1933, as amended, and the Company agrees to supply Warrant Agent with sufficient number of prospectuses to effectuate that purpose.

C. In case the registered holder of any Warrant Certificate shall

exercise fewer than all of the Warrants evidenced by such Warrant Certificate, the Warrant Agent shall promptly countersign and deliver to the registered holder of such Warrant Certificate, or to his duly authorized assigns, a new Warrant Certificate or Certificates evidencing the number of Warrants that were not so exercised.

D. Each person in whose name any certificate for securities is issued upon the exercise of Warrants shall for all purposes be deemed to have become the holder of record of the securities represented thereby as of, and such certificate shall be dated, the date upon which the Warrant Certificate was duly surrendered in proper form and payment of the Exercise Price (and of any applicable taxes or other governmental charges) was made; PROVIDED, HOWEVER, that if the date of such surrender and payment is a date on which the stock transfer books of the Company are closed, such person shall be deemed to have become the record holder of such shares as of, and the certificate for such shares shall be dated, the next succeeding business day on which the stock transfer books of the Company are open (whether before, on or after the Expiration Date) and the Warrant Agent shall be under no duty to deliver the certificate for such shares until such date. The Company covenants and agrees that it shall not cause its stock

transfer books to be closed for a period of more than 20 consecutive business days except upon consolidation, merger, sale of all or substantially all of its assets, dissolution or liquidation or as otherwise provided by law.

E. The Warrants outstanding at the time of a redemption may be redeemed at the option of the Company, in whole or in part on a pro rata basis, at any time if, at the time notice of such redemption is given by the Company as provided in Paragraph F, below, the Daily Price has exceeded $_____ for the 20 consecutive trading days immediately preceding the date of such notice, at a price equal to $0.25 per Warrant (the "Redemption Price"). For the purpose of the foregoing sentence, the term "Daily Price" shall mean, for any relevant day, the closing bid price on that day as reported by the principal exchange or quotation system on which prices for the Common Stock are reported. On the redemption date the holders of record of redeemed Warrants shall be entitled to payment of the Redemption Price upon surrender of such redeemed Warrants to the Company at the principal office of the Warrant Agent in _____.

F. Notice of redemption of Warrants shall be given at least 30 days prior to the redemption date by mailing, by registered or certified mail, return receipt requested, a copy of such notice to the Warrant Agent and to all of the holders of record of Warrants at their respective addresses appearing on the books or transfer records of the Company or such other address designated in writing by the holder of record to the Warrant Agent not less than 40 days prior to the redemption date.

G. From and after the redemption date, all rights of the Warrantholders (except the right to receive the Redemption Price) shall terminate, but only if (a) no later than one day prior to the redemption date the Company shall have irrevocably deposited with the Warrant Agent as paying agent a sufficient amount to pay on the redemption date the Redemption Price for all Warrants called for redemption and (b) the notice of redemption shall have stated the name and address of the Warrant Agent and the intention of the Company to deposit such amount with the Warrant Agent no later than one day prior to the redemption date.

H. The Warrant Agent shall pay to the holders of record of redeemed Warrants all monies received by the Warrant Agent for the redemption of Warrants to which the holders of record of such redeemed Warrants who shall have surrendered their Warrants are entitled.

I. Any amounts deposited with the Warrant Agent that are not required for redemption of Warrants may be withdrawn by the Company. Any amounts

deposited with the Warrant Agent that shall be unclaimed after six months after the redemption date may be withdrawn by the Company, and thereafter the holders of the Warrants called for redemption for which such funds were deposited shall look solely to the Company for payment. The Company shall be entitled to the interest, if any, on funds deposited with the Warrant Agent and the holders of redeemed Warrants shall have no right to any such interest.

J. If the Company fails to make a sufficient deposit with the Warrant Agent as provided above, the holder of any Warrants called for redemption may at the option of the holder (a) by notice to the Company declare the notice of redemption a nullity as to such holder,

or (b) maintain an action against the Company for the Redemption Price. If the holder brings such an action, the Company will pay reasonable attorneys' fees of the holder. If the holder fails to bring an action against the Company for the Redemption Price within 60 days after the redemption date, the holder shall be deemed to have elected to declare the notice of redemption to be a nullity as to such holder and such notice shall be without any force or effect as to such holder. Except as otherwise specifically provided in this Paragraph J, a notice of redemption, once mailed by the Company as provided in Paragraph F shall be irrevocable.

Section 8. FRACTIONAL INTERESTS

The Company shall not be required to issue any Warrant Certificate evidencing a fraction of a Warrant or to issue fractions of shares of securities on the exercise of the Warrants. If any fraction (calculated to the nearest one-hundredth) of a Warrant or a share of securities would, except for the provisions of this Section, be issuable on the exercise of any Warrant, the Company shall, at its option, either purchase such fraction for an amount in cash equal to the current value of such fraction computed on the basis of the closing market price (as quoted on NASDAQ) on the trading day immediately preceding the day upon which such Warrant Certificate was surrendered for exercise in accordance with Section 7 hereof or issue the required fractional Warrant or share. By accepting a Warrant Certificate, the holder thereof expressly waives any right to receive a Warrant Certificate evidencing any fraction of a Warrant or to receive any fractional share of securities upon exercise of a Warrant, except as expressly provided in this Section 8.

Section 9. RESERVATION OF EQUITY SECURITIES

The Company covenants that it will at all times reserve and keep available, free from any pre-emptive rights, out of its authorized and unissued equity securities, solely for the purpose of issue upon exercise of the Warrants, such number of shares of equity securities of the Company as shall then be issuable upon the exercise of all outstanding Warrants ("Equity Securities"). The Company covenants that all Equity Securities which shall be so issuable shall, upon such issue, be duly authorized, validly issued, fully paid and non-assessable.

The Company covenants that if any equity securities, required to be reserved for the purpose of issue upon exercise of the Warrants hereunder, require registration with or approval of any governmental authority under any federal or state law before such shares may be issued upon exercise of Warrants, the Company will use all commercially reasonable efforts to cause such securities to be duly registered, or approved, as the case may be, and, to the extent practicable, take all such action in anticipation of and prior to the exercise of the Warrants, including, without limitation, filing any and all post-effective amendments to the Company's Registration Statement on Form SB-2 (Registration No. _____) necessary to permit a public offering of the securities underlying the Warrants at any and all times during the

term of this Agreement, PROVIDED, HOWEVER, that in no event shall such securities be issued, and the Company is authorized to refuse to honor the exercise of any Warrant, if such exercise would result in the opinion of the Company's Board of Directors, upon advice of counsel, in the

violation of any law; and PROVIDED FURTHER that, in the case of a Warrant exercisable solely for securities listed on a securities exchange or for which there are at least two independent market makers, in lieu of obtaining such registration or approval, the Company may elect to redeem Warrants submitted to the Warrant Agent for exercise for a price equal to the difference between the aggregate low asked price, or closing price, as the case may be, of the securities for which such Warrant is exercisable on the date of such submission and the Exercise Price of such Warrants; in the event of such redemption, the Company will pay to the holder of such Warrants the above-described redemption price in cash within 10 business days after receipt of notice from the Warrant Agent that such Warrants have been submitted for exercise.

Section 10. REDUCTION OF CONVERSION PRICE BELOW PAR VALUE

Before taking any action that would cause an adjustment pursuant to Section 6 hereof reducing the portion of the Exercise Price required to purchase one share of capital stock below the then par value (if any) of a share of such capital stock, the Company will use its best efforts to take any corporate action which, in the opinion of its counsel, may be necessary in order that the Company may validly and legally issue fully paid and non-assessable shares of such capital stock.

Section 11. PAYMENT OF TAXES

The Company covenants and agrees that it will pay when due and payable any and all federal and state documentary stamp and other original issue taxes which may be payable in respect of the original issuance of the Warrant Certificates, or any shares of Common Stock or other securities upon the exercise of Warrants. The Company shall not, however, be required (i) to pay any tax which may be payable in respect of any transfer involved in the transfer and delivery of Warrant Certificates or the issuance or delivery of certificates for Common Stock or other securities in a name other than that of the registered holder of the Warrant Certificate surrendered for purchase or (ii) to issue or deliver any certificate for shares of Common Stock or other securities upon the exercise of any Warrant Certificate until any such tax shall have been paid, all such tax being payable by the holder of such Warrant Certificate at the time of surrender.

Section 12. NOTICE OF CERTAIN CORPORATE ACTION

In case the Company after the date hereof shall propose (i) to offer to the holders of Common Stock, generally, rights to subscribe to or purchase any additional shares of any class of its capital stock, any evidences of its indebtedness or assets, or any other rights or options or (ii) to effect any reclassification of Common Stock (other than a reclassification involving merely the subdivision or combination of outstanding shares of Common Stock) or any capital reorganization, or any consolidation or merger to which the Company is a party and for which approval of any stockholders of the Company is required, or any sale, transfer or other disposition of its property and assets substantially as an entirety, or the liquidation, voluntary

or involuntary dissolution or winding-up of the Company, then, in each such case, the Company shall file with the Warrant Agent and the Company, or the Warrant Agent on its behalf, shall mail (by first-class, postage prepaid mail) to all registered holders of the Warrant Certificates notice of such proposed action, which notice shall specify the date on which the books of the Company shall close or a record be taken for such offer of rights or options, or the date on which such reclassification, reorganization, consolidation, merger, sale, transfer, other disposition, liquidation, voluntary or involuntary dissolution or winding-up shall take place or commence, as the case may be, and which shall also specify any record date for determination of holders of Common Stock entitled to vote thereon or participate therein and shall set forth such facts with respect thereto as shall be reasonably necessary to indicate any adjustments in the Exercise Price and the number or kind of shares or other securities purchasable upon exercise of Warrants which will be required as a result of such action. Such notice shall be filed and mailed in the case of any action covered by clause (i) above, at least 10 days prior to the record date for determining holders of the Common Stock for purposes of such action or, if a record is not to be taken, the date as of which the holders of shares of Common Stock of record are to be entitled to such offering; and, in the case of any action covered by clause (ii) above, at least 20 days prior to the earlier of the date on which such reclassification, reorganization, consolidation, merger, sale, transfer, other disposition, liquidation, voluntary or involuntary dissolution or winding-up is expected to become effective and the date on which it is expected that holders of shares of Common Stock of record on such date shall be entitled to exchange their shares for securities or other property deliverable upon such reclassification, reorganization, consolidation, merger, sale, transfer, other disposition, liquidation, voluntary or involuntary dissolution or winding-up.

Failure to give any such notice or any defect therein shall not affect the legality or validity of any transaction listed in this Section 12.

Section 13. DISPOSITION OF PROCEEDS ON EXERCISE OF WARRANT CERTIFICATES, ETC.

The Warrant Agent shall account promptly to the Company with respect to Warrants exercised and concurrently pay to the Company all moneys received by the Warrant Agent for the purchase of securities or other property through the exercise of such Warrants.

The Warrant Agent shall keep copies of this Agreement available for inspection by Warrantholders during normal business hours at its stock transfer office. Copies of this Agreement may be obtained upon written request addressed to the Warrant Agent at its stock transfer office in _____.

Section 14. WARRANTHOLDER NOT DEEMED A STOCKHOLDER

No Warrantholder, as such, shall be entitled to vote, receive dividends or be deemed the holder of Common Stock or any other securities of the Company which may at any time be issuable on the exercise of the Warrants represented thereby for any purpose whatever, nor shall anything contained herein or in any Warrant Certificate be construed to confer upon

any Warrantholder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise), or to receive notice of meetings or other actions affecting stockholders (except as

provided in Section 12 hereof), or to receive dividend or subscription rights, or otherwise, until such Warrant Certificate shall have been exercised in accordance with the provisions hereof and the receipt of the Exercise Price and any other amounts payable upon such exercise by the Warrant Agent.

Section 15. RIGHT OF ACTION

All rights of action in respect to this Agreement are vested in the respective registered holders of the Warrant Certificates; and any registered holder of any Warrant Certificate, without the consent of the Warrant Agent or of any other holder of a Warrant Certificate, may, in his own behalf for his own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company suitable to enforce, or otherwise in respect of, his right to exercise the Warrants evidenced by such Warrant Certificate, for the purchase of shares of the Common Stock in the manner provided in the Warrant Certificate and in this Agreement.

Section 16. AGREEMENT OF HOLDERS OF WARRANT CERTIFICATES

Every holder of a Warrant Certificate by accepting the same consents and agrees with the Company, the Warrant Agent and with every other holder of a Warrant Certificate that:

A. The Warrant Certificates are transferable on the registry books of the Warrant Agent only upon the terms and conditions set forth in this Agreement; and

B. The Company and the Warrant Agent may deem and treat the person in whose name the Warrant Certificate is registered as the absolute owner of the Warrant (notwithstanding any notation of ownership or other writing thereon made by anyone other than the Company or the Warrant Agent) for all purposes whatever and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary.

Section 17. CANCELLATION OF WARRANT CERTIFICATES

In the event that the Company shall purchase or otherwise acquire any Warrant Certificate or Certificates after the issuance thereof, such Warrant Certificate or Certificates shall thereupon be delivered to the Warrant Agent and be canceled by it and retired. The Warrant Agent shall also cancel any Warrant Certificate delivered to it for exercise, in whole or in part, or delivered to it for transfer, split-up, combination or exchange. Warrant Certificates so

canceled shall be delivered by the Warrant Agent to the Company from time to time, or disposed of in accordance with the instructions of the Company.

Section 18. CONCERNING THE WARRANT AGENT

The Company agrees to pay to the Warrant Agent from time to time, on demand of the Warrant Agent, reasonable compensation for all services rendered by it hereunder and also its reasonable expenses, including counsel fees, and other disbursements incurred in the administration and execution of this Agreement and the exercise and performance of its duties hereunder. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense, incurred without gross negligence, bad faith or willful misconduct on the part of the Warrant Agent, arising out of or in connection with the acceptance and administration of this Agreement.

Section 19. MERGER OR CONSOLIDATION OR CHANGE OF NAME OF WARRANT AGENT

Any corporation into which the Warrant Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Warrant Agent shall be a party, or any corporation succeeding to the corporate trust business of the Warrant Agent, shall be the successor to the Warrant Agent hereunder without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor warrant agent under the provisions of Section 21 hereof. In case at the time such successor to the Warrant Agent shall succeed to the agency created by this Agreement, any of the Warrant Certificates shall have been countersigned but not delivered, any such successor to the Warrant Agent may adopt the countersignature of the original Warrant Agent and deliver such Warrant Certificates so countersigned; and in case at that time any of the Warrant Certificates shall not have been countersigned, any successor to the Warrant Agent may countersign such Warrant Certificates either in the name of the predecessor Warrant Agent or in the name of the successor Warrant Agent; and in all such cases such Warrant Certificates shall have the full force provided in the Warrant Certificates and in this Agreement.

In case at any time the name of the Warrant Agent shall be changed and at such time any of the Warrant Certificates shall have been countersigned but not delivered, the Warrant Agent may adopt the countersignature under its prior name and deliver Warrant Certificates so countersigned; and in case at that time any of the Warrant Certificates shall not have been countersigned, the Warrant Agent may countersign such Warrant Certificates either in its prior name or in its changed name; and in all such cases such Warrant Certificates shall have the full force provided in the Warrant Certificates and in this Agreement.

Section 20. DUTIES OF WARRANT AGENT

The Warrant Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, by all of which the Company and the holders of Warrant Certificates, by their acceptance thereof, shall be bound:

A. The Warrant Agent may consult with counsel satisfactory to it (who may be counsel for the Company or the Warrant Agent's in-house counsel), and the opinion of such counsel shall be full and complete authorization and protection to the Warrant Agent as to any action taken, suffered or omitted by it in good faith and in accordance with such opinion; PROVIDED, HOWEVER, that the Warrant Agent shall have exercised reasonable care in the selection of such counsel. Fees and expenses of such counsel, to the extent reasonable, shall be paid by the Company.

B. Whenever in the performance of its duties under this Agreement, the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by a Chairman or co-Chairman of the Board or the President or a Vice President or the Secretary of the Company and delivered to the Warrant Agent; and such certificate shall be full authorization to the Warrant Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate.

C. The Warrant Agent shall be liable hereunder only for its own gross negligence, bad faith or willful misconduct.

D. The Warrant Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Warrant Certificates (except its countersignature on the Warrant Certificates and such statements or recitals as describe the Warrant Agent or action taken or to be taken by it) or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only.

E. The Warrant Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Warrant Agent) or in respect of the validity or execution of any Warrant Certificate (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant Certificate; nor shall it be responsible for the making of any change in the number of shares of Common Stock for which a Warrant is exercisable required under the provisions of Section 6 or responsible for the manner, method or amount of any such change or the ascertaining of the existence of facts that would require any such adjustment or change (except with respect to the exercise of Warrant Certificates after actual notice of any adjustment of the Exercise Price); nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any

Warrant Certificate or as to whether any shares of Common Stock will, when issued, be validly issued, fully paid and non-assessable.

F. The Warrant Agent shall be under no obligation to institute any action, suit or legal proceeding or take any other action likely to involve expense unless the Company or one or more registered holders of Warrant Certificates shall furnish the Warrant Agent with reasonable security and indemnity for any costs and expenses which may be incurred. All rights of action under this Agreement or under any of the Warrants may be enforced by the Warrant Agent without the possession of any of the Warrants or the production thereof at any trial or other proceeding relative thereto, and any such action, suit or proceeding instituted by the Warrant Agent shall be brought in its name as Warrant Agent, and any recovery of judgment shall be for the ratable benefit of the registered holders of the Warrant Certificates, as their respective rights or interests may appear.

G. The Warrant Agent and any stockholder, director, officer or employee of the Warrant Agent may buy, sell or deal in any of the Warrants or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to or otherwise act as fully and freely as though it were not Warrant Agent under this Agreement. Nothing herein shall preclude the Warrant Agent from acting in any other capacity for the Company or for any other legal entity.

H. The Warrant Agent is hereby authorized and directed to accept instructions with respect to the performance of its duties hereunder from a Chairman or co-Chairman of the Board or President or a Vice President or the Secretary or the Controller of the Company, and to apply to such officers for advice or instructions in connection with the Warrant Agent's duties, and it shall not be liable for any action taken or suffered or omitted by it in good faith in accordance with instructions of any such officer.

I. The Warrant Agent will not be responsible for any failure of the Company to comply with any of the covenants contained in this Agreement or in the Warrant Certificates to be complied with by the Company.

J. The Warrant Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys, agents or employees and the Warrant Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorneys, agents or employees or for any loss to the Company resulting

from such neglect or misconduct; PROVIDED, HOWEVER, that reasonable care shall have been exercised in the selection and continued employment of such attorneys, agents and employees.

K. The Warrant Agent will not incur any liability or responsibility to the Company or to any holder of any Warrant Certificate for any action taken, or any failure to take action, in reliance on any notice, resolution, waiver, consent, order, certificate, or other paper, document or instrument reasonably believed by the Warrant Agent to be genuine and to have been signed, sent or presented by the proper party or parties.

L. The Warrant Agent will act hereunder solely as agent of the Company in a ministerial capacity, and its duties will be determined solely by the provisions hereof. The Warrant Agent will not be liable for anything which it may do or refrain from doing in connection with this Agreement except for its own negligence, bad faith or willful conduct.

Section 21. CHANGE OF WARRANT AGENT

The Warrant Agent may resign and be discharged from its duties under this Agreement upon 30 days' prior notice in writing mailed, by registered or certified mail, to the Company. The Company may remove the Warrant Agent or any successor warrant agent upon 30 days' prior notice in writing, mailed to the Warrant Agent or successor warrant agent, as the case may be, by registered or certified mail. If the Warrant Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Warrant Agent and shall, within 15 days following such appointment, give notice thereof in writing to each registered holder of the Warrant Certificates. If the Company shall fail to make such appointment within a period of 15 days after giving notice of such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Warrant Agent, then the Company agrees to perform the duties of the Warrant Agent hereunder until a successor Warrant Agent is appointed. After appointment and execution of a copy of this Agreement in effect at that time, the successor Warrant Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Warrant Agent without further act or deed; but the former Warrant Agent shall deliver and transfer to the successor Warrant Agent, within a reasonable time, any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Failure to give any notice provided for in this Section, however, or any defect therein shall not affect the legality or validity of the resignation or removal of the Warrant Agent or the appointment of the successor warrant agent, as the case may be.

Section 22. ISSUANCE OF NEW WARRANT CERTIFICATES

Notwithstanding any of the provisions of this Agreement or the several Warrant Certificates to the contrary, the Company may, at its option, issue new Warrant Certificates in such form as may be approved by its Board of Directors to reflect any adjustment or change in the Exercise Price or the number or kind of shares purchasable under the several Warrant Certificates made in accordance with the provisions of this Agreement.

Section 23. NOTICES

Notice or demand pursuant to this Agreement to be given or made on the Company by the Warrant Agent or by the registered holder of any Warrant Certificate shall be sufficiently given or made if sent by first-class or registered mail, postage prepaid, addressed (until another address is filed in writing by the Company with the Warrant Agent) as

follows:

AntiVirals Inc.
One S.W. Columbia, Suite 1105
Portland, OR 97258

Subject to the provisions of Section 21, any notice pursuant to this Agreement to be given or made by the Company or by the holder of any Warrant Certificate to or on the Warrant Agent shall be sufficiently given or made if sent by first-class or registered mail, postage prepaid, addressed (until another address is filed in writing by the Warrant Agent with the Company) as follows:

_____
_____
_____
Attention: Corporate Trust Department

Any notice or demand authorized to be given or made to the registered holder of any Warrant Certificate under this Agreement shall be sufficiently given or made if sent by first-class or registered mail, postage prepaid, to the last address of such holder as it shall appear on the registers maintained by the Warrant Agent.

Section 24. MODIFICATION OF AGREEMENT

The Warrant Agent may, without the consent or concurrence of the Warrantholders, by supplemental agreement or otherwise, concur with the Company in making any changes or corrections in this Agreement that the Warrant Agent shall have been advised by counsel (who may be counsel for the Company) are necessary or desirable to cure any ambiguity or to correct any defective or inconsistent provision or clerical omission or mistake or manifest error herein contained, or to make any other provisions in regard to matters or questions arising hereunder and which shall not be inconsistent with the provisions of the Warrant Certificates and which shall not adversely affect the interests of the Warrantholders. As of the date hereof, this Agreement contains the entire and only agreement, understanding, representation, condition, warranty or covenant between the parties hereto with respect to the matters herein, supersedes any and all other agreements between the parties hereto relating to such matters, and may be modified or amended only by a written agreement signed by both parties hereto pursuant to the authority granted by the first sentence of this Section.

Section 25. SUCCESSORS

All the covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and assigns hereunder.

Section 26. OREGON CONTRACT

This Agreement and each Warrant Certificate issued hereunder shall be deemed to be a contract made under the laws of the state of Oregon and for all purposes shall be construed in accordance with the laws of said State.

Section 27. TERMINATION

This Agreement shall terminate as of the close of business on the Expiration Date, or such earlier date upon which all Warrants shall have been exercised or redeemed, except that the Warrant Agent shall account to the Company as to all Warrants outstanding and all cash held by it as of the close of business on the Expiration Date.

Section 28. BENEFITS OF THIS AGREEMENT

Nothing in this Agreement or in the Warrant Certificates shall be construed to give to any person or corporation other than the Company, the Warrant Agent, and their respective successors and assigns hereunder and the registered holders of the Warrant Certificates any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Warrant Agent, their respective successors and assigns hereunder and the registered holders of the Warrant Certificates.

Section 29. DESCRIPTIVE HEADINGS

The descriptive headings of the several sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

Section 30. COUNTERPARTS

This Agreement may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed, all as of the day and year first above written.

ANTIVIRALS INC.

By: _____
Title:

_____

By: _____
Title:

EXHIBIT A

VOID AFTER 5:00 P.M. PACIFIC TIME ON _____, 2002

WARRANTS TO PURCHASE COMMON STOCK

W_____ _____ Warrants

ANTIVIRALS INC.

CUSIP _____

THIS CERTIFIES THAT

or registered assigns, is the registered holder of the number of Warrants ("Warrants") set forth above. Each Warrant entitles the holder thereof to purchase from AntiVirals, Inc., a corporation incorporated under the laws of the State of Oregon ("Company"), subject to the terms and conditions set forth hereinafter and in the Warrant Agreement hereinafter more fully described (the "Warrant Agreement") referred to, one fully paid and non-assessable share of Common Stock, $.0001 par value, of the Company ("Common Stock") upon presentation and surrender of this Warrant Certificate with the instructions for the registration and delivery of Common Stock filled in, at any time prior to 5:00 p.m., Pacific Time, on _____, 2002 or, if such Warrant is redeemed as provided in the Warrant Agreement, at any time prior to the effective time of such redemption, at the stock transfer office in _____, of _____, Warrant Agent of the Company ("Warrant Agent"), or of its successor warrant agent or, if there be no successor warrant agent, at the corporate offices of the Company, and upon payment of the Exercise Price (as defined in the Warrant Agreement) and any applicable taxes paid either in cash, or by certified or official bank check, payable in lawful money of the United States of America to the order of the Company. Each Warrant initially entitles the holder to purchase one share of Common Stock for $_____. The number and kind of securities or other property for which the Warrants are exercisable are subject to further adjustment in certain events, such as mergers, splits, stock dividends, recapitalizations and the like, to prevent dilution. The Company may redeem any or all outstanding and unexercised Warrants at any time if the Daily Price has exceeded $_____ for 20 consecutive trading days immediately preceding the date of notice of such redemption, upon 30 days' notice, at a price equal to $0.25 per Warrant. For the purpose of the foregoing sentence, the term "Daily Price" shall mean, for any relevant day, the closing bid price on that day as reported by the principal exchange or quotation system on which prices for the Common Stock are reported. All Warrants not theretofore exercised or redeemed will expire on _____, 2002.

This Warrant Certificate is subject to all of the terms, provisions and conditions of the Warrant Agreement, dated as of _____, 1997 ("Warrant Agreement"), between the Company and the Warrant Agent, to all of which terms, provisions and conditions the registered holder of this Warrant Certificate consents by acceptance hereof. The Warrant Agreement is incorporated herein by reference and made a part hereof and reference is made to the Warrant Agreement for a full description of the rights, limitations of rights, obligations, duties and immunities of the Warrant Agent, the Company and the holders of the Warrant Certificates. Copies of the Warrant Agreement are available for inspection at the stock transfer office of the Warrant Agent or may be obtained upon written request addressed to the Company at One S.W. Columbia, Suite 1105, Portland, Oregon 97258, Attention: Chief Executive Officer.

The Company shall not be required upon the exercise of the Warrants evidenced by this Warrant Certificate to issue fractions of Warrants, Common Stock or other securities, but shall make adjustment therefor in cash on the basis of the current market value of any fractional interest as provided in the Warrant Agreement.

In certain cases, the sale of securities by the Company upon exercise of Warrants would violate the securities laws of the United States, certain states thereof or other jurisdictions. The Company has agreed to use its best efforts to cause a registration statement to continue to be effective during the term of the Warrants with respect to such sales under the Securities Act of 1933, as amended, and to take such action under the laws of various states as may be required to cause the sale of securities upon exercise to be lawful. However, the Company will not be required to honor the exercise of Warrants if, in the opinion of the Board of Directors, upon advice of counsel, the sale of securities upon such exercise would be unlawful. In certain cases, the Company may, but is not required to, purchase Warrants submitted for exercise for a cash price equal to the difference between the market price of the securities obtainable upon such exercise and the exercise price of such Warrants.

This Warrant Certificate, with or without other Certificates, upon surrender to the Warrant Agent, any successor warrant agent or, in the absence of any successor warrant agent, at the corporate offices of the Company, may be exchanged for another Warrant Certificate or Certificates evidencing in the aggregate the same number of Warrants as the Warrant Certificate or Certificates so surrendered. If the Warrants evidenced by this Warrant Certificate shall be exercised in part, the holder hereof shall be entitled to receive upon surrender hereof another Warrant Certificate or Certificates evidencing the number of Warrants not so exercised.

No holder of this Warrant Certificate, as such, shall be entitled to vote, receive dividends or be deemed the holder of Common Stock or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose whatever, nor shall anything contained in the Warrant Agreement or herein be construed to confer upon the holder of this Warrant Certificate, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof or give or withhold consent to any corporate action (whether upon any matter submitted to stockholders at any meeting thereof, or give or withhold consent to any merger, recapitalization, issuance of stock, reclassification of stock, change of par value or change of

stock to no par value, consolidation, conveyance or otherwise) or to receive notice of meetings or other actions affecting stockholders (except as provided in the Warrant Agreement) or to receive dividends or subscription rights or otherwise until the Warrants evidenced by this Warrant Certificate shall have been exercised and the Common Stock purchasable upon the exercise thereof shall have become deliverable as provided in the Warrant Agreement.

If this Warrant Certificate shall be surrendered for exercise within any period during which the transfer books for the Company's Common Stock or other class of stock purchasable upon the exercise of the Warrants evidenced by this Warrant Certificate are closed for any purpose, the Company shall not be required to make delivery of certificates for shares purchasable upon such transfer until the date of the reopening of said transfer books.

Every holder of this Warrant Certificate by accepting the same consents and agrees with the Company, the Warrant Agent, and with every other holder of a Warrant Certificate that:

(a) this Warrant Certificate is transferable on the registry books of the Warrant Agent only upon the terms and conditions set forth in the Warrant Agreement, and

(b) the Company and the Warrant Agent may deem and treat the person in whose name this Warrant Certificate is registered as the absolute owner hereof (notwithstanding any notation of ownership or other writing thereon made by anyone other than the Company or the Warrant Agent) for all purposes whatever and neither the Company nor the Warrant Agent shall be affected by

any notice to the contrary.

The Company shall not be required to issue or deliver any certificate for shares of Common Stock or other securities upon the exercise of Warrants evidenced by this Warrant Certificate until any tax which may be payable in respect thereof by the holder of this Warrant Certificate pursuant to the Warrant Agreement shall have been paid, such tax being payable by the holder of this Warrant Certificate at the time of surrender.

This Warrant Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Warrant Agent.

WITNESS the facsimile signatures of the proper officers of the Company and its corporate seal.

Dated: _____, 1997.

ANTIVIRALS INC.

By: _____
Chief Executive Officer

Attest: _____
Secretary

Countersigned

_____

By: _____
Authorized Officer

THIS WARRANT HAS NOT BEEN REGISTERED
UNDER THE SECURITIES ACT OF 1933
AND IS NOT TRANSFERABLE
EXCEPT AS PROVIDED HEREIN

ANTIVIRALS INC.

PURCHASE WARRANT

Issued to:

PAULSON INVESTMENT COMPANY, INC.

Exercisable to Purchase

150,000 Units

of

ANTIVIRALS INC.

Void after _____, 2002

This is to certify that, for value received and subject to the terms and conditions set forth below, the Warrantholder (hereinafter defined) is entitled to purchase, and the Company promises and agrees to sell and issue to the Warrantholder, at any time on or after _____, 1997 and on or before_____, 2002, up to 150,000 Units (hereinafter defined) at the Exercise Price (hereinafter defined).

This Warrant Certificate is issued subject to the following terms and conditions:

1. DEFINITIONS OF CERTAIN TERMS. Except as may be otherwise clearly required by the context, the following terms have the following meanings:

(a) "Act" means the Securities Act of 1933, as amended.

(b) "Closing Date" means the date on which the Offering is closed.

(c) "Commission" means the Securities and Exchange Commission.

(d) "Common Stock" means the common stock, $.0001 par value, of the Company.

(e) "Company" means AntiVirals Inc., an Oregon corporation.

(f) "Company's Expenses" means any and all expenses payable by the Company or the Warrantholder in connection with an offering described in Section 6 hereof, except Warrantholder's Expenses.

(g) "Effective Date" means the date on which the Registration Statement is declared effective by the Commission.

(h) "Exercise Price" means the price at which the Warrantholder may purchase one complete Unit (or Securities obtainable in lieu of one complete Unit) upon exercise of Warrants as determined from time to time pursuant to the provisions hereof. The initial Exercise Price is $_____ per Unit. If a Warrant is exercised for a component of a Unit or Units, then the price payable in connection with such exercise shall be determined by allocating $0.001 to the Unit Warrant and the balance of the Exercise Price to the share of Common Stock,

or, in each case, to any securities obtainable in addition to or in lieu of such share of Unit Warrant or Common Stock by virtue of the application of Section 3 of this Warrant.

(i) "Offering" means the public offering of Units made pursuant to the Registration Statement.

(j) "Participating Underwriter" means any underwriter participating in the sale of the Securities pursuant to a registration under Section 6 of this Warrant Certificate.

(k) "Registration Statement" means the Company's registration statement (File No. _____) as amended on the Closing Date.

(l) "Rules and Regulations" means the rules and regulations of the Commission adopted under the Act.

(m) "Securities" means the securities obtained or obtainable upon exercise of the Warrant or securities obtained or obtainable upon exercise, exchange, or conversion of such securities.

(n) "Unit" means, as the case may require, either one of the Units offered to the Public pursuant to the Registration Statement or one of the Units obtainable on exercise of a Warrant.

(o) "Unit Warrant" means a Common Stock purchase warrant included as a component of a Unit.

(p) "Warrant Certificate" means a certificate evidencing the Warrant.

(q) "Warrantholder" means a record holder of the Warrant or Securities. The initial Warrantholder is Paulson Investment Company, Inc.

(r) "Warrantholder's Expenses" means the sum of (i) the aggregate amount of cash payments made to an underwriter, underwriting syndicate, or agent in connection with an offering described in Section 6 hereof multiplied by a fraction the numerator of which is the aggregate sales price of the Securities sold by such underwriter, underwriting syndicate, or agent in such offering and the denominator of which is the aggregate sales price of all of the securities sold by such underwriter, underwriting syndicate, or agent in such offering and (ii) all out-of-pocket expenses of the Warrantholder, except for the fees and disbursements of one firm retained as legal counsel for the Warrantholder that will be paid by the Company.

(s) "Warrant" means the warrant evidenced by this certificate, any similar certificate issued in connection with the Offering, or any certificate obtained upon transfer or partial exercise of the Warrant evidenced by any such certificate.

2. EXERCISE OF WARRANTS. All or any part of the Warrant may be exercised commencing on the first anniversary of the Effective Date and ending at 5:00 p.m. Pacific Time on the fifth anniversary of the Effective Date by surrendering this Warrant Certificate, together with appropriate instructions, duly executed by the Warrantholder or by its duly authorized attorney, at the office of the Company, One S.W. Columbia, Suite 1105, Portland, Oregon 97258, or at such other office or agency as the Company may designate. Upon receipt of notice of exercise, the Company shall immediately instruct its transfer agent to prepare certificates for

the Securities to be received by the Warrantholder upon completion of the Warrant exercise. When such certificates are prepared, the Company shall notify the Warrantholder and deliver such certificates to the Warrantholder or as per the Warrantholder's instructions immediately upon payment in full by the Warrantholder, in lawful money of the United States, of the Exercise Price payable with respect to the Securities being purchased. If the Warrantholder shall represent and warrant that all applicable registration and prospectus delivery requirements for their sale have been complied with upon sale of the Securities received upon exercise of the Warrant, such certificates shall not bear a legend with respect to the Securities Act of 1933.

If fewer than all the Securities purchasable under the Warrant are purchased, the Company will, upon such partial exercise, execute and deliver to the Warrantholder a new Warrant Certificate (dated the date hereof), in form and tenor similar to this Warrant Certificate, evidencing that portion of the Warrant not exercised. The Securities to be obtained on exercise of the Warrant will be deemed to have been issued, and any person exercising the Warrants will be deemed to have become a holder of record of those Securities, as of the date of the payment of the Exercise Price.

3. ADJUSTMENTS IN CERTAIN EVENTS. The number, class, and price of Securities for which this Warrant Certificate may be exercised are subject to adjustment from time to time upon the happening of certain events as follows:

(a) If the outstanding shares of the Company's Common Stock are divided into a greater number of shares or a dividend in stock is paid on the Common Stock, the number of shares of Common Stock for which the Warrant is then exercisable will be proportionately increased and the Exercise Price will be proportionately reduced; and, conversely, if the outstanding shares of Common Stock are combined into a smaller number of shares of Common Stock, the number of shares of Common Stock for which the Warrant is then exercisable will be proportionately reduced and the Exercise Price will be proportionately increased. The increases and reductions provided for in this subsection 3(a) will be made with the intent and, as nearly as practicable, the effect that neither the percentage of the total equity of the Company obtainable on exercise of the Warrants nor the price payable for such percentage upon such exercise will be affected by any event described in this subsection 3(a).

(b) In case of any change in the Common Stock through merger, consolidation, reclassification, reorganization, partial or complete liquidation, purchase of substantially all the assets of the Company, or other change in the capital structure of the Company, then, as a condition of such change, lawful and adequate provision will be made so that the holder of this Warrant Certificate will have the right thereafter to receive upon the exercise of the Warrant the kind and amount of shares of stock or other securities or property to which he would have been entitled if, immediately prior to such event, he had held the number of shares of Common Stock obtainable upon the exercise of the Warrant. In any such case, appropriate adjustment will be made in the application of the provisions set forth herein with respect to the rights and interest thereafter of the Warrantholder, to the end that the provisions set forth herein will thereafter be applicable, as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the exercise of the Warrant. The Company will not permit any

change in its capital structure to occur unless the issuer of the shares of stock or other securities to be received by the holder of this Warrant Certificate, if not the Company, agrees to be bound by and comply with the provisions of this Warrant Certificate.

(c) When any adjustment is required to be made in the number of shares of Common Stock, other securities, or the property purchasable upon exercise of the Warrant, the Company will promptly determine the new number of

such shares or other securities or property purchasable upon exercise of the Warrant and (i) prepare and retain on file a statement describing in reasonable detail the method used in arriving at the new number of such shares or other securities or property purchasable upon exercise of the Warrant and (ii) cause a copy of such statement to be mailed to the Warrantholder within thirty (30) days after the date of the event giving rise to the adjustment.

(d) No fractional shares of Common Stock or other securities will be issued in connection with the exercise of the Warrant, but the Company will pay, in lieu of fractional shares, a cash payment therefor on the basis of the mean between the bid and asked prices of the Common Stock in the over-the-counter market or the closing price on a national securities exchange on the day immediately prior to exercise.

(e) If securities of the Company or securities of any subsidiary of the Company are distributed pro rata to holders of Common Stock, such number of securities will be distributed to the Warrantholder or his assignee upon exercise of his rights hereunder as such Warrantholder or assignee would have been entitled to if this Warrant Certificate had been exercised prior to the record date for such distribution. The provisions with respect to adjustment of the Common Stock provided in this Section 3 will also apply to the securities to which the Warrantholder or his assignee is entitled under this subsection 3(e).

(f) Notwithstanding anything herein to the contrary, there will be no adjustment made hereunder on account of the sale of the Common Stock or other Securities purchasable upon exercise of the Warrant.

4. RESERVATION OF SECURITIES. The Company agrees that the number of shares of Common Stock, Unit Warrants or other Securities sufficient to provide for the exercise of the Warrant upon the basis set forth above will at all times during the term of the Warrant be reserved for exercise.

5. VALIDITY OF SECURITIES. All Securities delivered upon the exercise of the Warrant will be duly and validly issued in accordance with their terms, and the Company will pay all documentary and transfer taxes, if any, in respect of the original issuance thereof upon exercise of the Warrant.

6. REGISTRATION OF SECURITIES ISSUABLE ON EXERCISE OF WARRANT CERTIFICATE.

(a) The Company will register the Securities with the Commission pursuant to the Act so as to allow the unrestricted sale of the Securities to the public from time to time

commencing on the first anniversary of the Effective Date and ending at 5:00 p.m. Pacific Time on the fifth anniversary of the Effective Date (the "Registration Period"). The Company will also file such applications and other documents necessary to permit the sale of the Securities to the public during the Registration Period in those states in which the Units were qualified for sale in the Offering or such other states as the Company and the Warrantholder agree to. In order to comply with the provisions of this Section 6(a), the Company is not required to file more than one registration statement. No registration right of any kind, "piggyback" or otherwise, will last longer than five years from the Closing Date.

(b) The Company will pay all of the Company's Expenses and each Warrantholder will pay its pro rata share of the Warrantholder's Expenses relating to the registration, offer, and sale of the Securities.

(c) Except as specifically provided herein, the manner and conduct of the registration, including the contents of the registration, will be entirely in the control and at the discretion of the Company. The Company will file such

post-effective amendments and supplements as may be necessary to maintain the currency of the registration statement during the period of its use. In addition, if the Warrantholder participating in the registration is advised by counsel that the registration statement, in their opinion, is deficient in any material respect, the Company will use its best efforts to cause the registration statement to be amended to eliminate the concerns raised.

(d) The Company will furnish to the Warrantholder the number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Act, and such other documents as it may reasonably request in order to facilitate the disposition of Securities owned by it.

(e) The Company will, at the request of Warrantholders holding at least 50 percent of the then outstanding Warrants, (i) furnish an opinion of the counsel representing the Company for the purposes of the registration pursuant to this Section 6, addressed to the Warrantholders and any Participating Underwriter, (ii) furnish an appropriate letter from the independent public accountants of the Company, addressed to the Warrantholders and any Participating Underwriter, and (iii) make representations and warranties to the Warrantholders and any Participating Underwriter. A request pursuant to this subsection (e) may be made on three occasions. The documents required to be delivered pursuant to this subsection (e) will be dated within ten days of the request and will be, in form and substance, equivalent to similar documents furnished to the underwriters in connection with the Offering, with such changes as may be appropriate in light of changed circumstances.

7. INDEMNIFICATION IN CONNECTION WITH REGISTRATION.

(a) If any of the Securities are registered, the Company will indemnify and hold harmless each selling Warrantholder, any person who controls any selling Warrantholder within the meaning of the Act, and any Participating Underwriter against any losses, claims, damages, or liabilities, joint or several, to which any Warrantholder, controlling person, or

Participating Underwriter may be subject under the Act or otherwise; and it will reimburse each Warrantholder, each controlling person, and each Participating Underwriter for any legal or other expenses reasonably incurred by the Warrantholder, controlling person, or Participating Underwriter in connection with investigating or defending any such loss, claim, damage, liability, or action, insofar as such losses, claims, damages, or liabilities, joint or several (or actions in respect thereof), arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained, on the effective date thereof, in any such registration statement or any preliminary prospectus or final prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; PROVIDED, HOWEVER, that the Company will not be liable in any case to the extent that any loss, claim, damage, or liability arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in any registration statement, preliminary prospectus, final prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with written information furnished by a Warrantholder for use in the preparation thereof. The indemnity agreement contained in this subparagraph (a) will not apply to amounts paid to any claimant in settlement of any suit or claim unless such payment is first approved by the Company, such approval not to be unreasonably withheld.

(b) Each selling Warrantholder, as a condition of the Company's registration obligation, will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed any registration statement or other filing or any amendment or supplement thereto, and any person who controls the Company within the meaning of the Act, against any losses, claims, damages, or liabilities to which the Company or any such director, officer, or

controlling person may become subject under the Act or otherwise, and will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, or controlling person in connection with investigating or defending any such loss, claim, damage, liability, or action, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any untrue or alleged untrue statement of any material fact contained in said registration statement, any preliminary or final prospectus, or other filing, or any amendment or supplement thereto, or arise out of or are based upon the omission or the alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, but only to the extent that such untrue statement or alleged untrue statement or omission or alleged omission was made in said registration statement, preliminary or final prospectus, or other filing, or amendment or supplement, in reliance upon and in conformity with written information furnished by such Warrantholder for use in the preparation thereof; PROVIDED, HOWEVER, that the indemnity agreement contained in this subparagraph (b) will not apply to amounts paid to any claimant in settlement of any suit or claim unless such payment is first approved by the Warrantholder, such approval not to be unreasonably withheld.

(c) Promptly after receipt by an indemnified party under subparagraphs (a) or (b) above of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party, notify the indemnifying party of the commencement thereof; but the omission to notify the indemnifying party will not relieve

it from any liability that it may have to any indemnified party otherwise than under subparagraphs (a) and (b).

(d) If any such action is brought against any indemnified party and it notifies an indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in, and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party; and after notice from the indemnifying party to such indemnified party of its election to assume the defense thereof, the indemnifying party will not be liable to such indemnified party for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation.

8. RESTRICTIONS ON TRANSFER. This Warrant Certificate and the Warrant may not be sold, transferred, assigned or hypothecated for a one-year period after the Effective Date except to underwriters of the Offering or to individuals who are either a partner or an officer of such an underwriter or by will or by operation of law. The Warrant may be divided or combined, upon request to the Company by the Warrantholder, into a certificate or certificates evidencing the same aggregate number of Warrants.

9. NO RIGHTS AS A SHAREHOLDER. Except as otherwise provided herein, the Warrantholder will not, by virtue of ownership of the Warrant, be entitled to any rights of a shareholder of the Company but will, upon written request to the Company, be entitled to receive such quarterly or annual reports as the Company distributes to its shareholders.

10. NOTICE. Any notices required or permitted to be given hereunder will be in writing and may be served personally or by mail; and if served will be addressed as follows:

If to the Company:

One S.W. Columbia, Suite 1105
Portland, Oregon 97258

Attention: Chief Executive Officer

If to the Warrantholder:

at the address furnished by the
Warrantholder to the Company for
the purpose of notice.

Any notice so given by mail will be deemed effectively given 48 hours after mailing when deposited in the United States mail, registered or certified mail, return receipt requested, postage prepaid and addressed as specified above. Any party may by written notice to the other specify a different address for notice purposes.

11. APPLICABLE LAW. This Warrant Certificate will be governed by and construed in accordance with the laws of the state of Oregon, without reference to conflict of laws principles thereunder. All disputes relating to this Warrant Certificate shall be tried before the courts of Oregon located in Multnomah County, Oregon to the exclusion of all other courts that might have jurisdiction.

Dated as of _____, 1997

ANTIVIRALS INC.

By: _____
Its: _____

Agreed and accepted as of _____, 1997.

PAULSON INVESTMENT COMPANY, INC.

By: _____
Its: _____

ANTIVIRALS INC.

REGISTRATION RIGHTS AGREEMENT

DATED AS OF

_____, 19___

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT is entered into as of May 20, 1992, by and between ANTIVIRALS, INC., an Oregon corporation (the "Company"), and Ice Bear, Inc., an Alaska corporation ("Ice Bear").

RECITALS

Ice Bear is purchasing 65,790 shares of the Company's Common Stock (the "Common Stock") and a warrant dated as of May 20, 1992 for an additional 658,000 shares of Common Stock. The execution by the Company of this Agreement is a condition to such purchase of the Common Stock and the Warrant.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. DEFINITIONS. For purposes of this Agreement:

(a) The term "register," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Securities Act of 1933, as amended (the "Act"), and the declaration or ordering of effectiveness of such registration statement or document;

(b) The term "Registrable Securities" means (i) the 65,790 shares of the Company's Common Stock purchased under the Common Stock and Warrant Purchase Agreement dated as of May 20, 1992, (ii) the Common Stock of the Company issuable or issued upon exercise of the Warrant, and (iii) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, such Common Stock and Warrant, excluding in all cases, however, any Registrable Securities sold by a person in a transaction in which its rights under this Agreement are not assigned;

(c) The number of shares of "Registrable Securities then outstanding" shall be determined by the number of shares of Common Stock outstanding which are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities which are, Registrable Securities; and

(d) The term "Holder" means any person owning or having the right to acquire Registrable Securities who is a party to this Agreement as of the date hereof or who may be added as a party hereto pursuant to the terms of this Agreement, and any assignee thereof in accordance with Section 9.

2. COMPANY REGISTRATION. If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for shareholders other than the Holders) any of its stock or other securities under the Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in a Company employee stock plan), the Company shall, at each such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within 20 days after mailing of such notice by the Company, the Company shall, subject to the provisions of Section 6, cause to be registered under the Act all of the Registrable Securities that each such Holder has requested to be registered.

3. FURNISH INFORMATION. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Agreement with respect to any selling Holder that such selling Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of such securities as shall be reasonably required to effect the registration of its Registrable Securities and to execute such documents in connection with such registration as the Company may reasonably request.

4. EXPENSES OF COMPANY REGISTRATION. The Company shall bear and pay all expenses incurred in connection with any registration, filing or qualification of Registrable Securities with respect to the registrations pursuant to Section 2 for each Holder, including, without limitation, all registration, filing and qualification fees, printing and accounting fees, and the fees and disbursements of counsel for the Company and of one counsel for the Holders; provided, however, that the selling Holders shall bear the expenses of any underwriting discounts and commissions relating to the Registrable Securities.

5. UNDERWRITING REQUIREMENTS. The Company shall not be required under Section 2 to include any of the Holders' securities in an underwritten offering of the Company's securities unless such Holders accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by it, assuming usual and customary underwriting terms. If the total amount of securities, including Registrable Securities, requested by shareholders to be included in such offering exceeds the amount of securities that the underwriters reasonably believe compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters believe will not jeopardize the success of the offering (the securities so included to be apportioned pro rata among the selling shareholders according to the total amount of securities otherwise entitled to be included therein owned by each selling shareholder or in such other proportions as shall mutually be agreed to by such selling shareholders), but in no event shall the amount of securities of the selling Holders included in the offering be reduced

below 25% of the total amount of securities included in such offering, unless such offering is the initial public offering of the Company's securities, in which case the selling Holders may be excluded if the underwriters make the determination described above and provided no other shareholder's securities are included.

6. DELAY OF REGISTRATION. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Agreement.

7. INDEMNIFICATION. In the event any Registrable Securities are included in a registration statement under this Agreement:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, the partners, officers, agents, employees and directors of each Holder, any underwriter (as defined in the Act) for such

Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Act or the Securities Exchange Act of 1934, as amended (the "1934 Act"), against any losses, claims, damages or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities law or any rule or regulation promulgated under the Act, the 1934 Act or any state securities law; and the Company will reimburse each such Holder, partner, officer, agent, employee or director, underwriter or controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the indemnity agreement contained in this Section 7(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by, or on behalf of, any such Holder, underwriter or controlling person.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its officers, directors, agents or employees, each person, if any, who controls the Company within the meaning of the Act, any underwriter and any other Holder selling securities in such registration statement or any of its partners, agents, employees, directors or officers or any person who controls such Holder, against any losses, claims, damages or liabilities (joint or several) to which the Company or any such director, partner,

agent, employee, officer, controlling person, or underwriter, or other such Holder or director, officer, partner, agent, employee or controlling person may become subject, under the Act, the 1934 Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by, or on behalf of, such Holder expressly for use in connection with such registration; and each such Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such partner, agent, employee, director, officer, controlling person, underwriter or other Holder, in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the indemnity agreement contained in this Section 7(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided, further, that each selling Holder shall be liable under this Section 7(b) for only that amount of losses, claims, damages and liabilities as does not exceed the proceeds to such selling Holder as a result of such registration.

(c) Promptly after receipt by an indemnified party under this Section 7 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 7 deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party

similarly notified, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party shall have the right to retain its own counsel, with the fees and expenses to be paid by the indemnifying party, if, in the opinion of counsel for the indemnifying party, representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable period of time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 7 to the extent materially prejudicial to its ability to defend such action, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 7.

8. REPORTS UNDER THE ACT. With a view to making available to the Holders the benefits of SEC Rule 144 promulgated under the Act and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144, at all times after 90 days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public;

(b) take such action, including the voluntary registration of its Common Stock under Section 12 of the 1934 Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon as practicable after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after 90 days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

9. ASSIGNMENT OF REGISTRATION RIGHTS. The rights to cause the Company to register Registrable Securities pursuant to this Agreement may be assigned by a Holder to a transferee or assignee of such securities who shall, upon such transfer or assignment, be deemed a "Holder" under this Agreement, provided the Company is, within a reasonable period of time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; provided, further, that such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act.

10. "MARKET STAND-OFF" AGREEMENT. The Holders hereby agree that they shall not, to the extent requested by the Company and an underwriter of Common Stock (or other securities) of the Company, sell or otherwise transfer or dispose (other than to donees who agree to be similarly bound) of any Registrable Securities for up to 90 days following the effective date of a

registration statement of the Company filed under the Act; provided, however, that all officers and directors of the Company and all other persons with registration rights (whether or not pursuant to this Agreement) enter into similar agreements.

In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the Registrable Securities of the Holders (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period.

11. NOTICES. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given upon personal

delivery to the party to be notified or upon deposit with the United States Post Office, postage prepaid, registered or certified with return receipt requested and addressed to the party to be notified at the address indicated for such party on the signature page hereof or on Schedule A hereto, or at such other address as such party may designate by ten days' advance written notice to the other parties given in the foregoing manner.

12. AMENDMENTS AND WAIVER. Any term of this Agreement may be amended and the observance of any term may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the shares of Common Stock that are Registrable Securities themselves or upon which Registrable Securities are based. Additional Holders may be added to this Agreement with such consent by amending Schedule A hereto and adding a signature page executed by such additional Holder.

13. TERMINATION. The registration rights described in Section 2 shall terminate fifteen years after the effective date of the Company's first registration statement for a public offering of securities of the Company to the general public.

14. SEVERABILITY. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement, and the balance of this Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

15. GOVERNING LAW. This Agreement shall be governed by and construed under the laws of the State of Oregon as applied to agreements among Oregon residents entered into and to be performed entirely within the State of Oregon.

16. COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

17. ENTIRE AGREEMENT. This Agreement constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements with respect to the subject matter hereof.

ANTIVIRALS INC., an Oregon corporation

By_____
Its_____

Address: One S.W. Columbia Avenue
Suite 1105
Portland, OR 97238

ICE BEAR, INC., an Alaska corporation

By_____
Its_____

SCHEDULE A

NAME	ADDRESS
Ice Bear, Inc., an Alaska corporation	10800 N.E. Eighth Suite 415 Bellevue, WA 98004

Exhibit A

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND APPLICABLE STATE SECURITIES LAWS.

ANTIVIRALS, INC.

PURCHASE WARRANTS

Exercisable to Purchase
Shares of Common Stock
of
Antivirals, Inc.

This is to certify that, for value received and subject to the terms and conditions set forth below, the Warrantholder is entitled to purchase, and the Company promises and agrees to sell and issue to the Warrantholder, at any time on or after March 21, 1988, up to 1,800,000 shares of its Common Stock at a price of $0.0001 per share.

This Warrant Certificate is issued subject to the following terms and conditions:

1. DEFINITION OF CERTAIN TERMS. Except as may be otherwise clearly required by the context, the following terms shall have the following meanings:

(a) "Act" shall mean the Securities Act of 1933, as amended.

(b) "Agreement" shall mean the Agreement, dated July 20, 1992, between the Company and Oregon Resource and Technology Development Corporation.

(c) "Commission" shall mean the Securities and Exchange Commission.

(d) "Common Stock" shall mean the Common Stock of the Company.

(e) "Company" shall mean Antivirals, Inc., an Oregon corporation.

(f) "Purchase Price" shall mean the price at which a Warrantholder may purchase one share of Common stock (or Securities obtainable in lieu of one share of Common Stock) upon exercise of Warrants as determined from time to time pursuant to the provisions hereof.

(g) "Register," "registered" and "registration" shall mean a registration effected by preparing and filing a registration statement in compliance with the Act and the declaration or ordering of effectiveness of such registration statement.

(h) "Registrable Securities" shall mean (1) the Common Stock issuable upon conversion of the Securities and (2) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the Securities,

excluding in all cases, however, any Registrable Securities sold by a person in a transaction in which his or her rights under Section 6 herein are not assigned.

(i) "Registration Expenses" shall mean all expenses incurred by the Company in complying with Section 6 of this Warrant Certificate, including without limitation all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, and blue sky fees and expenses.

(j) "Rules and Regulations" shall mean the rules and regulations of the Commission adopted under the Act.

(k) "Securities" shall mean the securities obtained or obtainable upon exercise of the Warrants or securities obtained or obtainable upon exercise, exchange or conversion of such securities.

(l) "Selling Expenses" shall mean all underwriting discounts and selling commissions applicable to the sale of Securities of a Warrantholder and all fees and disbursements of counsel for such Warrantholder.

(m) "Shares" shall mean shares of the Common Stock issued or issuable upon exercise of the Warrants.

(n) "Ten Percent Shareholder" shall mean any person who is directly or indirectly the beneficial owner of more than ten percent (10%) of all of the outstanding capital stock of the Company, determined on a Common Stock equivalent basis.

(o) "Warrant Certificate" shall mean a certificate evidencing Warrants.

(p) "Warrantholder" shall mean a record holder of Warrants or Securities.

(q) "Warrants" shall mean the warrants evidenced by this certificate or any certificate obtained upon transfer or partial exercise of Warrants evidenced by any such certificate.

2. EXERCISE AND REDEMPTION OF WARRANTS.

(a) All or any part of the Warrants may be exercised by surrendering this Warrant Certificate, together with appropriate instructions, duly executed by the Warrantholder or by its duly authorized attorney, at the office of the Company set forth in Section 11 hereof or at such other office or agency the Company designates, accompanied by payment in full, in lawful money of the United States, of the Purchase Price for the Warrants being exercised. The Securities to be obtained on exercise of the Warrants shall be deemed to have been issued, and any person exercising the Warrants shall be deemed to have become a holder of record of those Securities, as of the date of the surrender of this Warrant Certificate and the payment of the Purchase Price.

(b) If fewer than all the Warrants evidenced by this Warrant Certificate are exercised or redeemed, the Company will, upon such exercise or redemption, execute and deliver to the Warrantholder a new Warrant Certificate (dated the date of issuance thereof), in form and tenor similar to this Warrant Certificate, evidencing the Warrants not exercised, surrendered or redeemed.

(c) No fractional shares of Common Stock or other securities will be issued in connection with the exercise of any Warrants, but the Company shall pay, in lieu of fractional shares, a cash payment therefor on the basis of the Purchase Price of the Common Stock or

other securities on the date immediately prior to the exercise as determined by its board of directors.

3. ADJUSTMENTS IN CERTAIN EVENTS. The number, class and price of Securities for which this Warrant Certificate may be exercised are subject to adjustment from time to time upon the happening of certain events as follows:

(a) If the outstanding shares of the Company's Common stock are divided into a greater number of shares or a dividend in stock is paid on the Common Stock, the number of Shares obtainable on exercise of the Warrants shall be proportionately increased and the Purchase Price in effect immediately prior to such subdivision or at the record date of such dividend shall, simultaneously with the effectiveness of such subdivision or immediately after the record date of such dividend, be proportionately reduced; and, conversely, if the outstanding shares of Common Stock are combined into a smaller number of shares of Common Stock, the number of shares of Common stock obtainable upon exercise of the warrant shall be proportionately reduced and the Purchase Price in effect immediately prior to such combination shall, simultaneously with the effectiveness of such combination, be proportionately increased. The increases and reductions provided for in this subsection 3(a) shall be made with the intent and, as nearly as practicable, the effect that neither the percentage of the total equity of the Company obtainable on exercise of the Warrants nor the price payable for such percentage upon such exercise shall be affected by any event described in this subsection 3(a).

(b) In case of any change in the securities of the Company through merger, consolidation, reclassification, reorganization, partial or complete liquidation, or other change in the capital structure of the Company (not including the issuance of additional shares of Securities by the Company other than by stock split or stock dividend), then, as a condition of the change in the capital structure of the Company, lawful and adequate provision shall be made so that the holder of this Warrant Certificate will have the right thereafter to receive upon the exercise of the Warrants the kind and amount of shares of stock or other securities or property to which he would have been entitled if, immediately prior to such merger, consolidation, reclassification, reorganization, recapitalization, or other change in the capital structure, he had held the number of shares of Common Stock obtainable upon the exercise of the Warrants. In any such case, appropriate adjustment shall be made in the application of the provisions set forth herein with respect to the rights and interest thereafter of the Warrantholder, to the end that the provisions set forth herein shall thereafter be applicable, as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the exercise of the Warrants.

(c) When any adjustment is required to be made in the number of Shares, other securities, or the property purchasable upon exercise of the Warrants, the Company shall promptly determine the new number of shares or other securities or property purchasable upon exercise of the Warrants and (i) prepare and retain on file a statement describing in reasonably detail the method used in arriving at the new number of shares or other securities or property purchasable upon exercise of the Warrants and (ii) cause a copy of such statement to be mailed

to the Warrantholder within thirty (30) days after the date when the event giving rise to the adjustment occurred.

(d) If preferred securities of the Company or securities of any subsidiary of the Company are distributed pro rata to holders of any or all of the Company's securities, such number of securities shall be distributed to the Warrantholder or his assignee upon exercise of his rights hereunder as such Warrantholder or assignee would have been entitled to if this Warrant Certificate had been exercised prior to such distribution. The provisions with

respect to adjustment of the Common stock provided in this Section 3 shall also apply to the preferred securities and securities of any subsidiary to which the Warrantholder or his assignee shall be entitled under this subsection (d).

(e) Notwithstanding anything herein to the contrary, there shall be no adjustment made hereunder on account of the sale and issuance of the Shares or Securities purchasable upon exercise of the Warrants.

4. RESERVATION OF SHARES. The Company agrees that the number of shares of Common Stock or other securities sufficient to provide for the exercise of the Warrants upon the basis set forth above shall at all times during the term of the Warrants be reserved for exercise.

5. VALIDITY OF SECURITIES. All securities delivered upon the exercise of the Warrants shall be duly and validly issued in accordance with their terms, and the Company will pay all documentary and transfer taxes, if any, in respect of the original issuance thereof upon exercise of the Warrants.

6. REGISTRATION RIGHTS.

6.1 COMPANY REGISTRATION.

(a) If at any time the Company determines to register any of its Common Stock for sale to the general public solely for cash on a form that would also permit sale of the Registrable Securities, either for its own account or the account of a security holder or holders exercising demand registration rights, the Company will (i) promptly give to each Warrantholder written notice thereof and (ii) use its best efforts to include in such registrations and in any related underwriting all Registrable Securities specified in a written request by any Warrantholders (which request shall state the intended method of distribution of the Securities), received by the Company within 15 business days after receipt of such written notice from the Company by any Warrantholder, except as set forth in subsection (b) below.

(b) If the registration of which the Company gives notice under this Section 6 is for a registered public offering involving an underwriting, the Company will so advise the Warrantholders as part of the written notice given to such Warrantholders pursuant to subsection (a) above. In such event the right of any Warrantholder to registration pursuant to this Section 6

will be conditioned on such Warrantholder's participation in such underwriting and the inclusion of such Warrantholder's shares in the underwriting to the extent provided herein. All Warrantholders proposing to distribute shares through such underwriting will (together with the Company and the other holders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Notwithstanding any other provision of this Section 6, if the underwriter of the offering determines that marketing factors require a limitation on the number of shares to be sold for the account of security holders, the Company will be required to include in the relevant offering and registration under this Section 6 only so many of such shares as the underwriter believes in good faith would not adversely affect the distribution of the securities to be offered and registered (the shares so included to be apportioned pro rata among all security holders to be included in the registration statement according to their respective holdings of shares).

6.2 EXPENSES.

(a) All incremental Registration Expenses incurred as a result of any Securities being included in a registration pursuant to Section 6.1 shall be borne by the Warrantholders on a pro rata basis according to the number of shares included in such registration.

(b) All Selling Expenses shall be borne by the holder of the Securities so registered.

(c) Notwithstanding any other provision of this Section 6.2, the provisions of this Section~6.2 shall be deemed amended to incorporate and comply with the provisions of any applicable state securities laws, regulations and administrative policies.

6.3 PROCEDURES. Whenever required under Section 6.1 of this Warrant Certificate to use its best efforts to effect the registration of any of the Securities, the Company will, as expeditiously as reasonably possible: (a) prepare and file with the Commission a registration statement with respect to such Securities and use its best efforts to cause such registration statement to become and remain effective, (b) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement, (c) furnish to each Warrantholder with respect to whom Securities are included in such registration statement a prospectus and such other documents as the Warrantholder reasonably may require to facilitate the disposition of such Securities, (d) use its reasonable efforts to register and qualify the Securities covered by such registration statement under such other securities or blue sky laws of such jurisdictions as reasonably are appropriate for the distribution of the Securities covered by such registration statement; provided, however, that the Company will not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any state or jurisdiction unless the Company is already subject to service in such jurisdiction and provided further that in connection with any proposed

registration, the Company will in no event be obligated to cause any such registration to remain effective for more than 90 days.

6.4 INFORMATION FROM WARRANTHOLDER. Each Warrantholder whose shares are included in any registration under Section 6.1 of this Warrant Certificate will promptly furnish in writing to the Company such information regarding such Warrantholder and the distribution proposed by such Warrantholder as the Company may request in writing and as may be required in connection with any registration, qualification, or compliance referred to in Section 6.1, and to execute such documents in connection with such registration as the Company may reasonably request. Each Warrantholder shall furnish any information required by this Section 6.4 within 15 business days of the Company's written request therefor.

6.5 ASSIGNMENT. Subject to compliance with the restrictions on transfer set forth in Sections 7 and 8 hereof, each Warrantholder's registration rights under Section 6.1 of this Warrant Certificate may be assigned by such Warrantholder to a transferee or assignee of the Securities if the Company is given written notice of the transfer, stating the name and address of said transferee or assignee and identifying the Securities with respect to which such registration rights are being assigned; provided, however, that such assignment shall be effective only if immediately following such transfer the further disposition of such Securities by the transferee or assignee is restricted under the Act and applicable state securities laws.

6.6 STAND-OFF AGREEMENT. No Warrantholder who participates in the registration, if so requested by the Company and an underwriter of securities of the Company, will sell or otherwise transfer or dispose of any other securities of the Company held by such Warrantholder other than pursuant to the registration statement during the 30-day period preceding and the 120-day period following and including the effective date of a registration statement; provided, however, that such Warrantholder's agreement in this Section 6.6 will only apply (a) to the first two such registration statements of the Company

including shares or securities to be sold on the Company's behalf to the general public in an underwritten offering and (b) if all officers and directors of the Company enter into similar agreements in writing in a form satisfactory to the Company and such underwriter covering shares of the Common stock (or other securities) owned by them. The Company may impose stop transfer instructions with respect to the securities subject to the restriction in this Section 6.6 until the end of the 120-day period.

6.7 INDEMNIFICATION IN CONNECTION WITH REGISTRATION.

(a) If any of the Registrable Securities are registered, to the extent permitted by law, the Company will indemnify and hold harmless each selling Warrantholder, any person who controls any selling Warrantholder within the meaning of the Act, any underwriter for a selling Warrantholder and any person who controls such underwriter within the meaning of the Act (collectively with the underwriter, a "Participating Underwriter") against any losses, claims, damages, or liabilities, joint or several, to which any Warrantholder, controlling person, or Participating Underwriter may be subject under the Act or otherwise; and it will reimburse each

Warrantholder, each controlling person, and each Participating Underwriter for any legal or other expenses reasonably incurred by the Warrantholder, controlling person, or Participating Underwriter in connection with investigating or defending any such loss, claim, damage, liability, or action, insofar as such losses, claims, damages, or liabilities, joint or several (or actions in respect thereof), arise out of or are based upon any of the following statements, omissions or violations (collectively or separately, a "Violation"): (i) any untrue statement or alleged untrue statement of any material fact contained, on the effective date thereof, in any such registration statement or any preliminary prospectus or final prospectus, or ~ny amendment or supplement thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities law, or any rule or regulation promulgated under the Act, the 1934 Act or any state securities law; provided, however, that the Company will not be liable in any case to the extent that any loss, claim, damage, or liability arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in any registration statement, preliminary prospectus, final prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with written information furnished by a Warrantholder for use in the preparation thereof and provided further, that if any losses, claims, damages or liabilities arise out of or are based upon an untrue statement, alleged untrue statement, omission or alleged omission contained in any preliminary prospectus which did not appear in the final prospectus, the Company shall not have any liability with respect thereto to (i) the selling Warrantholder or any person who controls such selling Warrantholder within the meaning of the Act, if the selling Warrantholder delivered a copy of the preliminary prospectus to the person alleging such losses, claims, damages or liabilities and failed to deliver a copy of the final prospectus, as amended or supplement if it has been amended or supplemented, to such person at or prior to the written confirmation of the sale to such person or (ii) any Participating Underwriter, if such Participating Underwriter delivered a copy of the preliminary prospectus to the person alleging such losses, claims, damages or liabilities and failed to deliver a copy of the final prospectus, as amended or supplemented if it has been amended or supplemented, to such person at or prior to the written confirmation of the sale to such person. The indemnity agreement contained in this subsection (a) shall not apply to amounts paid to any claimant in settlement of any suit or claim unless such-payment is first approved by the Company, such approval not to be unreasonably withheld.

(b) Each selling Warrantholder, to the extent permitted by law

and as a condition of the Company's registration obligation, will indemnify and hold harmless the Company, each of the Company's directors, each of the Company's officers who have signed any registration statement or other filing or any amendment or supplement thereto, any person who controls the Company within the meaning of the Act, each other Selling Warrantholder or any other person participating as a selling shareholder in the registration (collectively, a "Selling Shareholder"), any person who controls any such Selling shareholder within the meaning of the Act, and any Participating Underwriter against any losses, claims, damages, or liabilities to which the Company or any such director, officer, Selling Shareholder, Participating Underwriter or controlling person may become subject under the Act or otherwise, and will reimburse any

legal or other expenses reasonably incurred by the Company or any such director, officer, Selling Shareholder, Participating Underwriter, or controlling person in connection with investigating or defending any such loss, claim, damage, liability, or action insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any Violation but only to the extent that such Violation was made in said registration statement, preliminary or final prospectus, or other filing, or amendment or supplement, in reliance upon and in conformity with written information furnished by such Warrantholder for use in the preparation thereof; provided, however, that the indemnity agreement contained in this subsection (b) shall not apply to amounts paid to any claimant in settlement of any suit or claim unless such payment is first approved by the Warrantholder, such approval not to be unreasonably withheld.

(c) Promptly after receipt by an indemnified party under subsections (a) or (b) above of written notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party, deliver to the indemnifying party written notice of the commencement thereof. The failure to notify an indemnifying party promptly of the commencement of any such action, if prejudicial to the ability of the indemnifying party to defend the action, shall relieve the indemnifying party of any liability to the indemnified party pursuant to this Section 6; but the omission to notify the indemnifying party will not relieve it from any liability which it may have to any indemnified party otherwise than under subsections (a) and (b).

(d) If any such action is brought against any indemnified party and it notifies in writing an indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in, and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party; and after notice from the indemnifying party to such indemnified party of its election to assume the defense thereof, the indemnifying party will not be liable to such indemnified party for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation.

(e) The obligations of the Company and the Warrantholder under this Section 6.7 shall survive the redemption and conversion, if any, of the Common Stock, the completion of any offering of Registrable Securities in a registration statement under this Section 6, and otherwise.

6.8 DELAY OF REGISTRATION. No Warrantholder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as a result of any controversy that might arise with respect to the interpretation or implementation of this Section 6.

6.9 RESERVATION OF RIGHTS. Nothing herein contained shall prevent or limit the Company from granting similar registration rights in subsequent financings to any other person or entity on terms no more favorable and with no greater priority than those granted herein.

7. RESTRICTIONS ON TRANSFER. This Warrant Certificate, the Warrants, and the Securities are transferable. Prior to any proposed transfer, the Company must be given written notice of the transfer, stating the name and address of the proposed transferee, and identifying the securities to be transferred, the proposed transferee must agree in writing to comply with the terms of this Warrant Certificate; and the Company must receive an opinion of counsel, in form and substance and from counsel satisfactory to the Company, to the effect that the proposed transfer is in compliance with applicable federal and state securities laws.

8. RIGHTS OF FIRST REFUSAL. Notwithstanding any other provision of this Warrant Certificate, in the event a Warrantholder shall propose to accept one or more bona fide offers from any persons to purchase the Warrants or the Securities issuable thereunder from the Warrantholder, the Warrantholder shall promptly notify the Company of the terms and conditions of such offer or offers, and the Warrantholder shall not transfer any of the Warrants or the Securities for consideration unless the Warrantholder first offers to sell the Warrant or Securities on identical terms and conditions pursuant to this Section 8 and such offer is not accepted.

(a) All offers shall be made in writing and shall include the number of Warrants or Securities offered, the terms of transfer, including the price or consideration to be received, and any related arrangements or understandings that may have a bearing on the terms of the offer. All offers pursuant to this Section 8 shall be made first to the Company, and if not accepted by the Company within 20 days, to the Ten Percent Shareholders, which holders shall have an additional 20 days to accept the offer.

(b) Within 20 days of receipt of an offer pursuant to this Section 8, the Company may purchase any or all of the Warrants or Securities offered by written notice to the Warrantholder. The Company may assign its Right of First Refusal to a new shareholder if, after the acceptance of the offer by the new shareholder, it would be a Ten Percent Shareholder. To the extent not accepted by the Company within 20 days, the Warrantholder shall immediately offer any and all of the remaining Warrants or Securities to the Ten Percent Shareholders. Within 20 days after receipt of such offer, any Ten Percent Shareholder may purchase any and all of the Warrants or Securities offered. If Ten Percent Shareholders subscribe in the aggregate for more Warrants or Securities than are offered, they will be sold to Ten Percent Shareholder by the Warrantholder as directed in writing by the Company.

(c) The purchase price for Warrants or Securities shall be paid in lawful money of the United States. The total purchase price shall be paid by the Company or Ten Percent Shareholders within one year of the acceptance of the offer.

(d) For 30 days following the earlier to occur of (i) expiration of the final offer period or (ii) the written rejection of the offer by the Company and all Ten Percent Shareholders, the Warrantholder may sell the Warrants or Securities to the bona fide offeree or offerees on the same terms as offered to the Company and the Ten Percent Shareholders.

9. SALE OR LIQUIDATION. In the event of a voluntary or involuntary sale or liquidation of the Company or its assets, the Warrantholder shall have no rights as a creditor of the Company, rather the Warrantholder's liquidation rights and position shall be equivalent, on a pro-rata basis, to the rights and position of the holders of the Common Stock.

10. NO RIGHTS AS A SHAREHOLDER. Except as otherwise provided herein, the Warrantholder shall not, by virtue of ownership of Warrants, be entitled to

any rights of a shareholder of the Company, but shall be entitled to receive such quarterly or annual reports as the Company shall distribute to its shareholders.

11. NOTICE. Any notices required or permitted to be given hereunder shall be in writing and may be served personally or by mail; and if served shall be addressed as follows:

If to the Company:

249 S.W. Avery
Corvallis, OR 97333
ATTENTION: PRESIDENT

If to the Warrantholder:

1934 N.E. Broadway
Portland, OR 97232

Any notice so given by mail shall be deemed effectively given 48 hours after mailing when deposited in the United States mail, registered or certified mail, return receipt requested, postage prepaid and addressed as specified above. Any party may by written notice to the other specify a different address for notice purposes.

12. APPLICABLE LAW. This Warrant Certificate shall be governed by and construed in accordance with the laws of Oregon.

Dated as of _____, 1992.

ANTIVIRALS, INC.

By:

Denis Burger, PhD, President

OREGON RESOURCE AND TECHNOLOGY
DEVELOPMENT CORPORATION

By:

John A. Beaulieu, President

ANTIVIRALS INC.
1992 STOCK INCENTIVE PLAN

1. PURPOSE. The purpose of this Stock Incentive Plan (the "Plan") is to enable ANTIVIRALS Inc. (the "Company") to attract and retain the services of (1) selected employees, officers and directors of the Company or of any subsidiary of the Company and (2) selected nonemployee agents, consultants, advisors, persons involved in the sale or distribution of the Company's products and independent contractors of the Company or any subsidiary.

2. SHARES SUBJECT TO THE PLAN. Subject to adjustment as provided below and in paragraph 14, the shares to be offered under the Plan shall consist of Common Stock of the Company, and the total number of shares of Common Stock that may be issued under the Plan shall not exceed 4,000,000 shares. The shares issued under the Plan may be authorized and unissued shares or reacquired shares. If an option, stock appreciation right or performance unit granted under the Plan expires, terminates or is cancelled, the unissued shares subject to such option, stock appreciation right or performance unit shall again be available under the Plan. If shares sold or awarded as a bonus under the Plan are forfeited to the Company or repurchased by the Company, the number of shares forfeited or repurchased shall again be available under the Plan.

3. EFFECTIVE DATE AND DURATION OF PLAN.

(a) EFFECTIVE DATE. The Plan shall become effective as of June 3, 1992. No option, stock appreciation right or performance unit granted under the Plan to an officer who is subject to Section 16(b) of the Securities Exchange Act of 1934, as amended (an "Officer") or a director shall become exercisable, however, until the Plan is approved by the affirmative vote of the holders of a majority of the shares of Common Stock represented at a shareholders meeting at which a quorum is present and any such awards under the Plan prior to such approval shall be conditioned on and subject to such approval. Subject to this limitation, options, stock appreciation rights and performance units may be granted and shares may be awarded as bonuses or sold under the Plan at any time after the effective date and before termination of the Plan.

(b) DURATION. The Plan shall continue in effect until all shares available for issuance under the Plan have been issued and all restrictions on such shares have lapsed. The Board of Directors may suspend or terminate the Plan at any time except with respect to options, performance units and shares subject to restrictions then outstanding under the Plan. Termination shall not affect any outstanding options, any right of the Company to repurchase shares or the forfeitability of shares issued under the Plan.

4. ADMINISTRATION.

(a) BOARD OF DIRECTORS. The Plan shall be administered by the Board of Directors of the Company, which shall determine and designate from time to time the individuals to whom awards shall be made, the amount of the awards and the other terms and conditions of the awards. Subject to the provisions of the Plan, the Board of Directors may from time to time adopt and amend rules and regulations relating to administration of the Plan, advance the lapse of any waiting period, accelerate any exercise date, waive or modify any restriction applicable to shares (except those restrictions imposed by law) and make all other determinations in the judgment of the Board of Directors necessary or desirable for the administration of the Plan. The interpretation and construction of the provisions of the Plan and related agreements by the Board of Directors shall be final and conclusive. The Board of Directors may correct

any defect or supply any omission or reconcile any inconsistency in the Plan or in any related agreement in the manner and to the extent it shall deem expedient to carry the Plan into effect, and it shall be the sole and final judge of such expediency.

(b) COMMITTEE. The Board of Directors may delegate to a committee of the Board of Directors or specified officers of the Company, or both (the "Committee") any or all authority for administration of the Plan. If authority is delegated to a Committee, all references to the Board of Directors in the Plan shall mean and relate to the Committee except (i) as otherwise provided by the Board of Directors, (ii) that only the Board of Directors may amend or terminate the Plan as provided in paragraphs 3 and 16 and (iii) that a Committee including officers of the Company shall not be permitted to grant options to persons who are officers of the Company. If awards are to be made under the Plan to Officers or directors, authority for selection of Officers and directors for participation and decisions concerning the timing, pricing and amount of a grant or award, if not determined under a formula meeting the requirements of Rule 16b-3 under the Securities Exchange Act of 1934, as amended, shall be delegated to a committee consisting of two or more disinterested directors.

5. TYPES OF AWARDS; ELIGIBILITY. The Board of Directors may, from time to time, take the following action, separately or in combination, under the Plan: (i) grant Incentive Stock Options, as defined in Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), as provided in paragraphs 6(a) and 6(b); (ii) grant options other than Incentive Stock Options ("Non-Statutory Stock Options") as provided in paragraphs 6(a) and 6(c); (iii) award stock bonuses as provided in paragraph 7; (iv) sell shares subject to restrictions as provided in paragraph 8; (v) grant stock appreciation rights as provided in paragraph 9; (vi) grant cash bonus rights as provided in paragraph 10; (vii) grant performance units as provided in paragraph 11 and (viii) grant foreign qualified awards as provided in paragraph 12. Any such awards may be made to employees, including employees who are officers or directors, and to other individuals described in paragraph 1 who the Board of Directors believes have made or will make an important contribution to the Company or any subsidiary of the Company; provided, however, that only employees of the Company shall be eligible to receive Incentive Stock Options under the Plan. The Board of Directors shall select the individuals to whom awards shall be made and shall specify the action taken with respect to each individual to whom an

award is made. At the discretion of the Board of Directors, an individual may be given an election to surrender an award in exchange for the grant of a new award.

6. OPTION GRANTS.

(a) GENERAL RULES RELATING TO OPTIONS.

(i) TERMS OF GRANT. The Board of Directors may grant options under the Plan. With respect to each option grant, the Board of Directors shall determine the number of shares subject to the option, the option price, the period of the option, the time or times at which the option may be exercised and whether the option is an Incentive Stock Option or a Non-Statutory Stock Option. At the time of the grant of an option or at any time thereafter, the Board of Directors may provide that an optionee who exercised an option with Common Stock of the Company shall automatically receive a new option to purchase additional shares equal to the number of shares surrendered and may specify the terms and conditions of such new options.

(ii) EXERCISE OF OPTIONS. Except as provided in paragraph 6(a)(iv) or as determined by the Board of Directors, no option granted under the Plan may be exercised unless at the time of such exercise the optionee is employed by or in the service of the Company or any subsidiary of the Company and shall have been so employed or provided such service continuously since the

date such option was granted. Absence on leave or on account of illness or disability under rules established by the Board of Directors shall not, however, be deemed an interruption of employment or service for this purpose. Unless otherwise determined by the Board of Directors, vesting of options shall not continue during an absence on leave (including an extended illness) or on account of disability. Except as provided in paragraphs 6(a)(iv), 14 and 15, options granted under the Plan may be exercised from time to time over the period stated in each option in such amounts and at such times as shall be prescribed by the Board of Directors, provided that options shall not be exercised for fractional shares. Unless otherwise determined by the Board of Directors, if the optionee does not exercise an option in any one year with respect to the full number of shares to which the optionee is entitled in that year, the optionee's rights shall be cumulative and the optionee may purchase those shares in any subsequent year during the term of the option. Unless otherwise determined by the Board of Directors, if an Officer exercises an option within six months of the grant of the option, the shares acquired upon exercise of the option may not be sold until six months after the date of grant of the option.

(iii) NONTRANSFERABILITY. Each Incentive Stock Option and, unless otherwise determined by the Board of Directors with respect to an option granted to a person who is neither an Officer nor a director of the Company, each other option granted under the Plan by its terms shall be nonassignable and nontransferable by the optionee, either voluntarily or by operation of law, except by will or by the laws of descent and distribution of the state or country of the optionee's domicile at the time of death or, for options other than Incentive Stock Options, pursuant to a qualified domestic relations order as defined under the Code or Title I of the Employee Retirement Income Security Act.

(iv) TERMINATION OF EMPLOYMENT OR SERVICE.

(A) GENERAL RULE. Unless otherwise determined by the Board of Directors, in the event the employment or service of the optionee with the Company or a subsidiary terminates for any reason other than because of physical disability or death as provided in subparagraphs 6(a)(iv)(B) and (C), the option may be exercised at any time prior to the expiration date of the option or the expiration of 30 days after the date of such termination, whichever is the shorter period, but only if and to the extent the optionee was entitled to exercise the option at the date of such termination.

(B) TERMINATION BECAUSE OF TOTAL DISABILITY. Unless otherwise determined by the Board of Directors, in the event of the termination of employment or service because of total disability, the option may be exercised at any time prior to the expiration date of the option or the expiration of 12 months after the date of such termination, whichever is the shorter period, but only if and to the extent the optionee was entitled to exercise the option at the date of such termination. The term "total disability" means a mental or physical impairment which is expected to result in death or which has lasted or is expected to last for a continuous period of 12 months or more and which causes the optionee to be unable, in the opinion of the Company and two independent physicians, to perform his or her duties as an employee, director, officer or consultant of the Company and to be engaged in any substantial gainful activity. Total disability shall be deemed to have occurred on the first day after the Company and the two independent physicians have furnished their opinion of total disability to the Company.

(C) TERMINATION BECAUSE OF DEATH. Unless otherwise determined by the Board of Directors, in the event of the death of an optionee while employed by or providing service to the Company or a subsidiary, the option may be exercised at any time prior to the expiration date of the option or the expiration of 12 months

after the date of death, whichever is the shorter period, but only if and to the extent the optionee was entitled to exercise the option at the date of death and only by the person or persons to whom such optionee's rights under the option shall pass by the optionee's will or by the laws of descent and distribution of the state or country of domicile at the time of death.

(D) AMENDMENT OF EXERCISE PERIOD APPLICABLE TO TERMINATION. The Board of Directors at the time of grant or at any time thereafter, may extend the 30-day and 12-month exercise periods any length of time not longer than the original expiration date of the option, and may increase the portion of an option that is exercisable, subject to such terms and conditions as the Board of Directors may determine.

(E) FAILURE TO EXERCISE OPTION. To the extent that the option of any deceased optionee or of any optionee whose employment or service terminates is not exercised within the applicable period, all further rights to purchase shares pursuant to such option shall cease and terminate.

(v) PURCHASE OF SHARES. Unless the Board of Directors determines otherwise, shares may be acquired pursuant to an option granted under the Plan only upon receipt by the Company of notice in writing from the optionee of the optionee's intention to exercise, specifying the number of shares as to which the optionee desires to exercise the option and the date on which the optionee desires to complete the transaction, and if required in order to comply with the Securities Act of 1933, as amended, containing a representation that it is the optionee's present intention to acquire the shares for investment and not with a view to distribution. Unless the Board of Directors determines otherwise, on or before the date specified for completion of the purchase of shares pursuant to an option, the optionee must have paid the Company the full purchase price of such shares in cash (including, with the consent of the Board of Directors, cash that may be the proceeds of a loan from the Company) or, with the consent of the Board of Directors, in whole or in part, in Common Stock of the Company valued at fair market value, restricted stock, performance units or other contingent awards denominated in either stock or cash, promissory notes and other forms of consideration. The fair market value of Common Stock provided in payment of the purchase price shall be determined by the Board of Directors. If the Common Stock of the Company is not publicly traded on the date the option is exercised, the Board of Directors may consider any valuation methods it deems appropriate and may but is not required to, obtain one or more independent appraisals of the Company. If the Common Stock of the Company is publicly traded on the date the option is exercised, the fair market value of Common Stock provided in payment of the purchase price shall be the closing price of the Common Stock as reported in THE WALL STREET JOURNAL on the trading day preceding the date the option is exercised, or such other reported value of the Common Stock as shall be specified by the Board of Directors. No shares shall be issued until full payment for the shares has been made. With the consent of the Board of Directors, an optionee may request the Company to apply automatically the shares to be received upon the exercise of a portion of a stock option (even though stock certificates have not yet been issued) to satisfy the purchase price for additional portions of the option. Each optionee who has exercised an option shall immediately upon notification of the amount due, if any, pay to the Company in cash amounts necessary to satisfy any applicable federal, state and local tax withholding requirements. If additional withholding is or becomes required beyond any amount deposited before delivery of the certificates, the optionee shall pay such amount to the Company on demand. If the optionee fails to pay the amount demanded, the Company may withhold that amount from other amounts payable by the Company to the optionee, including salary, subject to applicable law. With the consent of the Board of Directors an optionee may satisfy this obligation, in whole or in part, by having the Company withhold from the shares to be issued upon the exercise that number of shares that would satisfy the withholding amount due or by delivering to the Company Common Stock to satisfy the withholding amount. Upon the

exercise of an option, the number of shares reserved for issuance under the Plan shall be reduced by the number of shares issued upon exercise of the option.

(b) INCENTIVE STOCK OPTIONS. Incentive Stock Options shall be subject to the following additional terms and conditions:

(i) LIMITATION ON AMOUNT OF GRANTS. No employee may be granted Incentive Stock Options under the Plan if the aggregate fair market value, on the date of grant, of the Common Stock with respect to which Incentive Stock Options are exercisable for the first time by that employee during any calendar year under the Plan and under any other incentive stock option plan (within the meaning of Section 422 of the Code) of the Company or any parent or subsidiary of the Company exceeds $100,000.

(ii) LIMITATIONS ON GRANTS TO 10 PERCENT SHAREHOLDERS. An Incentive Stock Option may be granted under the Plan to an employee possessing more than 10 percent of the total combined voting power of all classes of stock of the Company or of any parent or subsidiary of the Company only if the option price is at least 110 percent of the fair market value of the Common Stock subject to the option on the date it is granted, as described in paragraph 6(b)(iv), and the option by its terms is not exercisable after the expiration of five years from the date it is granted.

(iii) DURATION OF OPTIONS. Subject to paragraphs 6(a)(ii) and 6(b)(ii), Incentive Stock Options granted under the Plan shall continue in effect for the period fixed by the Board of Directors, except that no Incentive Stock Option shall be exercisable after the expiration of 10 years from the date it is granted.

(iv) OPTION PRICE. The option price per share shall be determined by the Board of Directors at the time of grant. Except as provided in paragraph 6(b)(ii), the option price shall not be less than 100 percent of the fair market value of the Common Stock covered by the Incentive Stock Option at the date the option is granted. The fair market value shall be determined by the Board of Directors. If the Common Stock of the Company is not publicly traded on the date the option is granted, the Board of Directors may consider any valuation methods it deems appropriate and may, but is not required to, obtain one or more independent appraisals of the Company. If the Common Stock of the Company is publicly traded on the date the option is exercised, the fair market value shall be deemed to be the closing price of the Common Stock as reported in THE WALL STREET JOURNAL on the day preceding the date the option is granted, or if there has been no sale on that date, on the last preceding date on which a sale occurred, or such other value of the Common Stock as shall be specified by the Board of Directors.

(v) LIMITATION ON TIME OF GRANT. No Incentive Stock Option shall be granted on or after the tenth anniversary of the effective date of the Plan.

(vi) CONVERSION OF INCENTIVE STOCK OPTIONS. The Board of Directors may at any time without the consent of the optionee convert an Incentive Stock Option to a Non-Statutory Stock Option.

(c) NON-STATUTORY STOCK OPTIONS. Non-Statutory Stock Options shall be subject to the following terms and conditions in addition to those set forth in Section 6(a) above:

(i) OPTION PRICE. The option price for Non-Statutory Stock Options shall be determined by the Board of Directors at the time of grant and may be any amount determined by the Board of Directors.

(ii) DURATION OF OPTIONS. Non-Statutory Stock Options granted under the Plan shall continue in effect for the period fixed by the Board of Directors.

7. STOCK BONUSES. The Board of Directors may award shares under the Plan as stock bonuses. Shares awarded as a bonus shall be subject to the terms, conditions, and restrictions determined by the Board of Directors. The restrictions may include restrictions concerning transferability and forfeiture of the shares awarded, together with such other restrictions as may be determined by the Board of Directors. If shares are subject to forfeiture, all dividends or other distributions paid by the Company with respect to the shares shall be retained by the Company until the shares are no longer subject to forfeiture, at which time all accumulated amounts shall be paid to the recipient. The Board of Directors may require the recipient to sign an agreement as a condition of the award, but may not require the recipient to pay any monetary consideration other than amounts necessary to satisfy tax withholding requirements. The agreement may contain any terms, conditions, restrictions, representations and warranties required by the Board of Directors. The certificates representing the shares awarded shall bear any legends required by the Board of Directors. Unless otherwise determined by the Board of Directors, shares awarded as a stock bonus to an Officer may not be sold until six months after the date of the award. The Company may require any recipient of a stock bonus to pay to the Company in cash upon demand amounts necessary to satisfy any applicable federal, state or local tax withholding requirements. If the recipient fails to pay the amount demanded, the Company may withhold that amount from other amounts payable by the Company to the recipient, including salary or fees for services, subject to applicable law. With the consent of the Board of Directors, a recipient may deliver Common Stock to the Company to satisfy this withholding obligation. Upon the issuance of a stock bonus, the number of shares reserved for issuance under the Plan shall be reduced by the number of shares issued.

8. RESTRICTED STOCK. The Board of Directors may issue shares under the Plan for such consideration (including promissory notes and services) as determined by the Board of Directors. Shares issued under the Plan shall be subject to the terms, conditions and restrictions determined by the Board of Directors. The restrictions may include restrictions concerning transferability, repurchase by the Company and forfeiture of the shares issued, together with such other restrictions as may be determined by the Board of Directors. If shares are subject to forfeiture or repurchase by the Company, all dividends or other distributions paid by the Company with respect to the shares shall be retained by the Company until the shares are no longer subject to forfeiture or repurchase, at which time all accumulated amounts shall be paid to the recipient. All Common Stock issued pursuant to this paragraph 8 shall be subject to a purchase agreement, which shall be executed by the Company and the prospective recipient of

the shares prior to the delivery of certificates representing such shares to the recipient. The purchase agreement may contain any terms, conditions, restrictions, representations and warranties required by the Board of Directors. The certificates representing the shares shall bear any legends required by the Board of Directors. Unless otherwise determined by the Board of Directors, shares issued under this paragraph 8 to an Officer may not be sold until six months after the shares are issued. The Company may require any purchaser of restricted stock to pay to the Company in cash upon demand amounts necessary to satisfy any applicable federal, state or local tax withholding requirements. If the purchaser fails to pay the amount demanded, the Company may withhold that amount from other amounts payable by the Company to the purchaser, including salary, subject to applicable law. With the consent of the Board of Directors, a purchaser may deliver Common Stock to the Company to satisfy this withholding obligation. Upon the issuance of restricted stock, the number of shares reserved for issuance under the Plan shall be reduced by the number of shares issued.

9. STOCK APPRECIATION RIGHTS.

(a) GRANT. Stock appreciation rights may be granted under the Plan by the Board of Directors, subject to such rules, terms, and conditions as the Board of Directors prescribes.

(b) EXERCISE.

(i) Each stock appreciation right shall entitle the holder, upon exercise, to receive from the Company in exchange therefor an amount equal in value to the excess of the fair market value on the date of exercise of one share of Common Stock of the Company over its fair market value on the date of grant (or, in the case of a stock appreciation right granted in connection with an option, the excess of the fair market value of one share of Common Stock of the Company over the option price per share under the option to which the stock appreciation right relates), multiplied by the number of shares covered by the stock appreciation right or the option, or portion thereof, that is surrendered. No stock appreciation right shall be exercisable at a time that the amount determined under this subparagraph is negative. Payment by the Company upon exercise of a stock appreciation right may be made in Common Stock valued at fair market value, in cash, or partly in Common Stock and partly in cash, all as determined by the Board of Directors.

(ii) A stock appreciation right shall be exercisable only at the time or times established by the Board of Directors. If a stock appreciation right is granted in connection with an option, the following rules shall apply: (1) the stock appreciation right shall be exercisable only to the extent and on the same conditions that the related option could be exercised; (2) upon exercise of the stock appreciation right, the option or portion thereof to which the stock appreciation right relates terminates; and (3) upon exercise of the option, the related stock appreciation right or portion thereof terminates. Unless otherwise determined by the Board of Directors, no stock appreciation right granted to an Officer or director may be exercised during the first six months following the date it is granted.

(iii) The Board of Directors may withdraw any stock appreciation right granted under the Plan at any time and may impose any conditions upon the exercise of a stock appreciation right or adopt rules and regulations from time to time affecting the rights of holders of stock appreciation rights. Such rules and regulations may govern the right to exercise stock appreciation rights granted prior to adoption or amendment of such rules and regulations as well as stock appreciation rights granted thereafter.

(iv) For purposes of this paragraph 9, the fair market value of the Common Stock shall be determined as of the date the stock appreciation right is exercised, under the methods set forth in paragraph 6(b)(iv).

(v) No fractional shares shall be issued upon exercise of a stock appreciation right. In lieu thereof, cash may be paid in an amount equal to the value of the fraction or, if the Board of Directors shall determine, the number of shares may be rounded downward to the next whole share.

(vi) Each stock appreciation right granted in connection with an Incentive Stock Option, and unless otherwise determined by the Board of Directors with respect to a stock appreciation right granted to a person who is neither an Officer nor a director of the Company, each other stock appreciation right granted under the Plan by its terms shall be nonassignable and nontransferable by the holder, either voluntarily or by operation of law, except by will or by the laws of descent and distribution of the state or country of the holder's domicile at the time of death, and each stock appreciation right by its terms shall be exercisable during the holder's lifetime only by the holder; provided, however, that a stock appreciation right not granted in connection with an Incentive Stock Option shall also be transferable pursuant to a qualified domestic relations order as defined under the Code or Title I of the Employee Retirement Income Security Act.

(vii) Each participant who has exercised a stock appreciation right shall, upon notification of the amount due, pay to the Company in cash amounts necessary to satisfy any applicable federal, state and local tax withholding requirements. If the participant fails to pay the amount demanded, the Company may withhold that amount from other amounts payable by the Company to the participant including salary, subject to applicable law. With the consent of the Board of Directors a participant may satisfy this obligation, in whole or in part, by having the Company withhold from any shares to be issued upon the exercise that number of shares that would satisfy the withholding amount due or by delivering Common Stock to the Company to satisfy the withholding amount.

(viii) Upon the exercise of a stock appreciation right for shares, the number of shares reserved for issuance under the Plan shall be reduced by the number of shares issued. Cash payments of stock appreciation rights shall not reduce the number of shares of Common Stock reserved for issuance under the Plan.

10. CASH BONUS RIGHTS.

(a) GRANT. The Board of Directors may grant cash bonus rights under the Plan in connection with (i) options granted or previously granted, (ii) stock appreciation rights granted or previously granted, (iii) stock bonuses awarded or previously awarded and (iv) shares sold or previously sold under the Plan. Cash bonus rights will be subject to rules, terms and conditions as the Board of Directors may prescribe. Unless otherwise determined by the Board of Directors with respect to a cash bonus right granted to a person who is neither an Officer nor a director of the Company, each cash bonus right granted under the Plan by its terms shall be nonassignable and nontransferable by the holder, either voluntarily or by operation of law, except by will or by the laws of descent and distribution of the state or country of the holder's domicile at the time of death or pursuant to a qualified domestic relations order as defined under the Code or Title I of the Employee Retirement Income Security Act. The payment of a cash bonus shall not reduce the number of shares of Common Stock reserved for issuance under the Plan.

(b) CASH BONUS RIGHTS IN CONNECTION WITH OPTIONS. A cash bonus right granted in connection with an option will entitle an optionee to a cash bonus when the related option is exercised (or terminates in connection with the exercise of a stock appreciation right related to the option) in whole or in part. If an optionee purchases shares upon exercise of an option and does not exercise a related stock appreciation right, the amount of the bonus shall be determined by multiplying the excess of the total fair market value of the shares to be acquired upon the exercise over the total option price for the shares by the applicable bonus percentage. If the optionee exercises a related stock appreciation right in connection with the termination of an option, the amount of the bonus shall be determined by multiplying the total fair market value of the shares and cash received pursuant to the exercise of the stock appreciation right by the applicable bonus percentage. The bonus percentage applicable to a bonus right shall be determined from time to time by the Board of Directors but shall in no event exceed 75 percent.

(c) CASH BONUS RIGHTS IN CONNECTION WITH STOCK BONUS. A cash bonus right granted in connection with a stock bonus will entitle the recipient to a cash bonus payable when the stock bonus is awarded or restrictions, if any, to which the stock is subject lapse. If bonus stock awarded is subject to restrictions and is repurchased by the Company or forfeited by the holder, the cash bonus right granted in connection with the stock bonus shall terminate and may not be exercised. The amount and timing of payment of a cash bonus shall be determined by the Board of Directors.

(d) CASH BONUS RIGHTS IN CONNECTION WITH STOCK PURCHASES. A cash bonus right granted in connection with the purchase of stock pursuant to paragraph 8 will entitle the recipient to a cash bonus when the shares are

purchased or restrictions, if any, to which the stock is subject lapse. Any cash bonus right granted in connection with shares purchased pursuant to paragraph 8 shall terminate and may not be exercised in the event the shares are repurchased by the Company or forfeited by the holder pursuant to applicable restrictions. The

amount of any cash bonus to be awarded and timing of payment of a cash bonus shall be determined by the Board of Directors.

(e) TAXES. The Company shall withhold from any cash bonus paid pursuant to paragraph 10 the amount necessary to satisfy any applicable federal, state and local withholding requirements.

11. PERFORMANCE UNITS. The Board of Directors may grant performance units consisting of monetary units which may be earned in whole or in part if the Company achieves certain goals established by the Board of Directors over a designated period of time, but not in any event more than 10 years. The goals established by the Board of Directors may include earnings per share, return on shareholders' equity, return on invested capital, and such other goals as may be established by the Board of Directors. In the event that the minimum performance goal established by the Board of Directors is not achieved at the conclusion of a period, no payment shall be made to the participants. In the event the maximum corporate goal is achieved, 100 percent of the monetary value of the performance units shall be paid to or vested in the participants. Partial achievement of the maximum goal may result in a payment or vesting corresponding to the degree of achievement as determined by the Board of Directors. Payment of an award earned may be in cash or in Common Stock or in a combination of both, and may be made when earned, or vested and deferred, as the Board of Directors determines. Deferred awards shall earn interest on the terms and at a rate determined by the Board of Directors. Unless otherwise determined by the Board of Directors with respect to a performance unit granted to a person who is neither an Officer nor a director of the Company, each performance unit granted under the Plan by its terms shall be nonassignable and nontransferable by the holder, either voluntarily or by operation of law, except by will or by the laws of descent and distribution of the state or country of the holder's domicile at the time of death or pursuant to a qualified domestic relations order as defined under the Code or Title I of the Employee Retirement Income Security Act. Each participant who has been awarded a performance unit shall, upon notification of the amount due, pay to the Company in cash amounts necessary to satisfy any applicable federal, state and local tax withholding requirements. If the participant fails to pay the amount demanded, the Company may withhold that amount from other amounts payable by the Company to the participant, including salary or fees for services, subject to applicable law. With the consent of the Board of Directors a participant may satisfy this obligation, in whole or in part, by having the Company withhold from any shares to be issued that number of shares that would satisfy the withholding amount due or by delivering Common Stock to the Company to satisfy the withholding amount. The payment of a performance unit in cash shall not reduce the number of shares of Common Stock reserved for issuance under the Plan. The number of shares reserved for issuance under the Plan shall be reduced by the number of shares issued upon payment of an award.

12. FOREIGN QUALIFIED GRANTS. Awards under the Plan may be granted to such officers and employees of the Company and its subsidiaries and such other persons described in paragraph 1 residing in foreign jurisdictions as the Board of Directors may determine from time to time. The Board of Directors may adopt such supplements to the Plan as may be necessary

to comply with the applicable laws of such foreign jurisdictions and to afford participants favorable treatment under such laws; provided, however, that no award shall be granted under any such supplement with terms which are more beneficial to the participants than the terms permitted by the Plan.

13. OPTION GRANTS TO NON-EMPLOYEE DIRECTORS.

(a) INITIAL GRANTS. Each person who is or becomes a Non-Employee Director after June 3, 1992 shall be automatically granted an option to purchase 100,000 shares of Common Stock on the date he or she becomes a Non-Employee Director. A "Non-Employee Director" is a director who is not an employee of the Company or any of its subsidiaries and has not been an employee of the Company or any of its subsidiaries within one year of any date as of which a determination of eligibility is made.

(b) EXERCISE PRICE. The exercise price of an option granted pursuant to this paragraph 13 shall be equal to the fair market value of the Common Stock as determined in accordance with the procedure set forth in paragraph 6(b)(iv).

(c) TERM OF OPTION. The term of each option granted pursuant to this paragraph 13 shall be 10 years from the date of grant.

(d) EXERCISABILITY. Until an option expires or is terminated and except as provided in paragraph 13(f), 14 and 15, an option granted under this paragraph 13 shall be exercisable according to the following schedule:

Period of Non-Employee Director's Continuous Service as a Director of the Company from the Date the Option is Granted	Portion of Total Option Which is Exercisable
Less than 12 months	0%
After 12 months	25% plus 25% for each 12 months of additional continuous service until fully vested.

For purposes of this paragraph 13(e), a complete month shall be deemed to be the period which starts on the day of grant and ends on the same day of the following calendar month, so that each successive "complete month" ends on the same day of each successive calendar month (or, in respect of any calendar month which does not include such a day, that "complete month" shall end on the first day of the next following calendar month).

(e) TERMINATION AS A DIRECTOR. If an optionee ceases to be a director of the Company for any reason, including death, the option may be exercised at any time prior to the expiration date of the option or the expiration of 30 days (or 12 months in the event of death) after the last day the optionee served as a director, whichever is the sooner period, but only if and to the extent the optionee was entitled to exercise the option as of the last day the optionee served as a director.

(f) NONTRANSFERABILITY. Each option by its terms shall be nonassignable and nontransferable by the optionee, either voluntarily or by operation of law, except by will or by the laws of descent and distribution of the state or country of the optionee's domicile at the time of death or pursuant to a qualified domestic relations order as defined under the Code or Title I of the Employee Retirement Income Security Act.

(g) EXERCISE OF OPTIONS. Options may be exercised upon payment of cash or shares of Common Stock of the Company in accordance with paragraph 6(a)(v). Unless otherwise determined by the Board of Directors, if an option is exercised within six months of the date of grant, the shares acquired upon such exercise may not be sold until six months after the date of grant.

14. CHANGES IN CAPITAL STRUCTURE. If the outstanding Common Stock of the Company is hereafter increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company or of another corporation by reason of any reorganization, merger, consolidation, plan of exchange, recapitalization, reclassification, stock split-up, combination of shares or dividend payable in shares, appropriate adjustment shall be made by the Board of Directors in the number and kind of shares available for awards under the Plan. In addition, except with respect to transactions referred to in paragraph 15, the Board of Directors shall make appropriate adjustment in the number and kind of shares as to which outstanding options and stock appreciation rights, or portions thereof then unexercised, shall be exercisable, so that the optionee's proportionate interest before and after the occurrence of the event is maintained. Notwithstanding the foregoing, the Board of Directors shall have no obligation to effect any adjustment that would or might result in the issuance of fractional shares, and any fractional shares resulting from any adjustment may be disregarded or provided for in any manner determined by the Board of Directors. Any such adjustments made by the Board of Directors shall be conclusive. If the shareholders of the Company receive capital stock of another corporation ("Exchange Stock") in exchange for their shares of Common Stock in any transaction involving a merger, consolidation or plan of exchange, all options granted hereunder shall be converted into options to purchase shares of Exchange Stock unless the Company and the corporation issuing the Exchange Stock, in their sole discretion, determine that any or all such options granted hereunder shall not be converted into options to purchase shares of Exchange Stock but instead shall terminate in accordance with the provisions of the last sentence of this paragraph 14. The amount and price of converted options shall be determined by adjusting the amount and price of the options granted hereunder in the same proportion as used for determining the number of shares of Exchange Stock the holders of the Common Stock receive in such merger. In the event of dissolution of the Company or a merger, consolidation

or plan of exchange affecting the Company to which paragraph 15 does not apply, in lieu of providing for options and stock appreciation rights as provided above in this paragraph 14, the Board of Directors may, in its sole discretion, provide a 30-day period prior to such event during which optionees shall have the right to exercise options and stock appreciation rights in whole or in part without any limitation on exercisability and upon the expiration of which 30-day period all unexercised options and stock appreciation rights shall immediately terminate.

15. ACCELERATION IN CERTAIN EVENTS. Notwithstanding any other provisions of the Plan, all options and stock appreciation rights outstanding under the Plan shall immediately become exercisable in full for the remainder of their terms at any time when any one of the following events has taken place:

(a) The shareholders of the Company approve one of the following ("Approved Transactions"):

(i) Any consolidation, merger or plan of exchange involving the Company ("Merger") pursuant to which Common Stock would be converted into cash; or

(ii) Any sale, lease, exchange, or other transfer (in one transaction or a series of related transactions) of all or substantially all of the assets of the Company or the adoption of any plan or proposal for the liquidation or dissolution of the Company; or

(b) A tender or exchange offer, other than one made by the Company, is made for Common Stock (or securities convertible into Common Stock) and such offer results in a portion of those securities being purchased and the offeror after the consummation of the offer is the beneficial owner (as determined pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), directly or indirectly, of at least 20 percent of the outstanding Common Stock (an "Offer"); or

(c) The Company receives a report on Schedule 13D of the Exchange Act reporting the beneficial ownership by any person of 20 percent or more of the Company's outstanding Common Stock, except that if such receipt shall occur during a tender offer or exchange offer by any person other than the Company or a wholly-owned subsidiary of the Company, Special Acceleration shall not take place until the conclusion of such offer; or

(d) During any period of 12 months or less, individuals who at the beginning of such period constituted a majority of the Board of Directors cease for any reason to constitute a majority thereof unless the nomination or election of such new directors was approved by a vote of at least two-thirds of the directors then still in office who were directors at the beginning of such period.

All options and stock appreciation rights that are accelerated pursuant to this paragraph 15 shall terminate upon the dissolution of the Company or upon the consummation of any Merger pursuant to which Common Stock would be converted to cash. The terms used

in this paragraph 15 and not defined elsewhere in the Plan shall have the same meanings as such terms have in the Exchange Act and the rules and regulations adopted thereunder.

16. CORPORATE MERGERS, ACQUISITIONS, ETC. The Board of Directors may also grant options, stock appreciation rights, performance units, stock bonuses and cash bonuses and issue restricted stock under the Plan having terms, conditions and provisions that vary from those specified in this Plan provided that any such awards are granted in substitution for, or in connection with the assumption of, existing options, stock appreciation rights, stock bonuses, cash bonuses, restricted stock and performance units granted, awarded or issued by another corporation and assumed or otherwise agreed to be provided for by the Company pursuant to or by reason of a transaction involving a corporate merger, consolidation, acquisition of property or stock, separation, reorganization or liquidation to which the Company or a subsidiary is a party.

17. AMENDMENT OF PLAN. The Board of Directors may at any time, and from time to time, modify or amend the Plan in such respects as it shall deem advisable because of changes in the law while the Plan is in effect or for any other reason. Except as provided in paragraphs 6(a)(iv), 9, 14 and 15, however, no change in an award already granted shall be made without the written consent of the holder of such award.

18. APPROVALS. The obligations of the Company under the Plan are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection with the grants under the Plan. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver Common Stock under the Plan if such issuance or delivery would violate applicable state or federal securities laws.

19. EMPLOYMENT AND SERVICE RIGHTS. Nothing in the Plan or any award pursuant to the Plan shall (i) confer upon any employee any right to be continued in the employment of the Company or any subsidiary or interfere in any way with the right of the Company or any subsidiary by whom such employee is employed to terminate such employee's employment at any time, for any reason, with or without cause, or to decrease such employee's compensation or benefits, or (ii) confer upon any person engaged by the Company any right to be retained or employed by the Company or to the continuation, extension, renewal, or modification of any compensation, contract, or arrangement with or by the Company.

20. RIGHTS AS A SHAREHOLDER. The recipient of any award under the

Plan shall have no rights as a shareholder with respect to any Common Stock until the date of issue to the recipient of a stock certificate for such shares. Except as otherwise expressly provided in the Plan, no adjustment shall be made for dividends or other rights for which the record date occurs prior to the date such stock certificate is issued.

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement"), made this 4th day of November, 1996, by and between ANTIVIRALS INC., an Oregon corporation, with its principle office at 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Company"), and DENIS R. BURGER, PH.D. 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Employee").

RECITALS:

A. Employee has been a valued employee of the Company since March, 1991 and has served in the capacities of Chief Operating Officer, President, and most recently Chief Executive Officer.

B. The Company desires to continue Employee's employment with the Company as Chief Executive Officer under the terms stated in this Agreement.

AGREEMENT:

NOW, THEREFORE, in consideration of the mutual benefits contained herein, the sufficiency of which the parties acknowledge, the parties hereby agree as follows:

1. EMPLOYMENT TERM. The term ("Term") of this Agreement shall commence on the date written above, and shall continue until terminated in accordance with Section 12.

2. DUTIES. Employee shall be responsible to perform such duties as assigned to him from time to time by the Board of Directors of the Company ("Board"). Employee shall be employed by the Company and shall devote his best efforts to the service of the Company throughout the Term. Employee shall devote at least for (40) hours per week to the affairs of the Company. Employee and Company acknowledge and agree that (i) Employee may hold certain offices within certain entities as set forth on Exhibit A to this Agreement, (ii) Employee's devotion of reasonable amounts of time in such capacities, so long as it does not interfere with his performance of services hereunder, shall not conflict with the terms of this Agreement, and (iii) Exhibit A may be amended from time to time by agreement of the parties.

3. COMPENSATION. For his services from the date of this Agreement until January 1, 1997 the Company shall compensate Employee at his current salary. Commencing January 1, 1997, the Company shall compensate Employee with an annual salary of $225,000, payable in accordance with Company's payroll practices in effect from time to time, and less amounts required to be withheld under applicable law and requested to be withheld by Employee. Employee's annual salary shall be subject to review on an annual basis. The Company may but shall not be required to pay bonus compensation to Employee. Except as otherwise provided in this Agreement, the base salary shall be prorated for any period of service less than a full month.

4. EXPENSES. The Company will reimburse Employee for all expenses reasonably incurred by him in discharging his duties for the Company, conditioned upon Employee's submission of written documentation in support of claimed reimbursement of such expenses, and consistent with the Company's expense reimbursement policies in effect from time to time.

5. BENEFITS. Subject to eligibility requirements, Employee shall be entitled to participate in such benefits plans and programs as adopted by the Company from time to time.

6. CONFIDENTIALITY.

(a) In the course of his employment with the Company, it is anticipated that Employee may acquire knowledge (both orally and in writing) regarding confidential affairs of the Company and confidential or proprietary information including: (a) matters of a technical nature, such as know-how, inventions, processes, products, designs, chemicals, compounds, materials, drawings, concepts, formulas, trade secrets, secret processes or machines, inventions or research projects; (b) matters of a business nature, such as information about costs, profits, pricing policies, markets, sales, suppliers, customers, plans for future development, plans for future products, marketing plans or strategies; and (c) other information of a similar nature which is not generally disclosed by the Company to the public, referred to collectively hereafter as "Confidential Information." "Confidential Information" shall not include information generally available to the public. Employee agrees that during the term of this Agreement and thereafter, he (i) will keep secret and retain in the strictest confidence all Confidential Information, (ii) not disclose Confidential Information to anyone except employees of the Company authorized to receive it and third parties to whom such disclosure is specifically authorized, and (iii) not use any Confidential Information for any purpose other than performance of services under this Agreement without prior written permission from the Company.

(b) If Employee is served with any subpoena or other compulsory judicial or administrative process calling for production or disclosure of Confidential Information or if Employee is otherwise required by law or regulation to disclose Confidential Information, Employee will immediately, and prior to production or disclosure, notify the Company and provide it with such information as may be necessary in order that the Company may take such action as it deems necessary to protect its interest.

(c) The provisions of this paragraph 6 shall survive termination of this Agreement.

7. NONCOMPETITION.

(a) Employee acknowledges that the increased compensation reflected in this Agreement amounts to a bona fide advancement for Employee. In consideration of this advancement, Employee agrees that during the Term and for a period of two (2) years following termination of employment with the Company for any reason, he will not directly or indirectly engage in any activity directed towards (i) the development of any uncharged sequence-specific nucleic acid-binding agents or any nucleic acid purification and concentration or detection system, or (ii) the development of drug delivery systems related to the "molecular engine" as defined in patents or patent applications filed or Contemplated at any time during the Term. Patents or patent

applications "Contemplated" are those included, recorded or discussed in the notebooks of researchers employed by or performing services on behalf of the Company.

(b) For a period of two (2) years, except with the express written consent of the Company, Employee agrees to refrain from directly or indirectly recruiting, hiring or assisting anyone else to hire, or otherwise counseling to discontinue employment with the Company, any person then employed by the Company or its subsidiaries or affiliates.

(c) The provisions of this paragraph 7 shall survive termination of this Agreement and the term of employment.

8. COVERED WORK.

(a) All right, title and interest to any Covered Work that

Employee makes or conceives (whether alone or with others) while employed by the Company, belong to the Company. This Agreement operates as an actual assignment of all rights in Covered Work to the Company. "Covered Work" means products and Inventions that relate to the actual or anticipated business of the Company or any of its subsidiaries or affiliates, or that result from or are suggested by a task assigned to Employee or work performed by Employee on behalf of the Company or any of its subsidiaries or affiliates, or that were developed in whole or in part on the Company time or using the Company's equipment, supplies or facilities. "Inventions" mean ideas, improvements, designs, computer software, technologies, techniques, processes, products, chemicals, compounds, materials, concepts, drawings, authored works or discoveries, whether or not patentable or copyrightable, as well as other newly discovered or newly applied information or concepts. Attached hereto as Exhibit B is a description of any product or Invention in which Employee had or has any right, title or interest which is not included within the definition of "Covered Work".

(b) Employee shall promptly reveal all information relating to Covered Work and Confidential Information to an appropriate officer of the Company and shall cooperate with the Company, and execute such documents as may be necessary, in the event that the Company desires to seek copyright, patent or trademark protection thereafter relating to same.

(c) In the event that the Company requests that Employee assist in efforts to defend any legal claims to patents or other right, the Company agrees to reimburse Employee for any reasonable expenses Employee may incur in connection with such assistance. This obligation to reimburse shall survive termination of this Agreement and the term of employment.

(d) The provisions of this paragraph 8 shall survive termination of this Agreement and the term of employment.

9. RETURN OF INVENTIONS, PRODUCTS AND DOCUMENTS. Employee acknowledges and agrees that all Inventions, all products of the Company and all originals and copies of records, reports, documents, lists, drawings, memoranda, notes, proposals, contracts and other documentation related to the business of the Company or containing any information described in this paragraph shall be the sole and exclusive property of the Company and shall be returned to the Company immediately upon the termination of Employee's employment with the Company or upon the written request of the Company.

10. INJUNCTION. Employee agrees that it would be difficult to measure damages to the Company from any breach by Employee of paragraph 6, 7, 8 and/or 9 of this Agreement, and that monetary damages would be an inadequate remedy for any such breach. Accordingly, Employee agrees that if Employee shall breach paragraph 6, 7, 8 and/or 9 of this Agreement, the Company shall be entitled, in addition to all other remedies it may have at law or in equity, to an injunction or other appropriate orders to restrain any such breach without showing or proving any actual damage sustained by the Company.

11. OBLIGATIONS TO OTHERS. Except for items fully disclosed in writing to the Company, Employee represents and warrants to the Company that (i) Employee's employment by the Company does not violate any agreement with any prior employer or other person or entity, and (ii) Employee is not subject to any existing confidentiality or noncompetition agreement or obligation, or any agreement relating to the assignment of Inventions except as has been fully disclosed in writing to the Company.

12. TERMINATION.

(a) Employee may voluntarily terminate his employment with the Company upon giving the Company sixty (60) days' written notice.

(b) The Company may terminate Employee's employment without Cause (as defined below) upon giving Employee thirty (30) days written notice of

termination.

(c) Employee's employment with the Company shall terminate upon the occurrence of any one of the following:

(1) Employee's death;

(2) The effective date of a notice sent to Employee stating the Board's determination made in good faith and after consultation with a qualified physician selected by the Board, that Employee is incapable of performing his duties under this Agreement, with or without reasonable accommodation, because of a physical or mental incapacity that has prevented Employee from performing such full-time duties for a period of ninety (90) consecutive calendar days and the determination that such incapacity is likely to continue for a least another ninety (90) such days; and

(3) The effective date of a notice sent to Employee terminating Employee's employment for Cause.

(d) "Cause" means the occurrence of one or more of the following events:

(1) Employee's willful and repeated failure or refusal to comply in any material respect with the reasonable and lawful policies, standards or regulations from time to time established by the Company, or to perform his duties in accordance with this Agreement after notice to Employee of such failure; and

(2) Employee engages in criminal conduct or engages in conduct with respect to the Company that is dishonest, fraudulent or materially detrimental to the reputation, character or standing of the Company.

13. TERMINATION COMPENSATION.

(a) Upon Employee's voluntary termination of employment (other than voluntary termination after a Change of Control (as defined below)), or termination of Employee's employment for Cause, the Company shall pay to Employee all compensation due to the date of termination, but shall have no further obligation to Employee hereunder in respect of any period following termination.

(b) Upon the death of Employee, the Company shall pay to Employee's estate or such other party who shall be legally entitled thereto, all compensation due to the date of death, and an additional amount equal to compensation at the rate set forth in this Agreement from the date of death to the final day of the month following the month in which the death occurs.

(c) Upon termination of Employee's employment by the Company other than for Cause, and upon Employee's voluntary termination of employment after a Change of Control, the Company shall pay to Employee an amount equal to twelve (12) months' compensation calculated with reference to Employee's then current annual compensation (exclusive of bonuses), which amount shall be due and payable at termination.

(d) Amounts payable under this Section shall be net of amounts required to be withheld under applicable law and amounts requested to be withheld by Employee.

(e) Upon Termination of employment other than for Cause, all outstanding options granted to Employee pursuant to the Company's 1992 Stock Incentive Plan, which vest with the passage of time (and are not performance related) shall be immediately fully vested.

(f) As used herein, "Change of Control" means the occurrence of

any one of the following events: (i) any Person becomes the beneficial owner of twenty-five percent (25%) or more of the total number of voting shares of the Company; (ii) any Person (other than the Persons named as proxies solicited on behalf of the Board of Directors of the Company) holds revocable or irrevocable proxies representing twenty-five percent (25%) or more of the total number of voting shares of the Company; (iii) any Person has commenced a tender or exchange offer, or entered into an agreement or received an option, to acquire beneficial ownership of twenty-five percent (25%) or more of the total number of voting shares of the Company; and (iv) as the result of, or in connection with, any cash tender or exchange offer, merger, or other business combination, sale of assets, or any combination of the foregoing transactions, the persons who were directors of the Company before such transactions shall cease to constitute at least two-thirds (2/3) of the Board of Directors of the Company or any successor entity.

14. NOTICE. Unless otherwise provided herein, any notice, request, certificate or instrument required or permitted under this Agreement shall be in writing and shall be deemed "given" upon personal delivery to the party to be notified or three business days after deposit with the United States Postal Service, by registered or certified mail, addressed to the party to receive notice at the address set forth above, postage prepaid. Either party may change its address by notice to the other party given in the manner set forth in this Section.

15. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties and contains all the agreements between them with respect to the subject matter hereof. It

also supersedes any and all other agreements or contracts, either oral or written, between the parties with respect to the subject matter hereof.

16. MODIFICATION. Except as otherwise specifically provided, the terms and conditions of this Agreement may be amended at any time by mutual agreement of the parties, provided that before any amendment shall be valid or effective, it shall have been reduced to writing and signed by an authorized representative of the Company and Employee.

17. NO WAIVER. The failure of any party hereto exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with its obligations, shall not be a waiver by such party of its right to exercise any such or other right, power or remedy or to demand compliance.

18. SEVERABILITY. In the event that any paragraph or provision of this Agreement shall be held to be illegal or unenforceable, such paragraph or provision shall be severed from this Agreement and the entire Agreement shall not fail as a result, but shall otherwise remain in full force and effect.

19. ASSIGNMENT. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and shall be binding upon Employee, his administrators, executors, legatees, and heirs. In that this Agreement is a personal services contract, it shall not be assigned by Employee.

20. DISPUTE RESOLUTION. Except as otherwise provided in Section 10, the Company and Employee agree that any dispute between Employee and the Company or its officers, directors, employees, or agents in their individual or Company capacity of this Agreement, shall be submitted to a mediator for nonbinding, confidential mediation. If the matter cannot be resolved with the aid of the mediator, the Company and Employee mutually agree to arbitration of the dispute. The arbitration shall be in accordance with the then-current Employment Dispute Resolution Rules of the American Arbitration Association ("AAA") before an arbitrator who is licensed to practice law in

the State of Oregon. The arbitration shall take place in or near Portland, Oregon. Employee and the Company will share the cost of the arbitration equally, but each will bear their own costs and legal fees associated with the arbitration. However, if any party prevails on a statutory claim which affords the prevailing party attorneys' fees, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees.

The Company and Employee agree that the procedures outlined in this provision are the exclusive method of dispute resolution.

21. ATTORNEYS' FEES. In the event suit or action is instituted pursuant to Section 10 of this Agreement, the prevailing party in such proceeding, including any appeals thereon, shall be awarded reasonable attorneys' fees and costs.

22. APPLICABLE LAW. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Oregon.

23. COUNTERPARTS. This Agreement may be signed in two counterparts, each of which shall be deemed an original and both of which shall together constitute one agreement.

IN WITNESS WHEREOF, Antivirals Inc. has caused this Agreement to be signed by its duly authorized representative, and Employee has hereunder set his name as of the date of this Agreement.

COMPANY: ANTIVIRALS INC.

By: /s/ Alan P. Timmins

EMPLOYEE: /s/ Denis R. Burger

DENIS R. BURGER, PH.D.

EXHIBIT A

LIST OF OFFICES HELD

Trinity Biotech plc	Director
SuperGen Inc	Director
Yamhill Valley Vineyards	President and Director
Cellegy Inc.	Director
Sovereign Ventures LLC	Partner
Sovereign Partners LLC	Partner
Burger Family Partnership LLC	Partner

EXHIBIT B

INVENTIONS EXCLUDED FROM COVERED WORKS

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement"), made this 4th day of November, 1996, by and between ANTIVIRALS INC., an Oregon corporation, with its principle office at 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Company"), and JAMES SUMMERTON, PH.D. 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Employee").

RECITALS:

A. Employee has been a valued employee of the Company since 1980 and has served in the capacities of Founder, President, Chief Executive Officer and Chief Scientific Officer.

B. The terms of Employee's employment with the Company have been as set forth in an Employment Contract entered into by and between Employee and Company dated June 17, 1992.

C. The Company desires to continue Employee's employment with the Company as President and Chief Scientific Officer under the terms stated in this Agreement.

AGREEMENT:

NOW, THEREFORE, in consideration of the mutual benefits contained herein, the sufficiency of which the parties acknowledge, the parties hereby agree as follows:

1. EMPLOYMENT TERM. The term ("Term") of this Agreement shall commence on the date written above, and shall continue until terminated in accordance with Section 12.

2. DUTIES. Employee shall be responsible to perform such duties as assigned to him from time to time by the Board of Directors of the Company ("Board"). Employee shall be employed by the Company and shall devote his best efforts to the service of the Company throughout the Term. Employee shall devote at least for (40) hours per week to the affairs of the Company. Employee and Company acknowledge and agree that (i) Employee may hold certain offices within certain entities as set forth on Exhibit A to this Agreement, (ii) Employee's devotion of reasonable amounts of time in such capacities, so long as it does not interfere with his performance of services hereunder, shall not conflict with the terms of this Agreement, and (iii) Exhibit A may be amended from time to time by agreement of the parties.

3. COMPENSATION. For his services from the date of this Agreement until January 1, 1997 the Company shall compensate Employee at his current salary. Commencing January 1, 1997, the Company shall compensate Employee with an annual salary of $150,000, payable in accordance with Company's payroll practices in effect from time to time, and less amounts required to be withheld under applicable law and requested to be withheld by Employee. Employee's annual salary shall be subject to review on an annual basis. The Company may but shall not be required to pay bonus compensation to Employee. Except as otherwise provided in this Agreement, the base salary shall be prorated for any period of service less than a full month.

4. EXPENSES. The Company will reimburse Employee for all expenses

reasonably incurred by him in discharging his duties for the Company, conditioned upon Employee's submission of written documentation in support of claimed reimbursement of such expenses, and consistent with the Company's expense reimbursement policies in effect from time to time.

5. BENEFITS. Subject to eligibility requirements, Employee shall be entitled to participate in such benefits plans and programs as adopted by the Company from time to time.

6. CONFIDENTIALITY.

(a) In the course of his employment with the Company, it is anticipated that Employee may acquire knowledge (both orally and in writing) regarding confidential affairs of the Company and confidential or proprietary information including: (a) matters of a technical nature, such as know-how, inventions, processes, products, designs, chemicals, compounds, materials, drawings, concepts, formulas, trade secrets, secret processes or machines, inventions or research projects; (b) matters of a business nature, such as information about costs, profits, pricing policies, markets, sales, suppliers, customers, plans for future development, plans for future products, marketing plans or strategies; and (c) other information of a similar nature which is not generally disclosed by the Company to the public, referred to collectively hereafter as "Confidential Information." "Confidential Information" shall not include information generally available to the public. Employee agrees that during the term of this Agreement and thereafter, he (i) will keep secret and retain in the strictest confidence all Confidential Information, (ii) not disclose Confidential Information to anyone except employees of the Company authorized to receive it and third parties to whom such disclosure is specifically authorized, and (iii) not use any Confidential Information for any purpose other than performance of services under this Agreement without prior written permission from the Company. Notwithstanding the foregoing, Employee as General Partner of ANTI-GENE DEVELOPMENT GROUP ("AGDG") is authorized to disclose and use Confidential Information, to the extent permitted under the terms of the Technology Transfer Agreement between the Company and AGDG, and any amendments to that Technology Transfer Agreement.

(b) If Employee is served with any subpoena or other compulsory judicial or administrative process calling for production or disclosure of Confidential Information or if Employee is otherwise required by law or regulation to disclose Confidential Information, Employee will immediately, and prior to production or disclosure, notify the Company and provide it with such information as may be necessary in order that the Company may take such action as it deems necessary to protect its interest.

(c) The provisions of this paragraph 6 shall survive termination of this Agreement.

7. NONCOMPETITION.

(a) Employee acknowledges that the increased compensation reflected in this Agreement amounts to a bona fide advancement for Employee. In consideration of this advancement, Employee agrees that during the Term and for a period of two (2) years following termination of employment with the Company for any reason, he will not directly or indirectly engage in any activity directed towards (i) the development of any uncharged sequence-specific nucleic acid-binding agents or any nucleic acid purification and concentration or detection system,

or (ii) the development of drug delivery systems related to the "molecular engine" as defined in patents or patent applications filed or Contemplated at any time during the Term. Patents or patent applications "Contemplated" are those included, recorded or discussed in the notebooks of researchers employed by or performing services on behalf of the Company. Nothing contained here shall preclude Employee's engaging in activities that are both (A) related only

to agents, compounds, techniques, processes or technologies licensed by the Company to AGDG, and (B) performed on behalf of AGDG or for some other entity in which Employee has a controlling interest. Nothing contained herein shall limit the scope or operation of Section 6 of this Agreement.

(b) For a period of one (1) year, except with the express written consent of the Company, Employee agrees to refrain from directly or indirectly recruiting, hiring or assisting anyone else to hire, or otherwise counseling to discontinue employment with the Company, any person then employed by the Company or its subsidiaries or affiliates.

(c) The provisions of this paragraph 7 shall survive termination of this Agreement and the term of employment.

8. COVERED WORK.

(a) All right, title and interest to any Covered Work that Employee makes or conceives (whether alone or with others) while employed by the Company, belong to the Company. This Agreement operates as an actual assignment of all rights in Covered Work to the Company. "Covered Work" means products and Inventions that relate to the actual or anticipated business of the Company or any of its subsidiaries or affiliates, or that result from or are suggested by a task assigned to Employee or work performed by Employee on behalf of the Company or any of its subsidiaries or affiliates, or that were developed in whole or in part on the Company time or using the Company's equipment, supplies or facilities. The contents of Employee's notebooks prepared during the course of his employment with the Company contain a comprehensive description of all of Employee's Covered Work. "Inventions" mean ideas, improvements, designs, computer software, technologies, techniques, processes, products, chemicals, compounds, materials, concepts, drawings, authored works or discoveries, whether or not patentable or copyrightable, as well as other newly discovered or newly applied information or concepts. Attached hereto as Exhibit B is a description of any product or Invention in which Employee had or has any right, title or interest which is not included within the definition of "Covered Work".

(b) Employee shall promptly reveal all information relating to Covered Work and Confidential Information via entry of such information into the Company's notebooks and confirmation of such entry by an appropriate officer of the Company via the witnessing and review of such notebooks and shall cooperate with the Company, and execute such documents as may be necessary, in the event that the Company desires to seek copyright, patent or trademark protection thereafter relating to same.

(c) In the event that the Company requests that Employee assist in efforts to defend any legal claims to patents or other right, the Company agrees to reimburse Employee for any reasonable expenses Employee may incur in connection with such assistance. This obligation to reimburse shall survive termination of this Agreement and the term of employment.

(d) The provisions of this paragraph 8 shall survive termination of this Agreement and the term of employment.

9. RETURN OF INVENTIONS, PRODUCTS AND DOCUMENTS. Employee acknowledges and agrees that all Inventions, all products of the Company and all originals and copies of records, reports, documents, lists, drawings, memoranda, notes, proposals, contracts and other documentation related to the business of the Company or containing any information described in this paragraph shall be the sole and exclusive property of the Company and shall be returned to the Company immediately upon the termination of Employee's employment with the Company or upon the written request of the Company. Notwithstanding the foregoing, in recognition of the emotional and historical interest which the Employee's notebooks have to Employee, the Company agrees that when the Employee leaves the Company the Employee may have and own a true and accurate copy of those notebooks in which he personally made entries during his employment with the

Company, and ten (10) years after Employee terminates employment with the Company it is agreed that said original notebooks will be given to Employee to have and own. The Company may retain a true, accurate and complete copy of said notebooks. If the original notebooks are needed at any time in connection with patent applications, patent litigation or other legitimate Company business, Employee will immediately upon Company's request, make them available to the Company for the period during with they are needed.

10. INJUNCTION. Employee agrees that it would be difficult to measure damages to the Company from any breach by Employee of paragraph 6, 7, 8 and/or 9 of this Agreement, and that monetary damages would be an inadequate remedy for any such breach. Accordingly, Employee agrees that if Employee shall breach paragraph 6, 7, 8 and/or 9 of this Agreement, the Company shall be entitled, in addition to all other remedies it may have at law or in equity, to an injunction or other appropriate orders to restrain any such breach without showing or proving any actual damage sustained by the Company.

11. OBLIGATIONS TO OTHERS. Except for items fully disclosed in writing to the Company, Employee represents and warrants to the Company that (i) Employee's employment by the Company does not violate any agreement with any prior employer or other person or entity, and (ii) Employee is not subject to any existing confidentiality or noncompetition agreement or obligation, or any agreement relating to the assignment of Inventions except as has been fully disclosed in writing to the Company.

12. TERMINATION.

(a) Employee may voluntarily terminate his employment with the Company upon giving the Company sixty (60) days' written notice.

(b) The Company may terminate Employee's employment without Cause (as defined below) upon giving Employee thirty (30) days written notice of termination.

(c) Employee's employment with the Company shall terminate upon the occurrence of any one of the following:

(1) Employee's death;

(2) The effective date of a notice sent to Employee stating the Board's determination made in good faith and after consultation with a qualified physician selected by the Board, that Employee is incapable of performing his duties under this Agreement, with or without reasonable accommodation, because of a physical or mental incapacity that has prevented Employee from performing such full-time duties for a period of ninety (90) consecutive calendar days and the determination that such incapacity is likely to continue for a least another ninety (90) such days; and

(3) The effective date of a notice sent to Employee terminating Employee's employment for Cause.

(d) "Cause" means the occurrence of one or more of the following events:

(1) Employee's willful and repeated failure or refusal to comply in any material respect with the reasonable and lawful policies, standards or regulations from time to time established by the Company, or to perform his duties in accordance with this Agreement after notice to Employee of such failure; and

(2) Employee engages in criminal conduct or engages in conduct with respect to the Company that is dishonest, fraudulent or materially detrimental to the reputation, character or standing of the Company.

13. TERMINATION COMPENSATION.

(a) Upon termination of Employee's employment for Cause, the Company shall pay to Employee all compensation due to the date of termination, but shall have no further obligation to Employee hereunder in respect of any period following termination.

(b) Upon the death of Employee, the Company shall pay to Employee's estate or such other party who shall be legally entitled thereto, all compensation due to the date of death, and an additional amount equal to compensation at the rate set forth in this Agreement from the date of death to the final day of the month following the month in which the death occurs.

(c) Upon termination of Employee's employment by the Company other than for Cause, and upon Employee's voluntary termination of employment after a Change of Control, the Company shall pay to Employee an amount equal to twelve (12) months' compensation calculated with reference to Employee's then current annual compensation (exclusive of bonuses), which amount shall be due and payable at termination.

(d) Amounts payable under this Section shall be net of amounts required to be withheld under applicable law and amounts requested to be withheld by Employee.

(e) Upon Termination of employment other than for Cause, all outstanding options granted to Employee pursuant to the Company's 1992 Stock Incentive Plan, which vest with the passage of time (and are not performance related) shall be immediately fully vested.

(f) In recognition of the Employee's substantial contributions to the Company and because many of the Employee's personal books and other information sources, including Nucleic Acids Abstracts, have been made available for Company use since 1980, it is agreed that upon

termination of employment, Employee has the right to take and own the books, papers, file cabinets, and such other items in his office as approved by the Company, as well as the full set of Nucleic Acids Abstracts in the Company's possession at the time of Employee's termination of employment. (In no event shall employee be entitled to originals of patent records.) In addition, Employee's original notebooks are to remain in the possession of the Company for ten (10) years from the date of Employee's termination, after which they are to be conveyed to Employee, subject to the provisions of Section 9.

(g) As used herein, "Change of Control" means the occurrence of any one of the following events: (i) any Person becomes the beneficial owner of twenty-five percent (25%) or more of the total number of voting shares of the Company; (ii) any Person (other than the Persons named as proxies solicited on behalf of the Board of Directors of the Company) holds revocable or irrevocable proxies representing twenty-five percent (25%) or more of the total number of voting shares of the Company; (iii) any Person has commenced a tender or exchange offer, or entered into an agreement or received an option, to acquire beneficial ownership of twenty-five percent (25%) or more of the total number of voting shares of the Company; and (iv) as the result of, or in connection with, any cash tender or exchange offer, merger, or other business combination, sale of assets, or any combination of the foregoing transactions, the persons who were directors of the Company before such transactions shall cease to constitute at least two-thirds (2/3) of the Board of Directors of the Company or any successor entity.

14. CONSULTING AGREEMENT. For a period of two (2) years following termination of Employee's employment, Employee shall provide up to ten (10) hours per week of consulting services to Company. As consideration for those consulting services, Employee shall be compensated at the rate of $75,000 per year, less amounts required to be withheld by law and requested to be withheld

by Employee. The first year of this arrangement is guaranteed, and the second year is at the Company's option at the same compensation.

15. NOTICE. Unless otherwise provided herein, any notice, request, certificate or instrument required or permitted under this Agreement shall be in writing and shall be deemed "given" upon personal delivery to the party to be notified or three business days after deposit with the United States Postal Service, by registered or certified mail, addressed to the party to receive notice at the address set forth above, postage prepaid. Either party may change its address by notice to the other party given in the manner set forth in this Section.

16. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties and contains all the agreements between them with respect to the subject matter hereof. It also supersedes any and all other agreements or contracts, either oral or written, between the parties with respect to the subject matter hereof.

17. MODIFICATION. Except as otherwise specifically provided, the terms and conditions of this Agreement may be amended at any time by mutual agreement of the parties, provided that before any amendment shall be valid or effective, it shall have been reduced to writing and signed by an authorized representative of the Company and Employee.

18. NO WAIVER. The failure of any party hereto exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to

insist upon compliance by any other party hereto with its obligations, shall not be a waiver by such party of its right to exercise any such or other right, power or remedy or to demand compliance.

19. SEVERABILITY. In the event that any paragraph or provision of this Agreement shall be held to be illegal or unenforceable, such paragraph or provision shall be severed from this Agreement and the entire Agreement shall not fail as a result, but shall otherwise remain in full force and effect.

20. ASSIGNMENT. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and shall be binding upon Employee, his administrators, executors, legatees, and heirs. In that this Agreement is a personal services contract, it shall not be assigned by Employee.

21. DISPUTE RESOLUTION. Except as otherwise provided in Section 10, the Company and Employee agree that any dispute between Employee and the Company or its officers, directors, employees, or agents in their individual or Company capacity of this Agreement, shall be submitted to a mediator for nonbinding, confidential mediation. If the matter cannot be resolved with the aid of the mediator, the Company and Employee mutually agree to arbitration of the dispute. The arbitration shall be in accordance with the then-current Employment Dispute Resolution Rules of the American Arbitration Association ("AAA") before an arbitrator who is licensed to practice law in the State of Oregon. The arbitration shall take place in or near Portland, Oregon. Employee and the Company will share the cost of the arbitration equally, but each will bear their own costs and legal fees associated with the arbitration. However, if any party prevails on a statutory claim which affords the prevailing party attorneys' fees, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees.

The Company and Employee agree that the procedures outlined in this provision are the exclusive method of dispute resolution.

22. ATTORNEYS' FEES. In the event suit or action is instituted pursuant to Section 10 of this Agreement, the prevailing party in such proceeding, including any appeals thereon, shall be awarded reasonable attorneys' fees and

costs.

23. APPLICABLE LAW. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Oregon.

24. COUNTERPARTS. This Agreement may be signed in two counterparts, each of which shall be deemed an original and both of which shall together constitute one agreement.

IN WITNESS WHEREOF, Antivirals Inc. has caused this Agreement to be signed by its duly authorized representative, and Employee has hereunder set his name as of the date of this Agreement.

COMPANY: ANTIVIRALS INC.

By: /s/ Alan P. Timmins
_____

EMPLOYEE: /s/ James Summerton
_____
JAMES SUMMERTON, PH.D.

EXHIBIT A

LIST OF OFFICES HELD

ANTI-GENE DEVELOPMENT GROUP, or a licensee thereof

EXHIBIT B

INVENTIONS EXCLUDED FROM COVERED WORKS

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement"), made this 4th day of November, 1996, by and between ANTIVIRALS INC., an Oregon corporation, with its principle office at 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Company"), and ALAN P. TIMMINS 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Employee").

RECITALS:

A. Employee has been a valued employee of the Company since September, 1992 and has served in the capacities of Chief Financial Officer and Chief Operating Officer.

B. The terms of Employee's employment with the Company have been as set forth in an Employment Contract entered into by and between Employee and Company in September, 1992 ("Prior Agreement").

C. The Company desires to continue Employee's employment with the Company as Chief Operating Officer and Chief Financial Officer under the terms stated in this Agreement.

AGREEMENT:

NOW, THEREFORE, in consideration of the mutual benefits contained herein, the sufficiency of which the parties acknowledge, the parties hereby agree as follows:

1. EMPLOYMENT TERM. The term ("Term") of this Agreement shall commence on the date written above, and shall continue until terminated in accordance with Section 12.

2. DUTIES. Employee shall be responsible to perform such duties as assigned to him from time to time by the Board of Directors of the Company ("Board"). Employee shall be employed by the Company and shall devote his best efforts to the service of the Company throughout the Term. Employee shall devote at least for (40) hours per week to the affairs of the Company. Employee and Company acknowledge and agree that (i) Employee may hold certain offices within certain entities as set forth on Exhibit A to this Agreement, (ii) Employee's devotion of reasonable amounts of time in such capacities, so long as it does not interfere with his performance of services hereunder, shall not conflict with the terms of this Agreement, and (iii) Exhibit A may be amended from time to time by agreement of the parties.

3. COMPENSATION. For his services from the date of this Agreement until January 1, 1997 the Company shall compensate Employee at his current salary. Commencing January 1, 1997, the Company shall compensate Employee with an annual salary of $135,000, payable in accordance with Company's payroll practices in effect from time to time, and less amounts required to be withheld under applicable law and requested to be withheld by Employee. Employee's annual salary shall be subject to review on an annual basis. The Company may but shall not be required to pay

bonus compensation to Employee. Except as otherwise provided in this Agreement, the base salary shall be prorated for any period of service less than a full month.

4. EXPENSES. The Company will reimburse Employee for all expenses reasonably incurred by him in discharging his duties for the Company, conditioned upon Employee's submission of written documentation in support of

claimed reimbursement of such expenses, and consistent with the Company's expense reimbursement policies in effect from time to time.

5. BENEFITS. Subject to eligibility requirements, Employee shall be entitled to participate in such benefits plans and programs as adopted by the Company from time to time.

6. CONFIDENTIALITY.

(a) In the course of his employment with the Company, it is anticipated that Employee may acquire knowledge (both orally and in writing) regarding confidential affairs of the Company and confidential or proprietary information including: (a) matters of a technical nature, such as know-how, inventions, processes, products, designs, chemicals, compounds, materials, drawings, concepts, formulas, trade secrets, secret processes or machines, inventions or research projects; (b) matters of a business nature, such as information about costs, profits, pricing policies, markets, sales, suppliers, customers, plans for future development, plans for future products, marketing plans or strategies; and (c) other information of a similar nature which is not generally disclosed by the Company to the public, referred to collectively hereafter as "Confidential Information." "Confidential Information" shall not include information generally available to the public. Employee agrees that during the term of this Agreement and thereafter, he (i) will keep secret and retain in the strictest confidence all Confidential Information, (ii) not disclose Confidential Information to anyone except employees of the Company authorized to receive it and third parties to whom such disclosure is specifically authorized, and (iii) not use any Confidential Information for any purpose other than performance of services under this Agreement without prior written permission from the Company.

(b) If Employee is served with any subpoena or other compulsory judicial or administrative process calling for production or disclosure of Confidential Information or if Employee is otherwise required by law or regulation to disclose Confidential Information, Employee will immediately, and prior to production or disclosure, notify the Company and provide it with such information as may be necessary in order that the Company may take such action as it deems necessary to protect its interest.

(c) The provisions of this paragraph 6 shall survive termination of this Agreement.

7. NONCOMPETITION.

(a) Employee acknowledges that pursuant to the terms of the Prior Agreement, Employee was precluded from engaging in any activity directed toward the development of any uncharged sequence-specific nucleic acid-binding agents or any nucleic acid purification and concentration or detection system, for a period of two (2) years following termination of his employment with the Company. Employee agrees to continue to be bound by this restriction.

(b) Employee further acknowledges that the increased compensation reflected in this Agreement amounts to a bona fide advancement for Employee. In consideration of this advancement, Employee further agrees that during the Term and for a period of two (2) years following termination of employment with the Company for any reason, he will not directly or indirectly engage in any activity directed towards the development of drug delivery systems related to the "molecular engine" as defined in patents or patent applications filed or Contemplated at any time during the Term. As used herein, the agents compounds, techniques, processes and/or technologies as to which patents are "Contemplated" are those included, recorded or discussed in the notebooks of researchers employed by or performing services on behalf of the Company.

(c) For a period of two (2) years, except with the express written consent of the Company, Employee agrees to refrain from directly or indirectly

recruiting, hiring or assisting anyone else to hire, or otherwise counseling to discontinue employment with the Company, any person then employed by the Company or its subsidiaries or affiliates.

(d) The provisions of this paragraph 7 shall survive termination of this Agreement and the term of employment.

8. COVERED WORK.

(a) All right, title and interest to any Covered Work that Employee makes or conceives (whether alone or with others) while employed by the Company, belong to the Company. This Agreement operates as an actual assignment of all rights in Covered Work to the Company. "Covered Work" means products and Inventions that relate to the actual or anticipated business of the Company or any of its subsidiaries or affiliates, or that result from or are suggested by a task assigned to Employee or work performed by Employee on behalf of the Company or any of its subsidiaries or affiliates, or that were developed in whole or in part on the Company time or using the Company's equipment, supplies or facilities. "Inventions" mean ideas, improvements, designs, computer software, technologies, techniques, processes, products, chemicals, compounds, materials, concepts, drawings, authored works or discoveries, whether or not patentable or copyrightable, as well as other newly discovered or newly applied information or concepts. Attached hereto as Exhibit B is a description of any product or Invention in which Employee had or has any right, title or interest which is not included within the definition of "Covered Work".

(b) Employee shall promptly reveal all information relating to Covered Work and Confidential Information to an appropriate officer of the Company and shall cooperate with the Company, and execute such documents as may be necessary, in the event that the Company desires to seek copyright, patent or trademark protection thereafter relating to same.

(c) In the event that the Company requests that Employee assist in efforts to defend any legal claims to patents or other right, the Company agrees to reimburse Employee for any reasonable expenses Employee may incur in connection with such assistance. This obligation to reimburse shall survive termination of this Agreement and the term of employment.

(d) The provisions of this paragraph 8 shall survive termination of this Agreement and the term of employment.

9. RETURN OF INVENTIONS, PRODUCTS AND DOCUMENTS. Employee acknowledges and agrees that all Inventions, all products of the Company and all originals and copies of records, reports, documents, lists, drawings, memoranda, notes, proposals, contracts and other documentation related to the business of the Company or containing any information described in this paragraph shall be the sole and exclusive property of the Company and shall be returned to the Company immediately upon the termination of Employee's employment with the Company or upon the written request of the Company.

10. INJUNCTION. Employee agrees that it would be difficult to measure damages to the Company from any breach by Employee of paragraph 6, 7, 8 and/or 9 of this Agreement, and that monetary damages would be an inadequate remedy for any such breach. Accordingly, Employee agrees that if Employee shall breach paragraph 6, 7, 8 and/or 9 of this Agreement, the Company shall be entitled, in addition to all other remedies it may have at law or in equity, to an injunction or other appropriate orders to restrain any such breach without showing or proving any actual damage sustained by the Company.

11. OBLIGATIONS TO OTHERS. Except for items fully disclosed in writing to the Company, Employee represents and warrants to the Company that (i) Employee's employment by the Company does not violate any agreement with any prior employer or other person or entity, and (ii) Employee is not subject to any existing confidentiality or noncompetition agreement or obligation, or any agreement relating to the assignment of Inventions except as has been

fully disclosed in writing to the Company.

12. TERMINATION.

(a) Employee may voluntarily terminate his employment with the Company upon giving the Company sixty (60) days' written notice.

(b) The Company may terminate Employee's employment without Cause (as defined below) upon giving Employee thirty (30) days written notice of termination.

(c) Employee's employment with the Company shall terminate upon the occurrence of any one of the following:

(1) Employee's death;

(2) The effective date of a notice sent to Employee stating the Board's determination made in good faith and after consultation with a qualified physician selected by the Board, that Employee is incapable of performing his duties under this Agreement, with or without reasonable accommodation, because of a physical or mental incapacity that has prevented Employee from performing such full-time duties for a period of ninety (90) consecutive calendar days and the determination that such incapacity is likely to continue for a least another ninety (90) such days; and

(3) The effective date of a notice sent to Employee terminating Employee's employment for Cause.

(d) "Cause" means the occurrence of one or more of the following events:

(1) Employee's willful and repeated failure or refusal to comply in any material respect with the reasonable and lawful policies, standards or regulations from time to time established by the Company, or to perform his duties in accordance with this Agreement after notice to Employee of such failure; and

(2) Employee engages in criminal conduct or engages in conduct with respect to the Company that is dishonest, fraudulent or materially detrimental to the reputation, character or standing of the Company.

13. TERMINATION COMPENSATION.

(a) Upon Employee's voluntary termination of employment (other than voluntary termination after a Change of Control (as defined below)), or termination of Employee's employment for Cause, the Company shall pay to Employee all compensation due to the date of termination, but shall have no further obligation to Employee hereunder in respect of any period following termination.

(b) Upon the death of Employee, the Company shall pay to Employee's estate or such other party who shall be legally entitled thereto, all compensation due to the date of death, and an additional amount equal to compensation at the rate set forth in this Agreement from the date of death to the final day of the month following the month in which the death occurs.

(c) Upon termination of Employee's employment by the Company other than for Cause, and upon Employee's voluntary termination of employment after a Change of Control, the Company shall pay to Employee an amount equal to twelve (12) months' compensation calculated with reference to Employee's then current annual compensation (exclusive of bonuses), which amount shall be due and payable at termination.

(d) Amounts payable under this Section shall be net of amounts required to be withheld under applicable law and amounts requested to be

withheld by Employee.

(e) Upon Termination of employment other than for Cause, all outstanding options granted to Employee pursuant to the Company's 1992 Stock Incentive Plan, which vest with the passage of time (and are not performance related) shall be immediately fully vested.

(f) As used herein, "Change of Control" means the occurrence of any one of the following events: (i) any Person becomes the beneficial owner of twenty-five percent (25%) or more of the total number of voting shares of the Company; (ii) any Person (other than the Persons named as proxies solicited on behalf of the Board of Directors of the Company) holds revocable or irrevocable proxies representing twenty-five percent (25%) or more of the total number of voting shares of the Company; (iii) any Person has commenced a tender or exchange offer, or entered into an agreement or received an option, to acquire beneficial ownership of twenty-five percent (25%) or more of the total number of voting shares of the Company; and (iv) as the result of, or in connection with, any cash tender or exchange offer, merger, or other business combination, sale of assets, or any combination of the foregoing transactions, the persons who were directors of the Company before such transactions shall cease to constitute at least two-thirds (2/3) of the Board of Directors of the Company or any successor entity.

14. NOTICE. Unless otherwise provided herein, any notice, request, certificate or instrument required or permitted under this Agreement shall be in writing and shall be deemed "given" upon personal delivery to the party to be notified or three business days after deposit with the United States Postal Service, by registered or certified mail, addressed to the party to receive notice at the address set forth above, postage prepaid. Either party may change its address by notice to the other party given in the manner set forth in this Section.

15. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties and contains all the agreements between them with respect to the subject matter hereof. It also supersedes any and all other agreements or contracts, either oral or written, between the parties with respect to the subject matter hereof.

16. MODIFICATION. Except as otherwise specifically provided, the terms and conditions of this Agreement may be amended at any time by mutual agreement of the parties, provided that before any amendment shall be valid or effective, it shall have been reduced to writing and signed by an authorized representative of the Company and Employee.

17. NO WAIVER. The failure of any party hereto exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with its obligations, shall not be a waiver by such party of its right to exercise any such or other right, power or remedy or to demand compliance.

18. SEVERABILITY. In the event that any paragraph or provision of this Agreement shall be held to be illegal or unenforceable, such paragraph or provision shall be severed from this Agreement and the entire Agreement shall not fail as a result, but shall otherwise remain in full force and effect.

19. ASSIGNMENT. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and shall be binding upon Employee, his administrators, executors, legatees, and heirs. In that this Agreement is a personal services contract, it shall not be assigned by Employee.

20. DISPUTE RESOLUTION. Except as otherwise provided in Section 10, the Company and Employee agree that any dispute between Employee and the Company or its officers, directors, employees, or agents in their individual or Company capacity of this Agreement, shall be submitted to a mediator for nonbinding, confidential mediation. If the matter cannot be resolved with the aid of the

mediator, the Company and Employee mutually agree to arbitration of the dispute. The arbitration shall be in accordance with the then-current Employment Dispute Resolution Rules of the American Arbitration Association ("AAA") before an arbitrator who is licensed to practice law in the State of Oregon. The arbitration shall take place in or near Portland, Oregon. Employee and the Company will share the cost of the arbitration equally, but each will bear their own costs and legal fees associated with the arbitration. However, if any party prevails on a statutory claim which affords the prevailing party attorneys' fees, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees.

The Company and Employee agree that the procedures outlined in this provision are the exclusive method of dispute resolution.

21. ATTORNEYS' FEES. In the event suit or action is instituted pursuant to Section 10 of this Agreement, the prevailing party in such proceeding, including any appeals thereon, shall be awarded reasonable attorneys' fees and costs.

22. APPLICABLE LAW. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Oregon.

23. COUNTERPARTS. This Agreement may be signed in two counterparts, each of which shall be deemed an original and both of which shall together constitute one agreement.

IN WITNESS WHEREOF, Antivirals Inc. has caused this Agreement to be signed by its duly authorized representative, and Employee has hereunder set his name as of the date of this Agreement.

COMPANY: ANTIVIRALS INC.

By: /s/ Denis R. Burger

EMPLOYEE: /s/ Alan P. Timmins

ALAN P. TIMMINS

EXHIBIT A

LIST OF OFFICES HELD

SCHEDULE A

EXHIBIT B

INVENTIONS EXCLUDED FROM COVERED WORKS

SCHEDULE B

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement"), made this 4th day of November, 1996, by and between ANTIVIRALS INC., an Oregon corporation, with its principle office at 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Company"), and DWIGHT WELLER, PH.D. 1 SW Columbia Street, Suite 1105, Portland, OR 97258 ("Employee").

RECITALS:

A. Employee has been a valued employee of the Company since September, 1992 and has served in the capacity of Vice President of Research and Development.

B. The terms of Employee's employment with the Company have been as set forth in an Employment Contract entered into by and between Employee and Company in September, 1992 ("Prior Agreement").

C. The Company desires to continue Employee's employment with the Company Vice President of Research and Development under the terms stated in this Agreement.

AGREEMENT:

NOW, THEREFORE, in consideration of the mutual benefits contained herein, the sufficiency of which the parties acknowledge, the parties hereby agree as follows:

1. EMPLOYMENT TERM. The term ("Term") of this Agreement shall commence on the date written above, and shall continue until terminated in accordance with Section 12.

2. DUTIES. Employee shall be responsible to perform such duties as assigned to him from time to time by the Board of Directors of the Company ("Board"). Employee shall be employed by the Company and shall devote his best efforts to the service of the Company throughout the Term. Employee shall devote at least for (40) hours per week to the affairs of the Company. Employee and Company acknowledge and agree that (i) Employee may hold certain offices within certain entities as set forth on Exhibit A to this Agreement, (ii) Employee's devotion of reasonable amounts of time in such capacities, so long as it does not interfere with his performance of services hereunder, shall not conflict with the terms of this Agreement, and (iii) Exhibit A may be amended from time to time by agreement of the parties.

3. COMPENSATION. For his services from the date of this Agreement until January 1, 1997 the Company shall compensate Employee at his current salary. Commencing January 1, 1997, the Company shall compensate Employee with an annual salary of $135,000, payable in accordance with Company's payroll practices in effect from time to time, and less amounts required to be withheld under applicable law and requested to be withheld by Employee. Employee's annual salary shall be subject to review on an annual basis. The Company may but shall not be required to pay

bonus compensation to Employee. Except as otherwise provided in this Agreement, the base salary shall be prorated for any period of service less

than a full month.

4. EXPENSES. The Company will reimburse Employee for all expenses reasonably incurred by him in discharging his duties for the Company, conditioned upon Employee's submission of written documentation in support of claimed reimbursement of such expenses, and consistent with the Company's expense reimbursement policies in effect from time to time.

5. BENEFITS. Subject to eligibility requirements, Employee shall be entitled to participate in such benefits plans and programs as adopted by the Company from time to time.

6. CONFIDENTIALITY.

(a) In the course of his employment with the Company, it is anticipated that Employee may acquire knowledge (both orally and in writing) regarding confidential affairs of the Company and confidential or proprietary information including: (a) matters of a technical nature, such as know-how, inventions, processes, products, designs, chemicals, compounds, materials, drawings, concepts, formulas, trade secrets, secret processes or machines, inventions or research projects; (b) matters of a business nature, such as information about costs, profits, pricing policies, markets, sales, suppliers, customers, plans for future development, plans for future products, marketing plans or strategies; and (c) other information of a similar nature which is not generally disclosed by the Company to the public, referred to collectively hereafter as "Confidential Information." "Confidential Information" shall not include information generally available to the public. Employee agrees that during the term of this Agreement and thereafter, he (i) will keep secret and retain in the strictest confidence all Confidential Information, (ii) not disclose Confidential Information to anyone except employees of the Company authorized to receive it and third parties to whom such disclosure is specifically authorized, and (iii) not use any Confidential Information for any purpose other than performance of services under this Agreement without prior written permission from the Company.

(b) If Employee is served with any subpoena or other compulsory judicial or administrative process calling for production or disclosure of Confidential Information or if Employee is otherwise required by law or regulation to disclose Confidential Information, Employee will immediately, and prior to production or disclosure, notify the Company and provide it with such information as may be necessary in order that the Company may take such action as it deems necessary to protect its interest.

(c) The provisions of this paragraph 6 shall survive termination of this Agreement.

7. NONCOMPETITION.

(a) Employee acknowledges that pursuant to the terms of the Prior Agreement, Employee was precluded from engaging in any activity directed toward the development of any uncharged sequence-specific nucleic acid-binding agents or any nucleic acid purification and concentration or detection system, for a period of two (2) years following termination of his employment with the Company. Employee agrees to continue to be bound by this restriction relating

to development of any unchanged sequence-specific nucleic acid-binding agents or any nucleic acid purification and concentration or detection system using uncharged agents.

(b) Employee further acknowledges that the increased compensation reflected in this Agreement amounts to a bona fide advancement for Employee. In consideration of this advancement, Employee further agrees that during the

Term and for a period of two (2) years following termination of employment with the Company for any reason, he will not directly or indirectly engage in any activity directed towards the development of drug delivery systems related to the "molecular engine" as defined in patents or patent applications filed or Contemplated at any time during the Term. Patents or patent applications "Contemplated" are those included, recorded or discussed in the notebooks of researchers employed by or performing services on behalf of the Company.

(c) For a period of two (2) years, except with the express written consent of the Company, Employee agrees to refrain from directly or indirectly recruiting, hiring or assisting anyone else to hire, or otherwise counseling to discontinue employment with the Company, any person then employed by the Company or its subsidiaries or affiliates.

(d) The provisions of this paragraph 7 shall survive termination of this Agreement and the term of employment.

8. COVERED WORK.

(a) All right, title and interest to any Covered Work that Employee makes or conceives (whether alone or with others) while employed by the Company, belong to the Company. This Agreement operates as an actual assignment of all rights in Covered Work to the Company. "Covered Work" means products and Inventions that relate to the actual or anticipated business of the Company or any of its subsidiaries or affiliates, or that result from or are suggested by a task assigned to Employee or work performed by Employee on behalf of the Company or any of its subsidiaries or affiliates, or that were developed in whole or in part on the Company time or using the Company's equipment, supplies or facilities. "Inventions" mean ideas, improvements, designs, computer software, technologies, techniques, processes, products, chemicals, compounds, materials, concepts, drawings, authored works or discoveries, whether or not patentable or copyrightable, as well as other newly discovered or newly applied information or concepts. Attached hereto as Exhibit B is a description of any product or Invention in which Employee had or has any right, title or interest which is not included within the definition of "Covered Work".

(b) Employee shall promptly reveal all information relating to Covered Work and Confidential Information to an appropriate officer of the Company and shall cooperate with the Company, and execute such documents as may be necessary, in the event that the Company desires to seek copyright, patent or trademark protection thereafter relating to same.

(c) In the event that the Company requests that Employee assist in efforts to defend any legal claims to patents or other right, the Company agrees to reimburse Employee for any reasonable expenses Employee may incur in connection with such assistance. This obligation to reimburse shall survive termination of this Agreement and the term of employment.

(d) The provisions of this paragraph 8 shall survive termination of this Agreement and the term of employment.

9. RETURN OF INVENTIONS, PRODUCTS AND DOCUMENTS. Employee acknowledges and agrees that all Inventions, all products of the Company and all originals and copies of records, reports, documents, lists, drawings, memoranda, notes, proposals, contracts and other documentation related to the business of the Company or containing any information described in this paragraph shall be the sole and exclusive property of the Company and shall be returned to the Company immediately upon the termination of Employee's employment with the Company or upon the written request of the Company.

10. INJUNCTION. Employee agrees that it would be difficult to measure

damages to the Company from any breach by Employee of paragraph 6, 7, 8 and/or 9 of this Agreement, and that monetary damages would be an inadequate remedy for any such breach. Accordingly, Employee agrees that if Employee shall breach paragraph 6, 7, 8 and/or 9 of this Agreement, the Company shall be entitled, in addition to all other remedies it may have at law or in equity, to an injunction or other appropriate orders to restrain any such breach without showing or proving any actual damage sustained by the Company.

11. OBLIGATIONS TO OTHERS. Except for items fully disclosed in writing to the Company, Employee represents and warrants to the Company that (i) Employee's employment by the Company does not violate any agreement with any prior employer or other person or entity, and (ii) Employee is not subject to any existing confidentiality or noncompetition agreement or obligation, or any agreement relating to the assignment of Inventions except as has been fully disclosed in writing to the Company.

12. TERMINATION.

(a) Employee may voluntarily terminate his employment with the Company upon giving the Company sixty (60) days' written notice.

(b) The Company may terminate Employee's employment without Cause (as defined below) upon giving Employee thirty (30) days written notice of termination.

(c) Employee's employment with the Company shall terminate upon the occurrence of any one of the following:

(1) Employee's death;

(2) The effective date of a notice sent to Employee stating the Board's determination made in good faith and after consultation with a qualified physician selected by the Board, that Employee is incapable of performing his duties under this Agreement, with or without reasonable accommodation, because of a physical or mental incapacity that has prevented Employee from performing such full-time duties for a period of ninety (90) consecutive calendar days and the determination that such incapacity is likely to continue for a least another ninety (90) such days; and

(3) The effective date of a notice sent to Employee terminating Employee's employment for Cause.

(d) "Cause" means the occurrence of one or more of the following events:

(1) Employee's willful and repeated failure or refusal to comply in any material respect with the reasonable and lawful policies, standards or regulations from time to time established by the Company, or to perform his duties in accordance with this Agreement after notice to Employee of such failure; and

(2) Employee engages in criminal conduct or engages in conduct with respect to the Company that is dishonest, fraudulent or materially detrimental to the reputation, character or standing of the Company.

13. TERMINATION COMPENSATION.

(a) Upon Employee's voluntary termination of employment (other than voluntary termination after a Change of Control (as defined below)), or termination of Employee's employment for Cause, the Company shall pay to Employee all compensation due to the date of termination, but shall have no further obligation to Employee hereunder in respect of any period following

termination.

(b) Upon the death of Employee, the Company shall pay to Employee's estate or such other party who shall be legally entitled thereto, all compensation due to the date of death, and an additional amount equal to compensation at the rate set forth in this Agreement from the date of death to the final day of the month following the month in which the death occurs.

(c) Upon termination of Employee's employment by the Company other than for Cause, and upon Employee's voluntary termination of employment after a Change of Control, the Company shall pay to Employee an amount equal to twelve (12) months' compensation calculation with reference to Employee's then current annual compensation (exclusive of bonuses), which amount shall be due and payable at termination.

(d) Amounts payable under this Section shall be net of amounts required to be withheld under applicable law and amounts requested to be withheld by Employee.

(e) Upon Termination of employment other than for Cause, all outstanding options granted to Employee pursuant to the Company's 1992 Stock Incentive Plan, which vest with the passage of time (and are not performance related) shall be immediately fully vested.

(f) As used herein, "Change of Control" means the occurrence of any one of the following events: (i) any Person becomes the beneficial owner of twenty-five percent (25%) or more of the total number of voting shares of the Company; (ii) any Person (other than the Persons named as proxies solicited on behalf of the Board of Directors of the Company) holds revocable or irrevocable proxies representing twenty-five percent (25%) or more of the total number of voting shares of the Company; (iii) any Person has commenced a tender or exchange offer, or entered into an agreement or received an option, to acquire beneficial ownership of twenty-five percent (25%) or more of the total number of voting shares of the Company; and (iv) as the result of, or in connection with, any cash tender or exchange offer, merger, or other business combination, sale of assets, or any combination of the foregoing transactions, the persons who were directors of the

Company before such transactions shall cease to constitute at least two-thirds (2/3) of the Board of Directors of the Company or any successor entity.

14. NOTICE. Unless otherwise provided herein, any notice, request, certificate or instrument required or permitted under this Agreement shall be in writing and shall be deemed "given" upon personal delivery to the party to be notified or three business days after deposit with the United States Postal Service, by registered or certified mail, addressed to the party to receive notice at the address set forth above, postage prepaid. Either party may change its address by notice to the other party given in the manner set forth in this Section.

15. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties and contains all the agreements between them with respect to the subject matter hereof. It also supersedes any and all other agreements or contracts, either oral or written, between the parties with respect to the subject matter hereof.

16. MODIFICATION. Except as otherwise specifically provided, the terms and conditions of this Agreement may be amended at any time by mutual agreement of the parties, provided that before any amendment shall be valid or effective, it shall have been reduced to writing and signed by an authorized representative of the Company and Employee.

17. NO WAIVER. The failure of any party hereto exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with its obligations, shall not be a waiver by such party of its right to exercise any such or other right, power or remedy or to demand compliance.

18. SEVERABILITY. In the event that any paragraph or provision of this Agreement shall be held to be illegal or unenforceable, such paragraph or provision shall be severed from this Agreement and the entire Agreement shall not fail as a result, but shall otherwise remain in full force and effect.

19. ASSIGNMENT. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and shall be binding upon Employee, his administrators, executors, legatees, and heirs. In that this Agreement is a personal services contract, it shall not be assigned by Employee.

20. DISPUTE RESOLUTION. Except as otherwise provided in Section 10, the Company and Employee agree that any dispute between Employee and the Company or its officers, directors, employees, or agents in their individual or Company capacity of this Agreement, shall be submitted to a mediator for nonbinding, confidential mediation. If the matter cannot be resolved with the aid of the mediator, the Company and Employee mutually agree to arbitration of the dispute. The arbitration shall be in accordance with the then-current Employment Dispute Resolution Rules of the American Arbitration Association ("AAA") before an arbitrator who is licensed to practice law in the State of Oregon. The arbitration shall take place in or near Portland, Oregon. Employee and the Company will share the cost of the arbitration equally, but each will bear their own costs and legal fees associated with the arbitration. However, if any party prevails on a statutory claim which affords the prevailing party attorneys' fees, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees.

The Company and Employee agree that the procedures outlined in this provision are the exclusive method of dispute resolution.

21. ATTORNEYS' FEES. In the event suit or action is instituted pursuant to Section 10 of this Agreement, the prevailing party in such proceeding, including any appeals thereon, shall be awarded reasonable attorneys' fees and costs.

22. APPLICABLE LAW. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Oregon.

23. COUNTERPARTS. This Agreement may be signed in two counterparts, each of which shall be deemed an original and both of which shall together constitute one agreement.

IN WITNESS WHEREOF, Antivirals Inc. has caused this Agreement to be signed by its duly authorized representative, and Employee has hereunder set his name as of the date of this Agreement.

COMPANY: ANTIVIRALS INC.

By: /s/ Alan P. Timmins
_____

EMPLOYEE: /s/ Dwight Weller
_____

EXHIBIT A

LIST OF OFFICES HELD

EXHIBIT B

INVENTIONS EXCLUDED FROM COVERED WORKS

TECHNOLOGY TRANSFER AGREEMENT

This Technology Transfer Agreement, dated February 9, 1992 (this "Agreement"), is by and between ANTI-GENE DEVELOPMENT GROUP, an Oregon limited partnership ("Seller"), and ANTIVIRALS Inc., an Oregon corporation ("Buyer").

RECITALS

A. Seller is the owner of certain patents, patent applications, and other intellectual property rights, all of which are more fully described in this Agreement (collectively, the "Intellectual Property").

B. Buyer intends to offer to issue 3,300 shares of Buyer's common stock in exchange for each limited partnership interest in Seller (the "Exchange Offer").

C. Following completion of the Exchange Offer, Seller wishes to transfer, and Buyer wishes to obtain, the right, title, and interest of Seller in and to the Intellectual Property.

D. Following the transfer, Buyer wishes to grant certain rights to Seller with respect to the Intellectual Property.

AGREEMENT

In consideration of the above and of the promises and covenants contained herein, the parties agree as follows:

SECTION 1
DEFINITIONS

As used in this Agreement, the following terms shall have the following meanings:

1.1 "Buyer Affiliate" shall mean Buyer's Licensees, other than Seller, and any entity other than Seller that controls, is controlled by, or is under common control with Buyer or Buyer's Licensees.

1.2 "Closing" and "Closing Date" shall have the meanings set forth in Section 2.1.

1.3 "Copyrights" shall mean all of Seller's rights under United States or foreign copyright laws with respect to any work of authorship used by Seller in connection with Seller's research and development and other business operations prior to the Closing Date.

1.4 "Exchange Offer" shall mean the offer by Buyer to exchange 3,300 shares of Buyer's common stock for each limited partnership interest in Seller.

1.5 "Intellectual Property" shall mean all Patents, Patent Applications, Trademarks, Trademark Applications, Copyrights, and all other Technology owned or controlled by Seller as of the date of this Agreement.

1.6 "Interests" shall mean the limited partnership interests in Seller.

1.7 "Licensee" shall mean any person, corporation, or other entity other than Buyer or Seller that obtains a License.

1.8 "License" shall mean a right granted by Buyer or a Buyer Affiliate to an entity to: (a) make a Product; (b) make a Product and use that Product; (c) make a Product and sell that Product; (d) have a Product made on behalf of said entity and use that Product; (e) have a Product made on behalf of said entity and sell that Product; or (f) use a method claimed in a Patent.

1.9 "Partners" shall mean the partners in Seller as of the effective date of the Exchange Offer.

1.10 "Patent Applications" shall mean the applications described in Schedule 1.10 attached.

1.11 "Patents" shall mean the patents listed on Schedule 1.11 attached, and any patents issuing from any Patent Applications and Planned Applications. "Patents" shall also include all continuations, continuations-in-part, divisions, reissues, patents of addition, renewals, any foreign counterparts of any such Patents, Patent Applications, and Planned Applications.

1.12 "Planned Applications" shall mean the planned patent applications covering the conceptions and inventions partially or fully reduced to practice owned by Seller and listed in Schedule 1.12.

1.13 "Product" shall mean any product the sale of which would infringe one or more valid claims of any Patent in the absence of this Agreement.

1.14 "Purchase Price" shall have the meaning set forth in Section 4.

1.15 "Sales" shall mean the total worldwide sales of Products by Buyer and Buyer Affiliates to Unaffiliated Entities at the Gross Invoice Amount minus returns, where returns comprise compensation to the purchaser of the Product for Products returned to Buyer or the Buyer Affiliate. "Gross Invoice Amount" shall mean all money and other valuable consideration paid to Buyer and Buyer Affiliates in exchange for Products. Transfers between Buyer and Buyer Affiliates or between Buyer Affiliates shall not be deemed Sales. In the event

Buyer or a Buyer Affiliate makes or has made a Product for the Buyer's or Buyer Affiliate's own use, each manufacture shall be considered a Sale and the amount of the Sale shall be based upon the average price at which such Product or the most nearly equivalent Product was sold by Buyer or Buyer Affiliates during the six months preceding the date of manufacture.

1.16 "Technology" shall mean conceptions, inventions, discoveries, improvements, trade secrets, formulas, techniques, processes, and know how, whether or not patented and whether or not reduced to practice, and any copies of documents, or other materials describing or relating to the foregoing, conceived, created, used, or developed by or on behalf of Seller prior to the Closing Date which relate to nucleic acid binding polymers, subunits useful for assembly of said polymers, methods of preparation, purification, and characterization of said subunits and polymers, modifications and adducts to said subunits and polymers, and uses and applications of said subunits and polymers.

1.17 "Trademark Applications" shall mean the Trademark Applications identified on Schedule 1.17 attached.

1.18 "Trademarks" shall means the trademarks and trademark registrations identified on Schedule 1.18 attached and the goodwill associated therewith.

1.19 "Unaffiliated Entity" shall mean any entity other than Buyer

and Buyer Affiliates.

SECTION 2
TRANSFER OF INTELLECTUAL PROPERTY

2.1 CLOSING. The closing of the transactions contemplated by this Agreement (the "Closing") shall take place at 10 a.m. on the date that is ten business days after the date that all conditions to Closing are satisfied (other than those conditions that by their terms are to occur at the Closing), unless another date and time are agreed to in writing by the parties. The Closing shall take place at the offices of Stoel Rives Boley Jones & Grey, 900 SW Fifth Avenue, Portland, Oregon, or such other reasonable location as shall be specified by Buyer. The date of the Closing is hereafter referred to as the Closing Date.

2.2 LIQUIDATION OF INTERESTS. Subject to all of the terms and conditions of this Agreement, on the Closing Date, Buyer shall tender to Seller Buyer's Interests for liquidation and Seller shall distribute to Buyer in liquidation of Buyer's Interests an undivided interest in the Intellectual Property. The ratio of the undivided interest conveyed to the whole of the Intellectual Property shall be the same as the ratio of the liquidated Interests to the number of Interests outstanding on the Closing Date before liquidation of Buyer's Interests.

2.3 SALE OF REMAINDER. Subject to all of the terms and conditions of this Agreement, on the Closing Date, contemporaneously with the distribution described in Section 2.2, Seller shall sell, convey, assign, transfer and deliver to Buyer, and Buyer shall

purchase and accept from Seller, all right, title and interest of Seller in and to the undivided interest in the Intellectual Property retained by Seller after the liquidating distribution described in Section 2.2.

SECTION 3
LIMITED ASSUMPTION OF LIABILITIES

Buyer shall assume all ongoing expenses associated with Patent Applications, Planned Applications, Trademark Applications, Patents and Trademarks including expenses associated with the filing of applications, continuations, continuations-in-part, responses to offices actions, payment of issue and maintenance fees, and prosecution of such infringement claims as Buyer elects to pursue. Other than the foregoing, Buyer will not assume and will not be liable for any liabilities of Seller, known or unknown, contingent or absolute, accrued or otherwise, and the Intellectual Property shall be transferred to Buyer free of all liabilities, obligations, security interests, mortgages, pledges, conditional sales agreements or other liens and encumbrances.

SECTION 4
CONSIDERATION

4.1 REDEMPTION OF INTERESTS. The consideration for distribution of an undivided interest in the Intellectual Property pursuant to Section 2.2 shall be Buyer's Interests liquidated by Seller pursuant to that section.

4.2 SALE OF REMAINDER. As consideration for the transfer of the remainder of the Intellectual Property pursuant to Section 2.3, Buyer shall pay the purchase price ("Purchase Price") set forth in this Section 4.2 pursuant to the terms set forth in this Section 4.

(a) If no Interests of Buyer are liquidated pursuant to Section 2.2, the Purchase Price shall be as follows: Subject to Sections 4.6 and 4.7, Buyer shall pay Seller eight (8) percent of the amount of the total Sales of each Product Buyer and any Buyer Affiliates sell to any Unaffiliated

Entity after the Closing Date. For purposes of this Section 4, transfers from Buyer to a Buyer Affiliate or vice versa and transfers between Buyer Affiliates shall not be deemed Sales.

(b) If Seller does distribute an undivided interest in the Intellectual Property to Buyer in liquidation of its Interests pursuant to Section 2.2, the Purchase Price set forth in Section 4.2(a) shall be reduced pro rata to reflect Seller's reduced ownership interest in the Intellectual Property resulting from the liquidating distribution. By way of example, if Buyer tenders for liquidation fifty (50.0000) percent of the Interests outstanding as of the Closing, Seller shall distribute in liquidation of Buyer's Interests an undivided one-half ownership interest in the Intellectual Property and Seller will retain an undivided one-half ownership interest. The Purchase Price shall be reduced by half so that Buyer will pay four (4.00000) percent of the total Sales of Products under Section 4.2(a).

4.3 REPORTS. Within thirty (30) days after the end of each calendar quarter, for so long as Products are covered by unexpired Patents, Buyer shall provide Seller with a written report setting forth the total amount of each Product sold by Buyer and Buyer Affiliates during the quarter, to whom the Products were sold, the gross invoice amount for each Sale, and the amount of any returns. At the time the report is made, Buyer shall pay Seller any amounts payable pursuant to this Section 4.

4.4 RECORDS. Buyer shall maintain records concerning Sales of Products sufficient to enable Seller to verify the amounts payable under this Agreement. Seller shall have the right, through an independent auditor, to examine such records that concern Sales of Products up to four times in any given year. Seller shall bear all expenses associated with such audits.

4.5 LATE PAYMENTS. If Buyer fails to make any Purchase Price payment owing to Seller when due, Buyer shall pay Seller interest on the amount past due at a rate equal to the "Prime Rate" in effect at the time when payment is due, plus 7.5 percent per annum The "Prime Rate" shall be the announced "prime rate" at First Interstate Bank of Oregon or its successors.

4.6 COMMENCEMENT OF PAYMENT OBLIGATIONS. Notwithstanding anything in this Agreement to the contrary, the first two hundred million dollars ($200,000,000) in total cumulative worldwide Sales by Buyer and Buyer Affiliates collectively are exempt from Purchase Price Payments Buyer shall be obligated under this Section 4 to make Purchase Price payments only on those Sales subsequent to the initial cumulative two hundred million dollars in exempt Sales by Buyer and Buyer Affiliates.

4.7 TERMINATION OF PAYMENT OBLIGATIONS. Buyer's obligation to make Purchase Price payments for any given Product shall end upon the expiration of all Patents containing claims that cover that Product. Buyer's obligation to make Purchase Price Payments shall terminate completely upon expiration of the last Patent to expire.

4.8 PAYMENT DISPUTES.

(a) Any dispute between the parties concerning payment of Purchase Price payments shall be settled by binding arbitration in accordance with the rules of the American Arbitration Association. The arbitration shall be held in Portland, Oregon before three (3) arbitrators who are knowledgeable about the industry and markets for the Products Judgment upon the arbitrators' award may be entered in any court having jurisdiction. This agreement to arbitrate shall apply only to disputes concerning Purchase Price payments, and shall not prevent either party from seeking judicial relief in connection with other matters relating to this Agreement. The prevailing party in any such arbitration proceeding shall be entitled to recover reasonable costs and attorneys fees at the arbitration and in connection with any judicial proceeding to enforce the arbitration award.

(b) If Seller believes Buyer has refused to make Purchase Price payments in bad faith, Seller may request that the arbitrators make a finding of Buyer's bad faith refusal to pay. The parties agree that such a finding of bad faith shall not be made unless there is clear and convincing evidence that Seller knew the payment was owing and refused to make the payment. Seller may appeal any finding of bad faith to any court having jurisdiction and the court shall review any finding of bad faith de novo.

(c) If the arbitrators make a finding of bad faith under Section 4.8(b) in two (2) separate proceedings relating to two (2) separate payment disputes involving the same Product, and neither finding is reversed on appeal, Seller shall have the right, upon notice to Buyer, to require Buyer to convey back to Seller at no cost to Seller any Patent covering the Product. Upon receipt of such notice, Buyer shall execute such documents as Seller may reasonably request to convey Buyer's rights in the Patent to Seller.

SECTION 5
REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer represents and warrants to Seller as follows:

5.1 ORGANIZATION AND STANDING. Buyer is a corporation duly organized and validly existing under the laws of the State of Oregon.

5.2 AUTHORIZATION AND BINDING OBLIGATION. Buyer has full corporate power and authority to enter into and perform this Agreement and the transactions contemplated hereby. The execution, delivery and performance of this Agreement by Buyer have been duly and validly authorized by all necessary corporate action on the part of Buyer. This Agreement has been duly executed and delivered by Buyer and constitutes the valid, binding and enforceable obligation of Buyer except as the provisions of this Agreement may be rendered unenforceable by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditor's rights generally or the application of general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law).

5.3 ABSENCE OF CONFLICTING AGREEMENTS OR REQUIRED CONSENTS. The execution, delivery and performance of this Agreement by Buyer (i) do not require the consent, approval, authorization, order or other action of, nor any filing with, any third party, including, without limitation, (A) any party to any contract, loan or credit agreement, instrument, commitment, understanding or other agreement to which Buyer is a party or (B) any court, administrative agency or other governmental authority; (ii) will not violate any provisions of the Articles of Incorporation or Bylaws of Buyer; (iii) will not violate any law, judgment, order, injunction, decree, rule, regulation or ruling of any governmental authority applicable to Buyer; and (iv) will not, either alone or with the giving of notice or the passage of time or both, conflict with, constitute grounds for termination of, result in breach of the terms, conditions or provisions of, or constitute a default under, any agreement, instrument, license or permit that

is individually or in the aggregate material to the transactions contemplated hereby and to which Buyer is now subject.

5.4 NO BROKERS. Neither Buyer, any officer or director of Buyer, nor any employee or shareholder of Buyer has employed any broker, finder or investment banker or incurred any liability for any commission, brokerage or

investment banking fee or finder's fee in connection with the transactions contemplated by this Agreement.

SECTION 6
REPRESENTATIONS AND WARRANTIES OF SELLER

Seller represents and warrants to Buyer as follows:

6.1 ORGANIZATION AND STANDING. Seller is a limited partnership duly organized and validly existing under the laws of the State of Oregon.

6.2 AUTHORIZATION AND BINDING OBLIGATION. Seller has full power and authority to enter into and perform this Agreement and the transactions contemplated hereby. The execution, delivery and performance of this Agreement by Seller have been duly and validly authorized by all necessary action on the part of Seller. This Agreement has been duly executed and delivered by Seller and constitutes the valid, binding and enforceable obligation of Seller except as the provisions of this Agreement may be rendered unenforceable by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditor's rights generally or the application of general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law).

6.3 ABSENCE OF CONFLICTING AGREEMENTS OR REQUIRED CONSENTS. The execution, delivery and performance of this Agreement by Seller (i) do not require the consent, approval, authorization, order or other action of, nor any filing with, any third party, including, without limitation, (A) any party to any contract, loan or credit agreement, instrument, commitment, understanding or other agreement to which Seller is a party or (B) any court, administrative agency or other governmental authority; (ii) will not violate any provisions of the partnership agreement of Seller; (iii) will not violate any law, judgment, order, injunction, decree, rule, regulation or ruling of any governmental authority applicable to Seller; (iv) will not, either alone or with the giving of notice or the passage of time or both, conflict with, constitute grounds for termination of, result in a breach of the terms, conditions or provisions of, or constitute a default under, any agreement, instrument, license or permit that is individually or in the aggregate material to the transactions contemplated hereby and to which Seller is now subject; and (v) will not result in the creation of any lien, charge or encumbrance on any of the Intellectual Property.

6.4 OWNERSHIP OF INTELLECTUAL PROPERTY. Except as set forth in Schedule 6.4 to this Agreement, Seller owns valid, unrestricted, enforceable and exclusive rights for the use of the Intellectual Property. Seller has delivered to Buyer copies of all documents establishing

the rights of Seller to the Intellectual Property. Schedules 1.10, 1.11, 1.12, 1.17 and 1.18 respectively list all patent applications, patents, planned patent applications, trademark applications, and trademarks owned by Seller.

6.5 ABSENCE OF INFRINGEMENT. Except as set forth in Schedule 6.5 to this Agreement, to the best of Seller's knowledge, the use by Seller of the Intellectual Property has not created any conflict with or infringement upon any intellectual property rights of third parties, and Seller has not been notified of any such conflicts or infringement claims.

6.6 ABSENCE OF ENCUMBRANCES. Except as set forth in Schedule 6.6 to this Agreement, none of the Intellectual Property is subject to any security interest, mortgage, pledge, conditional sales agreement~ or other lien or encumbrance.

6.7 NUMBER OF PARTNERSHIP INTERESTS. On the Closing Date, the number of partnership interests outstanding will be the number reflected in Seller's books and records as of that date.

6.8 LITIGATION AND ADMINISTRATIVE PROCEEDINGS. Except as set forth in Schedule 6.8 to this Agreement, there is no litigation, proceeding or investigation pending or, to the best of Seller's knowledge threatened, against Seller in any federal, state or local court or before any administrative agency individually or in the aggregate material to the transactions contemplated hereby, including, without limitation, any proceeding that seeks to enjoin or prohibit or otherwise questions the validity of any action taken or to be taken pursuant to or in connection with this Agreement.

6.9 NO BROKERS. Neither Seller, any officer or director of Seller, nor any employee or partner of Seller has employed any broker, finder or investment banker or incurred any liability for any commission, brokerage or investment banking fee or finder's fee in connection with the transactions contemplated by this Agreement.

6.10 DISCLOSURE. No representation or warranty made by Seller herein, or in any schedule referred to herein, or in any certificate delivered or to be delivered in connection with the transactions contemplated by this Agreement, contains or will contain any untrue statement of a material fact or omits or will omit to state any material fact necessary to make the statement not misleading.

SECTION 7
COVENANTS OF SELLER

7.1 PRE-CLOSING COVENANTS. Seller covenants and agrees that, between the date hereof and the Closing Date, except as contemplated by this Agreement or with the prior written consent of Buyer, Seller will conduct its business and operations in accordance with the following:

(a) Seller will not enter into any contract or commitment relating to the Intellectual Property or incur any obligations (including obligations relating to the borrowing of money of guaranteeing of indebtedness) with respect to the Intellectual Property.

(b) Seller will not create, assume or permit to exist any mortgage, pledge, lien or any charge or encumbrance or rights affecting any of the Intellectual Property.

(c) Seller will not sell, assign, license or otherwise transfer or dispose of any of the Intellectual Property.

(d) Seller will use its best efforts not to cause or permit, by any act or failure to act, any action which would impair or lessen the value of the Intellectual Property.

(e) Seller will not create or issue any Interests prior to Closing beyond those outstanding as of the date of this Agreement.

(f) From the date of this Agreement to the Closing Date, Seller will give to Buyer and its counsel, accountants, and other authorized representatives reasonable access during normal business hours to the books and records of Seller relating to the Intellectual Property and will furnish to Buyer and its authorized representatives all information relating to the Intellectual Property as they may reasonably request.

(g) Seller will notify Buyer of any material litigation or administrative proceeding pending or, to its knowledge, threatened against it or involving the Intellectual Property.

7.2 CLOSING COVENANT. On the Closing Date, Seller shall redeem the Interests and shall transfer, convey, assign and deliver to Buyer the

Intellectual Property as provided in Section 2 of this Agreement.

7.3 POST-CLOSING COVENANTS. After the Closing, Seller agrees that it will take such actions and execute and deliver to Buyer such further instruments of assignment, conveyance and transfer as, in the reasonable opinion of counsel for Buyer, may be necessary to ensure complete and evidence the full and effective transfer of the Intellectual Property to Buyer pursuant to this Agreement.

7.4 CONFIDENTIALITY. Both prior to and after the Closing, Seller will maintain the confidentiality of all Technology that is not in the public domain; provided that Seller's obligations under this Section 7.4 shall not apply to Technology to which Seller obtains ownership pursuant to Section 4.8 or pursuant to the License and Option Agreement described in Section 9.1; and provided further that Seller may not disclose Technology which is not in the public domain unless: (a) the disclosed has entered into a written agreement acceptable to Buyer under which the disclosed agrees to restrictions on disclosure, use, and transfer of the Technology; and (b) Buyer has consented in writing to the disclosure, which consent shall not

be unreasonably withheld The parties agree that Buyer may withhold consent if the proposed disclosed is an actual or potential competitor of Buyer and that such refusal to consent shall be reasonable

SECTION 8
COVENANTS OF BUYER

8.1 FILING, PROSECUTION, MAINTENANCE AND DEFENSE OF PATENTS. Buyer shall use its best efforts to file and prosecute the Planned Applications and the Patent Applications, to maintain the Planned Applications, the Patent Applications, and the Patents, and to bear the full cost of said maintenance. Buyer shall use its best efforts to prosecute the infringement of Patents and shall bear the cost associated with such prosecution, provided that Buyer shall have sole discretion with respect to what action it elects to take with respect to such prosecution. In the event Buyer is unable to or elects not to continue the prosecution or maintenance of a Patent Application, Planned Application, or Patent, or if Buyer otherwise acts or fails to act in such a manner as to result in de facto abandonment of a Patent Application, Planned Application, or Patent, Buyer shall notify Seller of this fact in a timely manner. To the extent Buyer's decision not to prosecute or maintain an Application or a Patent is based upon a decision by Buyer to abandon the Application or Patent, or otherwise results in de facto abandonment of the Application or Patent, Buyer agrees to convey all right, title, and interest in such Application or Patent to Seller at no cost to Seller. Buyer further agrees to provide Seller with copies of all office actions by the United States and any foreign patent offices concerning Planned Applications and Patent Applications within two weeks of receipt by Buyer of such office action and to provide in a timely manner a copy of Buyer's response to each such office action.

8.2 NOTICES. Buyer and Buyer Affiliates shall include on all Products sold labels containing appropriate trademark and patent notifications.

8.3 CONFIDENTIALITY. Both prior to and after the Closing, Buyer will maintain the confidentiality of all Technology that is not in the public domain; provided that Buyer's obligations under this Section 8.3 shall not apply to disclosures made pursuant to an appropriate confidentiality agreement to the extent Buyer, in its sole discretion, determines such disclosures to be appropriate to exploitation of the Technology.

SECTION 9
JOINT COVENANTS

9.1 LICENSE AND OPTION AGREEMENT. On the Closing Date, Buyer and Seller shall execute a License and Option Agreement in substantially the

form shown in Schedule 9.1.

9.2 NO INCONSISTENT ACTION. Seller and Buyer will not take any action inconsistent with their obligations under this Agreement or which could hinder or delay the consummation of the transactions contemplated by this Agreement.

9.3 PROVISION OF INFORMATION AND FILING OF PLANNED APPLICATIONS. Seller shall provide Buyer with copies of appropriate documents and other materials necessary to complete preparation of the Planned Applications listed in Schedule 1.12, and Buyer will use reasonable efforts to file such applications in a timely manner and carry out such other steps as are necessary in order to obtain patents on the basis of such applications. Both parties shall execute such documents and take such actions as the other party may reasonably request to facilitate the prosecution of the Planned Applications.

9.4 PROSECUTION OF INFRINGEMENT. Both parties shall cooperate in the prosecution of any infringement of any Patents; provided, however, that Buyer shall have the sole right to control the prosecution and settlement of any claim of infringement and shall have sole discretion with respect to such prosecution for so long as Buyer remains the owner of the Patent in question In the event that Seller elects to assist in the prosecution of any infringement, Seller shall have the right to share in any resulting recovery or settlement pro rata based upon the percentage established under Section 4 for the Purchase Price payments and shall have the right to share in any award of legal expenses and fees pro rata based upon Seller's share of such expenses and fees incurred.

9.5 CANCELLATION OF PRIOR AGREEMENTS. Effective as of the Closing, the License Agreements between the parties dated November 1, 1991 and November 4, 1991 are cancelled and superseded by this Agreement.

SECTION 10
CONDITIONS TO OBLIGATIONS OF BUYER

The obligations of Buyer hereunder are, at its option, subject to satisfaction, at or prior to the Closing Date, of each of the following conditions:

10.1 REPRESENTATIONS, WARRANTIES, COVENANTS.

(a) All representations and warranties of Seller made in this Agreement, or in any schedule or certificate delivered pursuant hereto, shall be true and complete on and as of the Closing Date with the same force and effect as if made on and as of that date.

(b) All of the terms, covenants and conditions to be complied with and performed by Seller on or prior to the Closing Date shall have been complied with or performed by Seller.

(c) Buyer shall have received a certificate of Seller executed by the General Partner of Seller and dated as of the Closing Date, to the effect that the representations and warranties of Seller contained in this Agreement, are true and complete on and as of the Closing Date as though made on and as of the Closing Date, and that Seller has complied with or performed all terms, covenants and conditions to be complied with or performed by Seller on or prior to the Closing Date.

10.2 THIRD PARTY CONSENTS. Seller shall have obtained such third party consents and made such filings or registrations with or notifications to,

or received such consents, approvals or authorizations of, all federal, state and local and foreign authorities, required for consummation of the transactions contemplated by this Agreement, in each case on terms and conditions that are satisfactory to Buyer in its sole discretion.

10.3 ADVERSE PROCEEDINGS. No suit, action, claim or proceeding shall have been instituted or threatened against, and no order, decree or judgment of any court, agency or other governmental authority shall have been rendered against, Buyer or Seller to restrain or prohibit, or obtain damages in respect of, this Agreement or the transactions contemplated by this Agreement.

10.4 NO MATERIAL ADVERSE CHANGE. There shall not have been any material adverse change in the Intellectual Property.

10.5 COMPLETION OF EXCHANGE OFFER. The Exchange Offer shall have been completed pursuant to its terms.

10.6 REDEMPTION OF INTERESTS. Seller shall have redeemed the Interests Tendered by Buyer pursuant to Section 2.2.

10.7 INSTRUMENTS OF CONVEYANCE AND TRANSFER. Seller shall have sold, conveyed, assigned, transferred and delivered to Buyer all right, title and interest of Seller in and to the Intellectual Property by the execution and delivery to Buyer of assignment documents prepared by Buyer and satisfactory in form and substance to Seller and shall have otherwise done all things necessary or desirable in the reasonable judgment of Buyer to place Buyer in ownership and control of the Intellectual Property, free and clear of any security interest, mortgage, pledge, conditional sales agreement, or other lien or encumbrance other than any security interest, mortgage, pledge, conditional sales agreement or other lien or encumbrance imposed on the Intellectual Property by or through Buyer.

10.8 OPINION OF COUNSEL. Counsel to Seller shall have delivered an opinion dated as of the Closing Date substantially in the form of Schedule 10.8.

10.9 SATISFACTION OF COUNSEL. All actions and proceedings required to be carried out by this Agreement, or incidental hereto, all documents and instruments to be delivered hereunder, or incidental hereto and all other relevant legal matters shall be reasonably satisfactory in all respects to counsel for Buyer.

SECTION 11
CONDITIONS TO OBLIGATIONS OF SELLER

The obligations of Seller hereunder are, at its option, subject to satisfaction, at or prior to the Closing Date, of each of the following conditions:

11.1 REPRESENTATIONS, WARRANTIES AND COVENANTS.

(a) All representations and warranties of Buyer made in this Agreement, or in any certificate delivered pursuant hereto, shall be true and complete on and as of the Closing Date with the same force and effect as if made on and as of that date.

(b) All of the terms, covenants and conditions to be complied with and performed by Buyer on or prior to the Closing Date shall have been complied with or performed by Buyer.

(c) Seller shall have received a certificate of Buyer, dated as of the Closing Date, executed by the President or other authorized officer of Buyer, to the effect that the representations and warranties of Buyer contained in this Agreement are true and complete on and as of the Closing Date

as though made on and as of the Closing Date and that Buyer has complied with or performed all terms, covenants and conditions to be complied with or performed by Buyer on or prior to the Closing Date.

11.2 COMPLETION OF EXCHANGE OFFER. The Exchange Offer shall have been completed pursuant to its terms.

SECTION 12
TERMINATION

12.1 TERMINATION BY BUYER. This Agreement may be terminated by Buyer upon notice to Seller if:

(a) The Closing shall not have occurred on or before July 1, 1993;

(b) Any representation of warranty of Seller shall prove false in any material respect;

(c) Seller shall (i) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all of its property, (ii) make a general assignment for the benefit of its creditors, (iii) commence a voluntary case under the Federal Bankruptcy Code (as now or hereafter in effect), (iv) be adjudicated a bankrupt or insolvent, (v) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts, (vi) fail to controvert in a timely and appropriate manner, or acquiesce in writing to, any petition filed against it in an involuntary case under such Bankruptcy Code, or (vii) take any action for the purpose of effecting any of the foregoing;

(d) A proceeding or case shall be commenced, without the application or consent of Seller, in any court of competent jurisdiction seeking (i) the liquidation, reorganization, dissolution or winding-up or the composition or readjustment of debts, of Seller,

(ii) the appointment of a trustee, receiver, custodian, liquidator or the like of Seller, or of all of any substantial part of its assets or (iii) similar relief in respect of Seller under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(e) On the Closing Date any condition precedent to the obligations of Buyer set forth in this Agreement shall not have been satisfied and Buyer shall not have previously waived such condition.

12.2 TERMINATION BY SELLER. This agreement may be terminated by Seller, if not then in default, upon notice to Buyer if:

(a) The Closing shall not have occurred on or before July 1, 1993;

(b) Any representation or warranty of Buyer shall prove false in any material respect; or

(c) Buyer shall (i) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or all of its property, (ii) make a general assignment for the benefit of creditors, (iii) commence a voluntary case under the federal Bankruptcy Code (as now or hereafter in effect), (iv) be adjudicated a bankrupt or insolvent, (v) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts, (vi) fail to controvert in a timely and appropriate manner, or acquiesce in writing to, any petition filed against it in an involuntary case under such Bankruptcy Code, or (vii) take any action for the purpose of

effecting any of the foregoing;

(d) A proceeding or case shall be commenced, without the application or consent of Buyer in any court of competent jurisdiction seeking (i) the liquidation, reorganization, dissolution or winding-up or the composition or readjustment of debts, of Buyer, (ii) the appointment of a trustee, receiver, custodian, liquidator or the like of Buyer, or of all or any substantial part of its assets or (iii) similar relief in respect of Buyer under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(e) On the Closing Date any condition precedent to the obligations of Buyer set forth in this Agreement shall not have been satisfied and Seller shall not have previously waived such condition.

12.3 EFFECT OF CLOSING. The termination provisions of this Section 12 shall cease upon the Closing.

SECTION 13
DISCLAIMER OF WARRANTY

Seller makes no warranty whatsoever with respect to the safety, efficacy, or utility of the Intellectual Property, the Patents, or the Products or as to the validity or utility of any claims in any Planned Applications, Patent Applications, or Patents. Buyer acknowledges that it has made its own assessment of and is satisfied with the value of the Intellectual Property.

SECTION 14
OTHER PROVISIONS

14.1 SURVIVAL. The conditions to closing contained in Sections 10 and 11 and the termination provisions of Section 12 shall be extinguished in the Closing. All other provisions of this Agreement, including, without limitation, the representations and warranties of the parties, shall survive the Closing and continue in full force and effect.

14.2 CHOICE OF LAW. The construction and performance of this Agreement will be governed by the laws of the state of Oregon (except for choice of law provisions thereof).

14.3 EXPENSES. Each party to this Agreement shall pay its own expenses incident to the negotiation, execution, delivery and performance of this Agreement

14.4 NOTICES. Any notice or other communication required or permitted under this Agreement shall be in writing (which may take the form of a telecopy communication) and shall be sent by certified mail, return receipt requested, or by confirmed telecopier or hand delivery:

If to Buyer, to the following address:

ANTIVIRALS Inc.
One Southwest Columbia, Suite 1105
Portland, Oregon 97204
Telecopy: (503) 227-0,51
Attention: President

With a copy to:

Stoel Rives Boley Jones & Grey
900 SW Fifth Avenue, Suite 2300

Portland, Oregon 97204
Telecopy: (503) 220-2480
Attention: E. Walter Van Valkenburg

If to Seller, to the following address:

ANTI-GENE DEVELOPMENT GROUP
P.O. Box 2210
Corvallis, Oregon 97339
Telecopy: (503) 754-3545
Attention: James E. Summerton, Ph.D

With a copy to:

James E. Summerton
ANTI-GENE DEVELOPMENT GROUP
1935 N.W. Larch
Corvallis, OR 97330

Unless otherwise provided in this Agreement, all notices and communications shall be deemed to have been duly given or made (i) when delivered by hand, (ii) five business days after being deposited in the mail, postage prepaid, as.registered or certified mail, return receipt requested, or (iii) when telecopied, receipt acknowledged. The address or telecopy numbers to which notices or other communications shall be directed may be changed from time to time by any party by giving written notice to the other parties of the substitute address or telecopy number.

14.5 ATTORNEY FEES. If a suit or action is filed by either party to enforce the provisions of this Agreement, or otherwise with respect to the subject matter of this Agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees and expenses (including, but not limited to those fees and expenses permitted or defined by statute) as fixed by the trial court, and if any appeal is taken from the decision of the trial court, as affixed by the appellate court. For purposes of this Agreement, the term "prevailing party" shall be deemed to include a party that successfully opposes a petition for review filed by an appellate court.

14.6 SUCCESSORS AND ASSIGNS. This Agreement will be binding upon and inure to the benefit of each of the parties and its successors and assigns; provided that no party may assign its rights under this Agreement without the consent of the other party, which consent shall not unreasonably be withheld.

14.7 AMENDMENT. No supplement, modification or amendment of, or waiver with respect to, this Agreement shall be binding unless executed in writing. This Agreement may be modified, amended or terminated upon the written agreement of both parties.

14.8 CONSENTS. Any consent required by this Agreement shall be effective only if given in a writing executed by the party giving the consent.

14.9 HEADINGS. The headings in this Agreement are solely for convenience of reference and shall not limit or otherwise affect the meaning of this Agreement.

14.10 SEVERABILITY. If any part of this Agreement is found invalid or unenforceable, it shall be enforced to the maximum extent permitted

by law, and other parts of this Agreement will remain in force.

14.11 ENTIRE AGREEMENT. This Agreement, including the License and Option Agreement comprising Schedule 9.1, constitutes the entire agreement pertaining to the subject matter hereof and supersedes all prior agreements and understandings of the parties in connection herewith. No covenant, representation or condition not expressed in this Agreement will affect or be effective to interpret, change or restrict, the express provisions of this Agreement.

14.12 COUNTERPARTS. This Agreement may be executed in counterparts, each of which will be considered an original, but all of which together will constitute the Same instrument

IN WITNESS WHEREOF, the parties hereto have executed this Technology Transfer Agreement the day and year first above written.

ANTIVIRALS Inc.

By:

Denis Burger, Ph.D, President

ANTI-GENE DEVELOPMENT GROUP

By:

James E. Summerton, Ph.D,
General Partner

Schedule 1.10

UNITED STATES PATENT APPLICATIONS

Application No. 944,707 for "Polynucleotide Assay Reagent and Method" (Filed December 18, 1986).

Application No. 454,056 for "Alpha-Morpholino Ribonucleoside Derivatives and Polymers Thereof" (Filed December 20, 1989).

Application No. 799,681 for "Uncharged Morpholino Based Polymers Having Phosphorous Linked Chiral Intersubunit Linkages" (Filed November 21, 1991).

Application No. 880,883 for "Uncharged Polynucleotide-Binding Polymers n (Filed May 8, 1992).

Application No. 979,158 for "Sequence Specific Binding Polymers for Duplex Nucleic Acids" (Filed November 23, 1992).

Application No. 988,451 for "Uncharged Morpholino-Based Polymers Having Phosphorous Containing Chiral Intersubunit Linkages" (Filed December 10, 1992).

FOREIGN PATENT APPLICATIONS

Application No. 869025957 (Europe) for "Polynucleotide Assay Reagent and Method" (Filed March 14, 1986).

Application No. 869021899 (Europe) for "Stereoregular Polynucleotide-Binding

Polymers" (Filed March 14, 1986).

Application No. 61-502179 (Japan) for "Polynucleotide Assay Reagent and Method" (Filed March 14, 1986).

Application No. 61-501967 (Japan) for "Stereoregular Polynucleotide-Binding Polymer" (Filed March 14, 1986).

Application No. 92/05208 (PCT) for "Sequence Specific Binding Polymers for Duplex Nucleic Acids" (Filed June 18, 1992).

Application No. 81109326 (Taiwan) for "Sequence Specific Binding Polymers for Duplex Nucleic Acids" (Filed November 21, 1992).

Application No. 20698691 (Canada) for "Uncharged Morpholino-Based Polymers Having Phosphorous-Containing Chiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 3502891 (Japan) for "Uncharged Morpholino-Based Polymers Having Phosphorous Containing Chiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 71642/91 (Australia) for "Uncharged Morpholino-Based Polymers Having Phosphorous-Containing Chiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 919020859 (EPO) for "Uncharged Morpholino-Based Polymers Having Phosphorous-Containing Chiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 92701479 (Korea) for "Uncharged Morpholino-Based Polymers Having Phosphorous-Containing Chiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 20699060 (Canada) for "Uncharged Morpholino-Based Polymers Having Achiral Intersubunit Linkagesll (Filed December 20, 1990).

Application No. 3502893 (Japan) for "Uncharged Morpholino-Based Polymers Having Achiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 71587/91 (Australia) for "Uncharged Morpholino-Based Polymers Having Achiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 919024018 (EPO) for "Uncharged Morpholino-Based Polymers Having Achiral Intersubunit Linkages" (Filed December 20, 1990).

Application No. 92701480 (Korea) for "Uncharged Morpholino-Based Polymers Having Achiral Intersubunit Linkages" (Filed December 20, 1990).

Schedule 1.11

UNITED STATES PATENTS

U.S. Patent No. 5,142,047 for "Uncharged Polynucleotide-Binding Polymers" (August 25, 1992).

U.S. Patent No. 5,034,506 for "Uncharged Morpholino-Based Polymers having Achiral Intersubunit Linkages" (July 23, 1991).

U.S. Patent No. 5,166,315 for "Sequence-Specific Binding Polymers for Duplex Nucleic Acids" (November 24, 1992).

FOREIGN PATENTS

Canadian Patent No. 1,268,404 for "Polynucleotide Assay Reagent and Method."

Schedule 1.12

PLANNED APPLICATIONS

Nonionic nucleic acid-binding polymers specific for single stranded DNA.

Single-probe diagnostic system utilizing nonionic reporter probe.

Novel adducts for improving entry of nucleic acids-binding polymers into cells.

Binding polymers having reduced sequence-specificity effective for binding RNA:RNA duplexes.

Subunits and nucleic acids-binding polymers containing novel 6-membered non-morpholino backbone moieties.

Continuous flow method for assembling sequence-specific nucleic acids-binding polymers.

Purification/concentration component for use with a probe diagnostic system which utilizes a nonionic capture probe.

Method for conversion of biologically-synthesized DNA to a nonionic form, and products of said conversion.

Schedule 1.17

TRADEMARK APPLICATIONS

U.S. Application No. 74-269,484 for GOOD-SENSE (Filed April 27, 1992).

U.S. Application No. 74-269,483 for ANTI-GENE (Filed April 27, 1992).

U.S. Application No. 74-269,482 for NEU-GENE (Filed April 27, 1992).

Schedule 1.18

TRADEMARKS

GOOD-SENSE
ANTI-GENE
NEU-GENE

Schedule 6.4

EXCEPTIONS TO INTELLECTUAL PROPERTY OWNERSHIP

None.

Schedule 6.6

LIENS AND ENCUMBRANCES

None.

Schedule 6.9

LITIGATION AND ADMINISTRATIVE PROCEEDINGS

None.

Schedule 9.1

LICENSE AND OPTION AGREEMENT

This License and Option Agreement is by and between ANTI-GENE DEVELOPMENT GROUP, an Oregon limited partnership ("AGD") and ANTIVIRALS Inc., an Oregon corporation ("AVI").

RECITALS

A. AGD and AVI are parties to a Technology Transfer Agreement (the "Transfer Agreement") under which AGD has conveyed to AVI certain Technology, as more fully described in the Transfer Agreement.

B. Each party wishes to grant to the other certain rights with respect to the Technology and Improvements thereto.

AGREEMENT

In consideration of the above and of the promises and covenants contained herein, the parties agree as follows:

1. DEFINITIONS.

1.1 Unless otherwise set forth in this Agreement, the terms used in this Agreement shall have the meanings given to them in the Transfer Agreement.

1.2 "AGD Affiliate" shall mean AGD Licensees, other than AVI, and any entity other than AVI that controls, is controlled by or is under common control with AGD.

1.3 "AGD Improvements n shall mean Improvements developed by AGD after the effective date of this Agreement but before January 1, 2000, and which AGD has the right to sublicense to AVI.

1.4 "AGD Licensee" shall mean any person, corporation or other entity, other than AVI, that obtains a right granted by AGD or an AGD Affiliate to: (a) make a Proposed Product or Related Product; (b) make a Proposed Product or Related Product and use that Proposed Product or Related Product; (c) make a Proposed Product or Related Product and sell that Proposed Product or Related Product; (d) have a Proposed Product or Related Product made on behalf of said entity and use that Proposed Product or Related Product; (e) have a Proposed Product or Related Product made on behalf of said entity and sell that Proposed Product or Related Product; or, (f) use a method claimed in a patent covering an

AVI Improvement.

1.5 "AVI Affiliate" shall have the meaning given to Buyer Affiliate" in the Transfer Agreement.

1.6 "AVI Improvements" shall mean Improvements developed by AVI after the effective date of this Agreement but before January 1, 2000, and which AVI has the right to license to AGD.

1.7 "Improvements" shall mean documented improvements to the Technology comprising inventions, discoveries, trade secrets, formulas, techniques, processes, and know-how, whether or not patented and whether or not reduced to practice, which are derived from, incorporate, or are based upon, are adducts to, or which relate to making or using the Technology.

1.8 "Licensed Product" shall mean any product with respect to which AVI obtains a license under Section 5 of this Agreement.

1.9 "Polymer" shall mean a single molecular specie of nucleic acid binding polymer incorporating one or more aspects of the Technology and/or Improvements.

1.10 "Proposed Product" shall have the meaning set forth in Section 3.1.

1.11 "Related Product" shall mean, with respect to any Proposed Product, all related products which have the same or similar structural type and adducts which achieve substantially the same biological effect and which are targeted against the same pathogen specie or cellular gene as the Proposed Product.

2. RESEARCH AND DEVELOPMENT LICENSE TO AGDG.

2.1 Subject to the terms of this Agreement, AVI hereby grants to AGD a nonexclusive, royalty free license, with the right to sublicense: (a) to use the Technology and AVI Improvements and to make, have made, and use any Products incorporating the Technology and AVI Improvements internally for research and development; and (b) to make, have made, use and sell Polymers in an amount of no more than ten (10) grams per month of each single Polymer; and (c) to make, have made, and use subunits and adducts in amounts not to exceed that required for assembly of said Polymers.

2.2 AGD may not disclose the Technology or any AVI Improvements that are not in the public domain unless: (a) the disclosed or transferee has entered into a written agreement acceptable to AVI under which the disclosed or transferee agrees to restrictions on disclosure, use, and transfer of the Technology or AVI Improvements, and (b) AVI has consented in writing to the disclosure, use and transfer, which consent shall not be unreasonably withheld; provided that AGD's obligation under this Section 2.2 shall not apply to Technology or Improvements to which AGD obtains a license pursuant to Section 3 or Section 6 or to which AGD obtains ownership pursuant to section 4.8 of the Transfer Agreement.

2.3 AVI shall not enter into any agreement restricting its right to license AVI Improvements solely for the purpose of denying a license to such AVI Improvements to AGD.

3. OPTION.

3.1 If AGD develops or obtains-a specific prototype product

which AVI has the right to make, use and sell and which incorporates one or more aspects of the Technology or Improvements and demonstrates at the biophysical level that said prototype product affords binding properties for its selected genetic target, AGD shall provide written notice (the "Notice") to AVI describing the product (the "Proposed Product") and shall provide AVI with such existing information and materials as AVI may reasonably request to enable AVI to evaluate the Proposed Product.

3.2 Within thirty (30) days after the date of the Notice required under Section 3.1, AVI shall notify AGD: (a) that AVI intends to begin optimization and commercialization of the Proposed Product; or (b) that AVI elects not to commercialize the Proposed Product. If AVI elects not to commercialize the Proposed Product, AVI shall grant AGD an exclusive, perpetual license, with the right to sublicense, to make, have made, use, sell, and otherwise distribute the Proposed Product and any Related Products and to make, have made, and use subunits and adducts in amounts not to exceed that required for assembly of the Proposed Product and any Related Products.

3.3 If AVI elects to begin optimization and commercialization of the Proposed Product, AVI shall take such steps as AVI, in its sole discretion, considers appropriate with respect to the Proposed Product: provided, however that AGD shall have the right, upon written notice to AVI, to obtain the license described in Section 3.2 if neither AVI nor any AVI Affiliate achieves the milestones set forth below by the dates indicated:

(a) Commencement of cell culture studies on the Proposed Product: Nine (9) months from the date of AGD's Notice under Section 3.1.

(b) Commencement of pharmacokinetics and toxicology studies of the Proposed Product: Twenty-four (24) months from the date of AGD is Notice under Section 3.1.

(c) Commencement of clinical trials of the Proposed Product or an optimized version thereof: thirty-six (36) months from the date of AGD's Notice under Section 3.1.

3.4 For purposes of Section 3.3, a milestone shall be met for a Proposed Product if the milestone occurs with respect to an optimized version of the Proposed Product which has the same or similar structural type and adducts which achieve substantially the same biological effect and which is targeted against the same pathogen specie or cellular gene.

3.5 Notwithstanding anything in this Section 3 to the contrary, AGD shall not have any rights under this Section 3 with respect to any Proposed Product as to which AVI or any AVI Affiliate has commenced large scale production prior to the date of AGD's Notice for so long as such large scale production continues. For purposes of this Section 3.5, Proposed Product includes Related Products and "large scale production" shall mean production of more than ten (10) grams each month.

4. ROYALTIES.

4.1 For any license granted by AVI to AGD pursuant to Section 3 of this Agreement which covers a Proposed Product or Related Product that does not incorporate a patented AVI Improvement, the license shall be royalty free.

4.2 For any license granted by AVI to AGD pursuant to Section 3 of this Agreement which covers a Proposed Product or Related Product that incorporates a patented AVI Improvement, AGD shall pay AVI as a royalty a percentage of the total Sales of each Proposed Product by AGD and any AGD Affiliate, which percentages shall be equal to the applicable percentages AVI is required to pay AGD as Purchase Price payments pursuant to the Transfer

Agreement; provided, however, that AGD's obligation to pay royalties under this section shall be limited to Proposed Products and Related Products, the sale of which would infringe a patent owned by AVI in the absence of this Agreement. For purposes of this section 4 2, "Sales" shall mean the total worldwide sales of Proposed Products and Related Products by AGD and AGD Affiliates, subject to the terms applicable to Sales by AVI under the Transfer Agreement.

4.3 AGD's obligation to pay royalties pursuant to this Section 4 shall be subject to all of the terms applicable to AVI's obligation to make Purchase Price payments set forth in Sections 4.3, 4.4, 4.5, 4.6, and 4.8 of the Transfer Agreement.

5. LICENSE TO AVI OF AGD IMPROVEMENTS.

5.1 Subject to the terms of this Agreement, AGD hereby grants to AVI a non-exclusive license, with the right to sublicense, to make, have made, use, and sell products incorporating AGD Improvements (a "Licensed Product").

5.2 AVI shall pay AGD as a royalty a percentage of the total Sales of each Licensed Product AVI or any AVI Affiliate sells, which percentages shall be equal to the applicable percentages AVI is required to pay AGD as Purchase Price payments pursuant to the Transfer Agreement; provided, however, that AVI's obligation to pay royalties under this section shall be limited to Licensed Products the sale of which would infringe a patent owned by AGD in the absence of this Agreement; and provided further that AVI shall have no obligation under this Section 5.2 with respect to Licensed Products covered by one or more

unexpired Patents owned by AVI. AVI's obligation with respect to Licensed Products covered by one or more unexpired Patents owned by AVI shall be limited to AVI's obligation to make Purchase Price payments pursuant to the Transfer Agreement.

5.3 AVI's obligation to pay royalties pursuant to this Section 5 shall be subject to all of the terms of AVI's obligation to make Purchase Price payments set forth in Sections 4.3, 4.4, 4.5, 4.6 and 4.8 of the Transfer Agreement; provided that the parties intend the exemption granted under Section 4.6 for the first two hundred million dollars ($200,000,000) in AVI and AVI Affiliate Sales to apply only once, so that Sales of Licensed Products under this Section 5 shall no longer be exempt once AVI and AVI Affiliates achieve the first two hundred million dollars in worldwide Sales of Products and Licensed Products.

5.4 AVI will maintain the confidentiality of all information about AGD Improvements that is not in the public domain unless: (a) the disclosed has entered into a written agreement acceptable to AGD under which the disclosed agrees to restrictions on disclosure, use, and transfer of the AGD Improvements, and (b) AGD has consented in writing to the disclosure or transfer, which consent shall not unreasonably be withheld.

6. OBLIGATION TO EXPLOIT.

If after January 1, 1994, AVI and AVI Affiliates together effectively cease development of Products based on the Technology, as evidenced by AVI, AVI Affiliates, and/or their successors and assigns in the aggregate having for a period of more than 180 consecutive days less than the equivalent of ten (10) full time employees devoted to development, testing, commercialization, production and/or sales of one or more products based on the Technology, then, upon request by AGD, AVI will grant to AGD an exclusive royalty-free license, with right to sublicense, to make, have made, use, sell, or otherwise distribute the Products, to practice the Technology, and to use the Trademarks.

7. DISCLAIMER OF WARRANTY.

Neither party makes any warranty whatsoever with respect to Technology;and Improvements licensed pursuant to this Agreement or any Products, Licensed Products, Proposed Products or Related Products. Each party's rights under this Agreement are limited to whatever rights that party has in the Technology and Improvements transferred.

8. FURTHER ASSISTANCE.

Each party shall take such actions and execute and deliver such other documents as, in the reasonable opinion of counsel for the other party, may be necessary to evidence the rights and interests of the requesting party hereunder.

9. OTHER PROVISIONS.

The provisions set forth in Section 14 of the Transfer Agreement are applicable to this Agreement and are incorporated herein by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of _____, 1993.

ANTIVIRALS INC.

By:

Denis Burger, Ph.D, President

ANTI-GENE DEVELOPMENT GROUP

By:

James E. Summerton, Ph.D,
General Partner

Schedule 10.8

OPINION OF COUNSEL FOR SELLER

[Closing Date]

Antivirals Inc.
One Southwest Columbia, Suite 1105
Portland, Oregon 97204

We have acted as counsel to Anti-Gene Development Group, an Oregon limited partnership ("Seller") in connection with the transactions contemplated by the Technology Transfer Agreement (the Transfer Agreement") dated as of February 9, 1993, between Seller and Antivirals Inc.

We have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments and have conducted such

other investigations of fact and law as we have deemed necessary.or advisable for purposes of this opinion.

Upon the basis of the foregoing and subject to the qualifications below, we are of the opinion that:

1. Seller is a limited partnership duly organized and validly existing under the laws of the state of Oregon.

2. Seller has full power and authority to enter into and perform the Transfer Agreement and the transactions contemplated thereby. The execution, delivery and performance of the Transfer Agreement by Seller have been duly and validly authorized by all necessary action on the part of Seller. The Transfer Agreement has been duly executed and delivered by Seller and constitutes the valid, binding and enforceable obligation of Seller except as the provisions of the Transfer Agreement may be rendered unenforceable by applicable bankruptcy, insolvency, reorganization, moratorium, or other similar laws affecting creditor's rights generally or the application of general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law).

3. The execution, delivery and performance of the Transfer Agreement by Seller (i) do not require the consent, approval, authorization, order or other action of, nor any filing with, any third party, including without limitation (A) any party to any contract, loan or credit agreement, instrument, commitment, understanding or other agreement to which Seller is a party or (B) any court, administrative agency or other governmental authority; (ii) will not violate any provisions of the partnership agreement of Seller; (iii) will not violate any law, judgment, order,

injunction, decree, rule, regulation or ruling of any governmental authority applicable to Seller; (iv) will not, either alone or with the giving of notice or the passage of time or both, conflict with, constitute grounds for termination of, result in a breach of the terms, conditions or provisions of, or constitute a default under, any agreement, instrument, license or permit that is individually or in the aggregate material to the transactions contemplated by the Transfer Agreement and to which Seller is now subject; and (v) will not result in the creation of any lien, charge or encumbrance on any of the Intellectual Property!

4. To the best of our knowledge, except as set forth in Schedule 6.4 to the Transfer Agreement, Seller owns valid, unrestricted, enforceable and exclusive rights for the use of the Intellectual Property, Seller has delivered to Buyer copies of all documents establishing the rights of Seller to the Intellectual Property, and all patent applications, patents, planned patent applications, trademark applications, and trademarks owned by Seller are respectively listed on Schedules 1.10, l.il, 1.12, 1.17 and 1.18 to the Transfer Agreement.

5. To the best of our knowledge, the use by Seller of the Intellectual Property has not created any conflict with or infringement upon any intellectual property rights of third parties, and Seller has not been notified of any such conflicts or infringement claims.

6. To the best of our knowledge, none of the Intellectual Property is subject to any security interest, mortgage, pledge, conditional sales agreement, or other lien or encumbrance.

7. To the best of our knowledge, there is no litigation, proceeding or investigation pending or threatened against Seller in any federal, state or local court or before any administrative agency individually or in the aggregate material to the transactions contemplated by the Transfer Agreement, including, without limitation, any proceeding that seeks to enjoin or prohibit or otherwise questions the validity of any action taken or to be taken pursuant to or in

connection with the Transfer Agreement.

This opinion is given solely to the addressee named above and may not be relied upon by any other person nor may it be used, circulated, quoted or otherwise referred to other than in connection with the transactions contemplated by the Transfer Agreement.

Very truly yours,

AMENDMENT TO TECHNOLOGY TRANSFER AGREEMENT
BETWEEN ANTI-GENE DEVELOPMENT GROUP AND ANTIVIRALS INC.

This Amendment to the Technology Transfer Agreement dated February 9, 1992 but executed on February 9, 1993 (the TT Agreement or the 1993 TT Agreement) between ANTI-GENE DEVELOPMENT GROUP and ANTIVIRALS Inc. (Amendment) is by and between ANTI-GENE DEVELOPMENT GROUP (AGD), an Oregon limited partnership, and ANTIVIRALS Inc. (AVI), an Oregon corporation.

RECITALS

A. As per the terms of the 1993 TT Agreement, hereby incorporated by reference herein, AGD (Seller) is due Purchase Price payments from AVI (Buyer) in the amount of 4.051 percent of Sales of Products after the first two hundred million dollars in total cumulative worldwide Sales by Buyer and Buyer Affiliates collectively.

B. AVI wishes to have Purchase Price payments reduced on Sales of diagnostic products.

C. AGD wishes to receive Purchase Price payments for diagnostic products and research products due upon AVI's sale of such products without regard to the two hundred million dollars exemption referred to in Recital A, and otherwise pursuant to the payment schedules and procedures set forth in this Amendment and in the TT Agreement.

D. AGD wishes to obtain from AVI a royalty-bearing license for small-scale products and a royalty-bearing license for diagnostic products.

AGREEMENT TO AMEND

In consideration of the above and as provided in Section 14.7 of the TT Agreement, AGD and AVI agree to amend the TT Agreement as set forth below.

1. TT AGREEMENT TERMS. All capitalized terms not defined in this Amendment shall have the meanings assigned to such terms in the TT Agreement or its Exhibits.

2. TT AGREEMENT DEFINITIONS.

2.1 BUYER AFFILIATE. Section 1.1 of the TT Agreement is hereby amended to read in its entirety as follows:

> "Buyer Affiliate" shall mean Buyer's Licensees and any other entity that controls, is controlled by, or is under common control with Buyer or Buyer's Licensees, except that Seller and any direct licensee of Seller shall not be deemed to be a Buyer Affiliate.

2.2 NEW DEFINITIONS. Section 1 of the TT Agreement is hereby amended to include the following definitions:

> 1.20 "Therapeutic Product" shall mean a Product, as defined in the TT Agreement, which is approved for use in, or is used in a human or other animal to achieve a therapeutic or prophylactic effect.
>
> 1.21 "Diagnostic Product" shall mean a Product, as defined in the TT Agreement, which is approved for, or is used for detecting

and/or quantitating in a biological specimen outside any animal body one or more selected nucleic acid sequences.

1.22 "Research Product" shall mean a Product, as defined in the TT Agreement, which is not classed as a Therapeutic Product or a Diagnostic Product.

1.23 "Small-Scale Product" shall mean a Product and AVI Improvements relating thereto--including adducts for enhancing delivery and cell entry, as defined in the TT Agreement, which meets all of the following requirements: 2(i) is produced in a lot size of less than 1 gram; 2(ii) is sold by any entity for research purposes only;

1.24 The terms "Seller's Affiliate" and "AGD Affiliate" are synonymous, and are understood and intended to mean, any entity that controls, is controlled by, or is under common control with, AGD, but only if James E. Summerton (i) controls AGD and such AGD Affiliate; and (ii) is an acting key policy decision maker and manager of AGD and such AGD Affiliate. For purposes of this paragraph, to "control" an entity means to own greater than 50% of the ownership interests with commensurate voting power in such entity.

3. TT AGREEMENT PURCHASE PRICE. Section 4.2(b) of the TT Agreement is hereby amended to read in its entirety as follows:

(b) If Seller does distribute an undivided interest in the Intellectual Property to Buyer in liquidation of its Interests pursuant to Section 2.2, the Purchase Price set forth in Section 4.2(a) shall be (i) with respect to Therapeutic Products, reduced pro rata to reflect Seller's reduced ownership interest in the Intellectual Property resulting from the liquidating distribution; and (ii) with respect to Diagnostic Products and

Research Products, a flat 2.00 percent. By way of example, if Buyer tenders for liquidation fifty (50.000) percent of the Interests outstanding as of the Closing, Seller shall distribute in liquidation of Buyer's Interests an undivided one-half ownership interest in the Intellectual Property and Seller will retain an undivided one-half ownership interest. The Purchase Price for a Therapeutic Product shall be reduced by half so that Buyer will pay four (4.00000) percent of the total Sales of Products under Section 4.2(a). The Purchase Price for a Diagnostic or Research Product shall remain two (2.00000) percent regardless of the Interests liquidated.

4. RIGHT OF FIRST REFUSAL. A new Section 4.9 is added to the TT Agreement, which Section reads in its entirety as follows:

4.9 RIGHT OF FIRST REFUSAL. Buyer shall have the right of first refusal to purchase a controlling interest or any interest in any AGD Affiliate upon any proposed change in ownership in such entity that would result in James E. Summerton losing control over such entity ("Triggering Event"). Transfers of interests by James E. Summerton to Summerton's children, James P., Jean and/or Daniel Summerton, shall not be considered a Triggering Event, and shall not give rise to Buyer's right of first refusal hereunder, but transfers by such children transferees to parties other than James E. Summerton would constitute a Triggering Event. Such rights of first refusal shall be exercised as follows: James E. Summerton or his children transferees (hereafter "Summerton") shall give written notice (the "Notice") of Summerton's desire to sell such interests prior to the sale, and the parties shall seek to determine the interest price as quickly as reasonably possible after such Notice. The price of the interests shall be (i) the price offered by the proposed transferee in

good faith and at arm's length; or (ii) if there is no proposed transferee or no terms have been offered by a proposed transferee, the price as determined by a neutral third party appraiser acceptable to both the AGD Affiliate and Buyer; or (iii) if a price has not been determined pursuant to the preceding subsections (i) or (ii), or the parties otherwise agree, a price mutually agreeable to both Buyer and the AGD Affiliate. If Buyer elects not to acquire the interests specified in the Notice, Summerton may sell such interests within the 60 day period following the parties' determination of the interest price, provided that the sale of such interests shall only occur at no less than the interest price as determined according to this paragraph. Once an AGD affiliate has obtained the SS license from AGD, Summerton's loss of control of AGD affiliate will not terminate this license.

5. REPORTS. Section 4.3 of the TT Agreement is hereby amended to read in its entirety as follows:

Within sixty (60) days after the end of each calendar quarter, for so long as Products are covered by unexpired Patents, Buyer shalt provide Seller with a written report setting forth the total amount of each Product sold by Buyer and Buyer Affiliates during the quarter, to whom the Products were sold, the gross invoice amount for each Sale, and the amount of any returns. At the time the report is made, Buyer shall pay Seller any amounts payable pursuant to this Section 4.

6. RECORDS. Section 4.4 of the TT Agreement is hereby amended to read in its entirety as follows:

Buyer shall maintain records concerning Sales of Products sufficient to enable Seller to verify the amounts payable under this Agreement. Seller shall have the right, through an independent auditor, to examine such records that concern Sales of Products once in any given calendar year. Seller shall bear all expenses associated with such audits.

7. COMMENCEMENT OF PAYMENT OBLIGATIONS. Section 4.6 of the TT Agreement is hereby amended to read in its entirety as follows:

The first two hundred million dollars ($200,000,000) in total cumulative worldwide Sales of Therapeutic Products by Buyer and Buyer Affiliates, collectively, are exempt from Purchase Price payments. All Sales of Diagnostic Products and Research Products by Buyer and Buyer Affiliates are subject to Purchase Price Payments as of the initial Sale without regard to any exemption.

8. NEW SCHEDULES. Section 9.1 of the TT Agreement is hereby amended to read in its entirety as follows:

Buyer and Seller shall execute a License and Option Agreement shown in SCHEDULE 9.1. In addition, the parties hereby enter into a License for Small-Scale Products, attached hereto as Schedule 9.1.1 and a License for Diagnostic Products and Improvements, attached hereto as Schedule 9.1.2.

9. SCHEDULE 9.1 DEFINITIONS. Schedule 9.1, Section 1.3 of the TT Agreement is hereby amended to read in its entirety as follows:

"AGD Improvements" shall mean Improvements developed by AGD after the effective date of this Agreement but before January 1, 1998, and which AGD has the right to sublicense to AVI.

10. SCHEDULE 9.1 AVI IMPROVEMENTS. Schedule 9.1, Section 1.6 of the TT Agreement is hereby amended to read in its entirety as follows:

"AVI Improvements" shall mean Improvements developed by AVI after the effective date of this Agreement but before January 1, 1998, and which AVI has the right to sublicense to AGD.

11. SCHEDULE 9.1 AGD IMPROVEMENTS. Schedule 9.1 of the original TT Agreement is hereby amended to include a new Section 2.4 which reads in its entirety as follows:

Improvements to the Technology made by AGD and its licensees under the Research and Development License to AGD will be defined as "AGD Improvements" which are to be made available to AVI under the terms of Section 5 of this Schedule 9.1 of the TT Agreement.

12. SCHEDULE 9.1 CROSS LICENSES. Section 5 of Schedule 9.1 of the original TT Agreement is amended as follows:

12.1. Change in Title. The title of Section 5 of Schedule 9.1 is hereby amended to read in its entirety as follows:

5. License to AVI and Cross Licenses of Improvements.

12.2. Change in Numbering of Section 5.4. Section 5.4 of Schedule 9.1, relating to the confidentiality of AGD improvements, is hereby renumbered 5.5 and is otherwise left intact.

12.3. New Section 5.4. A new Section 5.4 is hereby added to Schedule 9.1, which reads in its entirety as follows:

5.4 The parties grant each other the following cross-licenses. AGD agrees to grant to AVI a royalty-free non-exclusive license to make, use, sell, and sublicense any improvements made by AGD before January 1, 2000 relating to preparation of Morpholino subunits and/or assembly of said subunits into Morpholino polymers. AVI agrees to grant to AGD a royalty-free non-exclusive license to make, use, sell, and sublicense any improvements made by AVI before January 1, 2000 relating to preparation of Morpholino subunits and/or assembly of said subunits into Morpholino polymers.

IN WITNESS WHEREOF, the parties hereby execute this Amendment to the Technology Transfer Agreement, effective as of the later of the dates of signature by the representatives of AVI and AGD below.

ANTIVIRALS Inc.

By: /s/ Denis Burger

Denis Burger, Ph.D.
Chief Executive Officer

Date: 1/20/97

ANTI-GENE DEVELOPMENT GROUP

By: /s/ James E. Summerton

James E. Summerton, Ph.D.
Sole General Partner

Date: January 20, 1997

SCHEDULE 9.1.1

License for Small-Scale Products

1. SMALL-SCALE PRODUCTS LICENSE TO AGD

AVI hereby grants to AGD a license to Small-Scale Products (SS Products), with right to sublicense to AGD Affiliates, to make, have made, use, and sell SS Products, and to make, have made, and use subunits and other components in amounts not to exceed that required for assembly and use of SS Products. This license (the "SS Product License") is to be exclusive with respect to, and only with respect to selling SS Products. AGD and AGD Affiliates agree to label all SS products with the phrase "Not for use in humans."

2. ROYALTY

AGD shall pay AVI as a royalty four (4.00) percent of the total Sales of SS Products sold by AGD and AGD Affiliates, where Sales of SS Products shall mean total worldwide sales of SS Products by AGD and AGD Affiliates to any entity other than AGD and AGD Affiliates at the Gross Invoice Amount minus returns, where returns comprise compensation to the purchaser of the SS Product for SS Products returned to AGD or AGD Affiliates. Gross Invoice Amount shall mean all money and other valuable consideration paid to AGD and AGD Affiliates in exchange for SS Products.

3. INFORMATION FOR MAKING AND USING SS PRODUCTS

Unless requested earlier by AGD, in December of 1997 AVI will convey to AGD written "Information for Making and Using SS Products." This Information for Making and Using SS Products shall comprise the best ways known to AVI to make and use SS Products as of the date of conveyance of said Information for Making and Using SS Products. No other rights to transfer information concerning any other AVI Improvements are implied or granted by this SS Products License. If AGD shares information on AVI Improvements other than "Information for Making and Using SS Products," with a sublicensee for SS Products, except where expressly allowed by a separate AVI license to AGD, that sublicensee shall also be considered to be a Research and Development Licensee and any and all Improvements to the Technology made by that sublicensee will be defined as AGD improvements which are to be made available to AVI under the terms of Section 5 of Schedule 9.1 of the TT Agreement.

4. CONFIDENTIALITY OF INFORMATION

AGD may not disclose the Technology or any AVI Improvements described in the Information for Making and Using SS Products that are not in the public domain unless: (a) the recipient has entered into a written agreement acceptable to AVI under which the recipient agrees to restrictions on disclosure, use and transfer of the Technology and AVI Improvements, and (b) AVI has consented in writing to the disclosure, use, and transfer, which consent shall not be unreasonably withheld.

5. EXEMPTION

AVI's provision of Small-Scale Products to a for-profit entity as part of a contract which includes testing and assessment of Products by said for-profit entity, where said contract is for an amount not less than $100,000, shall not

be construed as infringing the "exclusive with respect to selling SS Products" clause of this SS Products license to AGD. It is understood that AVI is free to provide SS Products to any of its collaborators at no charge (including, without limitation in arrangements such as the 1995 option arrangement with Abbott Laboratories). Further, it is understood that AVI may sell SS Products to a given collaborator is those sales are part of a contract with a value of not less than $100,000 for the purchase of SS Products.

6. EFFECTIVE DATE

The effective date of this SS Products License shall be when both AVI and AGD have signed the Amendment to which this is Schedule 9.1.1, except that the exclusivity of the SS Product License granted to AGD under Section 1 above will only become effective at the time AGD or AGD Affiliate demonstrates a capability to prepare at lease 10 different 20-mer Morpholino polymers in a 2 week period and two such representative Morpholino polymers exhibit on a per mass basis in a cell-free translation system at least 60% of the efficacies of corresponding highly-purified Morpholino polymers prepared by AVI.

7. TERMINATION OF PAYMENT OBLIGATIONS

AGD's obligation to make royalty payments to AVI for any given SS Product shall end upon the expiration of all AVI patents claims that cover that SS Product.

8. TERMINATION OF SS PRODUCT LICENSE

Either party may terminate this SS Products License for any material breach by the other party that remains uncured 90 days after that party receives notice of the breach from the non-breaching party, except that if a dispute arises with respect to AGD's payment of royalties, AVI shall be entitled to terminate this SS Products License only after the arbitration process set forth in Section 14.

9. OBLIGATION TO EXPLOIT

Subsequent to the year 1999 AGD must pay AVI a royalty of at least $10,000 per year for this SS Products License. If the royalty paid is less than this amount the exclusivity granted to AGD to the SS Product License under Section 1 shall automatically terminate.

10. DISCLAIMER OF WARRANTY

AVI makes no warranty whatsoever, express or implied, including without limitation a warranty of merchantability or fitness, with respect to Technology, AVI Improvements, or SS Products licensed to AGD pursuant to this Amendment, which SS Products AGD takes "as is".

11. REPORTS

Within sixty (60) days after the end of each calendar quarter, for so long a SS Products are covered by unexpired AVI Patents, AGD shalt provide AVI with a written report setting forth the total amount of each Product sold by AGD and AGD Affiliates during the quarter, the gross invoice amount for each Sale, and the amount of any returns. At the time the report is made, AGD shall pay AVI any amounts payable pursuant to this SS Products License.

12. RECORDS

AGD shall maintain records concerning Sales of SS Products sufficient to enable AVI to verify the amounts payable under this SS Products License. AVI shall have the right, through an independent auditor, to examine such records that concern Sales of SS Products once in any given year. AVI shall bear all

expenses associated with such audits.

13. LATE PAYMENTS

If AGD fails to make any royalty payments due to AVI from this SS Products License when due, AGD shall pay AVI interest on the amount past due at a rate equal to the "Prime Rate" reported in the Wall Street Journal on the date payment is due, plus 7.5% per annum.

14. PAYMENT DISPUTES

(a) Any dispute between the parties concerning payment of royalty payments on this SS Products License shall be settled by binding arbitration in accordance with the rules of the American Arbitration Association. The arbitration shall be held in Portland, Oregon before three (3) arbitrators who are knowledgeable about the industry and markets for the SS Products. Judgment upon the arbitrators' award may be entered in any court having jurisdiction. This agreement to arbitrate shall apply only to disputes concerning royalty payments in this SS Products License and shall not prevent either party from seeking judicial relief in connection with other matters relating to this SS Product License. The prevailing party in any such arbitration proceeding shall be entitled to recover reasonable costs and attorneys fees at the arbitration and in connection with any judicial proceeding to enforce the arbitration award.

(b) If AVI believes AGD has refused to make royalty payments in bad faith, AVI may request that the arbitrators make a finding of AGD's bad faith refusal to pay. The parties agree that such a finding of bad faith shall not be made unless there is clear and convincing evidence that AGD knew the payment was owing and refused to make the payment. AGD may appeal any finding of bad faith to any court having jurisdiction and the court shall review any finding of bad faith de novo.

(c) If the arbitrators make a finding of bad faith under Section 14(b) above in three (3) separate proceedings relating to three (3) separate payment disputes involving SS Products in a single year, AVI shall have the right, upon notice to AGD, to terminate this SS Products License.

15. CHOICE OF LAW

The construction and performance of this SS Products License will be governed by the laws of the state of Oregon (except for conflicts of law provisions thereof.)

16. EXPENSES

Each party to this SS Products License shall pay its own expenses incident to the negotiation, execution, delivery and performance of this SS Products License.

17. NOTICES

Any notice or other communication required or permitted under this Agreement shall be in writing and shall be sent by certified mail, return receipt requested, or by hand delivery:

If to AVI, to the following address:

ANTIVIRALS Inc.
One SW Columbia, Suite 1105
Portland, Oregon 97258
Attention: Denis Burger

With a copy to:

ANTIVIRALS Inc.
4575 SW Research Way, Suite 200
Corvallis, Oregon 97333
Attention: Alan Timmins

If to AGD, to the following address:

ANTI-GENE DEVELOPMENT GROUP
Attention: James E. Summerton
P.O. Box 2210
Corvallis, Oregon 97339

With a copy to:

James E. Summerton
General Partner of AGDG
3107 N.W. Norwood Pl.
Corvallis, Oregon 97330

Unless otherwise provided in this SS Products License, all notices and communications shall be deemed to have been duty given or made (i) When delivered by hand, (ii) five business days after being deposited in the U.S. mail, postage prepaid, as registered or certified mail, return receipt requested. The address to which notices or other communications shall be directed may be changed from time to time by any party by giving written notice to the other parties of the substituted address.

18. ATTORNEY FEES

If a suit or action is filed by either party to enforce the provisions of this SS Products License, or otherwise with respect to the subject matter of this SS Products License, the prevailing party shall be entitled to recover reasonable attorneys' fees and expenses (including, but not limited to those fees and expenses permitted or defined by statute) as fixed by the trial court, and if any appeal is taken from the decision of the trial court, as affixed by the appellate court.

19. SUCCESSORS AND ASSIGNS

This SS Products License will be binding upon and inure to the benefit of each of the parties and its successors and assigns; provided that no party may assign its rights under this SS Products License agreement without the consent of the other party, which consent shall not unreasonably be withheld.

20. AMENDMENT

No supplement, modification or amendment of, or waiver with respect to, this SS Products License shall be binding unless executed in writing. This SS Product License agreement may be modified, amended, or terminated upon the written agreement of both parties.

21. CONSENTS

Any consent required by this SS Products License shall be effective only if given in a writing executed by the party giving the consent.

22. HEADINGS

The headings in this SS Products License are solely for convenience of reference and shall not limit or otherwise affect the meaning of this SS

Products License.

23. SEVERABILITY

If any part of this SS Products License is found invalid or unforceable, it shall be enforced to the maximum extent permitted by law, and other parts of this SS Products License will remain in force.

24. ENTIRE LICENSE

This SS Products License, whose terms comprise Schedule 9.1.1 of the 1997 Amendment to the 1993 TT Agreement between AGD and AVI, constitutes the entire license pertaining to SS Products and supersedes all prior agreements and understandings of the parties in connection therewith. No covenant, representation or condition not expressed in this SS Products License will affect or be effective to interpret, change or restrict, the express provisions of this SS Products License.

SCHEDULE 9.1.2

License for Diagnostic Products and Improvements

1. AVI GRANT OF DIAGNOSTIC PRODUCTS AND IMPROVEMENTS LICENSE TO AGD

AVI grants to AGD a non-exclusive license (the "DPI license"), with right to sublicense to AGD Affiliates, to the Diagnostic Products and AVI Improvements relating thereto, as defined in the 1993 TT Agreement and the 1997 amendment thereto. The DPI license is to make, have made, use, and sell Diagnostic Products and AVI Improvements relating thereto (DPI), and to make, have made, and use subunits and other components of DPI in amounts not to exceed that required for assembly and use of DPI. AVI also grants to AGD the right to develop and patent "undeveloped AVI ideas relating to diagnostics" (Undeveloped Ideas), where Undeveloped Ideas are defined as AVI ideas relating to diagnostics which have not been reduced to practice as of the effective date of this DPI license. This right to develop and patent Undeveloped Ideas is non-exclusive and is only effective if "develop and patent" includes an actual reduction to practice. The right to develop and patent the Undeveloped Ideas shall not eliminate AGD's responsibility to pay royalties upon the sale of any DPI as set forth in Section 2 below.

2. ROYALTY

AGD shall pay AVI as a royalty four (4.00) percent of the total Sales of DPI sold by AGD and AGD Affiliates, where Sales of DPI shall mean total worldwide sales of DPI by AGD and AGD Affiliates to any entity other than AGD and AGD Affiliates at the Gross Invoice Amount minus returns, where returns comprise compensation to the purchaser of the DPI for DPI returned to AGD or AGD Affiliates. Gross Invoice Amount shall mean all money and other valuable consideration paid to AGD and AGD Affiliates in exchange for DPI.

3. INFORMATION FOR MAKING AND USING DIAGNOSTIC PRODUCTS AND AVI IMPROVEMENTS RELATING THERETO (DPI INFORMATION)

Upon request by AGD, but not later than December 1997, AVI will convey to AGD written DPI Information. This DPI Information shall comprise only the specific information described in Exhibit A. No other rights to transfer information concerning any other AVI Improvements are implied or granted by this DPI license. If AGD shares information on AVI Improvements other than "DPI Information," with a sublicensee for DPI, except where expressly allowed by a separate AVI license to AGD, that sublicense shall also be considered to be a Research and Development licensee and any and all Improvements to the Technology made by that sublicensee will be defined as AGD Improvements which have to be made available to AVI under the terms of Section 5 of Schedule 9.1 of the TT

Agreement.

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4. CONFIDENTIALITY OF DPI INFORMATION

AGD may not disclosed the Technology or any AVI Improvements described in the DPI Information that are not in the public domain unless: (a) the recipient has entered into a written agreement acceptable to AVI under which the recipient agrees to restrictions on disclosure, use and transfer of the Technology and AVI Improvements, and (b) AVI has consented in writing to the disclosure, use, and transfer, which consent shall not be unreasonably withheld.

5. EFFECTIVE DATE

The effective date of this DPI license shall be the date when both AVI and AGD have signed the Amendment to which this is Schedule 9.1.2.

6. TERMINATION OF PAYMENT OBLIGATIONS

AGD's obligation to make royalty payments to AVI for any given DPI shall end upon the expiration of all AVI patents containing claims that cover that DPI.

7. TERMINATION OF DPI LICENSE

Either party may terminate this DPI License for any material breach by the other party that remains uncured 90 days after that party receives notice of the breach from the non-breaching party, except that if a dispute arises with respect to AGD's payment of royalties, AVI shall be entitled to terminate this DPI license only after the arbitration process set forth in Section 12.

8. DISCLAIMER OF WARRANTY

AVI makes no warranty whatsoever, express or implied, including without limitation a warranty of merchantability or fitness, with respect to Technology, AVI Improvements, or DPI licensed to AGD pursuant to this Amendment, which AVI Improvements or DPI AGD takes "as is".

9. REPORTS

Within sixty (60) days after the end of each calendar quarter, for so long as DPI are covered by unexpired AVI Patents, AGD shall provide AVI with a written report setting forth the total amount of each DPI sold by AGD and AGD Affiliates during the quarter, the gross invoice amount for each Sale, and the amount of any returns. At the time the report is made, AGD shall pay AVI any amounts payable pursuant to this DPI license.

10. RECORDS

AGD shall maintain records concerning Sales of DPI sufficient to enable AVI to verify the amounts payable under this DPI license. AVI shall have the right, through an independent auditor, to examine such records that concern Sales of DPI once in any given year. AVI shall bear all expenses associated with such audits.

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11. LATE PAYMENTS

If AGD fails to make any royalty payments due to AVI from this DPI license when due, AGD shall pay AVI interest on the amount past due at a rate equal to

the "Prime Rate" "Prime Rate" reported in the Wall Street Journal on the date payment is due, plus 7.5% per annum.

12. PAYMENT DISPUTES

(a) Any dispute between the parties concerning payment of royalty payments on this DPI license shall be settled by binding arbitration in accordance with the rules of the American Arbitration Association. The arbitration shall be held in Portland, Oregon, before three (3) arbitrators who are knowledgeable about the industry and markets for diagnostics. Judgment upon the arbitrators' award may be entered in any court having jurisdiction. This agreement to arbitrate shall apply only to disputes concerning royalty payments on this DPI license, and shall not prevent either party from seeking judicial relief in connection with other matters relating to this DPI license. The prevailing party in any such arbitration proceeding shall be entitled to recover reasonable costs and attorneys fees at the arbitration and in connection with any judicial proceeding to enforce the arbitration award.

(b) If AVI believes AGD has refused to make royalty payments in bad faith, AVI may request that the arbitrators make a finding of AGD's bad faith refusal to pay. The parties agree that such a finding of bad faith shall not be made unless there is clear and convincing evidence that AGD knew the payment was owing and refused to make the payment. AGD may appeal any finding of bad faith to any court having jurisdiction and the court shall review any finding of bad faith de novo.

(c) If the arbitrators make a finding of bad faith under Section Section 12(b) above in three (3) separate proceedings relating to three (3) separate payment disputes involving DPI in a single year.

13. CHOICE OF LAW

The construction and performance of this DPI license will be governed by the laws of the state of Oregon (except for conflicts of law provisions thereof).

14. EXPENSES

Each party to this DPI license shall pay its own expenses incident to the negotiation, execution, delivery and performance of this DPI license.

15. NOTICES

Any notice or other communication required or permitted under this Agreement shall be in writing and shalt be sent by certified mail, return receipt requested, or by hand delivery.

If to AVI, to the following address:
ANTIVIRALS Inc.
One SW Columbia, Suite 1105
Portland, Oregon 97258
Attention: Denis Burger

With a copy to:
ANTIVIRALS Inc.
4575 SW Research Way, Suite 200
Corvallis, Oregon 97333
Attention: Alan Timmins

If to AGD, to the following address:
ANTI-GENE DEVELOPMENT GROUP
Attention: James E. Summerton
P.O. Box 2210

Corvallis, Oregon 97339

With a copy to:

James E. Summerton
General Partner of AGDG
3107 N.W. Norwood Pl.
Corvallis, Oregon 97330

Unless otherwise provided in this DPI license, all notices and communications shall be deemed to have been duly given or made (i) when delivered by hand, (ii) five business days after being deposited in the U.S. mail, postage prepaid, as registered or certified mail, return receipt requested. The address to which notices or other communications shall be directed may be changed from time to time by any party by giving written notice to the other parties of the substituted address.

16. ATTORNEY FEES

If a suit or action is filed by either party to enforce the provisions of this DPI license, or otherwise with respect to the subject matter of this DPI license, the prevailing party shall be entitled to recover reasonable attorneys' fees and expenses (including, but not limited to those fees and expenses permitted or defined by statute) as fixed by the trial court, and if any appeal is taken from the decision of the trial court, as affixed by the appellate court.

17. SUCCESSORS & ASSIGNS

This DPI license will be binding upon and inure to the benefit of each of the parties and its successors and assigns; provided that no party may assign its rights under this license agreement without the consent of the other party, which consent shall not unreasonably be withheld.

18. AMENDMENT

No supplement, modification or amendment of, or waiver with respect to, this DPI license shall be binding unless executed in writing. This DPI license may be modified, amended, or terminated upon the written agreement of both parties.

19. CONSENTS

Any consent required by this DPI license shall be effective only if given in a writing executed by the party giving the consent.

20. HEADINGS

The headings in this DPI license are solely for convenience of reference and shall not limit or otherwise affect the meaning of this DPI license.

21. SEVERABILITY

If any part of this DPI license if found invalid or unenforceable, it shall be enforced to the maximum extent permitted by law, and other parts of this DPI license will remain in force.

22. ENTIRE LICENSE

This DPI license, whose terms comprise Schedule 9.1.2 of the 1997 Amendment to the 1993 TT Agreement between AGD and AVI, constitutes the entire license pertaining to DPI and supersedes all prior agreements and understandings of the parties in connection therewith. No covenant,

representation or condition not expressed in this DPI license will affect or be effective to interpret, change or restrict, the express provisions of this DPI license.

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EXHIBIT A

DPI Information

Below is a listing of specific notebooks which comprise the agreed upon DPI Information. This notebook information constitutes the entire DPI Information.

Notebook Designation	Notebook Title	Dates of Entries
J. Summerton Notebook	Diagnostics 1	Jan. 20, 1993 - May 1, 1993
J. Summerton Notebook	Diagnostics 2	May 1, 1983 - July 16, 1994
AVI 9	Diagnostics 3	July 17, 1994 - Dec. 23, 1994
AVI 10	Diagnostics 4	Dec. 24, 1994 - Jan. 27, 1995
AVI 29	Diagnostics 5	Jan. 30, 1985 - Mar. 4, 1995
AVI 32	Diagnostics 6	Mar. 4, 1995 - Apr. 4, 1995
AVI 33	Diagnostics 7	Apr. 4, 1995 - Apr. 26, 1995
AVI 38	Diagnostics 8	Apr. 26, 1995 - Oct. 31, 1995
AVI 57	Diagnostics 9	Oct. 31, 1995 - Dec. 24, 1995

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ANTIVIRALS Inc. (AVI) hereby provides its consent to ANTI-GENE DEVELOPMENT GROUP (AGD) to allow the transfer to and use by a single sublicensee of AGD of "Information for Making and Using SS Products" and "DPI Information," where "Information for Making and Using SS Products" and "DPI Information" are as defined in the 1997 Amendment to the 1993 Technology Transfer Agreement between AGD and AVI. In return for this AVI consent to allow transfer to and use of said information by a sublicensee of AGD, said sublicensee agrees not to disclose to any other entity any of said information, excepting that which is already in the public domain, and to abide by all terms necessary for its licensor, AGD, to fulfill AGD's license obligations to AVI under the terms in Schedules 9.1.1 and 9.1.2 of the 1997 Amendment to the 1993 Technology Transfer Agreement between AGD and AVI.

By: /s/ Denis Burger

Denis Burger, Ph.D.
Chief Executive Officer
ANTIVIRALS Inc.

Date: 1/20/97

By: /s/ James E. Summerton

President
_____ (Sublicensee of AGD)

Jan. 20, 1997

LICENSE AND OPTION AGREEMENT

This License and Option Agreement is by and between ANTI-GENE DEVELOPMENT GROUP, an Oregon limited partnership ("AGD") and ANTIVIRALS Inc., an Oregon corporation ("AVI").

RECITALS

A. AGD and AVI are parties to a Technology Transfer Agreement (the "Transfer Agreement") under which AGD has conveyed to AVI certain Technology, as more fully described in the Transfer Agreement.

B. Each party wishes to grant to the other certain rights with respect to the Technology and Improvements thereto.

AGREEMENT

In consideration of the above and of the promises and covenants contained herein, the parties agree as follows:

1. DEFINITIONS.

1.1 Unless otherwise set forth in this Agreement, the terms used in this Agreement shall have the meanings given to them in the Transfer Agreement.

1.2 "AGD Affiliate" shall mean AGD Licensees, other than AVI, and any entity other than AVI that controls, is controlled by or is under common control with AGD.

1.3 "AGD Improvements n shall mean Improvements developed by AGD after the effective date of this Agreement but before January 1, 2000, and which AGD has the right to sublicense to AVI.

1.4 "AGD Licensee" shall mean any person, corporation or other entity, other than AVI, that obtains a right granted by AGD or an AGD Affiliate to: (a) make a Proposed Product or Related Product; (b) make a Proposed Product or Related Product and use that Proposed Product or Related Product; (c) make a Proposed Product or Related Product and sell that Proposed Product or Related Product; (d) have a Proposed Product or Related Product made on behalf of said entity and use that Proposed Product or Related Product; (e) have a Proposed Product or Related Product made on behalf of said entity and sell that Proposed Product or Related Product; or, (f) use a method claimed in a patent covering an AVI Improvement.

1.5 "AVI Affiliate" shall have the meaning given to Buyer Affiliate" in the Transfer Agreement.

1.6 "AVI Improvements" shall mean Improvements developed by AVI after the effective date of this Agreement but before January 1, 2000, and which AVI has the right to license to AGD.

1.7 "Improvements" shall mean documented improvements to the Technology comprising inventions, discoveries, trade secrets, formulas, techniques, processes, and know-how, whether or not patented and whether or not reduced to practice, which are derived from, incorporate, or are based upon, are adducts to, or which relate to making or using the Technology.

1.8 "Licensed Product" shall mean any product with respect to which AVI obtains a license under Section 5 of this Agreement.

1.9 "Polymer" shall mean a single molecular specie of nucleic acid binding polymer incorporating one or more aspects of the Technology and/or Improvements.

1.10 "Proposed Product" shall have the meaning set forth in Section 3.1.

1.11 "Related Product" shall mean, with respect to any Proposed Product, all related products which have the same or similar structural type and adducts which achieve substantially the same biological effect and which are targeted against the same pathogen specie or cellular gene as the Proposed Product.

2. RESEARCH AND DEVELOPMENT LICENSE TO AGDG.

2.1 Subject to the terms of this Agreement, AVI hereby grants to AGD a nonexclusive, royalty free license, with the right to sublicense: (a) to use the Technology and AVI Improvements and to make, have made, and use any Products incorporating the Technology and AVI Improvements internally for research and development; and (b) to make, have made, use and sell Polymers in an amount of no more than ten (10) grams per month of each single Polymer; and (c) to make, have made, and use subunits and adducts in amounts not to exceed that required for assembly of said Polymers.

2.2 AGD may not disclose the Technology or any AVI Improvements that are not in the public domain unless: (a) the disclosed or transferee has entered into a written agreement acceptable to AVI under which the disclosed or transferee agrees to restrictions on disclosure, use, and transfer of the Technology or AVI Improvements, and (b) AVI has consented in writing to the disclosure, use and transfer, which consent shall not be unreasonably withheld; provided that AGD's obligation under this Section 2.2 shall not apply to Technology or Improvements to which AGD obtains a license pursuant to Section 3 or Section 6 or to which AGD obtains ownership pursuant to section 4.8 of the Transfer Agreement.

2.3 AVI shall not enter into any agreement restricting its right to license AVI Improvements solely for the purpose of denying a license to such AVI Improvements to AGD.

3. OPTION.

3.1 If AGD develops or obtains-a specific prototype product which AVI has the right to make, use and sell and which incorporates one or more aspects of the Technology or Improvements and demonstrates at the biophysical level that said prototype product affords binding properties for its selected genetic target, AGD shall provide written notice (the "Notice") to AVI describing the product (the "Proposed Product") and shall provide AVI with such existing information and materials as AVI may reasonably request to enable AVI to evaluate the Proposed Product.

3.2 Within thirty (30) days after the date of the Notice required under Section 3.1, AVI shall notify AGD: (a) that AVI intends to begin optimization and commercialization of the Proposed Product; or (b) that AVI elects not to commercialize the Proposed Product. If AVI elects not to commercialize the Proposed Product, AVI shall grant AGD an exclusive, perpetual license, with the right to sublicense, to make, have made, use, sell, and otherwise distribute the Proposed Product and any Related Products and to make, have made, and use subunits and adducts in amounts not to exceed that required for assembly of the Proposed Product and any Related Products.

3.3 If AVI elects to begin optimization and commercialization of the Proposed Product, AVI shall take such steps as AVI, in its sole discretion, considers appropriate with respect to the Proposed Product: provided, however that AGD shall have the right, upon written notice to AVI, to obtain the license described in Section 3.2 if neither AVI nor any AVI Affiliate achieves the

milestones set forth below by the dates indicated:

(a) Commencement of cell culture studies on the Proposed Product: Nine (9) months from the date of AGD's Notice under Section 3.1.

(b) Commencement of pharmacokinetics and toxicology studies of the Proposed Product: Twenty-four (24) months from the date of AGD is Notice under Section 3.1.

(c) Commencement of clinical trials of the Proposed Product or an optimized version thereof: thirty-six (36) months from the date of AGD's Notice under Section 3.1.

3.4 For purposes of Section 3.3, a milestone shall be met for a Proposed Product if the milestone occurs with respect to an optimized version of the Proposed Product which has the same or similar structural type and adducts which achieve substantially the same biological effect and which is targeted against the same pathogen specie or cellular gene.

3.5 Notwithstanding anything in this Section 3 to the contrary, AGD shall not have any rights under this Section 3 with respect to any Proposed Product as to which AVI or any AVI Affiliate has commenced large scale production prior to the date of AGD's Notice for so long as such large scale production continues. For purposes of this Section 3.5, Proposed Product includes Related Products and "large scale production" shall mean production of more than ten (10) grams each month.

4. ROYALTIES.

4.1 For any license granted by AVI to AGD pursuant to Section 3 of this Agreement which covers a Proposed Product or Related Product that does not incorporate a patented AVI Improvement, the license shall be royalty free.

4.2 For any license granted by AVI to AGD pursuant to Section 3 of this Agreement which covers a Proposed Product or Related Product that incorporates a patented AVI Improvement, AGD shall pay AVI as a royalty a percentage of the total Sales of each Proposed Product by AGD and any AGD Affiliate, which percentages shall be equal to the applicable percentages AVI is required to pay AGD as Purchase Price payments pursuant to the Transfer Agreement; provided, however, that AGD's obligation to pay royalties under this section shall be limited to Proposed Products and Related Products, the sale of which would infringe a patent owned by AVI in the absence of this Agreement. For purposes of this section 4 2, "Sales" shall mean the total worldwide sales of Proposed Products and Related Products by AGD and AGD Affiliates, subject to the terms applicable to Sales by AVI under the Transfer Agreement.

4.3 AGD's obligation to pay royalties pursuant to this Section 4 shall be subject to all of the terms applicable to AVI's obligation to make Purchase Price payments set forth in Sections 4.3, 4.4, 4.5, 4.6, and 4.8 of the Transfer Agreement.

5. LICENSE TO AVI OF AGD IMPROVEMENTS.

5.1 Subject to the terms of this Agreement, AGD hereby grants to AVI a non-exclusive license, with the right to sublicense, to make, have made, use, and sell products incorporating AGD Improvements (a "Licensed Product").

5.2 AVI shall pay AGD as a royalty a percentage of the total Sales of each Licensed Product AVI or any AVI Affiliate sells, which percentages shall be equal to the applicable percentages AVI is required to pay AGD as Purchase Price payments pursuant to the Transfer Agreement; provided, however, that AVI's obligation to pay royalties under this section shall be limited to Licensed Products the sale of which would infringe a patent owned by AGD in the absence of this Agreement; and provided further that AVI shall have no

obligation under this Section 5.2 with respect to Licensed Products covered by one or more unexpired Patents owned by AVI. AVI's obligation with respect to Licensed Products covered by one or more unexpired Patents owned by AVI shall be limited to AVI's obligation to make Purchase Price payments pursuant to the Transfer Agreement.

5.3 AVI's obligation to pay royalties pursuant to this Section 5 shall be subject to all of the terms of AVI's obligation to make Purchase Price payments set forth in Sections 4.3, 4.4, 4.5, 4.6 and 4.8 of the Transfer Agreement; provided that the parties intend the exemption granted under Section 4.6 for the first two hundred million dollars ($200,000,000) in AVI and AVI Affiliate Sales to apply only once, so that Sales of Licensed Products under this Section 5 shall no longer be exempt once AVI and AVI Affiliates achieve the first two hundred million dollars in worldwide Sales of Products and Licensed Products.

5.4 AVI will maintain the confidentiality of all information about AGD Improvements that is not in the public domain unless: (a) the disclosed has entered into a written agreement acceptable to AGD under which the disclosed agrees to restrictions on disclosure, use,

and transfer of the AGD Improvements, and (b) AGD has consented in writing to the disclosure or transfer, which consent shall not unreasonably be withheld.

6. OBLIGATION TO EXPLOIT.

If after January 1, 1994, AVI and AVI Affiliates together effectively cease development of Products based on the Technology, as evidenced by AVI, AVI Affiliates, and/or their successors and assigns in the aggregate having for a period of more than 180 consecutive days less than the equivalent of ten (10) full time employees devoted to development, testing, commercialization, production and/or sales of one or more products based on the Technology, then, upon request by AGD, AVI will grant to AGD an exclusive royalty-free license, with right to sublicense, to make, have made, use, sell, or otherwise distribute the Products, to practice the Technology, and to use the Trademarks.

7. DISCLAIMER OF WARRANTY.

Neither party makes any warranty whatsoever with respect to Technology;and Improvements licensed pursuant to this Agreement or any Products, Licensed Products, Proposed Products or Related Products. Each party's rights under this Agreement are limited to whatever rights that party has in the Technology and Improvements transferred.

8. FURTHER ASSISTANCE.

Each party shall take such actions and execute and deliver such other documents as, in the reasonable opinion of counsel for the other party, may be necessary to evidence the rights and interests of the requesting party hereunder.

9. OTHER PROVISIONS.

The provisions set forth in Section 14 of the Transfer Agreement are applicable to this Agreement and are incorporated herein by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of _____, 1993.

ANTIVIRALS INC.

By: ----------
Denis Burger, Ph.D, President

ANTI-GENE DEVELOPMENT GROUP

By: ----------

James E. Summerton, Ph.D,
General Partner

COMMERCIAL LEASE

RESEARCH WAY INVESTMENTS

LANDLORD

ANTIVIRAL, INC.

TENANT

LEASE

For and in consideration of the Rent and other sums to be paid by Tenant to Landlord under this Lease, and of the covenants and agreements hereinafter set forth to be kept and performed by Tenant, Landlord hereby leases, to Tenant and Tenant hereby leases from Landlord the Premises for the term, at the rental and subject to and upon all of the terms, covenants, conditions and agreements hereinafter set forth:

1. PREMISES:

1.1 DESCRIPTION. The Premises comprise the area described in PARAGRAPH D OF THE SUMMARY OF LEASE TERMS, and are shown as crosshatched on EXHIBIT A attached hereto and made a part hereof.

1.2 NET RENTABLE AREA DEFINED. The term "Net Rentable Area" is hereby defined for the purposes of this Lease to mean the area of space leased by Tenant (or, in the case of the entire Building, leasable) computed by measuring to the inside finish of permanent outer building walls, to the Premises side of public corridors and/or other permanent partitions and to the center of partitions which separate the adjoining rentable areas, with no deductions for columns and projections in the Building. On multi-tenant floors, common corridors and toilets, air conditioning rooms, fan rooms, janitorial closets, electrical and telephone closets and any other areas serving that floor are considered common area and for purposes of this Section shall be allocated pro rata to the tenants. Tenant acknowledges that Tenant has measured or has waived measurement of the Net Rentable Area of the Premises and Building and Tenant agrees that the square footage stated in PARAGRAPH D OF THE SUMMARY OF LEASE TERMS is the Net Rentable Area for the Premises and Building calculated on the basis of the foregoing definition and Tenant further agrees to waive any right to contest the amount of such square footage.

2. TERM:

2.1 TERM. The term of this Lease shall be for a period commencing as of the Commencement Date (as defined in PARAGRAPH E OF THE SUMMARY OF LEASE TERMS) and continuing to and including the Expiration Date (as defined in PARAGRAPH E OF THE SUMMARY OF LEASE TERMS) unless sooner terminated pursuant to this Lease.

2.2 DELAY IN COMMENCEMENT. Tenant agrees that in the event of the inability of Landlord for any reason whatsoever to deliver possession of the Premises to Tenant on the Commencement Date, Landlord shall not be liable for

any damage suffered thereby nor shall such inability affect the validity of this Lease or the obligations of Tenant hereunder, but in such case there shall be a proportionate reduction in Fixed Rent and Tenant's Percentage Share of Operating Costs and Taxes until possession of the Premises is tendered to Tenant. No delay in the delivery of possession shall extend the term hereof beyond the Expiration Date.

2.3 EARLY OCCUPANCY. In the event the Premises are ready for occupancy prior to the Commencement Date, Tenant shall have the right to take possession of the Premises on such date as Landlord and Tenant shall agree upon in writing, and notwithstanding the Commencement Date, the term of this Lease and the obligation of Tenant to pay Rent and all other monetary sums to be paid by Tenant under this Lease (whether or not payable directly to Landlord) shall begin on such date; provided, however, that the Expiration Date in all events shall remain unchanged.

2.4 ACKNOWLEDGMENT OF COMMENCEMENT DATE. In the event the Commencement Date is other than as specified in PARAGRAPH E OF THE SUMMARY OF LEASE TERMS, Landlord and Tenant shall execute a written acknowledgment of the actual date of commencement which shall be deemed to be the Commencement Date.

2.5 OPTION TO TERMINATE. Landlord shall have the option to terminate this Lease if Landlord intends to demolish or substantially alter all or a substantial portion of the Building. Landlord shall exercise this option by written notice given to Tenant no less than nine (9) months prior to the effective date of such termination.

3. RENT:

3.1 FIXED RENT. Tenant agrees to pay to Landlord the Fixed Rent (as set forth in PARAGRAPH F OF THE SUMMARY OF LEASE TERMS) in equal monthly installments in advance on the first day of each calendar month of the term of this Lease without deduction, offset, prior notice or demand, in lawful money of the United States, at the office of Landlord at Landlord's address for notice as specified in PARAGRAPH M OF THE SUMMARY OF LEASE TERMS or at such other place as designated by Landlord (the "Fixed Rent"). If the Commencement Date is not the first day of a month, or if the Expiration Date is not the last day of a month, a prorated monthly installment shall be paid at the then current rate for the fractional month during which the Lease commences and/or expires. It is the responsibility of Tenant to ensure that the Rent arrives at the above-mentioned place on or before the due date. If the due date is a weekend or holiday, then Tenant must arrange for earlier delivery. Payments made by mail will be considered late if they do not arrive at the place designated by Landlord on the designated due date.

All amounts of Rent, including, without limitation, Fixed Rent, and other sums due under this Lease if not paid when due shall (i) bear interest from the due date until paid at a per annum rate equal to the lesser of (x) the maximum rate allowed by law, or (y) fifteen percent (15%) (the "Default Rate") until fully paid, and (ii) incur a late charge of five percent (5%) of such unpaid amount. Landlord and Tenant agree that the amount of such interest and late charge is fair and reasonable compensation for costs and expenses incurred by Landlord due to the failure by Tenant to timely make any payment of Rent or other sums due under this Lease as such costs and expenses are extremely difficult to estimate and ascertain.

3.2 CPI ADJUSTMENTS. The amount of Fixed Rent shall be adjusted as of the expiration of each calendar year after the calendar year in which this Lease commences (the

"Adjustment Dates") to reflect any increase in the cost of living. Each

adjustment, if any, shall be calculated on the basis of the United States Department of Labor, Bureau of Labor Statistics, Consumer Price Index, All Item, All Urban Consumers for the region specified in PARAGRAPH G(i) OF THE SUMMARY OF LEASE TERMS (the "Index") as of the Commencement Date of this Lease. The Index for the month in which the sixtieth (60th) day preceding each Adjustment Date falls shall be deemed the "Adjustment Index." The Adjustment Index for determining an adjustment to Fixed Rent for a specific Adjustment Date shall be deemed the Index on the next following Adjustment Date. At the Adjustment Date, the new Fixed Rent shall be determined by multiplying the then current Fixed Rent by the percentage increase of the Adjustment Index over the Index, if any. In no event shall the Fixed Rent as so adjusted be less than the Fixed Rent in effect for the month immediately prior to such Adjustment Date. When the new Fixed Rent is determined, Landlord shall give Tenant written notice of same. If Landlord fails to give timely notice of the new Fixed Rent, the adjustment shall be retroactive to the Adjustment Date and Tenant shall pay the arrears within fifteen (15) days after being billed therefor. If at any Adjustment Date, the Index is no longer published as described in this Section, Landlord, after consultation with Tenant, shall substitute the official index published by the United States Department of Labor, Bureau of Labor Statistics or successor or similar governmental agency as may then be in existence which is most nearly equivalent thereto.

3.3 MARKET VALUE RENT ADJUSTMENT. The Fixed Rent shall be adjusted on each Adjustment Date listed in PARAGRAPH G(ii) OF THE SUMMARY OF LEASE TERMS to an amount equal to the then current fair market rental for the Premises. The Market Value Rent Adjustment is defined in and shall be determined in accordance with the provisions of PARAGRAPH G(ii) OF THE SUMMARY OF LEASE TERMS and the Addendum referred to therein. In no event shall Fixed Rent ever be reduced pursuant to the provisions of this SECTION 3.3.

3.4 RENT DEFINITION. Fixed Rent, as adjusted in accordance with the terms hereof, and any other sums due to Landlord from Tenant pursuant to this Lease shall be deemed to be "Rent" hereunder.

4. SECURITY DEPOSIT:

Concurrently with Tenant's execution of this Lease, Tenant shall deposit with Landlord the Security Deposit (as set forth in PARAGRAPH H OF THE SUMMARY OF LEASE TERMS). The Security Deposit shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants, conditions and provisions of this Lease to be kept and performed or observed by Tenant. If Tenant defaults with respect to any provision of this Lease, including, but not limited to, the provisions relating to the payment of Rent or any other monetary sums due herewith, Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or other monetary sums due herewith and/or for the payment of any other amount which Landlord may spend or become obligated by reason of Tenant's default, or to compensate Landlord for any other loss or damage which Landlord may suffer thereby. If any portion of the Security Deposit is so used or applied, Tenant shall, within ten (10) days after demand therefor, deposit cash with Landlord in an

amount sufficient to restore the Security Deposit to the full amount thereof, and Tenant's failure to do so shall be a material breach of this Lease. Landlord shall not be required to keep the Security Deposit separate from its general accounts and/or funds. If Tenant shall fully and faithfully perform all of its obligations hereunder, the Security Deposit, or any balance thereof that has not theretofore been applied by Landlord, shall be returned to Tenant, without payment of interest or other increment for its use (or, at Landlord's option, to the last assignee of Tenant's interest hereunder), within ten (10) days after the expiration of the Lease term and after Tenant has vacated the Premises. In the event of termination of Landlord's interest in this Lease, Landlord shall transfer the Security Deposit to Landlord's

successor in interest whereupon Landlord shall be released from any and all liability for the return thereof or the accounting therefor. No trust relationship is created herein between Landlord and Tenant with respect to the Security Deposit.

5. OPERATING COSTS AND REAL PROPERTY TAXES:

5.1 DEFINITIONS. For purposes of this Section and Lease, the following terms are herein defined:

(a) OPERATING COSTS: All costs and expenses of management, ownership, operation and maintenance of the Building and Property, including by way of illustration but not limited to, utilities; waste disposal; materials and supplies; insurance (unless otherwise paid for by Tenant pursuant to the provisions of SECTION 13.1 below); cost of services of independent contractors and employees (including, without limitation, wages, salaries, employment taxes and fringe benefits of such persons but excluding persons performing services not uniformly available to all Building tenants), day-to-day operation, maintenance and repair of the Premises, Building, its equipment, and the common areas, parking areas, walkways, access ways, and landscaped areas, including, without limitation, janitorial, gardening, security, elevator servicing, painting, plumbing, electrical, carpentry, heating, ventilation, air conditioning, window washing, signing and advertising; rental expense or depreciation of personal property used in the maintenance, operation, and repair of the Building; the cost of capital improvements to the Building (amortized in accordance with generally accepted accounting principles together with interest at the prevailing annual rate on the unamortized portion of such cost) made after the date of this Lease which reduce other items of Operating Costs or are required under any governmental law or regulation; provided, however, that Operating Costs shall not include Real Property Taxes (as defined in SECTION 5.1(b) below) or the taxes referred to in SECTION 5.3 below; debt service, if any, on the Building; depreciation on the Building other than depreciation on exterior window draperies provided by Landlord and carpeting in public corridors and common areas; costs of Tenant's improvements; real estate brokers' commissions; capital items other than those included in Operating Costs above; and the cost of repairs, utilities, or extra services furnished to, billed to and payable separately by, Tenant or any other lessee of the Building.

(b) REAL PROPERTY TAXES: Includes without limitation, all taxes, service payments levied or assessed wholly or partly in lieu of taxes, annual or periodic license, permit,

inspection or use fees, excises, transit charges, housing fund assessments, assessments, levies, fees or charges, general and special, ordinary and extraordinary, unforeseen as well as foreseen, of any kind which are assessed, levied, charged, confirmed, or imposed by any recorded declaration affecting the Property or by any public authority upon the Property, the Building, its operation, personal property contained therein, or the Rent payable hereunder, (but excluding taxes referred to in SECTION 5.3 below and state and federal, personal or corporate income taxes measured by the net income of Landlord from all sources), and the cost of contesting by appropriate proceedings the amount or validity of any of the aforementioned taxes.

5.2 TENANT'S PERCENTAGE SHARE OF OPERATING COSTS AND TAXES.

(a) In addition to the Fixed Rent payable during each calendar year or any portion thereof, during the term of this Lease Tenant shall pay Tenant's proportionate share of the amount of Operating Costs and Real Property Taxes paid or incurred by Landlord in such year or any portion thereof ("Tenant's Percentage Share of Operating Costs and Taxes") (as shown in PARAGRAPH I OF THE SUMMARY OF LEASE TERMS). Tenant's Percentage Share of Operating Costs and Taxes has been computed by dividing the amount of Tenant's

Net Rentable Area by the amount of Net Rentable Area for the entire Building. In the event that either Tenant's Net Rentable Area or the Building's Net Rentable Area is changed, Tenant's Percentage Share of Operating Costs and Taxes shall be appropriately adjusted by Landlord, such adjustment to be conclusive and binding on Tenant. If such change occurs during any calendar year, Tenant's Percentage Share of Operating Costs and Taxes shall be determined for that calendar year on the basis of the number of days during such calendar year each such percentage is applicable.

(b) Landlord's estimate of Tenant's Percentage Share of Operating Costs and Taxes for the first Lease Year is set forth in PARAGRAPH I OF THE SUMMARY OF LEASE TERMS. On December of each calendar year or as soon thereafter as practicable, Landlord shall give Tenant notice of its adjusted estimate of Tenant's Percentage Share of Operating Costs and Taxes for the succeeding calendar year. On or before the first day of each month during the succeeding calendar year (or in the case of the first year of the Lease, on or before the first day of each month during such first year), Tenant shall pay to Landlord one-twelfth (1/12) of such estimate or adjusted estimate. If Landlord fails to deliver such notice to Tenant in December, Tenant shall continue to pay Tenant's Percentage Share of Operating Costs and Taxes on the basis of the prior year's estimate until the first day of the next calendar month after such notice is given, provided that on such date Tenant shall pay to Landlord the amount of such estimated adjustment payable to Landlord as of January 1 of the year in question, less any portion thereof previously paid by Tenant.
(b)

(c) Within ninety (90) days after the close of each calendar year or as soon after such ninety (90) day period as practicable, Landlord shall deliver to Tenant a statement of Tenant's Percentage Share of Operating Costs and Taxes for such calendar year. If, on the basis of such statement, Tenant owes an amount that is more than the estimated payments for such calendar year previously made by Tenant, Tenant shall pay the deficiency to Landlord within fifteen (15) days after delivery of the statement. If on the basis of such

statement Tenant has paid to Landlord an amount in excess of the actual adjustment to be made for the preceding calendar year and Tenant is not in default in the performance of any of its covenants under this Lease, then Landlord, at its option, shall either promptly refund such excess to Tenant or credit the amount thereof to the Rent next becoming due from Tenant until such credit has been exhausted.

(d) In the event of any dispute as to any amount due by Tenant for Tenant's Percentage Share of Operating Costs and Taxes, Tenant shall have the right upon reasonable advance written notice to inspect Landlord's accounting records relative to Operating Costs and Real Property Taxes at the address at which Landlord maintains its records during normal business hours at any time within forty-five (45) days following the furnishing by Landlord to Tenant of such statement. If Tenant makes such timely written demand, a certification as to the proper amount of Tenant's Percentage Share of Operating Costs and Taxes shall be made by an independent public accountant designated by Landlord, which certification shall be final and conclusive. Tenant agrees to pay the cost of such certification unless it is determined that Landlord's original determination of Tenant's Share of Operating Costs and Taxes was in error by more than ten percent (10%) over Tenant's actual obligation.

(e) If this Lease (i) terminates on a day other than the last day of a calendar year, the amount of Tenant's Percentage Share of Operating Costs and Taxes payable by Tenant applicable to the calendar year in which such termination occurs, shall be prorated on the basis which the number of days from the commencement of such calendar year, to and including such termination date, bears to 360; or (ii) commences on a day other than the first day of a calendar year, the amount of Tenant's Percentage Share of Operating Costs and Taxes payable by Tenant applicable to the calendar year in which such commencement occurs, shall be prorated on the basis which the number of days from the Commencement Date, to and including the last day of the calendar year

in which the Commencement Date occurs, bears to 360.

Tenant's obligations to pay Tenant's Percentage Share of Operating Costs and Taxes for either year end adjustments or partial lease years as contemplated by subparagraphs (c) and (e) above shall survive the termination or expiration of this Lease.

5.3 OTHER TAXES PAYABLE BY TENANT. Tenant shall reimburse Landlord upon demand for, or upon Landlord's request shall pay directly to the appropriate party or entity the amount of, any and all taxes payable by Landlord (other than net income taxes) whether or not now customary or within the contemplation of the parties hereto:

(a) imposed upon, measured by or reasonably attributable to the cost or value of Tenant's equipment, furniture, fixtures and other personal property located on the Premises or by the cost or value of any leasehold improvements made in or to the Premises by or for Tenant, other than building standard improvements made by Landlord, if any, regardless of whether title to such improvements shall be in Tenant or Landlord;

(b) imposed upon or measured by the Rent payable hereunder, including, without limitation, any gross income tax or excise tax levied by the City and County in which the Premises are located, the Federal Government or any other governmental body with respect to the receipt of such rental;

(c) imposed upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion thereof; and

(d) imposed upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

In the event that it shall not be lawful for Tenant to so reimburse Landlord, the Rent payable to Landlord under this Lease shall be revised to net Landlord the same income after imposition of any such tax upon Landlord as would have been received by Landlord hereunder prior to the imposition of any such tax.

6. USE:

6.1 USE. The Premises shall be used and occupied by Tenant for the purposes stated on PARAGRAPH J OF THE SUMMARY OF LEASE TERMS and for no other purpose without the prior written consent of Landlord.

6.2 SUITABILITY. Tenant acknowledges that neither Landlord nor any officer, director, shareholder, employee or agent of Landlord has made any representation or warranty with respect to the condition of the Premises or the Building or with respect to the suitability of either for the conduct of Tenant's business, nor has Landlord agreed to undertake any modification, alteration or improvement to the Premises except as provided in this Lease. The taking of possession of the Premises by Tenant shall conclusively establish that the Premises and the Building were at such time in a satisfactory condition.

6.3 USES PROHIBITED.

(a) Tenant shall not do or permit anything to be done in or about the Premises or the Building, or bring or keep or permit to be brought or kept anything in or about the Premises or Building, which is prohibited by any Law (as defined in SECTION 6.3(b) below), or which is prohibited by, or will in any way increase the existing rate of, cause a cancellation of, or otherwise affect any fire or other insurance on the Building, or any part thereof, or any of its contents.

(b) Tenant shall at its sole cost and expense promptly comply with all applicable covenants, conditions and restrictions now or hereafter affecting the Premises, or the Building, or the Property, with all laws, rules, ordinances, regulations, directives and requirements of all federal, state, county and municipal authorities having jurisdiction over the

Premises, or the Building, or the Property ("Laws"), including without limitation those relating to health, safety, noise, environmental protection, waste disposal, water and air quality, and other environmental matters, and the use, storage and disposal of Hazardous Materials, as such term is defined in SECTION 6.4(a) below, and with the certificate of occupancy for the Premises or the Building and shall not permit anything to be done on the Premises in violation thereof. Upon written demand, Tenant shall discontinue any use of the Premises in violation of any covenants, conditions and restrictions, or of any Law or of the certificate of occupancy.

(c) Tenant shall not do or permit anything to be done in, or about the Premises, or the Building, or the Property which will in any way obstruct or interfere with the rights of other tenants or occupants of the Building, or injure or annoy them, or use or allow the Premises to be used for any improper, immoral, unlawful or objectionable purpose, nor shall Tenant cause, maintain or permit any nuisance in, on, or about the Premises or the Building, or the Property nor use or permit to be used any loudspeaker, or other device, system or apparatus which can be heard outside the Premises without the prior written consent of Landlord. Tenant shall not commit or suffer to be committed any waste in or upon the Premises, the Building, or the Property.

6.4 TENANT'S OBLIGATIONS REGARDING ENVIRONMENTAL MATTERS.

(a) Tenant shall at all times and in all respects comply with all federal, state and local laws, ordinances and regulations (collectively "Hazardous Materials Laws") relating to industrial hygiene, environmental protection or the use, analysis, generation, manufacture, storage, disposal, or transportation of any oil, gasoline and related products, flammable substance or explosives, asbestos, radioactive materials or waste, or other hazardous, toxic, contaminated or polluting materials, substances, chemicals, wastes or related injurious materials, whether injurious by themselves or in combination with other materials including, without limitation, any "hazardous substances," "hazardous wastes," "hazardous materials," or "toxic substances" under any such Laws, any toxic or hazardous substance, material or waste listed in the United States Department of Transportation Table (49 CFR 172.101) or by the Environmental Protection Agency as a hazardous substance (40 CFR, Part 302) and amendments thereto, or such substances, materials and wastes which are or become regulated or listed as toxic under any applicable local, state or federal law) (collectively, "Hazardous Materials").

(b) Tenant shall at its own expense procure, maintain in effect and comply with all conditions of any and all permits, licenses and other governmental and regulatory approvals required for Tenant's use of the Premises, including, without limitation, discharge of (appropriately treated) materials or wastes into or through any sanitary sewer serving the Premises. Except as discharged into the sanitary sewer in compliance with all applicable Hazardous Materials Laws, Tenant shall cause any and all Hazardous Materials removed from the Premises to be removed and transported solely by duly licensed haulers to duly licensed facilities for final disposal of such materials and wastes as required by applicable governmental agencies having responsibility for any such removal. Tenant shall in all respects handle, treat, deal with and manage any and all Hazardous Materials in, on, under or about the Premises in compliance with all applicable Hazardous Materials Laws and prudent industry practices regarding management of such Hazardous Materials. Upon expiration or earlier termination of the term of this Lease, Tenant shall cause all Hazardous Materials in excess of levels permitted by governmental authorities to be removed from the Premises and transported for use, storage or disposal in accordance and compliance with all applicable Hazardous Materials Laws. Tenant

shall not take any remedial action in response to the presence of any Hazardous Materials in or about the

Premises or the Building, nor enter into any settlement agreement, consent decree or other compromise in respect to any claims relating to any Hazardous Materials in any way connected with the Premises or the Building, without first notifying Landlord of Tenant's intention to do so and affording Landlord ample opportunity to appear, intervene or otherwise appropriately assert and protect Landlord's interest with respect thereto.

(c) Tenant shall immediately notify Landlord in writing of: (i) any enforcement, cleanup, removal or other governmental or regulatory action instituted, completed or threatened pursuant to any Hazardous Materials Laws; (ii) any claim made or threatened by any person against Tenant, the Premises, the Building, or the Property relating to damage, contribution, cost recovery compensation, loss or injury resulting from or claimed to result from any Hazardous Materials; and (iii) any reports made to any environmental agency arising out of or in connection with any Hazardous Materials in, on, under, about or removed from the Premises, the Building, or the Property including any complaints, notices, warnings or asserted violations in connection therewith. Tenant shall also supply to Landlord as promptly as possible, and in any event within five (5) business days after Tenant first receives or sends the same, copies of all claims, reports, complaints, notices, warnings or asserted violations relating in any way to the Property, the Building, or the Premises, or Tenant's use thereof. Tenant shall promptly deliver to Landlord copies of hazardous waste manifests reflecting the legal and proper disposal of all Hazardous Materials removed from the Premises.

(d) Tenant shall indemnify, defend (by counsel reasonably acceptable to Landlord), protect, and hold Landlord, and each of Landlord's partners, employees, agents, attorneys, lenders, successors and assigns, and the Premises, the Building, and Property free and harmless from and against any and all loss of rents and/or damages, claims, liabilities, penalties, liens, judgments, forfeitures, costs, losses or expenses (including permits, and consultants' and attorneys' fees) or death of or injury to any person or damage to any property or the environment whatsoever, arising from or caused in whole or in part, directly or indirectly, by (a) the presence in, on, under or about the Premises, the Building or the Property or discharge in or from the Premises, the Building, or the Property of any Hazardous Materials caused or contributed to by Tenant, or Tenant's use, analysis, storage, transportation, disposal, release, threatened release, discharge or generation of Hazardous Materials to, in, on, under, about or from the Premises, the Building, or the Property or (b) Tenant's failure to comply with any Hazardous Materials Laws or (c) any storage tank brought onto the Premises, the Building or the Property by or for Tenant. Tenant's obligations hereunder shall include, without limitation, and whether foreseeable or unforeseeable, all costs of any required or necessary investigation (including consultants' and attorneys' fees and testing), repair, cleanup or detoxification or

decontamination of the Premises, the Building, or the Property, and the preparation and implementation of any restoration, abatement, closure, remedial action or other required plans in connection therewith, and shall survive the expiration or earlier termination of the term of this Lease. For purposes of the release and indemnity provisions hereof, any acts or omissions of Tenant, or by employees, agents, assignees, contractors or subcontractors of Tenant or others acting for or on behalf of Tenant (whether or not they are negligent, intentional, willful or unlawful) shall be strictly attributable to Tenant. No termination, cancellation or release agreement entered into by Landlord and Tenant shall release Tenant from its obligations under this Lease with respect to Hazardous Materials or storage tanks, unless specifically so agreed in writing at the time of such agreement.

7. SERVICES AND UTILITIES:

7.1 LANDLORD'S OBLIGATIONS. Provided that Tenant is not in default in the performance or observation of any of the terms, covenants, conditions or provisions of this Lease to be kept and performed or observed by it, Landlord, subject to the rules and regulations of the Building hereinafter referred to, agrees to (i) furnish to the Premises during reasonable hours of generally recognized business days (as determined by Landlord) water, gas, electricity, heating and air conditioning suitable for the intended use of the Premises; (ii) maintain and keep lighted the common stairs, entries and bathrooms in the Building and outside lighting on the Property; (iii) make all repairs other than those specified to be Tenant's obligation under this Lease; and (iv) maintain and repair, other than as specified to be Tenant's obligation under this Lease, the elevators, if any, and maintain all portions of the Property and Building used in common by Tenant and Landlord's other tenants; provided that such repair shall be at Tenant's cost and expense if damage thereto is caused by the negligence of Tenant, or Tenant's employees, agents, contractors or invitees. Tenant agrees that at all times it will cooperate fully with Landlord and abide by all regulations and requirements that Landlord may prescribe for the proper functioning and protection of any of the Building's heating, ventilation and air conditioning systems. Whenever heat generating machines or equipment are used in the Premises by Tenant which affect the temperature otherwise maintained by the air conditioning system, if any, Landlord shall have the right to install supplementary air conditioning units in the Premises, and the cost thereof, including the cost of installation, operation and maintenance thereof, shall be paid by Tenant to Landlord upon demand by Landlord with interest at the Default Rate accruing from the date Landlord incurs such costs until the time payment for same is actually received by Landlord, and Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies in the event of non-payment thereof by Tenant as in the case of failure by Tenant to pay Rent hereunder. To the extent that the cost and expense incurred by Landlord in performing its obligations in this SECTION 7.1 are not reimbursed to Landlord by insurance or individual tenants, such costs shall be included in Operating Expenses.

7.2 NON-LIABILITY. Landlord shall not be liable for, and Tenant shall not be entitled to, any abatement or reduction of Rent by reason of Landlord's failure to furnish any of the items Landlord is obligated to furnish pursuant to SECTION 7.1 above when such failure

is caused by accident, breakage, repairs, strikes, lockouts or other labor disturbances or disputes of any character; by the limitation, curtailment, rationing or restrictions on use of electricity, gas or any other form of energy; or by any other cause, similar or dissimilar, beyond the reasonable control of Landlord; and Landlord shall not be liable under any circumstances for injury to or death of any person or damage to or destruction of any property, however occurring, through or in connection with or incidental to failure to furnish any of the foregoing.

7.3 TENANT'S OBLIGATIONS. Tenant agrees it will not, without the written consent of Landlord, use any apparatus or device in the Premises (including, without limitation, electronic data processing machines, computers or machines using current in excess of 110 volts) which will in any way increase the amount of electricity, water or air conditioning usually furnished or supplied to the Premises for the purposes allowed pursuant to SECTION 6.1 above or connect with electric current (except through existing electrical outlets in the Premises) or with water pipes any apparatus or device for the purposes of using electric current or water. If Tenant shall require water or electrical current in excess of that usually furnished or supplied to the Premises as used for the purposes allowed pursuant to SECTION 6.1 above, Tenant shall first obtain the written consent of Landlord, and Landlord may cause an electric current or water meter to be installed in the Premises in order to measure the amount of electric current or water consumed for any such excess use. The cost

of any such meter and of the installation, maintenance and repair thereof; all charges for such excess water and electric current consumed (as shown by such meters and at the rates then charged by the furnishing public utility); and any additional expense incurred by Landlord in keeping account of electric current or water so consumed shall be paid by Tenant, and Tenant agrees to pay Landlord therefor promptly upon demand by Landlord, and Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies in the event of non-payment thereof by Tenant as in the case of failure by Tenant to pay Rent hereunder.

7.4 ADDITIONAL SERVICES. Landlord agrees to make reasonable effort to provide utilities and services to the Premises during hours and on days not otherwise provided in this Lease upon written request by Tenant. Tenant shall give reasonable notice in making such request. Tenant agrees to pay promptly on demand any and all costs incurred by Landlord in connection with providing such additional services, and Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies in the event of non-payment thereof by Tenant as in the case of failure by Tenant to pay Rent hereunder.

8. MAINTENANCE AND REPAIR:

8.1 TENANT'S OBLIGATIONS. By its execution hereof, Tenant accepts the Premises as being in the condition in which Landlord is obligated to deliver the Premises. Tenant, at Tenant's sole cost and expense, shall at all times maintain and keep the Premises in good and sanitary order, condition and repair, including, but not limited to, the interior surfaces of the ceilings, walls and floors, all doors, interior surface of windows (and replacement of all cracked or broken glass), all plumbing and all electrical fixtures and special items in excess of building standard improvements, and all equipment (including heating, cooling, or air conditioning units)

installed by or at the request of Tenant. Tenant expressly waives the benefits of any statute now or hereafter in effect permitting Tenant to repair the Premises and deduct the cost thereof from Rent otherwise due.

8.2 SURRENDER OF PREMISES. Upon the Expiration Date, Tenant shall surrender the Premises and all Alterations (as defined in SECTION 9 below) thereto (unless designated by Landlord to be removed in accordance with SECTION 9) to Landlord in the same condition as received, ordinary wear and tear (except to the extent Tenant is obligated to keep the Premises in good condition and repair) and damage thereto by fire, earthquake, acts of God or the elements alone excepted, and shall promptly remove or cause to be removed at Tenant's expense from the Premises and the Building any signs, notices and displays placed by Tenant, as well as any furniture or fixtures placed therein by Tenant. Tenant shall indemnify the Landlord against any loss, cost, liability and/or expense (including, without limitation, attorneys' and paralegals' fees and costs and court costs) resulting from delay by Tenant in so surrendering the Premises and Alterations thereto, including, without limitation, any claims made by any succeeding tenant founded on such delay.

8.3 REMOVAL OF FIXTURES. Tenant agrees to repair any damage to the Premises or the Building caused by or in connection with the removal of any articles of personal property business or trade fixtures, movable equipment, and cabinetwork, belonging to Tenant including without limitation thereto, repairing the floor and patching and painting the walls where required by Landlord to Landlord's reasonable satisfaction, all at Tenant's sole cost and expense.

9. ALTERATIONS AND ADDITIONS:

Tenant agrees not to make or suffer to be made any alteration, addition or improvement to or of the Premises or any part thereof ("Alterations"), without obtaining the prior written consent of Landlord. If Landlord consents to the making of any Alterations, they shall be made by Tenant

at its sole cost and expense. Tenant shall use a contractor designated by Landlord or shall obtain Landlord's prior written approval to any contractor selected by Tenant. Prior to commencement of any work, Tenant shall deliver to Landlord for its approval plans and specifications for each Alteration to be undertaken by Tenant; and, at the completion of such work, Tenant shall deliver to Landlord a certificate from Tenant's architect or engineer stating that the work has been completed in full compliance with such plans and specifications, such certificate to be in form and substance reasonably satisfactory to Landlord. Landlord shall also have the right to impose as a condition to its consent such requirements as Landlord may deem necessary in its sole discretion including, without limitation, full reimbursement to Landlord of any and all expenses incurred by Landlord in connection with the granting of its consent, the amounts and types of liability and other insurance covering all risks normally associated with such work and the times and dates during which the Alterations are to be accomplished. If Landlord is required pursuant to applicable law or agrees to supervise such work, Tenant shall pay to Landlord a fee in the amount of fifteen percent (15%) of the total cost of the Alterations for its management and supervision of the progress of the work. Tenant agrees that in no event shall such management or supervision by Landlord impose any obligation

or liability upon Landlord to Tenant as to or in connection with such work. All sums due and owing to contractors which have been paid by Landlord due to Tenant's failure to pay such sums when due, shall bear interest payable to Landlord at the Default Rate until fully paid. Upon the Expiration Date, Tenant, at its sole cost and expense, shall promptly remove any Alterations designated by Landlord to be so removed and repair any damage to the Premises or the Building caused by such removal and any Alterations not so designated to be removed shall become the property of the Landlord. Unless removed by Tenant prior to or on the Expiration Date, any equipment, trade fixtures, machinery, cabinetwork, movable furniture, or other personal property remaining on the Premises at the expiration or sooner termination of this Lease shall, in the sole option of Landlord, either (i) become the property of Landlord; or (ii) be removed from the Premises and discarded at Tenant's sole cost and expense. It is agreed that Landlord has no obligation, and has made no promises, to alter, add to, remodel, improve, repair, decorate or paint the Premises or any part thereof and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant except as may be specifically set forth herein.

10. ENTRY BY LANDLORD:

(a) Landlord reserves, and shall at any and all times have, the right to enter the Premises to (i) inspect them; (ii) supply any service to be provided by Landlord to Tenant hereunder; (iii) present the Premises to prospective purchasers, mortgagees or lessees; (iv) post notices of non-responsibility, "For Sales" and "For Lease" signs; and (v) alter, improve or repair the Premises and any portion of the Building all without abatement of Rent, and may erect scaffolding and other necessary structures where reasonably required by the character of the work to be performed, using all reasonable efforts to provide that Tenants's use of the Premises shall not be unreasonably interfered with thereby. As part of the consideration for this Lease, Tenant hereby waives any claim for damages for any injury or inconvenience to or interference with Tenant's business, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned by such entry, For each of the aforesaid purposes, Landlord shall at all times have and retain a key with which to unlock all doors, in, upon and about the Premises, excluding Tenant's vaults and safes, and Landlord shall have the right to use any and all means which Landlord may deem proper to open said doors in an emergency, in order to obtain entry to the Premises, and any entry to the Premises obtained by Landlord by any of said means, or otherwise, shall not under any circumstances be construed or deemed to be a forcible or unlawful entry into, or a detainer of, or an eviction of Tenant from, the Premises or any portion thereof.

(b) Landlord shall also have the right at any time to change the arrangement or location of or eliminate entrances or passageways, doors and doorways, and corridors, elevators, stairs, toilets or other public or common areas of the Building, or change the arrangement and location of or eliminate parking areas, access ways, or landscaped areas of the Property, and to change the name, number or designation by which the Building is commonly known, and none of the foregoing shall be deemed an actual or constructive eviction

of Tenant, nor shall it entitle Tenant to any reduction of Rent or result in any liability of Landlord to Tenant.

11. LIENS:

Tenant shall keep the Premises, the Building and the land upon which the Building is situated, free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant and shall indemnify, hold harmless and defend Landlord from any liens and encumbrances arising out of any work performed or materials furnished by or at the direction of Tenant. In the event that Tenant does not, within ten (10) days following the recording of notice of any such lien, cause such lien to be released of record, by payment or posting of a proper bond, Landlord shall have, in addition to all other remedies provided herein and by law, the right, but not the obligation, to cause such lien to be released by such means as it shall deem proper, including payment of the claim giving rise to such lien. All sums paid by Landlord and all expenses incurred by it in connection therewith, including, without limitation, attorneys' and paralegals' fees and costs and court costs, shall be payable to Landlord by Tenant on demand with interest at the Default Rate, from the date such expenses are incurred by Landlord to the date payment is received by Landlord from Tenant and Landlord shall have (in addition to any other right of remedy of Landlord) the same rights and remedies in the event of non-payment thereof by Tenant as in the case of failure of Tenant to pay Rent hereunder. Landlord shall have the right- at all times to post and keep posted on the Premises any notices permitted or required by law, or which Landlord shall deem proper for the protection of Landlord, the Premises, the Building, the Property, or any other party having an interest therein, or to keep same free from mechanics' and materialmen's and similar liens. Tenant shall give Landlord at least ten (10) days prior written notice of the date of commencement of any construction or other work on or to the Premises.

12. INDEMNITY:

Landlord shall not be liable to Tenant and Tenant waives all claims against Landlord for any injury to or death of any person or for loss of use of, damage to, or destruction of property in or about the Premises, the Building, or the Property by or from any cause whatsoever, including without limitation, earthquake or earth movement, gas, fire, oil, electricity or leakage from the roof, walls, basement or other portion of the Premises or the Building, unless caused by the gross negligence or willful misconduct of Landlord, its agents or employees. Tenant agrees to hold Landlord harmless from and to indemnify and defend Landlord against all claims, liability, damage or loss and against all costs and expenses, including, without limitation, attorneys' and paralegals' fees and costs and court costs in connection therewith, arising out of any injury or death of any person or damage to or destruction of property (i) occurring in, on or about the Premises, from any cause whatsoever, including, without limitation, Tenant's use of the Premises, unless caused solely by the gross negligence or willful misconduct of Landlord, its agents or employees; or (ii) occurring in, on or about any facilities (including without limitation elevators, stairways, passageways or hallways) the use of which Tenant has in common with other lessees, or elsewhere in or about

the Property or the Building other than the Premises, when such claim, injury or damage is caused in whole or in part by the act, neglect, default, or omission of any duty by Tenant, its agents, employees, contractors, invitees, or subtenants or otherwise by any conduct of any of said persons in or about the Premises, the Building, or the Property including failure of Tenant to observe or perform any of its obligations under this Lease, including, without limitation, its obligations under SECTION 6 hereof.

Without in any way limiting the foregoing, Tenant specifically acknowledges that Tenant assumes all risks in the use of any or all of the exercise equipment or facilities in the Building; Tenant acknowledges that neither the Landlord nor the property manager provide instruction for or supervision of the use of the exercise equipment and facilities, and neither the Landlord nor the property manager shall be liable for injury, death, or any claim arising directly or indirectly out of use of the exercise equipment and facilities. Tenant agrees to hold Landlord harmless from and to indemnify and defend Landlord against all claims, liability, damage, or loss and against all costs and expenses, including, without limitation, attorneys' and paralegals' fees and costs and court costs in connection therewith, arising out of any injury or death of any person using the exercise equipment or facilities through said person's association with Tenant. Tenant further acknowledges that said exercise equipment and/or facilities may only be used by Tenant and its employees in common with other tenants and their employees. Tenant shall not permit use of the exercise equipment or facilities by Tenant's vendors, or the family members or friends of Tenant and its employees.

The provisions of this SECTION 12 shall survive the termination of this Lease with respect to any claims or liability occurring prior to such termination.

13. INSURANCE:

13.1 TENANT'S REQUIRED COVERAGE. Tenant shall, at Tenant's sole cost and expense, procure and continue in force the following policies of insurance in the amounts set forth in PARAGRAPH K OF THE SUMMARY OF LEASE TERMS, unless such amounts are otherwise set forth in this SECTION 13.1:

(i) Liability insurance on an occurrence basis, with limits in an amount set forth in PARAGRAPH K OF THE SUMMARY OF LEASE TERMS, for claims or losses arising out of or resulting from personal injury (including bodily injury), death and/or property damage sustained or alleged to have been sustained by any person for any reason on or about the Premises, for liability arising out of or resulting from Tenant's covenants contained in SECTION 12 above to indemnify Landlord, its agents and employees, or for contractual liability;

(ii) All risk replacement cost insurance with an agreed amount endorsement upon property of every description and kind owned by Tenant and located in the Premises and for all improvements located in the Premises except building standard improvements in an amount equal to 100% of the full replacement value thereof;

(iii) Workers' compensation insurance (including employer's liability insurance) in accordance with applicable law;

(iv) Such other insurance as may be reasonably required by Landlord or by any holder of any ground or underlying lease, mortgage or deed of trust.

Not more often than every year and upon not less than sixty (60) days prior written notice, Landlord, in its reasonable discretion, may require Tenant to increase the insurance limits set forth in subparagraphs (i) or (ii) above.

13.2 LANDLORD'S REQUIRED COVERAGE. Landlord shall procure and continue in force the following policies of insurance in the amounts set forth in PARAGRAPH L OF THE SUMMARY OF LEASE TERMS, the cost of same to be included in Operating Costs:

(i) Liability insurance on an occurrence basis, with limits in the amount set forth in PARAGRAPH L OF THE SUMMARY OF LEASE TERMS, for claims or losses arising out of or resulting from personal injury (including bodily injury), death and/or property damage sustained or alleged to have been sustained by any person for any reason on or about the Premises, for liability arising out of or resulting from Tenant's covenants contained in SECTION 12 above to indemnify Landlord, its agents and employees, or for contractual liability;

(ii) Casualty insurance insuring the Building against loss by or damage due to risks covered by the broadest form of casualty insurance policy (such coverage shall include, without limitation, coverage against the risk of fire, lightning, extended coverage, vandalism and malicious mischief). Such policy, shall also include, a rental loss endorsement. Such policy, exclusive of the rental loss endorsement, shall be in the face amount of not less than ninety (90%) percent of the full value of the improvements covered thereby. The rental loss endorsement shall cover Landlord's loss of rentals in an amount of not less than one (1) year's aggregate Rent for the Premises;

(iii) Difference in conditions insurance against (1) damage or loss by flood if the Premises are located in an area identified by the Secretary of Housing and Urban Development or any successor thereto or other appropriate authority (governmental or private) as an area having special flood hazards and in which flood insurance has been made available under the National Flood Insurance Act of 1968 or the Flood Disaster Protection Act of 1973, as amended, modified, supplemented or replaced from time to time, on such basis as shall be required by Landlord and with coverage in an amount not less than as set forth in PARAGRAPH L OF THE SUMMARY OF LEASE TERMS, and (2) against damage or loss by earthquake with a deductible of not more than ten percent (10%) and with coverage in an amount not less than as set forth in PARAGRAPH L OF THE SUMMARY OF TERMS, so long as same is available at commercially reasonable rates;

(iv) Such other insurance as may be reasonably required by Landlord or by any holder of any ground or underlying lease, mortgage or deed of trust.

Landlord may increase the insurance limits set forth in subparagraphs (i), (ii), or (iii) above.

13.3 INSURANCE POLICIES. The minimum limits of insurance policies as set forth in SECTION 13.1 above shall in no event limit the liability of Tenant hereunder. The following provisions shall apply regarding all insurance policies Tenant is required to procure and maintain under SECTION 13.1 above. For any insurance policies Landlord is to procure and maintain under SECTION 13.2 above, Landlord may, at its option, have such policies comply with such provisions. The aforesaid insurance shall name Landlord as an additional insured (and, at Landlord's option, the property manager and the holder of any mortgage or deed of trust on the Building, or any part thereof or interest therein, as an additional insured), and shall be with companies having a rating of not less than AAA in "Best's insurance Guide" or another comparable rating or publication if Best's Insurance Guide is no longer published or produced. For any insurance policies procured by Tenant, Tenant shall cause the insurance companies to furnish Landlord with certificates of coverage, and shall provide that such insurance policy shall not be canceled or subject to reduction or modification of coverage except after thirty (30) days' prior written notice to Landlord by the insurer. All such policies shall be written as primary policies, not contributing with and not in excess of the

coverage which Landlord may carry and shall contain a cross-liability endorsement stating that the rights of named insureds shall not be prejudiced by one insured making a claim or commencing an action against another named insured. For any insurance policies procured by Tenant, Tenant shall, at least thirty (30) days prior to the expiration of such policies, furnish Landlord with renewals or binders for renewals thereof. Tenant agrees that if Tenant does not procure and maintain the insurance required to be procured and maintained by Tenant pursuant to SECTION 13.1 above Landlord may (but shall not be required to) procure said insurance on Tenant's behalf and charge Tenant the premiums charged therefor together with the sum equal to all costs and expenses incurred by Landlord in connection therewith (including, without limitation, costs allocated to the use of Landlord's employees in connection therewith, including without limitation, costs of wages for such employees) together with interest thereon at the Default Rate, payable upon demand and upon Tenant's failure to pay such insurance premiums and handling charge, Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies as in the case of failure by Tenant to pay Rent hereunder. Tenant shall have the right to provide the insurance policies required pursuant to SECTION 13.1 above pursuant to blanket policies obtained by Tenant, provided such blanket policies expressly afford coverage to the Premises and to Landlord as required by this Lease.

13.4 WAIVER OF SUBROGATION. Landlord and Tenant each hereby waive any and all rights of recovery against the other or against the officers, employees, agents and representatives of the other, on account of loss or damage occasioned to such waiving party or its property or the property of others under its control to the extent that such loss or damage is insured against under any fire and extended coverage insurance policy which either may have

in force at the time of such loss or damage. Tenant shall, upon obtaining the policies of insurance required under this Lease, give notice to the insurance carrier or carriers that the foregoing mutual waiver of subrogation is contained in this Lease and shall obtain from such insurance carrier or carriers a waiver of any right of recovery by way of subrogation against Landlord.

14. DAMAGE OR DESTRUCTION:

PARTIAL DAMAGE - INSURED. In the event the Premises or the Building are partially damaged by fire or other casualty which is covered under fire and extended coverage insurance carried pursuant to SECTION 13.2(1) above, Landlord shall restore such damage provided insurance proceeds are available to pay one hundred percent (100%) of the cost of restoration and provided such restoration can be completed within one hundred eighty (180) days after the commencement of the work thereof under the laws and regulations of the state, federal, county and municipal authorities having jurisdiction thereover and if such conditions apply so as to require Landlord to restore such damage, this Lease shall continue in full force and effect. Tenant shall be entitled to a proportionate reduction of Fixed Rent and Tenant's Proportionate Share of Operating Costs and Taxes while such restoration takes place, such proportionate reduction to be based upon the extent to which the restoration efforts interfere with Tenant's business in the Premises, provided that Tenant shall not be entitled to such reduction in Fixed Rent and Tenant's Proportionate Share of Operating Costs and Taxes if the damage is the result of negligence, default or omission of Tenant, its agents, employees, contractors, or invitees; and provided, further, that in no event shall the reduction of Fixed Rent and Tenant's Proportionate Share of Operating Costs and Taxes exceed the amounts received by Landlord from rent loss insurance. Tenant's rights to a reduction in Fixed Rent and Tenant's Proportionate Share of Building Operating Costs and Taxes hereunder shall be Tenant's sole and exclusive remedy in connection with any such damage.

Notwithstanding the foregoing, Landlord may terminate this Lease if

such damage or casualty occurs during the last twelve (12) months of the term of this Lease (or the term of any renewal option, if applicable) by giving Tenant notice thereof at any time within thirty (30) days of the occurrence of such damage or casualty and such notice shall specify the date of such termination which date shall not be less than thirty (30) nor more than sixty (60) days after the giving of such notice. In the event of the giving of such notice of termination, this Lease shall expire and all interest of Tenant in the Premises shall terminate on the date so specified in such notice and the Rent shall be paid to the date of such termination.

14.2 PARTIAL DAMAGE - UNINSURED. In the event the Premises or the Building are partially damaged by a risk not covered by Landlord's fire and extended coverage insurance or the proceeds of available insurance are less than one hundred percent (100%) of the cost of restoration, or if the restoration cannot be completed within one hundred eighty (180) days after the commencement of such restoration under the laws and regulations of the state, federal, county and municipal authorities having jurisdiction thereover in the reasonable opinion of Landlord, or if such damage occurs during the last twelve (12) months of the term of this Lease

(or the term of any renewal option, if applicable), Landlord shall have the option either to (i) repair or restore such damage, with the Lease continuing in full force and effect, but the Rent to be proportionately abated as provided in SECTION 14.1 above; or (ii) give notice to Tenant at any time within thirty (30) days after the occurrence of such damage terminating this Lease as of a date to be specified in such notice which date shall not be less than thirty (30) nor more than sixty (60) days after the giving such notice. In the event of the giving of such notice of termination, this Lease shall expire and all interest of Tenant in the Premises shall terminate on the date so specified in such notice and the Rent, reduced by any proportionate reduction in Fixed Rent and Tenant's Proportionate Share of Building Operating Costs and Taxes as provided for in this Section and/or SECTION 14.1 above, shall be paid to the date of such termination.

14.3 TOTAL DESTRUCTION. In the event the Premises are totally destroyed or the Premises cannot be restored as required herein under applicable laws and regulations, notwithstanding the availability of insurance proceeds, Landlord shall have the right to terminate this Lease by giving Tenant notice thereof within thirty (30) days of date of the occurrence of such casualty specifying the date of termination which shall not be less than thirty (30) days nor more than sixty (60) days after the date of the delivery of such notice.

14.4 LANDLORD'S OBLIGATIONS. Notwithstanding the provisions of this Lease, Landlord shall in no event be required to repair any injury or damage by fire or other cause whatsoever to, or to make any restoration or replacement of, any paneling, decorations, partitions, railings, ceilings, floor coverings, office fixtures or any other improvements or property installed in the Premises by Tenant or at the direct or indirect expense of Tenant. Tenant shall be required to restore or replace same in the event of damage at its sole cost and expense and except for abatement of Fixed Rent and Tenant's Proportionate share of Operating Costs and Taxes, if any, Tenant shall have no claim against Landlord for any damage, loss, liability, cost or expense incurred by Tenant by reason of any such injury, damage or destruction to or repair or restoration of such items.

14.5 TENANT'S WAIVER. The provisions of this SECTION 14 shall constitute the express agreement of the parties regarding damage to or destruction of the Premises and shall supersede any statute now or hereafter in effect.

15. CONDEMNATION:

(a) If all or part of the Premises shall be taken by any public or quasi-public authority under the power of eminent domain or shall be conveyed

in lieu thereof, this Lease shall terminate as to any portion of the Premises so taken or conveyed on the date when title or the right to possession vests in the condemnor.

(b) If (i) a part of the Premises shall be taken by any public or quasi-public authority under the power of eminent domain or shall be conveyed in lieu thereof; and (ii) Tenant is reasonably able to continue the operation of Tenant's business in that portion of the Premises remaining; and (iii) Landlord elects to restore the Premises to an architectural

whole, then this Lease shall remain in effect as to said portion of the Premises remaining, and the Fixed Rent and Tenant's Proportionate Share of Operating Costs and Taxes payable from the date of the taking shall be reduced in the same proportion as the area of the Premises taken bears to the total area of the Premises. If, after a partial taking, Tenant is not reasonably able to continue the operation of its business in the Premises or Landlord elects not to restore the Premises as hereinabove described, this Lease may be terminated by either Landlord or Tenant by giving written notice to the other party within thirty (30) days of the date of the taking. Such notice shall specify the date of termination which shall not be less than thirty (30) nor more than sixty (60) days after the date of such notice.

(c) If a portion of the Building is taken, whether any portion of the Premises is taken or not, and Landlord determines that it is not economically feasible to continue operating the portion of the Building remaining, then Landlord shall have the option for a period for sixty (60) days after such taking to terminate this Lease. If Landlord determines that it is economically feasible to continue operating the portion of the Building remaining after such taking, then this Lease shall remain in effect, and Landlord at Landlord's cost shall restore the Building to an architectural whole.

(d) Landlord shall be entitled to any and all payment, income, rent, award, or any interest thereon whatsoever which may be paid or made in connection with such taking or conveyance, and Tenant hereby assigns any rights to same to Landlord and Tenant shall have no claim against Landlord or otherwise for the value of any unexpired term of this Lease. Notwithstanding the foregoing, to the extent that Landlord's recovery for such taking shall not be diminished, Tenant shall have the right to make a claim for moving expenses and for loss or damage to Tenant's trade fixtures, equipment and movable furniture.

(e) No temporary taking of the Premises and/or of Tenant's rights therein or under this Lease shall terminate this Lease or give Tenant any right to any abatement of Rent hereunder.

16. ASSIGNMENT AND SUBLETTING:

(a) Tenant shall not assign, transfer, mortgage, pledge hypothecate or encumber this Lease or any interest therein and shall not sublet the Premises or any part thereof, or allow occupation or use thereof by any other party or entity, without the prior written consent of Landlord. In the event Tenant should desire to assign or transfer this Lease or sublet any part of the Premises, Tenant shall notify Landlord in writing (hereinafter referred to as "Sublet Notice") of the terms of the proposed assignment or transfer or subletting, at least ninety (90) days in advance of the date on which Tenant desires to make such assignment or transfer or sublease. Landlord shall then have a reasonable period of time following receipt or such notice within which to notify Tenant in writing that Landlord elects to do one of the following:

(i) Terminate this Lease as to the space so affected as of the date so specified by Tenant in the Sublet Notice, in which event Tenant shall be relieved of all further obligations hereunder as to such space from and after such date; or

(ii) Grant consent to Tenant to assign or transfer the Lease or sublet such space to the proposed assignee or transferee or sublessee on the terms set forth in the Sublet Notice; or

(iii) Deny consent to Tenant to assign or transfer the Lease or sublet such space.

(b) If Tenant proposes to sublease less than all of the Premises, an election by Landlord under subparagraph (a)(i) above to terminate this Lease with respect to such space shall not affect the force or validity of the Lease with respect to the remainder of the Premises, provided that the Rent payable hereunder shall be adjusted on a pro rata basis in accordance with the reduction in the rentable area of the Premises. If Landlord should fail to notify Tenant in writing of its election under subparagraph (a) within the thirty (30) day period, Landlord shall be deemed to have waived the option described in subparagraph (a)(i), but prior written consent by Landlord of the proposed assignee or transferee or sublessee shall still be required. Landlord shall have the right to require complete financial statements and business history information (including without limitation, the name and legal composition of the proposed assignee or transferee or sublessee and the nature of the business proposed to be carried on in the Premises) regarding the proposed assignee or transferee or sublessee before determining whether or not to consent.

(c) Any consideration in excess of the Fixed Rent and Tenant's Proportionate Share of Building Operating Costs and Taxes payable hereunder which is realized by Tenant under any sublease or assignment or transfer in accordance with this Section shall be paid entirely to Landlord. Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies in the event of nonpayment thereof by Tenant as in the case of failure by Tenant to pay Rent hereunder.

(d) The consent of Landlord to any assignment, transfer, mortgage, pledge, encumbrance, hypothecation, subletting, occupation or use by any other person or entity shall not release Tenant from any of Tenant's obligations hereunder or discharge any liability of Tenant under this Lease, nor shall said consent be deemed to be a consent to any subsequent similar or dissimilar assignment, transfer, mortgage, pledge, encumbrance, hypothecation, subletting, occupation or use by any other person or entity. Any such assignment, transfer, mortgage, pledge, encumbrance, hypothecation, subletting, occupation or use by any other person or entity without such consent shall be void and shall constitute a breach of the Lease by Tenant and shall, at the option of Landlord, constitute a material event of default hereunder. The acceptance of Rent by Landlord from any other person or entity shall not be deemed to be a waiver by Landlord of any provision of this Lease or to be a consent to any assignment, subletting or other transfer thereof.

(e) For purposes of this SECTION 16, sales, transfers or assignments of (i) a controlling interest in the stock of Tenant (if Tenant is a corporation); (ii) the general partnership interest of Tenant sufficient to materially change its general partnership composition and management (if Tenant is a partnership); or (iii) the majority of controlling underlying beneficial interest of Tenant (if Tenant is any other form or business entity) shall constitute an assignment hereunder.

(f) The voluntary or other surrender of this Lease or of the Premises by Tenant or a mutual cancellation of this Lease shall not work a merger, and at the option of Landlord any existing subleases may be terminated or be deemed assigned to Landlord in which event the tenants under such subleases shall become tenants of Landlord.

(g) Tenant shall reimburse Landlord for all costs incurred by Landlord in connection with its review and consideration of any proposed assignment, transfer, mortgage, pledge, encumbrance or hypothecation of the Lease or subletting of the Premises, or any part thereof, including without limitation, reasonable attorneys' fees.

17. MORTGAGEE/GROUND LANDLORD PROTECTION:

17.1 SUBORDINATION. This Lease, at the Landlord's option, shall be subject and subordinate at all times to all ground or underlying leases which now exist or may hereafter exist affecting the Premises, the Building or the land upon which the Building is situated, or all of same, and to the lien of any mortgage or deed of trust in any amount or amounts whatsoever now or hereafter placed on or against the Building or land upon which the Building is situated, or both, or on or against Landlord's interest or estate therein, all without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

17.2 SUBORDINATION AGREEMENTS. Tenant covenants and agrees to execute and deliver upon demand and without charge, such further instruments evidencing subordination of this Lease to (i) any ground or underlying leases and (ii) to the lien of any mortgages or deeds of trust, as described in SECTION 17.1 above, as may be requested by Landlord. Tenant hereby appoints Landlord as Tenant's attorney-in-fact, irrevocably, to execute and deliver any such agreements, instruments, releases or other documents.

17.3 FINANCIAL STATEMENTS. If this Lease is to be subject and subordinate to any ground or underlying lease, mortgage or deed of trust executed after this date, within ten (10) days after Landlord's request, Tenant shall deliver to Landlord, or to any actual or prospective ground lessor or lender that Landlord designates, such financial statements as are reasonably required by any holder of any underlying or ground lease or mortgage or deed of trust (the "Holder") to verify the net worth of Tenant (or any assignee, subtenant or guarantor of Tenant) to facilitate the financing or refinancing of the Building, or any part

18. INSOLVENCY OR BANKRUPTCY:

18.1 EVENTS OF DEFAULT. In addition to the occurrences set forth in SECTION 19 below, the following events shall constitute a default under this Lease: (i) Tenant admits in writing its inability to pay its debts as they mature; (ii) Tenant makes an assignment for the benefit of creditors or takes any other similar action for the protection or benefit of creditors; (iii) Tenant gives notice to any governmental body of insolvency or pending insolvency, or suspension or pending suspension of operations; (iv) Tenant files a voluntary petition in bankruptcy or shall be adjudicated a bankrupt or insolvent; (v) an involuntary petition in bankruptcy is filed against Tenant and is not dismissed within sixty (60) days from the date same is filed; (vi) Tenant files any petition or answer seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or other similar relief under any present or future bankruptcy statute, regulation or law; (vii) a court of competent jurisdiction enters an order, judgment or decree approving a petition filed against Tenant seeking any relief described in the preceding subparagraph (vi) and such order, judgment or decree shall remain unvacated and unstayed for an aggregate of thirty (30) days from the date of entry thereof; (viii) a trustee, receiver, conservator or liquidator of Tenant or of all or any substantial part of its property or its interest in the Premises is employed or appointed and such receivership remains undissolved for thirty (30) days; or (ix) this Lease or any estate of Tenant hereunder is levied upon under any attachment or execution and such attachment or execution shall remain unvacated and unstayed for ten (10) days.

18.2 BANKRUPTCY. Upon the filing of a petition by or against Tenant under the United States Bankruptcy Code, Tenant, as debtor in possession,

and any trustee who may be appointed agree to:

(i) Perform each and every obligation of Tenant under this Lease until such time as this Lease is either rejected or assumed by order of the United States Bankruptcy Court;

(ii) Pay monthly in advance on the first day of each month as reasonable compensation for use and occupancy of the Premises the Rent payable hereunder and all other charges due pursuant to this Lease as said charges become due;

(iii) Reject or assume this Lease within sixty (60) days of the filing of such petition under Chapter 7 of the Bankruptcy Code or within one hundred twenty (120) days (or such shorter term as Landlord, in its sole discretion, may deem reasonable so long as notice of such period is given) of the filing of a petition under any other Chapter;

(iv) Give Landlord at least forty-five (45) days prior written notice of any abandonment of the Premises, any such abandonment to be deemed a rejection of this Lease; and

(v) Do all other things of benefit to Landlord otherwise required under the Bankruptcy Code.

Tenant, as debtor in possession, and any such trustee shall be deemed to have rejected this Lease in the event of the failure to comply with any of the above requirements and to have consented to the entry of an order by an appropriate Bankruptcy Court providing all of the above, waiving notice and hearing of the entry of same.

19. DEFAULT AND REMEDIES:

In the event that (i) any of the events described in SECTION 18.1 above shall occur; (ii) Tenant abandons or vacates the Premises; (iii) Tenant fails to pay any Rent payable hereunder when and as the same becomes due and payable and such failure shall continue for more than five (5) days; or (iv) Tenant fails to perform any other term, covenant or condition of this Lease and such failure continues for more than thirty (30) days after receiving notice thereof from Landlord, or, if such default cannot reasonably be cured within said thirty (30) day period, fails to commence to cure such default with all due diligence and dispatch within said thirty (30) day period, or having commenced such cure, shall fail to diligently prosecute such cure to completion; then Landlord, in addition to any other rights and remedies of Landlord at law or in equity, shall have the right to terminate Tenant's right to possession of the Premises and either terminate this Lease or have this Lease continue in full force and effect. Should Landlord elect to terminate Tenant's right to possession of the Premises, then Landlord shall have the right of entry and may remove all persons and property from the Premises, subject to applicable law. Such property so removed may be stored in a public warehouse or elsewhere at the cost and for the account of Tenant. Upon such termination, Landlord, in addition to any other rights and remedies provided by law, shall be entitled to recover from Tenant (i) all delinquent Rent, together with interest and late charges; and (ii) all costs and expenses of recovering possession, in restoring the Premises to good order and condition, or in remodeling, renovating, or preparing the Premises for reletting; (iii) all costs of reletting, including broker's commissions; (iv) the worth at the time of award of the amount by which the unpaid Rent for the balance of the term hereof after the time of award exceeds the amount of such Rent loss that the Tenant proves could be reasonably avoided; and (v) all other damages caused by Tenant's default. The worth at the time of award of the amount referred to in this subparagraph shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one percent (1%). As used herein, the term "time of award" shall mean either the date upon which Tenant

pays to Landlord the amount recoverable by Landlord as hereinabove set forth or the date of entry of any determination, order or judgment of any court or other legally constituted body, or of any arbitrators determining the amount recoverable, whichever first occurs.

(b) Should Landlord, following any breach or default of this Lease by Tenant, elect to keep this Lease in full force and effect with Tenant retaining the right to possession of the Premises (notwithstanding the fact that Tenant may have abandoned the Premises), then Landlord, in addition to all other rights and remedies Landlord may have at law or in equity,

shall have the right to enforce all of Landlord's rights and remedies under this Lease, including, but not limited to, the right to recover the installments of Rent as they become due under this Lease. Notwithstanding any such election to have this Lease remain in full force and effect, Landlord may at any time thereafter elect to terminate Tenant's right to possession of said Premises for any previous breach or default hereunder by Tenant which remains uncured or for any subsequent breach or default.

20. MISCELLANEOUS:

20.1 TRANSFER OF LANDLORD'S INTEREST. In the event of a sale or conveyance by Landlord of Landlord's interest in the Premises,or the Building, or Property Landlord shall be relieved from any further obligations and liabilities accruing hereunder (whether express or implied) in favor of Tenant on the part of Landlord. Tenant agrees to look solely to the successor in interest of Landlord in and to the Property or the Building and this Lease. This Lease shall not be affected by any such sale and Tenant agrees to attorn to the Landlord's successor in interest.

20.2 RIGHT OF LANDLORD TO PERFORM. All terms and covenants of this Lease to be performed or observed by Tenant shall be performed or observed by Tenant at Tenant's expense and without any reduction of Rent. If Tenant fails to pay any Rent hereunder or fails to perform any other term or covenant hereunder on its part to be performed, and such failure shall continue for ten (10) days after written notice thereof by Landlord, Landlord, without waiving or releasing Tenant from any obligation of Tenant hereunder, may (but shall not be obligated to) make any such payment or perform any such other term or covenant on Tenant's part to be performed. All sums so paid by Landlord and all necessary costs of such performance by Landlord, together with interest thereon at the Default Rate from the date of such payment or performance by Landlord, shall be paid by Tenant to Landlord on demand by Landlord, and Landlord shall have (in addition to any other right or remedy of Landlord) the same rights and remedies in the event of non-payment thereof by Tenant as in the case of failure by Tenant in the payment of Rent hereunder.

20.3 CAPTIONS: ATTACHMENTS; DEFINED TERMS.

(a) The captions of the paragraphs of this Lease are for convenience of reference only and shall not be deemed to be relevant in resolving any question of interpretation or construction of any section of this Lease.

(b) Exhibits attached hereto, and addendums and schedules initialed by the parties, are deemed by attachment to constitute part of this Lease and are incorporated herein.

(c) The words "Landlord" and "Tenant," as used herein, shall include the plural as well as the singular. Words used in neuter gender include the masculine and feminine and words in the masculine or feminine gender include the neuter. If there be more

than one Tenant, the obligations hereunder imposed upon Tenant shall be joint and several; as to a Tenant which consists of husband and wife, the obligations shall extend individually to their sole and separate property as well as community property. The term "Landlord" shall mean only the owner or owners at the time in question of the fee title or a tenant's interest in a ground lease of the land underlying the Building. The obligations contained in this Lease to be performed by Landlord shall be binding on Landlord or Landlord's successors and assigns only during their respective periods of ownership.

20.4 ENTIRE AGREEMENT. This instrument together with any exhibits and attachments hereto constitutes the entire agreement between Landlord and Tenant relative to the Premises and this Lease and such exhibits and attachments hereto may be modified, amended or revoked only by an instrument in writing signed by the party to be charged thereunder. Landlord and Tenant hereby agree that all prior or contemporaneous agreements (whether oral or otherwise) between and among themselves and their agents or representatives relative to the leasing of the Premises are merged in, superseded by or revoked by this Lease.

20.5 SEVERABILITY. If any term or provision of this Lease shall, to any extent, be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Lease shall not be affected thereby, and each term and provision of this Lease shall be valid and be enforceable to the fullest extent permitted by law.

20.6 COSTS OF SUIT.

(a) If Landlord places this Lease in the hands of an attorney for collection or enforcement of Tenant's obligations as a consequence of Tenant's default hereunder, Tenant agrees to pay reasonable attorney fees and expenses so incurred, even though no suit or action is filed.

(b) If Tenant or Landlord shall bring any action for any relief against the other, declaratory or otherwise, arising out of this Lease, including, but not limited to, any suit by Landlord for the recovery of Rent or possession of the Premises, the losing party shall pay the successful party the court costs and reasonable attorneys' fees incurred therefor and such expenses shall be paid whether or not such action is prosecuted to judgment.

(c) Should Landlord, without fault on Landlord's part, be made a party to any litigation instituted by Tenant or by any third party against Tenant, or by or against any person holding under or using the Premises by license of Tenant (for the purposes of this Section the "Licensee"), or for the foreclosure of any lien for labor or material furnished to or for Tenant or any Licensee or otherwise arising out of or resulting from any act or transaction of Tenant or of any Licensee, Tenant agrees and covenants to save and hold Landlord harmless from any judgment rendered against Landlord or the Premises or Building or any part of either thereof, and to defend and indemnify Landlord as to any and all costs and expenses, including attorneys' fees and court costs, incurred by Landlord in or in connection with such litigation.

20.7 TIME: JOINT AND SEVERAL LIABILITY. Time is of the essence as to this Lease and each and every provision thereof, except as to the conditions relating to the delivery of possession of the Premises to Tenant. All the terms, covenants and conditions contained in this Lease to be performed by either party, if such party shall consist of more than one person or organization, shall be deemed to be joint and several, and all rights and remedies of the parties shall be cumulative and nonexclusive of any other remedy at law or in equity.

20.8 BINDING EFFECT: CHOICE OF LAW. The parties hereto agree that all provisions of this Lease are to be construed as both covenants and conditions as though the words importing such covenants and conditions were used in each separate paragraph. Subject to any provisions hereof restricting assignment or subletting by Tenant and subject to the provisions of SECTION 20.1 above, all of the provisions hereof shall bind and inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and assigns. This Lease shall be governed by the laws of the state in which the Premises are located.

20.9 WAIVER. No covenant, term or condition or the breach thereof shall be deemed waived, except by written consent of the party against whom the waiver is claimed, and any waiver or the breach of any covenant, term or condition shall not be deemed to be a waiver of any preceding or succeeding breach of the same or any other covenant, term or condition of this Lease. Acceptance by Landlord of any performance by Tenant after the time the same shall have become due (including, but not limited to, the acceptance of Rent) shall not constitute a waiver by Landlord of the breach or default of any covenant, term or condition of the Lease unless otherwise expressly agreed to by Landlord in writing.

20.10 SURRENDER OF LEASE. The voluntary or other surrender of this Lease by Tenant, or a mutual cancellation thereof, shall not work a merger, and shall, at the option of Landlord, terminate all or any existing subleases or subtenancies, or may, at the option of Landlord operate as an assignment to it of any or all such subleases or subtenancies.

20.11 RELOCATION OF THE PREMISES. Landlord reserves the unrestricted and unconditional right to relocate the Premises to substantially comparable space subject to the same terms and conditions as the Premises originally leased. Landlord shall give Tenant written notice of its intention to relocate the Premises, and Tenant shall complete such relocation within ninety (90) days after receipt of such written notice. If the improvements of the space to which Landlord proposes to relocate Tenant are substantially inferior than those of the Premises, or if the fixed rent of the new space is substantially greater than the Fixed Rent, Tenant may so notify Landlord, and if Landlord fails to offer space satisfactory to Tenant, Tenant may terminate this Lease by written notice thereof effective as of the thirtieth (30th) day after Landlord's initial notice. If Landlord does relocate Tenant, then effective on the date of such relocation this Lease shall be amended by (i) deleting the description of the original Premises and substituting for it a description of such comparable space, and (ii) making such other changes thereto as Landlord reasonably requires. Landlord agrees to reimburse Tenant for its actual moving costs to such other space to the extent such costs are reasonable.

20.12 HOLDING OVER. Any holding over after the expiration or other termination of the term of this Lease with the written consent of Landlord delivered to Tenant shall be construed to be a tenancy from month-to-month on all the terms, covenants and conditions herein specified so far as applicable, except that the Rent (including the Fixed Rent and the Percentage Rent, if any) shall be an amount equal to one hundred percent (100%) of the Rent otherwise payable by Tenant immediately prior to such holding over. Any holding over after the expiration or other termination of the term of this Lease without the written consent of Landlord shall be construed to be a tenancy from month-to-month on all the terms set forth herein, except that the Rent (including the Fixed Rent and the Percentage Rent, if any) shall be an amount equal to two hundred percent (200%) of the Rent otherwise payable by Tenant immediately prior to such holding over. Acceptance by Landlord of Rent after the expiration or termination of this Lease shall not constitute a consent by Landlord to any such tenancy from month-to-month or result in any other tenancy or any renewal of the term hereof. The provisions of this paragraph are in addition to, and do not affect, Landlord's right to re-entry or other rights provided by this Lease or by law.

20.13 SIGNS.

(a) Tenant shall not place or permit to be placed in or upon the Premises, or outside the Premises, or any part of the Building (including, but not limited to the exterior or roof) any signs, notices, drapes, shutters, blinds or displays of any type without the prior written consent of Landlord.

(b) Landlord reserves the right in Landlord's sole discretion to place and locate on the roof, exterior of the Building, and in any area of the Building not leased to Tenant such signs, notices, displays and similar items as Landlord deems appropriate in the proper operation of the Building.

20.14 RULES AND REGULATIONS. Tenant and Tenant's agents, servants, employees, visitors and licensees shall observe and comply fully and faithfully with the Rules and Regulations attached hereto as Exhibit B for the care, protection, cleanliness and operation of the Building and its lessees and any modification or addition thereto adopted by Landlord, provided Landlord shall give notice thereof to Tenant. Landlord shall not be responsible to Tenant for the non-performance by any other lessee or occupant of the Building of any said Rules and Regulations.

20.15 NOTICES. All notices, demands, requests, advice or designations ("Notices") which may be or are required to be given by either party to the other hereunder shall be in writing. All Notices by Landlord to Tenant shall be sufficiently given, made or delivered if personally served on Tenant by leaving the same at the Premises, or if sent by United States certified or registered mail, postage prepaid, addressed to Tenant at Tenant's address as set forth in PARAGRAPH M OF THE SUMMARY OF LEASE TERMS. All notices by Tenant to Landlord shall be sufficiently given, made or delivered if personally served on Landlord or sent by United States certified registered mail, postage prepaid, addressed to (or in the case of personal delivery,

delivered to) Landlord at Landlord's address for notices as set forth in PARAGRAPH M OF THE SUMMARY OF LEASE TERMS. Each Notice shall be deemed received on the date of the personal service or three (3) days after the mailing thereof in the manner herein provided.

20.16 CORPORATE AUTHORITY. If Tenant is a corporation, each individual executing this Lease on behalf of said corporation represents and warrants that he or she is duly authorized to execute and deliver this Lease on behalf of said corporation in accordance with a duly adopted resolution of the Board of Directors of said corporation or in accordance with the Bylaws of said corporation, and that this Lease is binding upon said corporation in accordance with its terms; and at the time of execution of this Lease, Tenant shall deliver to Landlord a certified copy of a resolution of the Board of Directors of said corporation authorizing or ratifying the execution of this Lease.

20.17 RECORDING. Tenant shall not record this Lease or any memoranda thereof without Landlord's prior written consent.

20.18 LIGHT AIR AND VIEW. Tenant agrees that no diminution or shutting off of light, air or view by any structure which may be erected (whether or not by Landlord) on property adjacent to the Building shall in any way affect this Lease, entitle Tenant to any reduction of Rent hereunder or result in any liability of Landlord to Tenant.

20.19 NAME. Tenant agrees that it shall not use the name of the Building for any purpose other than as the address of the business conducted by Tenant in the Premises without first obtaining the written consent of Landlord.

20.20 BROKERAGE. Tenant covenants and represents that it has negotiated this Lease directly with Landlord and has not acted by implication to authorize, nor has authorized, any real estate broker, finder or salesman to act for it in these negotiations other than the Broker (as defined in PARAGRAPH N OF THE SUMMARY OF LEASE TERMS). Tenant agrees to hold Landlord harmless from and to defend and indemnify Landlord against any and all claims, cost, liability and/or expense (including attorneys' fees and court costs) incurred by Landlord in connection with any claim by any real estate broker or salesman or finder (other than the Broker) for a commission or finder's fee as a result of Tenant's entering into this Lease The provisions contained herein shall survive the termination of this Lease

20.21 EXAMINATION OF LEASE. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and this instrument is not effective as a Lease or otherwise until its execution and delivery by both Landlord and Tenant.

20.22 ESTOPPEL LETTER. Tenant shall at any time and from time to time within ten (10) days following request from Landlord execute, acknowledge and deliver to Landlord a statement in writing and signed by Tenant, (i) certifying that

this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect), (ii) acknowledging that there are not, to Tenant's knowledge, any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, (iii) certifying the date that Tenant entered into occupancy of the Premises and that Tenant is open for business in the Premises, (iv) certifying the amount of the Fixed Rent and the date to which Rent is paid in advance, if any, (v) evidencing the status of this Lease as may be required either by a lender making a loan affecting, or a purchaser of, the Premises or the Building of any interest of Landlord therein, (vi) certify the amount of the Security Deposit, if any, (vii) certifying that all building standard improvements to be constructed in the Premises by Landlord, if any, are substantially completed except for punch list items which do not prevent Tenant from using the Premises for its intended use, and (viii) certifying such other matters relating to this Lease and/or the Premises as may be requested by either a lender making a loan to Landlord or a purchaser purchasing the Premises or the Building, or any interest of Landlord therein, from Landlord. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the Building or any interest therein. Tenant shall, within ten (10) days following request of Landlord, deliver such other documents including Tenant's financial statements as are reasonably requested in connection with the sale of, or loan to be secured by, the Premises or Building or any interest therein. Tenant's failure to deliver said statement in the time required shall be conclusive upon Tenant that: (i) the Lease is in full force and effect, without modification except as may be represented by Landlord; (ii) there are no uncured defaults in Landlord's performance and Tenant has no right of offset, counterclaim or deduction against Rent under the Leases; and (iii) no more than one month's Fixed Rent has been paid in advance.

20.23 NO THIRD PARTY BENEFICIARIES. Unless otherwise expressly specified herein, no term, covenant, condition or provision of this Lease shall be construed to be for the benefit of any lessee (other than Tenant) or occupant of the Building or any other third party or entity.

20.24 EASEMENTS. Landlord reserves the right to grant public utility easements and other rights on, over and under the Premises without any abatement in Rent, provided that such rights do not unreasonably interfere with Tenant's business operations on the Premises.

20.25 FORCE MAJEURE. Landlord shall incur no liability to

Tenant, and shall not be responsible for any failure to perform any of Landlord's obligations hereunder, if such failure is caused by reason of strike, other labor trouble, governmental rule, regulations, ordinance, statute or interpretation, or by fire, earthquake, civil commotion, or any and all other causes beyond the reasonable control of Landlord. The amount of time for Landlord to perform any of Landlord's obligations shall be extended for the amount of time Landlord is delayed in performing such obligation by reason of such force majeure occurrence.

20.26 SURVIVAL OF OBLIGATIONS. Any obligations of Tenant accruing prior to the expiration of this Lease shall survive termination of this Lease, and Tenant shall promptly perform all such obligations whether or not the Lease term has expired.

21. EXCULPATION:

Any liability of Landlord (including without limitation Landlord's partners and their shareholders, affiliates, agents, and employees) to Tenant or any other person shall be limited to the interest of Landlord in the Property. Tenant or any other person claiming through Tenant agrees to look solely to such interest for the recovery of any judgment against Landlord, it being intended by the parties that neither Landlord, its partners, and their shareholders, affiliates, agents and employees, nor any other assets of Landlord or such partners, and their shareholders, affiliates, agents, and employees shall be liable for any such judgment.

THIS IS A LEGAL DOCUMENT. PLEASE READ IT CAREFULLY. IF YOU HAVE ANY QUESTIONS ABOUT IT, YOU SHOULD CONSULT YOUR OWN ATTORNEY. NOTE THAT SOME STATES REQUIRE AN ACKNOWLEDGEMENT.

RESEARCH WAY INVESTMENTS, INC. ANTIVIRALS, INC.

/s/ Rex Jacobsma /s/ William H. Fleming
- ---------- ----------

By: Rex Jacobsma By: William H. Fleming
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Its: General Partner Its: Director of Business Development
---------- ----------

ACKNOWLEDGMENTS

FOR INDIVIDUAL ACKNOWLEDGMENT

STATE OF Oregon)
) ss.
COUNTY OF Multnomah)

THIS IS TO CERTIFY that on this 17TH day of June, 1992, before me, the undersigned, a notary public in and for said State, duly commissioned and sworn, personally appeared William Fleming, to me known to be the individual

described in and who executed the within and foregoing instrument, and acknowledged to me that said individual signed the same as said individual's free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in this certificate first above written.

/s/ Janet M. Eayes

Notary public in and for state of Oregon,
residing at

My appointment expires 10/20/95

FOR PARTNERSHIP ACKNOWLEDGMENT

STATE OF X X X)
) ss.
COUNTY OF X X X)

THIS IS TO CERTIFY that on this X day of X , 19X, before me, the undersigned, a notary public in and for said State, duly commissioned and sworn, personally appeared Rex Jacobsma, to me known to be a general partner of Research Way Investments, the _____ partnership that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said partnership for the uses and purposes therein mentioned, and on oath stated that said individual was authorized to execute said instrument.

WITNESS my hand and official seal the day and year in this certificate first above written.

X X X

Notary public in and for state of X X,
residing at

My appointment expires X X

FOR CORPORATE ACKNOWLEDGMENT

STATE OF Oregon)
) ss.
COUNTY OF Multnomah)

THIS IS TO CERTIFY that on this 17th day of June, 1992, before me, the undersigned, a notary public in and for said State, duly commissioned and sworn, personally appeared William Fleming, to me known to be the Director of AntiVirals, the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned, and on oath stated that said individual was authorized to execute said instrument.

WITNESS my hand and official seal the day and year in this certificate first above written.

/s/ Janet M . Eayes

Notary public in and for state of Oregon, residing at

My appointment expires 10/20/95

ADDENDUM 1
TO COMMERCIAL LEASE BETWEEN
RESEARCH WAY INVESTMENTS AND ANTIVIRALS, INC.

1. At Tenant's request, from time to time, Landlord will permit Tenant access to the space between the floor of the Premises and the ceiling of the first floor area directly below the Premises for the purpose of conducting inspection, maintenance, and repairs to equipment and conduits. Tenant shall request access as far in advance of the actual inspection, repair, or maintenance as is reasonably possible and shall coordinate the scheduling of the access so as to minimum disturbance of the first floor tenants that may be affected by Tenant's access to said area between the floor and the ceiling. Tenant shall promptly repair any damage to the floor, the ceiling below the floor, Landlord's conduits or equipment, or the first floor tenants that is caused by Tenant.

2. Within a reasonable time of Tenant's request, Landlord shall provide partitions/dividers for Tenant's use during the term of this Lease. Tenant shall install the partitions/dividers at Tenant's expense and shall repair or replace any damaged or lost partitions/dividers during the term of this Lease.

3. Tenant shall not be obligated to pay Fixed Rent for the stairs and stairwell in the Premises. However, all other terms and provisions of this Lease shall apply to the stairs and stairwell, including Tenant's obligation to pay its Percentage Share of Operating Costs and Taxes; without limiting the foregoing, Tenant shall be responsible for cleaning and maintaining the stairs and stairwell in good condition throughout the term of the Lease.

4. Tenant shaM have the right to cancel this Lease after Tenant has paid Fixed Rent on the entire Premises for 48 months; provided, that Tenant shall give Landlord a minimum of 12 months' prior written notice of Tenant's intent to cancel, which notice shall be accompanied by a cancellation payment in

the sum of $54,000.00; and, provided further, that Tenant shall not be entitled to cancel this Lease if Tenant is in default.

5. Tenant agrees to pay a leasing commission to Jacobsma & Associates in the amount of $34,399.80, which sum shall be paid in installment payments equivalent to installments of Fixed Rent on the first day of each month until paid in full. Landlord shall credit Tenant with payments of Fixed Rent equivalent to each installment of leasing commission timely paid to Jacobsma & Associates. Notwithstanding the foregoing, Tenant acknowledges that Jacobsma & Associates has represented only the interests of Landlord in this transaction and in the negotiations for this Lease; there is no fiduciary relationship or agency relationship between Jacobsma & Associates and Tenant. Tenant shall pay its Percentage Share of Operating Costs and Taxes directly to Landlord.

6. Tenant shall have access from the Premises to the upstairs freight elevator and access from the shipping/receiving area to the freight elevator on the first floor; Landlord shall have the right to change the route of the access from time to time.

7. Tenant may, at its option, extend this Lease for three additional years beyond December 15, 1997 at a Fixed Rent rate of 78CENTS per square foot of Net Rental Area per month; provided, that Tenant shall give Landlord prior written notice on or before December 15, 1996, of its intent to extend the Lease, which notice shall be accompanied by a nonrefundable payment of $20,000 to be applied toward Fixed Rent due and payable during the extended term; and, provided further, that Tenant shall not be entitled to extend this Lease if Tenant is in default.

8. Tenant shall have a "second right of refusal" to lease other space in the Building on the following terms and conditions: prior to Landlord entering into a lease with a third party for space in the Building, Landlord shall first offer such space in writing (on the same terms and conditions on which Landlord is willing to lease to said third party) to CH2M Hill and then to Tenant herein ("Landlord's Written Notice"). Tenant shall have 10 days, from the date of Landlord's Written Notice, to deliver written notice to Landlord unconditionally agreeing to lease such space on the specified terms and conditions. If Tenant fails to deliver said written acceptance to Landlord within the 10-day period, Tenant shall have no further "second right of refusal" on the space described in Landlord's Written Notice so long as Landlord thereafter enters into a lease for said space on the terms and conditions specified in Landlord's Written Notice or on terms and conditions more favorable to Landlord. Tenant acknowledges that notwithstanding Landlord's Written Notice, CH2M Hill has a "first right of refusal" and may preempt Tenant's right to lease such space. Notwithstanding the foregoing, Tenant shall have no "second right of refusal" if Tenant is in default.

9. Landlord hereby agrees to pay Jacobsma & Associates a leasing commission, if Tenant extends the Lease pursuant to SECTION 7 of this Addendum or otherwise, as follows: 3% of Rent (Fixed Rent plus Tenant's estimated Percentage Share of Operating Expenses and Taxes) to be paid during the extended term of the Lease, provided that no commission shall be payable for extensions beyond the first 10 years of Tenant's occupancy of the entire Premises; said commission shall be due and payable in full at the commencement of the extended term. Landlord hereby agrees to pay Jacobsma & Associates a leasing commission if Tenant leases additional space, pursuant to the "second right of refusal" or otherwise, as follows: 3% of Rent (Fixed Rent plus Tenant's estimated Percentage Share of Operating Expenses and Taxes) to be paid during the term of the lease for the additional space, provided, that no commission shall

be payable for any portion of the lease term that extends beyond the first 10 years of Tenant's occupancy of the additional space.

RESEARCH WAY INVESTMENTS, INC.	ANTIVIRALS, INC.
/s/ Rex Jacobsma	/s/ William H. Fleming
By: Rex Jacobsma	By: William H. Fleming
Its: General Partner	Its: Director of Corporate Deveploment

EXHIBIT B

To

COMMERCIAL LEASE

RULES AND REGULATIONS

1. No sidewalks, entrance, passages, courts, elevators, vestibules, stairways, corridors or halls shall be obstructed or encumbered by Tenant or used for any purpose other than ingress and egress to and from the Premises or the Building and if the Premises are situated on the ground floor of the Building. Tenants shall further, at Tenant's own expense, keep the sidewalks and curb directly in front of the Premises clean and free from rubbish.

2. No awning or other projection shall be attached to the outside walls or windows of the Building or Premises without the prior written consent of Landlord. No curtains, blinds, shades, drapes or screens shall be attached to or hung in, or used in connection with any window or door of the Premises, without the prior written consent of Landlord. Such awnings, projections, curtains, blinds, shades, drapes, screens and other fixtures must be of a quality, type, design, color, material and general appearance approved by Landlord, and shall be attached in the manner approved by Landlord. All electrical fixtures hung in offices or spaces along the perimeter of the Premises must be fluorescent, of a quality, type, design, bulb color, size and general appearance approved by Landlord.

3. No sign, advertisement, notice or other lettering shall be exhibited, inscribed, painted or affixed by Tenant on any part of the outside or inside of the Premises or of the Building without the prior written consent of Landlord. In the event of the violation of the foregoing by Tenant, Landlord may remove same without any liability, and may charge the expense incurred by such removal to Tenant. Interior signs on doors and the directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at the expense of Tenant, and shall be of a quality, quantity, type, design, color, size, style, composition, material, location and general appearance acceptable to Landlord.

4. The sashes, sash doors, skylights, windows and doors that reflect or admit light or air into the halls, passageways or other public places in the Building shall not be covered or obstructed by Tenant, nor shall any bottles, parcels or other articles be placed on the window sills or in the public portions of the Building.

5. No show cases or other articles shall be put in front of or affixed to any part of the exterior of the Building, nor placed in public portion thereof without the prior written consent of Landlord.

6. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be thrown therein. All damages resulting from any misuse of the fixtures shall be borne by Tenant to the extent that Tenant or Tenant's agents, servants, employees, contractors, visitors or licensees shall have caused the same.

7. Tenant shall not mark, paint, drill into or in any way deface any part of the Premises or Building. No boring, cutting or stringing of wires shall be permitted, except with the prior written consent of Landlord, and as Landlord may direct.

8. No animal or bird of any kind shall be brought into or kept in or about the Premises or Building.

9. Tenant shall not make, or permit to be made, any unseemly or disturbing noises or disturb or interfere with occupants of the Building or neighboring buildings or premises or those having business with them. Tenant shall not throw anything out of the doors, windows or skylights or down the passageways.

10. Neither Tenant nor any of Tenant's agents, servants, employees, contractors, visitors or licensees shall at any time bring or keep upon the Premises any flammable, combustible or explosive fluid, chemical or substance other than those substances in reasonable quantities, customarily used in Tenant's operations.

11. No additional locks, bolts or mail slots of any kind shall be placed upon any of the doors or windows by Tenant, nor shall any change be made in existing locks or the mechanism thereof. Tenant must, upon the termination of the tenancy, restore to Landlord all keys of stores, offices and toilet rooms, either furnished to, or otherwise procured by Tenant, and in the event of the loss of any keys so furnished, Tenant shall pay to Landlord the cost thereof.

12. All removals, or the carrying in or out of any safes, freight, furniture, construction material, bulky mater or heavy equipment of any description must take place during the hours which Landlord or its agent may determine from time to time. Landlord reserves the right to prescribe the weight and position of all safes, which must be placed upon two-inch thick plank strips to distribute the weight. The moving of safes, freight, furniture, fixtures, bulky matter or heavy equipment of any kind must be made upon previous notice to the Superintendent of the Building and in a manner and at times prescribed by him, and the persons employed by Tenant for such work are subject to Landlord's prior approval. Landlord reserves the right to inspect all safes, freight or other bulky articles to be brought into the Building and to exclude from the Building all safes, freight or other bulky articles which violate any of these Rules and Regulations or the Lease of which these Rules and Regulations are a part.

13. Tenant shall not engage janitorial or maintenance or other like service from any company or persons not approved by Landlord. Landlord shall approve a sufficient number of

sources of such services to provide Tenant with a reasonable selection, but only in such instances and to such extent as Landlord in its judgment shall consider consistent with security and proper operation of the Building.

14. Landlord shall have the right to prohibit any advertising or business conducted by Tenant referring to the Building which, in Landlord's opinion, tends to impair the reputation of the Building or its desirability as a first class building for offices and/or commercial services and upon notice from Landlord, Tenant shall refrain from or discontinue such advertising.

15. Landlord reserves the right (but does not have the obligation) to exclude from the Building between the hours of 6:00 p.m. and 8:00 a.m. on all days and at all hours on Saturdays, Sundays and legal holidays, all persons who do not present a pass to the Building or Project issued by Landlord. Landlord may furnish passes to Tenant so that Tenant may validate and issue same. Tenant shall safeguard said passes and shall be responsible for all acts of persons in or about the Building or Project who possess a pass issued by Tenant.

16. Tenant's contractors shall, while in the Building, be subject to and under the control and direction of the Superintendent of the Building (but not as agent or servant of said Superintendent of the Building or of Landlord).

17. If the Premises is or becomes infested with vermin as a result of the use or any misuse or neglect of the Premises by Tenant, its agents, servants, employees, contractors, visitors or licensees, Tenant shall forthwith at Tenant's expense cause the same to be exterminated from time to time to the satisfaction of Landlord and shall employ such licensed exterminators as shall be approved in writing in advance by Landlord.

18. The requirements of Tenant will be attended to only upon application at the office of the Landlord. Building personnel shall not perform any work or do anything outside of their regular duties, unless under special instructions from the office of the Landlord.

19. Canvassing, soliciting and peddling in the Building are prohibited and Tenant shall cooperate to prevent the same.

20. No water cooler, air conditioning unit or system or other apparatus shall be installed or used by Tenant without the written consent of Landlord.

21. There shall not be used in any space, or in the public halls, plaza areas or lobbies of the Building, either by Tenant or by jobbers or others, in the delivery or receipt of merchandise, any hand trucks or dollies, except those equipped with rubber tires and sideguards.

22. Tenant, Tenant's agents, servants, employees, contractors, licensees, or visitors shall not park any vehicles in any driveways, service entrances, or areas posted "No Parking" and shall comply with any other parking restrictions imposed by Landlord from time to time.

23. Tenant shall install and maintain, at Tenant's sole cost and expense, an adequate visibly marked (at all times properly operational) fire extinguisher next to any duplicating or photocopying machine or similar heat producing equipment, which may or may not contain combustible material in the Premises.

24. Tenant shall not use the name of the Building for any purpose other than as the address of the business to be conducted by Tenant in the Premises, nor shall Tenant use any picture of the Building in its advertising, stationery or in any other manner without the prior written permission of Landlord. Landlord expressly reserves the right at any time to change said name without in any manner being liable to Tenant therefor.

25. Tenant shall not prepare any food nor do any cooking, conduct any restaurant, luncheonette or cafeteria for the sale or service of food or beverages to its employees or to others, or cause or permit any odors of cooking or other processes, or otherwise to emanate from the Premises. Tenant shall not install or permit the installation or use of any vending machine or permit the delivery of any food or beverage to the Premises except by such persons and in such manner as are approved in advance in writing by Landlord.

26. Tenant, Tenant's agents, servants, employees, contractors, licensees, or visitors shall not smoke in the interior common areas of the Building.

27. Tenant shall not use the elevator in any way which exceeds the posted weight limit of the elevator.

28. Tenant acknowledges that the exercise equipment and facilities may only be used by Tenant and its employees; Tenant shall not permit the exercise equipment and facilities to be used by Tenant's vendors, customers, family members, friends, etc.

COMMERCIAL LEASE

SUMMARY OF LEASE TERMS

A. EXECUTION DATE:

B. LANDLORD:

Research Way Investments, a California Limited Partnership

C. TENANT:

Antivirals, Inc., an Oregon corporation

D. PREMISES (SECTION 1, EXHIBIT A):

Approximately 13,180 square feet (not including stairs and stairwell) of Net Rentable Area located on the second floor in that certain building located and addressed at Research Way, Corvallis, Oregon (the "Building"), situated on the real property described on Exhibit C ("Property"). The Net Rentable Area of the Building is 89,000 square feet.

E. TERM (SECTION 2.1):

Commencement Date: June 15, 1992
Expiration Date: December 15, 1997
Length of Term: 5.5 Years

F. FIXED RENT (SECTION 3.1):

*First year: $.26 per square foot of Net Rentable Area per month;
Second year: $.52 per square foot of Net Rentable Area per month;
Third year: $.52 per square foot of Net Rentable Area per month;
Fourth year: $.52 per square foot of Net Rentable Area per month;
Fifth year through expiration date: $.78 per square foot of Net Rentable Area per month;
Tenant has paid $0 installments of Fixed Rent in advance totalling the sum of $0.

G. ADJUSTMENTS TO RENT:

(i) CPI Rent Adjustment Region (Section 3.2): N/A

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* First year commences when Tenant occupies any portion of the Premises; Tenant pays Fixed Rent only on portions that Tenant occupies (prorated to nearest 100 square feet), but shall pay Fixed Rent on entire Premises commencing December 15, 1992 in any event. Second year commences 12 months after commencement of First year, etc. All of Tenant's other obligations in this Lease commence on the Commencement Date defined in Section E, above.

(ii) Market Value Rent Adjustment Dates (Section 3.3 and Addendum No. _____): N/A

H. SECURITY DEPOSIT (SECTION 4):

$25,000 00

I. OPERATING COSTS AND TAXES (SECTION 5.2):*

Tenant's Percentage Share of Operating Costs and Taxes: Fourteen and ninety-nine hundreds percent (14.99%)

Estimate for First Lease Year: $56,036.40

* Tenant shall commence payment of its Percentage Share of Operating Costs and Taxes on the Commencement Date defined in Section E, above.

J. PERMITTED USE (SECTION 6.1):

Pharmaceutical research and development laboratory.

K. TENANT'S INSURANCE REQUIREMENTS (SECTION 13.1):

(i)	Liability:	$5,000,000 min.
(ii)	All Risk Replacement Cost:	$Cost of replacement

L. LANDLORD'S INSURANCE REQUIREMENTS (SECTION 13.2):

(i)	Liability:	$5,000,000.00
(ii)	Casualty:	Cost of replacement
(iii)	Difference in Conditions:	Actual loss of rents

M. ADDRESS FOR NOTICES (SECTION 20.15):

TO LANDLORD:	WITH COPIES TO:
Research Way Investments	Turn-Key Property Management
c/o Rex Jacobsma	P.O. Box 1715
P.O. Box 1833/1508 Olive St.	1508 Olive Street
Paso Robles, California 93447/93446	Paso Robles, California 93447/93446
(805) 239-3090	(805) 2394795
(805) 239-9088 (FAX)	(805) 239-9088 (FAX)

TO TENANT:	WITH COPIES TO:
Antivirals, Inc.	N/A
One SW Columbia, Suite 1105	----------
Portland OR 97258	
503) 227-0554	
(503) 227-0751 (FAX)	

N. BROKER(S) (SECTION 20.20):

Broker(s): Jacobsma & Associates
Address: P.O. Box 1833, Paso Robles, California 93447
Party Paying Commission (Landlord or Tenant): Tenant*

* See Addendum 1

O. LIST OF EXHIBITS:

EXHIBIT A - Floor Plan
EXHIBIT B - Rules and Regulations
EXHIBIT C - Real Property Description

P. LIST OF ADDENDA:

Addendum 1

The provisions of the lease identified above in parentheses are those provisions making reference to above-described Lease Terms. Each such reference in the Lease shall incorporate the applicable Lease Terms. In the event of any conflict between the Summary of Lease Terms and the Lease, the latter shall control.

TABLE OF CONTENTS

LEASE

Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises set forth and described on the Reference Page. The Reference Page including all terms defined thereon is hereby incorporated as part of this Lease.

1. USE AND RESTRICTIONS ON USE.

The Premises are to be used solely for the purposes stated on the Reference Page. Tenant shall not do or permit anything to be done in or about the Premises which will in any way obstruct or interfere with the rights of other tenants or occupants of the Building or injure, annoy, or disturb them or allow the Premises to be used for any improper, immoral, unlawful, or objectionable purpose. Tenant shall not commit or suffer the commission of any waste in on or about the Premises. Tenant shall not do or permit anything to be done on or about the Premises or bring or keep anything therein which will in any way increase the rate of fire insurance upon the Building or any of its contents.

2. TERM.

The term of this Lease shall be as indicated on the Reference Page (unless sooner terminated as herein provided). Tenant agrees that in the event of the inability of Landlord to deliver possession of the Premises on the Commencement Date, Landlord shall not be liable for any damage thereby, but Tenant shall not be liable for any rent until the time when Landlord can,

alter notice to Tenant, deliver possession of the Premises to Tenant. No such failure to give possession on the Commencement Date shall affect the other obligations of Tenant hereunder, nor shall such failure be construed in any way to extend the Term. If Landlord is unable to deliver possession of the Premises within ninety (90) days of the Commencement Date (other than as a result of strikes, shortages of materials or similar matters beyond the reasonable control of Landlord and Tenant is notified by Landlord in writing as to such delay), Tenant shall have the option to terminate this Lease unless said delay is as a result of: (a) Tenant's failure to agree to plans and specifications; (b) Tenant's request for materials, finishes or installations other than Landlord's standard; (c) Tenant's change in architectural plans; or (d) performance or completion by a party employed by Tenant. If said delay is the result of any of the foregoing, the Commencement Date and the payment of rent hereunder shall be accelerated by the number of days of such delay.

In the event Landlord shall permit Tenant to occupy the Premises prior to the Commencement Date, such occupancy shall be subject to all the provisions of this Lease. Said early possession shall not advance the Termination Date.

3. RENT.

Tenant agrees to pay to Landlord the Annual Rent by paying the Monthly Installment of Rent on or before the first day of each full calendar month during the Term, except that the first month's rent shall be paid upon the execution hereof. Rent for any period during the Term which is less than one full month shall be a prorated portion of the Monthly Installment of Rent based upon the actual number of days in a month. Said rent shall be paid to Landlord, without deduction or offset and without notice or demand at the Landlord's address, as set forth on the Reference Page or to such other person or at such other place as Landlord may from time to time designate in writing.

Tenant recognizes that late payment of any rent or other sum due hereunder will result in administrative expense to Landlord the extent of which additional expense is extremely difficult and economically impractical to ascertain. Tenant therefore agrees that if rent or any other sum is due and payable pursuant to this Lease and such amount remains due and unpaid ten (10) days alter said amount is due, such amount shall be increased by a late charge in an amount equal to the greater of: (a) Fifty Dollars ($50.00) or (b) a sum equal to five percent (5%) of the unpaid rent or other payment. The amount of the late charge to be paid by Tenant shall be reassessed and added to Tenant's obligation for each successive monthly period until paid. The provisions of this Article in no way relieve Tenant of the obligation to pay rent or other payments on or before the date on which they are due, nor do the terms of this Article in any way affect Landlord's remedies pursuant to Article 20 in the event said rent or other payment is unpaid after date due.

No security or guarantee which may now or hereafter be furnished to Landlord for the payment of rent or the performance of Tenant's other obligations under this Lease shall in any way constitute a bar to the recovery of the Premises or defense to any action in unlawful detainer or to any other action which Landlord may bring for a breach of any of the terms, covenants or conditions of this Lease.

4. RENT ADJUSTMENTS.

For the purpose of this Article 4, the following terms are defined as follows:

BASE YEAR (DIRECT EXPENSES): The calendar year for Base Year (Direct Expenses) set forth on the Reference Page.

COMPARISON YEAR: Each calendar year falling partly or wholly within the Term after the Base Year (Direct Expenses).

DIRECT EXPENSES: All direct costs of operation, maintenance, repair, and management of the Building and parking garage (including the amount of any credits which Landlord may grant to particular tenants of the Building in lieu of providing any standard services or paying any standard costs described herein for similar tenants) as determined in accordance with generally accepted accounting principles, including the following costs by way of illustration, but not limitation: water and sewer charges; insurance premiums of or relating to all insurance policies and endorsements deemed by Landlord to be reasonably necessary or desirable and relating in any manner to the protection, preservation, or operation of the Building or any part thereof or as required by a mortgagor which Landlord may not deem to be reasonably necessary; utility costs, including but not limited to, the cost of heat, light, power, steam, gas, and waste disposal; the cost of janitorial services; the cost of security and alarm services; window cleaning costs; landscaping costs; labor costs; costs and expenses of managing the Building including reasonable management fees, if any; air conditioning costs; elevator maintenance fees and supplies; material costs; equipment costs and the cost of service agreements on equipment; tool costs; licenses, permits and inspection fees; wages and salaries for building management employees; employee benefits and payroll taxes for building management employees; accounting and legal fees; any sales use or service taxes incurred in connection therewith.

Landlord shall be entitled to amortize and include in Direct Expenses an allocable portion of the cost of capital improvement items, including life safety systems which are reasonably calculated to reduce operating expenses, or which are required under any governmental laws, regulations or ordinances which were not applicable to the Building at the time it was constructed. All such costs shall be amortized over the reasonable life of such improvements with interest at two percent (2%) over the prime lending rate charged by First Interstate Bank to its most credit worthy borrowers on the unamortized amount, in accordance with such reasonable life and amortization schedules as shall be determined by Landlord in accordance with generally accepted accounting principles.

Direct Expenses shall not include depreciation or amortization of the Building or equipment therein except as provided above, loan principal payments, costs of alterations of tenant's premises, leasing commissions, interest expenses on borrowings, advertising cost or management salaries for executive personnel other than personnel located at the Building.

CPI-U: OMITTED IN ITS ENTIRETY.

(A) If in any Comparison Year Direct Expenses paid or incurred shall exceed the Direct Expenses paid or incurred in the Base Year (Direct Expenses), Tenant shall pay as additional rent for such Comparison Year Tenant's Proportionate Share of such excess. The annual determination of Direct Expenses shall be made by Landlord and shall be binding upon Landlord and Tenant. Tenant may review the books and records

supporting such determination in the office of Landlord or Landlord's agent during normal business hours, upon giving Landlord five (5) days advance written notice. In the event that during all or any portion of any calendar year the Building is not fully rented and occupied Landlord may elect to make an appropriate adjustment in occupancy related Direct Expenses for such year for the purpose of avoiding distortion of the amount of such Direct Expenses to be attributed to Tenant by reason of variation in total occupancy of the building, employing sound accounting and management principles, to determine Direct Expenses that would have been paid or incurred by Landlord had the

Building been fully rented and occupied and the amount so determined shall be deemed to have been Direct Expenses for such year.

(B) Prior to the actual determination of Direct Expenses for a Comparison Year, Landlord may from time to time estimate the amount of such Direct Expenses. If such Direct Expenses is estimated to exceed the Direct Expenses for the Base Year (Direct Expenses), Landlord will give Tenant written notification of the amount of such estimated excess and Tenant agrees that it will pay, by increase of its Monthly Installments of Rent due in such Comparison Year, additional rent in the amount of Tenant's Proportionate Share of such estimated excess, and such increased rate of Monthly Installments of Rent shall remain in effect until further written notification to Tenant pursuant hereto.

(C) When the above-mentioned actual determination of Direct Expenses is made and Tenant is so notified in writing then:

(i) If the total additional rent Tenant actually paid pursuant to paragraph (B) of the Article 4 for the Comparison Year is less than Tenant's Proportionate Share of the actual excess of Direct Expenses, then Tenant shall pay to Landlord as additional rent in one lump sum the difference between such total additional rent actually paid by Tenant pursuant to paragraph (B) for the Comparison Year and the Tenant's Proportionate Share of such excess, this lump sum payment to be made within thirty (30) days of receipt of Landlord's bill therefor; or

(ii) If the total additional rent Tenant actually paid pursuant to paragraph (B) of this Article 4 for the Comparison Year is more than Tenant's Proportionate Share of the actual excess of Direct Expenses as so determined, then Landlord shall credit the difference against the then nest due payments to be made by Tenant under this Article 4.

(D) If the Commencement Date is other than January 1 and is in a Comparison Year or if the Termination Date is other than December 31, Tenant's Proportionate Share of any increased Direct Expense for such Comparison Year shall be prorated based upon a three hundred sixty-five (365) day year.

(E) Even though the Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Proportionate Share of Direct Expenses for the year in which this Lease terminates, Tenant shall pay any increase due over the estimated expenses paid and conversely any overpayment, less any amounts due Landlord hereunder shall be rebated by Landlord to Tenant.

(F) OMITTED IN ITS ENTIRETY.

Notwithstanding anything contained in this Article or Article 5 hereof, the Annual Rent and Monthly Installment of Rent payable by Tenant shall in no event be less than that specified in the Reference Page.

5. REAL ESTATE TAXES.

For the purpose of this Article 5, the following terms are defined as follows:

BASE YEAR (TAXES): The calendar year for Base Year (Taxes) set forth on the Reference Page.

COMPARISON YEAR: Each calendar year falling partly or wholly within the Term after the Base Year (Taxes).

TAXES: All such taxes as hereinbelow described which are in addition to those provided for and payable by Tenant to Landlord pursuant to Article 7 below, and shall include the following by way of illustration, but not

limitation: real estate taxes and any other taxes, charges and assessments which are levied with respect to the Building or the land appurtenant to the Building, or with respect to any improvements, fixtures and equipment or other property of Landlord, real or personal, located in the Building and used in connection with the operation of the Building and said land, including any payments to any ground lessor in reimbursement of tax payments made by such lessor; and any gross receipts tax and/or any tax which shall be levied in addition to or in lieu of real estate, possessory interest or personal property taxes, other than taxes covered by Article 28.

(A) If the Taxes to be paid by Landlord in any Comparison Year shall exceed the amount of such Taxes which became due and payable in the Base Year (Taxes), regardless of the year for which such Taxes are assessed, Tenant shall pay as additional rent for such Comparison Year, Tenant's Proportionate Share of such excess.

(B) Prior to the actual determination of the Taxes to be paid in a Comparison Year, Landlord may from time to time estimate the amount of such Taxes. If such Taxes are estimated to exceed the Taxes which became due in the Base Year (Taxes), Landlord will give Tenant written notification of the amount of such estimated excess and Tenant

agrees shall it will pay, by increase of its Monthly Installments of Rent due in such Comparison Year, additional rent in the amount of Tenant's Proportionate Share of such estimated excess, and such increased rate of Monthly Installments of Rent shall remain in effect until further written notification to Tenant pursuant hereto.

(C) Upon issuance of the actual bill or bills for the Taxes to be paid by Landlord in any Comparison Year, Landlord shall determine the amount of any actual excess over the amount of such Taxes which became due and payable in the Base Year (Taxes), and when Tenant is notified thereof in writing, then:

(i) If the total additional rent then paid and to be paid by Tenant pursuant to paragraph (B) of this Article 5 for the Comparison Year is less than Tenant's Proportionate Share of the actual excess of the Taxes for such Comparison Year as so determined by Landlord, the monthly payments of additional rent to be paid by Tenant pursuant to said paragraph (B) for the remainder of such Comparison Year beginning not less than thirty (30) days after receipt of Landlord's aforesaid notification to Tenant, shall be increased by such amount as shall be sufficient to fully pay such difference by the end of such Comparison Year.

(ii) If the total additional rent then paid and to be paid by Tenant pursuant to paragraph (B) of this Article 5 for the Comparison Year is more than Tenant's Proportionate Share of the actual excess of the Taxes for such Comparison Year as so determined by Landlord, then Landlord shall credit such amount against the next Monthly Installments of Rent coming due under the Lease until such amount has been paid in full.

(D) In addition, Tenant shall pay upon demand Tenant's Proportionate of any fees, expenses, and costs incurred by Landlord in protesting any assessments, levies or the tax rate pertaining to any Taxes to be paid by Landlord in any Comparison Year.

(E) If the Commencement Date is other than January 1 and is in a Comparison Year or if the Termination Date is other than December 31, Tenant's Proportionate Share of any increase in Taxes shall be prorated based upon a three hundred sixty-five (365) day year.

(F) Even though the Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Proportionate Share of Taxes for the year in which this Lease terminates, Tenant shall pay any increases due over the estimated Taxes paid and conversely any overpayment, less

any amounts due Landlord hereunder, shall be rebated to Tenant.

Notwithstanding anything contained in this Article or Article 4 hereof, the Annual Rent and Monthly Installment of Rent payable by Tenant shall in no event be less than that specified in the Reference Page.

6. SECURITY DEPOSIT.

Tenant has deposited with Landlord the Security Deposit. Said sum shall be held by Landlord as security for the faithful performance by Tenant of all the terms, covenants and conditions of this Lease to be kept and performed by Tenant and not as an advance rental deposit or as a measure of Landlord's damage in case of Tenant's default. If Tenant defaults with respect to any provision of this Lease, Landlord may use any part of this Security Deposit for the payment of any real or any other sum in default, or for the payment of any amount which Landlord may spend or become obligated to spend by reason of Tenant's default, or to compensate Landlord for any other loss or damage which Landlord may suffer by reason of Tenant's default. If any portions is so used, Tenant shall within five days after written demand therefor deposit with Landlord as amount sufficient to restore the Security Deposit to its original amount and Tenant's failure to do so shall be a material breach of this Lease. Landlord shall not be required to keep this Security Deposit separate from its general funds, and Tenant shall not be entitled to interest on such deposit. If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, the Security Deposit or any balance thereof shall be returned to Tenant at such time after termination of this Lease when Landlord shall have determined that all of Tenant's obligations under this Lease have been fulfilled.

7. ALTERATIONS.

Tenant shall not make or suffer to be made any alterations, additions, or improvements, including, but not limited to paint and redecorating, the attachment of any fixtures or equipment in, on, or to the Premises or any part thereof or the making of any improvements as required by Article 8 hereof without the prior written consent of Landlord. Any alteration, additions or improvements to be done by Tenant as part of Tenant's initial occupancy shall be specified in Exhibit B hereto. Any alteration, addition, or improvement in, on, or to the Premises including carpeting, but excepting movable furniture and trade fixtures, shall be and remain the property of Tenant during the Term but shall, unless Landlord elects otherwise, become a part of the realty and belong to Landlord without compensation to Tenant upon the expiration or sooner termination of the Term and title shall pass to Landlord under this Lease as by a bill of sale. When applying for such consent, Tenant shall furnish complete plans and specifications for such alterations, additions and improvements. Tenant will be financially responsible for having Landlord's building architect, mechanical, electrical and structural engineers either prepare such plans or approve such plans as prepared by others licensed to do business in the State of Oregon. In the event Landlord consents to the making of any such alteration, addition, or improvement by Tenant, the same shall be

made using Landlord's contractor and designated subcontractors at Tenant's sole cost and expense and in any event Landlord may charge Tenant a reasonable charge to cover building overhead as it relates to such proposed work. All alterations, additions or improvements proposed by Tenant shall be constructed in accordance with all government laws, ordinances, rules and regulations and Tenant shall, prior to construction, provide such assurances to Landlord, including but not limited to, waivers of lien, surety company performance bonds and personal guaranties of individuals of substance as Landlord shall require to assure payment of the costs thereof and to protect

Landlord against any loss from any mechanics', materialmen's or other liens. Tenant shall pay in addition to any sums due pursuant to Article 5 above any increase in real estate taxes attributable to any such alteration, addition, or improvement for so long, during the Term, as such increase is ascertainable. Upon the expiration or sooner termination of the Term as herein provided, Tenant shall upon demand by Landlord, at Tenant's sole cost and expense, forthwith and with all due diligence remove any such alterations, additions, or improvements which are designated by Landlord to be removed, and Tenant shall forthwith and with all due diligence, at its sole cost and expense, repair and restore the Premises to their original condition, reasonable wear and tear excepted.

8. REPAIR.

By taking possession, Tenant accepts the Premises as being in good order condition and repair, and in the condition in which Landlord is obligated to deliver them and Tenant shall execute and deliver to Landlord, upon demand, a letter of acceptance of delivery of the Premises. Tenant shall, at all times during the Term, keep the Premises in good condition and repair, excepting damage thereto by fire, earthquake, Act of God or the elements, shall comply with all governmental laws, ordinances and regulations applicable to the use and its occupancy of the Premises, and shall promptly comply with all governmental orders and directives for the corrective prevention and abatement of any violations or nuisances in or upon, or connected with, the Premises, all at Tenant's sole expense. It is hereby understood and agreed that Landlord has no obligation to alter, remodel, improve, repair, decorate or paint the Premises, except as specified in Exhibit B if attached hereto, and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant, except as specifically set forth herein. Notwithstanding the above provisions of this Article, Landlord shall repair and maintain the structural portions of the Building, including the basic plumbing, (excluding wet bars and sinks within the Tenant's space,) air conditioning, heating and electrical systems, installed or furnished by Landlord. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after written notice of the need of such repairs or maintenance is given to Landlord by Tenant. Except as provided in Article 22, there shall be no abatement of rent and no liability of Landlord by reason of any injury to or interference with Tenant's business arising from the making of any repairs, alterations or improvements in or to any portion of the Building or the Premises or in or to fixtures, appurtenances and equipment

herein. Tenant waives the right to make repairs at Landlord's expense under any law, statute or ordinance now or hereafter in effect.

9. LIENS.

Tenant shall keep the Premises and Tenant's leasehold interest in the Premises free from any liens arising out of any work performed, materials furnished, or obligations incurred by Tenant. In the event that Tenant contracts for work lo be done to or on the premises by any laborer or materialman capable of claiming a construction lien against the premises pursuant to the Oregon Construction Lien Law, Oregon Revised Statute Chapter 87, Tenant shall notify Landlord prior to the commencement of any construction on the premises and prior to the supplying of any materials to the premises so as to allow Landlord to post a notice of nonresponsibility pursuant to ORS 87.030. In the event that Tenant shall not, within ten (10) days following the imposition of any such lien, cause the same to be released of record, Landlord shall have the right to cause the same to be released by such means as it shall deem proper, including payment of the claim giving rise to such lien. All such sums paid by Landlord and all expenses incurred by it in connection therewith shall be considered additional rent and shall be payable to it by Tenant on demand with interest at two percent (2%) over the prime lending rate charged by First Interstate Bank to its most credit

worthy customers or the highest rate permitted by law, whichever is lower.

10. ASSIGNMENT AND SUBLETTING.

Tenant shall not have the right to assign or pledge this Lease or to sublet the whole or any part of the premises, whether voluntarily or by operation of law, or permit the use or occupancy of the premises by anyone other than Tenant, without the prior written consent of Landlord. Such restrictions shall also be binding upon any assignee or subtenant to which Landlord has consented. In the event Tenant desires to sublet the Premises, or any portion thereof, or assign this Lease, Tenant shall give written notice thereof to Landlord at least ninety (90) days but no more than one hundred eighty (180) days prior to the proposed commencement date of such subletting or assignment, which notice shall set forth the name of the proposed subtenant or assignee, the relevant terms of any sublease and copies of financial reports and other relevant financial information of the proposed subtenant or assignee. The form of any sublease or assignment agreement shall be subject to Landlord's approval. Notwithstanding any permitted assignment or subletting, Tenant shall at all times remain directly, primarily and fully responsible and liable for the payment of the rent herein specified a d for compliance with all of its other obligations under the terms, provisions and covenants of this Lease. Upon the occurrence of an "event of default" (as hereinafter defined), if the Premises or any part thereof are then assigned or sublet, Landlord, in addition to any other remedies herein provided or provided by law, may, at its option, collect directly from such assignee or subtenant all rents due and becoming due to Tenant under such assignment or sublease and apply such

rent against any sums due to Landlord from Tenant hereunder, and no such collection shall be construed to constitute a novation or release of Tenant from the further performance of Tenant's obligations hereunder.

In addition to, but not in limitation of, Landlord's right to approve of any subtenant or assignee, Landlord shall have the option, in its sole discretion, in the event of any proposed subletting or assignment, to terminate this Lease, or in the case of a proposed subletting of less than the entire Premises, to recapture the portion of the Premises to be sublet, as of the date the subletting or assignment is to be effective. The option shall be exercised, if at all, by Landlord giving Tenant written notice thereof within sixty (60) days following Landlord's receipt of Tenant's written notice as required above. If this lease shall be terminated with respect to the entire Premises pursuant to this Article, the Term of this Lease shall end on the Date stated in Tenant's notice as the effective date of the sublease or assignment as if that date had been originally fixed in this Lease for the expiration of the Term. If Landlord recaptures under this Article only a portion of the Premises, the rent during the unexpired Term shall abate proportionately based on the rent contained in the Lease as of the date immediately prior to such recapture. Tenant shall, at Tenant's own cost and expense, discharge in full any outstanding commission obligation on the part of Landlord with respect to this Lease, and any commissions which may be due and owing as a result of any proposed assignment or subletting, whether or not the Premises are recaptured pursuant hereto and rented by Landlord to the proposed tenant or any other tenant.

Consent by Landlord to any assignment or subletting shall not include consent to the assignment or transferring of any lease renewal option rights or space option rights, special privileges or extra services granted to Tenant by this Lease, or addendum or amendment hereto or letter of agreement (and such options, right, privileges or services shall terminate upon such assignment). Any sale, assignment, mortgage, transferrer of this Lease or subletting which does not comply with the provisions of this Article shall be void.

In the event that Tenant sells, sublets, assigns, or transfers this Lease and at any time receives rent and/or other consideration which exceeds

that which Tenant would at that time be obligated to pay to Landlord, Tenant shall pay to Landlord one hundred percent (100%) of the gross increase in such rent as such rent is received by Tenant and one hundred percent (100%) of any other consideration received by tenant from such subtenant in connection with such sublease or in the case of an assignment of this Lease by Tenant, Landlord shall receive one hundred percent (100%) of any consideration paid to Tenant by such assignee in connection with such assignment.

In the event Tenant is a corporation and if at any time during the term of this lease any or all of the voting securities of Tenant are transferred by any means resulting in a change in the person or persons owning or controlling the majority of said voting

securities on the date hereof, such transfer shall constitute an assignment of the Lease for purposes of this Section 10. If Tenant is a general partnership, the sale or transfer of a general partnership interest shall constitute an assignment of the Lease for purposes of this Section 10.

If Tenant requests consent to a proposed transfer, Tenant or the prospective transferee will pay a review fee of $100.00 for application to Landlord's expense in reviewing the request for consent to transfer. Additionally, Tenant will pay any additional attorneys fees, related costs and expenses, incurred by landlord as a result of the proposed transfer.

11. INDEMNIFICATION.

Landlord shall not be liable and Tenant hereby waives all claims against Landlord for any damage to any property or any injury to any person in or about the Premises or the Building by or from any cause whatsoever, (including without limiting the foregoing, rain or water leakage of any character from the roof, windows, walls, basement, pipes, plumbing works or appliances, the Building not being in good condition or repair, gas, fire, oil, electricity or theft), except to the extent caused by or arising from the negligent or willful act of Landlord, or its agents, employees or contractors for which Landlord will indemnify and hold Tenant harmless. Tenant shall hold Landlord harmless from and defend Landlord against any and all claims, liability or costs (including court costs and attorney's fees) for any damage to any property or any injury to any person occurring in, on or about the Premises or the Building to the extent that such injury or damage shall be caused by or arise from (a) the act, neglect, fault, or omission with respect to the injury or damage, by Tenant, its agents, servants, employees, invitees, or visitors; (b) the conduct or management of any work or thing whatsoever done by the Tenant in or about the Premises or from transactions of the Tenant concerning the Premises; or (c) any breach or default on the part of the Tenant in the performance of any covenant or agreement on the part of the Tenant to be performed pursuant to this Lease. The provisions of this Article shall survive the termination of this Lease with respect to any claims or liability occurring prior to such termination.

12. INSURANCE.

Tenant agrees to purchase at its own expense and to keep in force during the Term a comprehensive public liability and property damage insurance policy to protect against any liability to the public or to any invitee of Tenant or Landlord incident to the use of or resulting from any accident occurring in or upon the Premises with a comprehensive single limit of not less than $1,000,000.00. Said policy or policies shall: (a) name Landlord as an additional insured; (b) be issued by an insurance company which is acceptable to Landlord; and (c) provide that said insurance shall not be cancelled unless thirty (30) days prior written notice shall have been given to Landlord. Said policy or

policies or certificates thereof shall be delivered to Landlord by Tenant upon the Commencement Date and upon each renewal of said insurance.

Landlord covenants and agrees that throughout the Term it will insure the Building and the Building standard leasehold improvements installed therein at Landlord's expense, against damage by fire and extended perils coverage, and will carry public liability and property insurance, all in such reasonable amounts and with such reasonable deductions as would be carried by a prudent owner of a similar property in Portland, Oregon. Notwithstanding any contribution by Tenant to the cost of insurance premiums as provided herein, Tenant acknowledges that it has no right to receive any proceeds from any such insurance policies carried by Landlord, and that such insurance will be for the sole benefit of Landlord with no coverages for tenant for any risk insured against.

13. WAIVER OF SUBROGATION.

So long as their respective insurers so permit, Tenant and Landlord hereby mutually waive their respective rights of recovery against each other for any loss insured by fire, extended coverage, or all risk insurance now or hereafter existing for the benefit of the respective party but only to the extent of the insurance proceeds payable under such policies. Each party shall obtain any special endorsements required by their insurer to evidence compliance with the aforementioned waiver.

14. SERVICES AND UTILITIES.

Provided Tenant shall not be in default hereunder, and subject to the other provisions hereof, Landlord agrees to furnish to the Premises between the hours of 8:00 a.m. and 6:00 p.m. on generally recognized business days (but exclusive in any event of Saturdays, Sundays, and legal holidays), the following services and utilities subject to the rules and regulations of the Building prescribed from time to time: (a) water suitable for the intended use of the Premises; (b) heat and air conditioning for the use and occupation of the Premises; (c) elevator service by nonattended automatic elevators (at least one elevator shall remain operable at all times); (d) such window washing as may from time to time be reasonably required; (e) electricity for lighting and convenience outlets; and, (f) janitorial service to be performed five (5) nights per week after 5 p.m. Tenant shall be solely responsible for the professional cleaning and upkeep of any and all carpeting, special flooring and drapery installed in the Premises. Tenant agrees at all times to cooperate fully with Landlord and to abide by all the rules and regulations which Landlord may prescribe for the proper functioning and protection of said systems. Landlord shall not be liable for, and Tenant shall not be entitled to, any abatement or reduction of rental by reason of Landlord's failure to furnish any of the foregoing, unless such failure shall persist for an unreasonable time after written notice of such failure is given to Landlord by Tenant and provided further that Landlord shall not be liable when such failure is caused by accident, breakage, repairs, labor disputes of any character,

energy usage restrictions or by any other cause, similar or dissimilar, beyond the reasonable control of Landlord. Landlord shall use reasonable efforts to remedy any interruption in the furnishing of services and utilities. Notwithstanding the above, Landlord shall be entitled, without compensation to Tenant or any abatement of rent, to cooperate voluntarily in a reasonable manner with the efforts of national, state or local governmental bodies or utilities' suppliers in reducing energy or other resources consumption.

Should Tenant require any additional work or service, as described above, including services furnished outside ordinary business hours specified above, Landlord may, upon reasonable advance notice by Tenant, furnish such additional service and Tenant agrees to pay Landlord such charges as may be

agreed upon, including any imposed thereon, but in no event at a charge less than actual cost building overhead for such additional service and where appropriate a reasonable allowance for depreciation of any systems being used to provide such service.

Wherever heat-generating machines or equipment are used by Tenant in the Premises which affect the temperature otherwise maintained by the air conditioning system, Landlord reserves the right to install supplementary air conditioning units in or for the benefit of the Premises and the cost thereof, including the cost of installation and the cost of operation and maintenance, shall be paid by Tenant to Landlord upon demand as additional rent.

Tenant will not without the written consent of Landlord use any apparatus or device in the Premises, including but not limited to, electronic data processing machines and machines using current in excess of 1200 watts or 208 volts, which will in any way increase the amount of electricity or water usually furnished or supplied for use of the Premises as general office space, nor connect with electric current, except through existing electrical outlets in the Premises, or water pipes, any apparatus or device for the purposes of using electrical current or water. If Tenant shall require water for domestic or airconditioning purposes or electric current in excess of that usually furnished or supplied for use of the Premises as general office space, Tenant shall procure the prior written consent of Landlord for the use thereof, and if Landlord does consent Landlord may cause a water meter or electric current meter to be installed so as to measure the amount of water and electric current consumed for any such other use. The cost of any such meters and facilities necessary to furnishing such excess capacity and of the installation, maintenance and repair thereof shall be paid for by Tenant. Tenant agrees to pay as additional rent to Landlord promptly upon demand therefor the cost of all such increased water and electric current consumed (as shown by said meters, if any, or, if none, as reasonably estimated by Landlord) at the rates charged for such services by the local public utility or agency furnishing the same, plus any additional reasonable expense incurred in keeping account of the water and electric current so consumed.

15. HOLDING OVER.

Tenant shall pay Landlord for each day Tenant retains possession without Landlord's consent of the Premises or part thereof after termination hereof by lapse of time or otherwise 200% of the amount of the Annual Rent for the last period prior to the date of such termination plus all Rent Adjustments under Articles 4 and 5 hereof prorated on a daily basis, and also pay all damages sustained by Landlord by reason of such retention, and shall indemnify and hold Landlord harmless from any loss or liability resulting from such holding over and delay in surrender. If Landlord gives notice to Tenant of Landlord's election thereof, such holding over shall constitute renewal of this Lease for a period from month to month or for one year, whichever shall be specified in such notice, in either case at 200% of the Annual Rent being paid to Landlord under this Lease immediately prior hereto plus all Rent Adjustments under Articles 4 and 5 hereof, but if the Landlord does not so elect, acceptance by Landlord of rent after such termination shall not constitute a renewal. This provision shall not be deemed to waive Landlord's right of reentry or any other right hereunder or at law. Tenant shall pay rent until such alternations and corrections as are required to be made by Tenant are made and until such additions and improvements as Tenant is entitled to remove have been removed.

16. SUBORDINATION, ATTORNMENT AND NONDISTURBANCE.

(A) This Lease is and shall be subject and subordinate to any mortgage and/or deed of trust which now or will hereafter affect the land on which the Building is situated (the "Land") and which mortgage or deed of trust is a first lien against the Land (the "First Mortgage") and to all renewals, modifications, consolidations, replacements and extensions thereof. It is

further agreed that Tenant, or Tenants' successors in interest, will execute and deliver upon the demand of Landlord any and all instruments desired by Landlord subordinating in the manner requested by Landlord this Lease to any such First Mortgage.

(B) In the event of foreclosure or exercise of power of sale under any First Mortgage now or hereafter affecting the Land and/or the Building, the holder or beneficiary of any such First Mortgage, or purchaser at any foreclosure sale held pursuant to the terms of any First Mortgage, or the grantee of any deed taken in lieu of foreclosure of the lien of the First Mortgage (all collectively the "Purchaser") shall have the option: (i) to require Tenant to attorn to the Purchaser for the balance of the Term then remaining hereunder the same terms and conditions as those herein provided; or (ii) notwithstanding this Section, to elect that this Lease become or remain, as the case may be, superior to the First Mortgage. Tenant shall upon request by the Purchaser, execute and deliver any and all instruments desired by the Purchaser evidencing the superiority of this Lease to any First Mortgage.

(C) In the event of any attornment by Tenant pursuant to Article 16(B), it is understood and agreed that this Lease and Tenant's right hereunder shall continue undisturbed while Tenant is not in default hereunder, subject, however, to the provisions of the terms of Article 16(B).

(D) Notwithstanding any other provisions hereof, in the event of any attornment by Tenant pursuant to Article 16(B) the Purchaser or successor in interest shall not be:

(i) liable for any act or omission of Landlord, or

(ii) subject to any offsets or defenses which Tenant might have against Landlord.

17. RULES AND REGULATIONS.

Tenant shall faithfully observe and comply with all the rules and regulations as set forth in Exhibit C hereto and all reasonable modifications of and additions thereto from time to time put into effect by Landlord. Landlord shall not be responsible to Tenant for the non-performance by any other tenant or occupant of the Building of any such rules and regulations.

18. REENTRY BY LANDLORD.

Landlord reserves and shall at all times have the right to re-enter the Premises to inspect the same, to supply janitor service and any other service to be provided by Landlord to Tenant hereunder, to show said Premises to prospective purchasers, mortgagees or tenants, and to alter, improve, or repair the Premises and any portion of the Building, without abatement of rent, and may for that purpose erect, use, and maintain scaffolding, pipes, conduits, and other necessary structures in and through the Building and Premises where reasonably required by the character of the work to be performed, provided entrance to the Premises shall not be blocked thereby, and further provided that the business of Tenant shall not be interfered with unreasonably. Landlord shall give to Tenant such notice of its intent to re-enter the Premises as is reasonable and practicable under the circumstances then existing. In the event that Landlord requires access to any under-floor duct, Landlord's liability for carpet (or other floor covering) replacement shall be limited to replacement of the piece removed. Tenant hereby waives any claim for damages for any injury or inconvenience to or interference with Tenant's business, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned thereby. For each of the aforesaid purposes, Landlord shall at all times have and retain a key with which to unlock all of the doors in the Premises, excluding Tenant's vaults and safes, or special security areas (designated in advance), and Landlord shall have the right to use any and all means which Landlord may deem proper to open said doors in an emergency to obtain entry to any portion

of the Premises. Landlord

shall also have the right at any time to change the arrangement and/or location of building entrances or passageways, doors and doorways, and corridors, elevators, stairs, toilets or other public parts of the Building, and to change the name, number or designation by which the Building is commonly known.

19. DEFAULT.

The following events shall be deemed to be events of default under this Lease:

(A) Tenant shall fail to pay when due any sum of money becoming due to be paid to Landlord hereunder, whether such sum be any installment of the rent herein reserved, any other amount treated as additional rent hereunder, or any other payment or reimbursement to Landlord required herein, whether or not treated as additional rent hereunder, and such failure shall continue for a period of five days from the date such payment was due; or

(B) Tenant shall fail to comply with any term, provision or covenant of this Lease, other than by failing to pay when or before due any sum of money becoming due to be paid to Landlord hereunder, and shall not cure such failure within twenty (20) days (forthwith, if the default involves a hazardous condition) after written notice thereof to Tenant; or

(C) Tenant shall abandon or vacate any substantial portion of the Premises; or

(D) Tenant shall fail to vacate the Premises immediately upon termination of this Lease, by lapse of time or otherwise, or upon termination of Tenant's right to possession only; or

(E) The leasehold interest of Tenant shall be levied upon under execution or be attached by process of law or Tenant shall fail to contest diligently the validity of any lien or claimed lien and give sufficient security to Landlord to insure payment thereof or shall fail to satisfy any judgment rendered thereon and have the same released, and such default shall continue for ten days after written notice thereof to Tenant; or

(F) The Tenant or any Affiliate (as defined in 11 U.S.C. Section 101(2)) thereof, shall commence (by petition, application or otherwise) a voluntary case or other proceeding under the laws of any jurisdiction seeking liquidation, reorganization, or other relief with respect to itself or its debts under any bankruptcy, insolvency, or other similar law now or hereafter in effect, or seeking the appointment of a trustee, self-trusteeship, receiver, custodian or other similar official of it or any substantial part of its property; or shall consent (by answer or failure to answer or otherwise) to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it; or shall make an assignment for the benefit of

creditors; or shall generally not pay its debts as they become due (or not be able to pay its debts as they become due); or admit in writing its inability to pay its debts as they become due; or shall take any corporate action to authorize any of the foregoing;

(G) An involuntary case or other proceeding shall be commenced under the laws of any jurisdiction against the Tenant or any Affiliate (as defined in 11 U.S.C. Section 101(2)) thereof, seeking liquidation, reorganization, or other relief with respect to it or its debts under any bankruptcy, insolvency, or other similar law now or hereafter in effect, or seeking the appointment of a

trustee, receiver, custodian, or other similar official of it or any substantial part of its property, and such involuntary case or other proceeding shall remain undismissed and unstayed for a period of 30 days or a trustee, receiver, custodian or other official shall be appointed in such involuntary case;

(H) A judgment or order for the payment of money in excess of $5,000 shall be rendered against the Tenant or any Affiliate (as defined in 11 U.S.C. Section 101(2)) thereof, and such judgment or order shall continue unsatisfied and unstayed for a period of thirty (30) days; or

(I) Any judgment, writ, attachment, execution, injunction, or similar process in excess of $5,000 shall be issued or levied against the property of the Tenant or any Affiliate (as defined in 11 U.S.C. Section 101(2)) thereof, and such process shall not be released, vacated, or fully bonded within thirty (30) days after its issue or levy.

20. REMEDIES.

Upon the occurrence of any of such events of default described in Article 19 or elsewhere in this Lease, Landlord shall have the option to pursue any one or more of the following remedies:

(A) Landlord may, at its election, terminate this Lease or terminate Tenant's right to possession only, without terminating the Lease;

(B) Upon any termination of this Lease, whether by lapse or otherwise, or upon any termination of Tenant's right to possession without termination of the Lease, Tenant shall surrender possession and vacate the Premises immediately, and deliver possession thereof to Landlord, and Tenant hereby grants to Landlord full and free license to enter into and upon the Premises in such event with or without process of law and to repossess Landlord of the Premises as of Landlord's former estate and to expel or remove Tenant and any others who may be occupying or within the Premises and to remove any and all property therefrom, without being deemed in any manner guilty of trespass, eviction or forcible entry or detainer, and without incurring any liability for any damage resulting therefrom, Tenant hereby waiving any right to claim damage for such re-entry and

expulsion, and without relinquishing Landlord's right to rent or any other right given to Landlord hereunder or by operation of law;

(C) Upon any termination of this Lease, whether by lapse of time or otherwise, Landlord shall be entitled to recover as damages, all rent, including any amounts treated as additional rent hereunder, and other sums due and payable by Tenant on the date of termination, plus the sum of (i) an amount equal to the then present value of the rent, including any amounts treated as additional rent hereunder, and other sums provided herein to be paid by Tenant for the residue of the Term hereof, less the fair rental value of the Premises for such residue (taking into account the time and expense necessary to obtain a replacement tenant or tenants, including expenses hereinafter described in subparagraph (D) relating to recovery of the Premises, preparation for reletting and for reletting itself), and (ii) the cost of performing any other covenants which would have otherwise been performed by Tenant;

(D) (i) Upon any termination of Tenant's right to possession only without termination of the Lease, Landlord may, at Landlord's option, enter into the Premises, remove Tenant's signs and other evidences of tenancy, and take and hold possession thereof as provided in subparagraph (B) above, without such entry and possession terminating the Lease or releasing Tenant, in whole or in part, from any obligation, including Tenant's obligation to pay the rent, including any amounts treated as additional rent, hereunder for the full Term. In any such case Tenant shall pay forthwith to Landlord, if Landlord so elects, a sum equal to the entire amount of the rent, including any amounts treated as additional rent hereunder, for the residue of the Term

plus any other sums provided herein to be paid by Tenant for the remainder of the Term. no such re-entry or repossession of the Premises by Landlord shall be construed as an election on the Landlord's part to terminate this Lease unless a written notice of termination is given to the Tenant by the Landlord;

(ii) Landlord may, but need not, relet the Premises or any part thereof for such rent and upon such terms as Landlord in its sole discretion shall determine (including the right to relet the Premises for a greater or lesser term than that remaining under this Lease, the right to relet the Premises as a part of a larger area, and the right to change the character or use made of the Premises) and Landlord shall not be required to accept any tenant offered by Tenant or to observe any instructions given by Tenant about such reletting. In any such case, Landlord may make repairs, alterations and additions in or to the Premises, and redecorate the same to the extent Landlord deems necessary or desirable, and Tenant shall, upon demand, pay the cost thereof, together with Landlord's expenses of reletting including, without limitation, any broker's commission incurred by Landlord. If the consideration collected by Landlord upon any such reletting plus any sums previously collected from Tenant are not sufficient to pay the full amount of all rent, including any amounts treated as additional rent hereunder and other sums reserved in this Lease for the remaining Term, together with the costs of repairs, alterations,

additions, redecorating, and Landlord's expenses of reletting and the collection of the rent accruing therefrom (including attorney's fees and broker's commissions), Tenant shall pay to Landlord the amount of such deficiency upon demand and Tenant agrees that Landlord may file suit to recover any sums falling due under this section from time to time and no one suit or claim by Landlord against Tenant shall bar a later suit or claim for further damages incurred by Landlord as a result of Tenant's default hereunder;

(E) Landlord may, at Landlord's option, enter into and upon the Premises, with or without process of law, if Landlord determines in its sole discretion that Tenant is not acting within a commercially reasonable time to maintain, repair or replace anything for which Tenant is responsible hereunder and correct the same, without being deemed in any manner guilty of trespass, eviction or forcible entry and detainer and without incurring any liability for any damage resulting therefrom and Tenant agrees to reimburse Landlord, on demand, as additional rent, for any expenses which Landlord may incur in thus effecting compliance with Tenant's obligations under this Lease;

(F) Any and all property which may be removed from the Premises by Landlord pursuant to the authority of this Lease or of law, to which Tenant is or may be entitled, may be handled, removed and stored, as the case may be, by or at the direction of Landlord at the risk, cost and expense of Tenant, and Landlord shall in no event be responsible for the value, preservation or safekeeping thereof. Tenant shall pay to Landlord, upon demand, any and all expenses incurred in such removal and all storage charges against such property so long as the same shall be in Landlord's possession or under Landlord's control. Any such property of Tenant not retaken by Tenant from storage within thirty (30) days after removal from the Premises shall, at Landlord's option, be deemed conveyed by Tenant to Landlord under this Lease as by a bill of sale without further payment or credit by Landlord to Tenant.

Pursuit of any of the foregoing remedies shall not preclude pursuit of any of the other remedies herein provided or any other remedies provided by law (all such remedies being cumulative), nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any rent due to Landlord hereunder or of any damages accruing to Landlord by reason of the violation of any of the terms, provisions and covenants herein contained. No act or thing done by Landlord or its agents during the Term shall be deemed a termination of this Lease or an acceptance of the surrender of the Premises, and no agreement to terminate this Lease or accept a surrender of said

Premises shall be valid unless in writing signed by Landlord. No waiver by Landlord of any violation or breach of any of the terms, provisions and covenants herein contained shall be deemed or construed to constitute a waiver of any other violation or breach of any of the terms, provisions and covenants herein contained. Landlord's acceptance of the payment of rental or other payments hereunder after the occurrence of an event of default shall not be construed as a waiver of such default, unless Landlord so notifies Tenant in writing. Forbearance by Landlord in enforcing one or more of the remedies herein provided upon

an event of default shall not be deemed or construed to constitute a waiver of such default or of Landlord's right to enforce any such remedies with respect to such default or any subsequent default.

21. QUIET ENJOYMENT.

Landlord represents and warrants that it has full right and authority to enter into this Lease and that Tenant, while paying the rental and performing its other covenants and agreements herein set forth, shall peaceably and quietly have, hold and enjoy the Premises for the Term without hindrance or molestation from Landlord subject to the terms and provisions of this Lease. In the event this Lease is a sublease, then Tenant agrees to take the Premises subject to the provisions of the prior leases. Landlord shall not be liable for any interference or disturbance by other tenants or third persons, nor shall Tenant be released from any of the obligations of this Lease because of such interference or disturbance.

22. DAMAGE BY FIRE, ETC.

In the event the Premises or the Building are damaged by fire or other casualty, Landlord shall forth with repair the same provided such damage can, in Landlord's reasonable estimation, be materially restored within ninety (90) days and this Lease shall remain in full force an effect except that if such damage is not the result of any negligence or willful misconduct of Tenant, or its agents, employees, or invitees, then Tenant shall be entitled to a proportionate abatement in rent from the date of such damage, such reduction to be based pro rata to the extent to which the damage and the making of such repairs shall interfere with the use and occupancy by Tenant of the Premises. Within thirty (30) days from date of such damage, Landlord shall notify Tenant, in writing, whether or not material restoration can be made within the ninety (90) day period, and Landlord's determination shall be binding on Tenant. For purposes hereof, the Building or Premises shall be deemed "materially restored" if they are such condition as would not prevent or materially interfere with Tenant's use of the Premises for the purpose for which it was then being used.

If such repairs cannot, in Landlord's reasonable estimation, be made within ninety (90) days, Landlord and Tenant shall each have the option of giving the other, at any time within sixty (60) days after such damage, notice terminating this Lease as of the date of such damage. In the event of the giving of such notice, this Lease shall expire and all interest of the Tenant in the Premises shall terminate as of the date of such damage as if such date had been originally fixed in this Lease for the expiration of the Term. In the event that neither Landlord nor Tenant exercise the above set forth option to terminate this Lease in the event of partial destruction, then Landlord shall repair or restore such damage, this Lease continuing in full force and effect, but the rent hereunder to be proportionately abated as hereinabove provided. Landlord shall not be required to repair

any injury or damage by fire or other cause, or to make any repairs or replacements of any panelings, decorations, partitions, additions, railings, ceilings, floor coverings, office fixtures or any other property or

improvements installed on the Premises at the expense of Tenant. Any insurance which may be carried by Landlord or Tenant against loss or damage to the Building or Premises shall be for the sole benefit of the party carrying such insurance and under its sole control.

In the event that Landlord should fail to complete such repairs and material restoration within one hundred fifty (150) days after the date of such damage, Tenant may at its option and as its sole remedy terminate this Lease by delivering written notice to Landlord, whereupon the Lease shall end on the date of such notice as if the date of such notice was the date originally fixed in this Lease for the expiration of the Term; provided, however, that if construction is delayed because of changes, deletions or additions in construction requested by Tenant, strikes, lockouts, casualties, acts of God, war, material or labor shortages, government regulation or control or other causes beyond the reasonable control of Landlord, the period for restoration, repair or rebuilding shall be extended for the amount of time Landlord is so delayed. Notwithstanding anything to the contrary contained in this Article, (a) Landlord shall not have any obligation whatsoever to repair, reconstruct, or restore the Premises when the damages resulting from any casualty covered by the provisions of this Article occurs during the last twelve months of the Term or any extension thereof, and (b) in the event the holder of any indebtedness secured by a mortgage or deed of trust covering the Premises or Building requires that any insurance proceeds be applied to such indebtedness, then Landlord shall have the right to terminate this Lease by delivering written notice of termination to Tenant within fifteen (15) days after such requirement is made by any such holder, whereupon this Lease shall end on the date of such damage as if the date of such damage were the date originally fixed in this Lease for the expiration of the Term.

In the event any damage or destruction to the Building or Premises by any peril covered by the provisions of this Article, Tenant shall upon notice from Landlord, remove forthwith, at its sole cost and expense, such portion or all of the property belonging to Tenant or his licensees from such portion or all of the Building or Premises as Landlord shall request and Tenant hereby indemnifies and holds Landlord harmless from any loss, liability, costs and expenses, including attorneys' fees, arising out of any claim of damage or injury as a result of any alleged failure to properly secure the Premises prior to such removal and/or such removal.

23. EMINENT DOMAIN.

If all or any substantial part of the Premises shall be taken or appropriated by any public or quasi-public authority under the power of eminent domain, or conveyance in lieu thereof, either party hereto shall have the right, at its option, of giving the other, at any time within thirty (30) days after such taking, notice terminating this Lease. If

neither party hereto shall so elect to terminate this Lease, the rental thereafter to be paid shall be adjusted on a pro rata basis. Before Tenant may terminate this Lease by reason of taking or appropriation as above provided, such taking or appropriation shall be so substantial as to materially interfere with Tenant's use and occupancy thereof. In addition to the rights of Landlord above, if any substantial part of the Building shall be taken or appropriated by any public or quasi-public authority under the power of eminent domain, or conveyance in lieu thereof and regardless of whether the Premises or any part thereof are so taken or appropriated, Landlord shall have the right, at its sole option, to terminate this Lease. Landlord shall be entitled to any and all income, rent, award, or any interest therein whatsoever which may be paid or made in connection with any such public or quasi-public use or purpose, and Tenant hereby assigns to Landlord any interest it may have in or claim to all or any part of such sums, and Tenant shall have no claim against Landlord for the value of any unexpired Term.

24. SALE BY LANDLORD.

In the event of a sale or conveyance by Landlord of the Building, the same shall operate to release Landlord from any liability arising after the date of such sale or conveyance upon any of the covenants or conditions, expressed or implied, herein contained in favor of Tenant, and in such event Tenant agrees to look solely to the responsibility of the successor in interest of Landlord in and to this Lease. Except as set froth in this Article, this Lease shall not be affected by any such sale, and Tenant agrees to attorn to the purchaser or assignee. If any security has been given by Tenant to secured the faithful performance of any of the covenants of this Lease, Landlord may transfer or deliver said security, as such, to Landlord's successor in interest and thereupon Landlord shall be discharged from any further liability with regard to said security, provided that any successor shall not be liable for such security unless such successor receives the same.

25. ESTOPPEL CERTIFICATES.

Within ten (10) days following any written request which Landlord may make from time to time, Tenant shall execute and deliver to Landlord or any prospective Landlord or mortgagee or prospective mortgagee a sworn statement certifying: (a) the date of commencement of this Lease, (b) the fact that this Lease is unmodified and in full force and effect (or, if there have been modifications hereto, that this Lease in full force and effect, as modified, and stating the date and nature of such modifications), (c) the date to which the rent and other sums payable under this Lease have been paid, (d) the fact that there are no current defaults under this Lease by either Landlord or Tenant except as specified in Tenant's statement, and (e) such other matters required by Landlord. Landlord and Tenant intend that any statement delivered pursuant to this Article may be relied upon by any mortgagee, beneficiary or purchaser and Tenant shall be liable for all loss, cost or expense resulting from the failure of any sale or funding of

any loan caused by any material misstatement contained in such estoppel certificate. Tenant hereby irrevocably appoints Landlord or if Landlord is a trust, Landlord's beneficiary or agent, as attorney-in-fact for the Tenant with full power and authority to execute and deliver in the name of Tenant such estoppel certificate if Tenant fails to deliver the same within such ten (10) day period and such certificate as signed by Landlord, Landlord's beneficiary or agent, as the case may be, shall be fully binding on Tenant, if Tenant fails to deliver a contrary certificate within five (5) days after receipt by Tenant of a copy of the certificate executed by Landlord, Landlord's beneficiary or agent, as the case may be, on behalf of Tenant.

26. SURRENDER OF PREMISES.

Tenant shall, at lease ninety (90) days before the last day of the Term arrange to meet Landlord for a joint inspection of the Premises. In the event of Tenant's failure to arrange such joint inspection, Landlord's inspection at or after Tenant's vacating the Premises shall be conclusively deemed correct for purposes of determining Tenant's responsibility for repairs and restoration.

At the end of the Term or any renewal thereof or other sooner termination of this Lease, Tenant will peaceably deliver up to Landlord possession of the Premises, together with all improvements or additions upon or belonging to the same, by whomsoever made, in the same condition as received or first installed broom clean and free of all debris, ordinary wear and tear and damage by fire, earthquake, Act of God, or the elements alone excepted. Tenant may, upon termination of this Lease, remove all movable partitions of less than full height from floor to ceiling, counters, and other trade fixtures installed by Tenant, at Tenant's sole cost, title to which shall be in Tenant until such termination, repairing such damage caused by such removal. Property not so removed shall be deemed abandoned by the Tenant and title to the same shall thereupon pass to Landlord under his Lease

as by a bill of sale. Upon request by Landlord, Tenant shall remove any or all movable partitions, counters and other trade fixtures which may be left by Tenant and repair any damage resulting from such removal. Tenant shall indemnify Landlord against any loss or liability resulting from delay by Tenant in so surrendering the Premises, including any claims made by any succeeding tenant founded on such delay.

All obligations of Tenant hereunder not fully performed as of the expiration or earlier termination of the Term shall survive the expiration or earlier termination of the Term. Upon the expiration or earlier termination of the Term, Tenant shall pay to Landlord the amount, as estimated by Landlord, necessary: (i) to repair and restore the Premises as provided herein; and (ii) to discharge Tenant's obligation for unpaid amounts due Landlord. All such amounts shall be used and held by Landlord for payment of such obligations of Tenant, with Tenant being liable for any additional costs upon demand by Landlord, or with any excess to be returned to Tenant after all such oblations have been

determined and satisfied. Any Security Deposit shall be credited against the amount payable by Tenant hereunder.

27. NOTICES.

Any notice or document required or permitted to be delivered hereunder shall be in writing. All notices shall be personally delivered or sent by United States Mail, postage prepaid, Certified or Registered Mail, addressed to the parties hereto at the respective addresses set forth on the Reference Page, or at such other address as they have theretofore specified in written notice delivered in accordance herewith.

28. TAXES PAYABLE BY TENANT.

In addition to rent and other charges to be paid by Tenant hereunder, Tenant shall reimburse to Landlord, upon demand, any and all taxes payable by Landlord (other than net income taxes) whether or not now customary or within the contemplation of the parties hereto: (a) upon, allocable to, or measured by or on the gross or net rent payable hereunder, including without limitation any gross income tax or excise tax levied by the State, any political subdivision thereof, or the Federal Government with respect to the receipt of such rent; or (b) upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use location of the premises in any special tax district or occupancy of the Premises or any portion thereof, including any sales, use or service tax imposed as a result thereof; or (c) upon or measured by the Tenant's gross receipt or payroll or the value of Tenant's equipment, furniture, fixtures, and other personal property of Tenant or leasehold improvements, alterations, additions, located in the Premises; or (d) upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

In addition to the foregoing, Tenant agrees to pay, before delinquency, any and all taxes levied or assessed against Tenant and which become payable during the term hereof upon Tenant's equipment, furniture, fixtures, and other personal property of Tenant located in the Premises.

29. RELOCATION BY TENANT.

Landlord, at its sole expense, on at least ninety (90) days prior written notice, may require Tenant to move from the Premises to other space of comparable size and decor in order to permit Landlord to consolidate the space leased to Tenant with other adjoining space leased or to be leased to another tenant. Provided, however, that in the event of receipt of any such notice, Tenant by written notice to Landlord may elect not to move to the other space and in lieu thereof terminate this Lease, effective sixty (60) days after the date of the original notice of relocation by Landlord. In the event of any such relocation, Landlord will pay all expenses or preparing and

decorating the new premises so that they

will be substantially similar to the Premises from which Tenant is moving and Landlord will also pay the expense of moving Tenant's furniture and equipment to the relocated premises. In such event this Lease and each and all of the terms and covenants and conditions hereof shall remain in full force and effect and thereupon be deemed applicable to such new space except that a revised Reference Page shall become part of this Lease and shall reflect the location of the new premises.

30. DEFINED TERMS AND HEADINGS.

The article headings herein are for convenience of reference and shall in no way define, increase, limit, or describe the scope or intent of any provision of this Lease. Any indemnification of, insurance of, or option granted to Landlord shall also include or be exercisable by Landlord's trustee, beneficiary, agents and employees, as the case may be. In any case, where this Lease is signed by more than one person, the obligations hereunder shall be joint and several. The terms "Tenant" and "Landlord" or any pronoun used in place thereof shall indicate and include the masculine or feminine, the singular or plural number, individuals, firms, or corporations, and their and each of their respective successors, executors, administrators and permitted assigns, according to the context hereof. The term "rentable area" shall mean the rentable area of the Premises or the Building as calculated by the Landlord on the basis of the plans and specifications of the Building including a proportionate share of any common areas. Tenant hereby consents and agrees that the calculation of rentable area on the Reference Page shall be controlling.

If Tenant signs as a corporation each of the persons executing this Lease on behalf of Tenant represents and warrants that Tenant has been and is qualified to do business in the State of Oregon, that the corporation has full right and authority to enter into this Lease, and that all persons signing on behalf of the corporation were authorized to do so by appropriate corporate actions. If Tenant signs as a partnership, trust, or other legal entity, each of the persons executing the Lease on behalf of Tenant represents and warrants that Tenant has complied with all applicable laws, rules and governmental regulations relative to its right to do business in the State of Oregon and that such entity on behalf of the Tenant was authorized to do so by any and all appropriate partnership, trust, or other actions. Tenant agrees to furnish promptly upon demand a corporate resolution, proof of due authorization by partners, or other appropriate documentation evidencing the due authorization of Tenant to enter into this Lease.

31. ERISA REPRESENTATION.

Tenant represents and warrants to Landlord to the best of its knowledge that, as of the date hereof, neither Tenant nor any affiliate of Tenant has employee pension or profit-sharing plans that hold, in the aggregate, beneficial interests representing greater than five percent (5%) of the total assets of any RREEF investment fund. Tenant acknowledges

that a breach of the foregoing representation and warranty may constitute a prohibited transaction under the terms of the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code, as modified by PTE 82-51, an administrative exemption from certain of the prohibited transaction rules granted to the RREEF Funds by the United States Department of Labor (46 Fed. Reg. 14,238 (April 2, 1982)). If, at any time, Tenant or any affiliate of Tenant has employee pension or profit-sharing plans that hold, in the aggregate, beneficial interests representing greater than five percent (5%) of the total assets of any RREEF investment fund, Tenant shall promptly

advise Landlord of such fact in writing.

32. ENFORCEABILITY.

If for any reason whatsoever any of the provisions hereof shall be unenforceable or ineffective, all of the other provisions shall be and remain in full force and effect.

33. COMMISSIONS.

Each of the parties (i) represents and warrant to the other that it has not dealt with any broker or finder in connection with this Lease, except as described on the Reference Page; and (ii) indemnifies and holds the other harmless from any and all losses, liability, costs or expenses (including attorneys' fees) incurred as a result of any alleged breach of the foregoing warranty by it.

34. TIME AND APPLICABLE LAW.

Time is of the essence of this Lease and all of its provisions. This Lease shall in all respects be governed by the laws of the state in which the Building is located.

35. SUCCESSORS AND ASSIGNS.

Subject to the provisions of Article 10, the terms, covenants and conditions contained herein shall be binding upon and inure to the benefit of the heirs, successors, executors, administrators, and assigns of the parties hereto.

36. ENTIRE AGREEMENT.

This Lease, together with its exhibits, contains all agreements of the parties hereto and supersedes any previous negotiations. There have been no representations made by the Landlord or understandings made between the parties other than those set forth in this Lease and its exhibits. This Lease may not be modified except by a written instrument duly executed by the parties hereto.

37. EXAMINATION NOT OPTION.

Submission of this Lease shall not be deemed to be a reservation of the Premises. Landlord shall not be bound hereby until its delivery to Tenant of an executed copy hereof signed by Landlord, already having been signed by Tenant, and until such delivery Landlord reserves the right to exhibit and lease the Premises to other prospective tenants. Notwithstanding anything contained herein to the contrary, Landlord may withhold delivery of possession of the Premises from Tenant until such time as Tenant has paid to Landlord the security deposit required by Article 6, the first month's rent as set forth in Article 3, and any sum owed pursuant hereto.

38. RECORDATION.

Tenant shall not record this Lease or a short form memorandum hereof without the prior written consent of Landlord. If Tenant does not record the Lease or short form memorandum without the prior written consent of Landlord it shall be considered a default under the Lease entitling the Landlord to terminate the Tenant's occupancy.

39. MUTUAL WAIVER OF JURY TRIAL.

Both Landlord and Tenant hereby waive trial by jury in any action, proceeding or claim brought to Tenant against each other on any matter whatsoever or in any way connected with this Lease. Such waiver shall

survive the Lease termination. The award made to the prevailing party in any proceeding shall be limited to reasonable legal fees and a judgment requiring "Specific Performance" subject to other provisions contained herein.

40. ATTORNEY FEES.

In the event either party shall commence a suit or action for breach of or to enforce any of the terms and conditions of this Lease, the prevailing party shall be entitled to recover from the other party such sum as the court may adjudge reasonable as attorney fees at trial or on appeal of such suit or action.

41. CORPORATE AUTHORITY.

If Tenant is a corporation, Tenant represents and warrants that this Lease and the undersigned's execution of this Lease has been duly authorized and approved by the corporation's board of directors. The undersigned officers and representatives of the corporation executing this Lease on behalf of the corporation represent and warrant that they are officers of the corporation with authority to execute this Lease on behalf of the corporation.

42. RENT SCHEDULE.

Monthly base rent shall be paid pursuant to Article 3 of this Lease according to the following schedule:

RENTAL PERIOD	RATE	Monthly BASE RENT
05/01/92 - 7/31/92	$ -0-	
08/01/92 - 04/30/93	10.58	$2,092.00
05/01/93 - 07/31/93	15.00	2,967.00
08/01/93 - 07/31/95	18.50	3,659.00

43. FORGIVENESS OF RENT.

If Tenant takes possession of the Premises as of the commencement date of the term and complies with all other obligations of this Lease, then rent for the first (1st) through third (3rd) months of the Lease term shall be forgiven. Provided, however, that in case of failure by Tenant to occupy the Premises, or any default under the terms of the Lease, then this provision shall have no effect, and Tenant shall be obligated to pay on demand any rent payments forgiven prior to the occurrence of the default.

44. IMPROVEMENTS.

The Landlord shall provide at its sole expense the following improvements to the premises: construct new wall as required to demise the premises; modify entry door (i.e. change to inside swing); modify electrical switching for light fixtures; modify thermostats and HVAC controls. Any and all other improvements and/or alterations shall be at the sole expense of the Tenant.

45. LIMITATION OF LANDLORD'S LIABILITY.

Redress for any claims against Landlord under this Lease shall only be made against Landlord to the extent of Landlord's interest in the property to which the leased premises are a part. The obligations of Landlord under this Lease shall not be personally binding on, nor shall any resort be had to the private properties of, any of its trustees or board of directors and officers, as the case may be, its investment manager, the general partners thereof or any beneficiaries, stockholders, employees or agents of Landlord, or the investment manager.

The parties hereto have executed this Lease on the dates specified immediately below their respective signatures.

LANDLORD:

BENJAMIN FRANKLIN PLAZA, INC., an Oregon corporation	ANTIVIRALS, INC., an Oregon corporation
By /s/ Keith K ***	By /s/ William H. Fleming
For Jun Kato	William H. Fleming
Title: President	Title: Dir. of Business Development
Dated 5/05/92	Dated 4/10/92

EXHIBIT B TO LEASE DATED _____ by and between BENJAMIN FRANKLIN PLAZA, an Oregon Corporation, AS LANDLORD, AND ANTIVIRALS, INC., an Oregon corporation AS TENANT.

EXHIBIT B

RULES AND REGULATIONS

1. No sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside or inside of the Building if visible from a public area without the prior written consent of the Landlord. Landlord shall have the right to remove, at Tenant's expense and without notice, any sign installed or displayed in violation of this rule. All approved signs or lettering in public corridors shall be inscribed or affixed at the expense of Tenant by a person or vendor chosen by Landlord and in conformance with the Building standard signage program. In addition, Landlord reserves the right to change from time to time the format of the signs or lettering and to require previously approved signs or lettering to be appropriately altered. One 12" x 12" building standard tenant door sign with suite number and two (2) lines shall be provided.

2. Tenant shall use and keep in place the Building standard window covering. Any additional draperies or window coverings shall be not be lined and be of an open weave. Tenant shall not place anything or allow anything to be placed against or near any doors or windows which may appear unsightly, in the opinion of Landlord, from outside the Premises.

3. Tenant shall not obstruct any sidewalks, halls, passages, exits, entrances, elevators, escalators or stairways of the Building. The halls, passages, exits, entrances, shopping malls, elevator, escalators and stairways are not for the general public, and Landlord shall in all cases retain the right to control and prevent access thereto of all persons whose presence in the judgment of Landlord would be prejudicial to the safety character, reputation and interests of the Building and its tenants provided that nothing herein contained shall be construed to prevent such access to persons with whom any tenant normally deals in the ordinary course of its business, unless such persons are engaged in illegal activities. No tenant and no employee or invitee of any tenant shall go upon the roof of the Building.

4. The directory of the Building will be provided exclusively for the display of the name and location of tenants only and Landlord reserves the right to exclude any other names therefrom. One entry in the directory at the building and one entry on the floor directory shall be provided.

5. All cleaning and janitorial services for the Building and the Premises shall be arranged exclusively through the Landlord. Tenant shall not cause any unnecessary labor by carelessness or indifference to the good order and cleanliness of the Premises. Landlord shall not in any way be responsible to any Tenant for any loss of property on the Premises, however occurring, or for any damage to any Tenant's property by the janitor or any other employee or any other person.

6. Landlord will furnish Tenant free of charge with two keys to each door lock in the Premises. Landlord may make a reasonable charge for any additional keys. Tenant shall not make or have made additional keys, and Tenant shall not alter any lock or install a new or additional lock or bolt on any door of its Premises. Tenant, upon the termination of its tenancy, shall deliver to Landlord the keys of all doors which have been furnished to Tenant, and in the event of loss of any keys so furnished, shall pay Landlord therefor.

7. If Tenant requires telegraphic, telephonic, burglar alarm or similar services, it shall first obtain, and comply with, Landlord's instructions in their installation.

8. No equipment, materials, furniture, packages, supplies, merchandise or other property will be received in the Building or carried in the elevators except between such hours and in such elevators as may be designated by Landlord. Furniture, equipment or supplies shall be moved in and out of the Building only during such hours and in such manner and by vendors designated by Landlord.

9. Tenant shall not place a load upon any floor which exceeds the load per square foot which such floor was designed to carry and which is allowed by law. Landlord through Landlord's structural engineer whose fee shall be paid for by Tenant shall have the right to prescribe the weight, size and position of all equipment, materials, furniture or other property brought into the Building. Heavy objects shall stand on such platforms as determined by Landlord to be necessary to properly distribute the weight. Business machines and mechanical equipment belonging to Tenant which cause noise or vibration that may be transmitted to the structure of the Building or to any space therein to such a degree as to be objectionable to Landlord or to any tenants shall be placed and maintained by Tenant, at Tenant's expense, on vibration eliminators or other devices sufficient to eliminate noise or vibration. The person employed to move such equipment in or out of the Building must be acceptable to Landlord. Landlord will not be responsible for loss of, or damage done to the Building by maintaining or moving such equipment or other property shall be repaired at the expense of Tenant.

10. Tenant shall not use any method of heating or air conditioning such as space heaters or fans other than that supplied by Landlord. Tenant shall not waste electricity, water or air conditioning. Tenant shall keep corridor doors closed.

11. Landlord reserves the right to exclude from the Building between the hours of 5:30 p.m. and 7 a.m. the following day, or such other hours as may be established from time to time by Landlord, and on Sundays and legal holidays any person unless that person has a Building Pass issued by Landlord at Tenant's written request. Tenant shall be responsible for all persons for whom it requests passes and shall be liable to Landlord for all acts of such persons. Landlord shall not be liable for damages for any error with regard to the admission to or exclusion from the Building of any person.

12. Tenant shall close and lock the doors of its Premises and entirely shut off all water faucets or other water apparatus and electricity, gas or air outlets before Tenant and its employees leave the Premises. Tenant shall be responsible for any damage or injuries sustained by other tenants or occupants

of the Building or by Landlord for noncompliance with this rule.

13. The toilet rooms, toilets, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed, no foreign substance of any kind whatsoever shall be thrown therein, and the expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by the Tenant who, or whose employees or invitees, shall have caused it.

14. Tenant shall not install any radio or television antenna, loudspeaker or other device on the roof or exterior walls of the Building. Tenant shall not interfere with radio or television broadcasting or reception from or in the Building or elsewhere.

15. Except as approved by Landlord, Tenant shall not mark, drive nails, screw or drill into the partitions, woodwork or plaster or in any way deface the Premises. Tenant shall not cut or bore holes for wires. Tenant shall not affix any floor covering to the floor of the premises in any manner except as approved by Landlord. Tenant shall repair any damage resulting from noncompliance with this rule.

16. Except with Landlord's written consent Tenant shall not install, maintain or operate upon the Premises any vending machine.

17. Tenant shall store all its trash and garbage within its Premises. Tenant shall not place in any trash box or receptacle any material which cannot be disposed of in the ordinary and customary manner of trash and garbage disposal. All garbage and refuse disposal shall be made in accordance with directions issued from time to time by Landlord.

18. No cooking shall be done or permitted by any Tenant on the Premises, except that use by the Tenant of Underwriters' Laboratory approved equipment for brewing coffee, tea, hot chocolate and similar beverages shall be permitted, provided that

such equipment and use is in accordance with all applicable federal, state and city laws, codes, ordinances, rules and regulations.

19. Tenant shall not use in any space or in the public halls of the Building any hand trucks except those equipped with the rubber tires and side guards or such other material-handling equipment as Landlord may approve. Tenant shall not bring any other vehicles of any kind into the Building.

20. Tenant shall not use the name of the Building in connection with or in promoting or advertising the business of Tenant except as Tenant's address.

21. Tenant shall pay on demand the cost of replacement of any glass broken on the leased Premises including outside windows and doors of the perimeter of the leased Premises during the continuance of the Lease, unless the glass shall be broken by Landlord, it's employees or agents.

22. The requirements of Tenant will be attended to only upon appropriate application to the office of the Building by an authorized individual. Employees of Landlord shall not perform any work or do anything outside of their regular duties unless under special instructions from Landlord, and no employee of Landlord will admit any person (Tenant or otherwise) to any office without specific instructions from Landlord.

23. Landlord may waive any one or more of these Rules and Regulations for the benefit of any particular tenant or tenants.

24. No animals except seeing eye dogs shall be allowed in the Building.

25. The use of oil, gas or inflammable liquids for heating, lighting or

cleaning or any other purpose is expressly prohibited. Explosive or other articles deemed hazardous shall not be brought into the Building.

26. Canvassing, soliciting and peddling in or about the Building is expressly prohibited.

27. Building office personnel will not unlock suite entry doors for any individual, for any reason, at any time, unless Tenant has placed written notice to the contrary on file with the Office of the Building. It will be Tenant's responsibility to keep such notice updated in writing from time to time as necessary. Individuals authorized for access by such notice from Tenant will be requested to present proper identification before entry.

28. Rental due under the Lease is payable in lawful money of the United States of America at the Landlord's notice address. Landlord may elect to accept payment from Tenant by check or other means. No such acceptance shall constitute a waiver of the Lease requirements concerning the method and mode of payment. In the event of late payment and/or return check, Landlord may elect to thereafter insist upon payment of rental in cash or by cashier's check to bank certified check. Any check not paid due to insufficient funds shall be subject to a service charge in the sum of $25.00, in addition to any late charges due by reason of Tenant's failure to promptly pay rent.

29. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the terms, conditions, covenants, agreements and conditions of any lease of premises in the Building.

PARKING AGREEMENT

This Parking Agreement dated April 10, 1992, by and between BENJAMIN FRANKLIN PLAZA, INC., an Oregon corporation, as Landlord, and ANTIVIRALS, INC., an Oregon corporation, as Tenant, who agree to the following:

1. Tenant is entitled to lease two (2) spaces in the Benj. Franklin parking garage ("Parking Spaces") from the present or any future parking garage contracted vendor.

2. The term of this Parking Agreement shall commence on May 2, 1992, and terminate on July 31, 1995, subject to Landlord's right to determine a new rental rate for Parking Spaces as provided below. Tenant may terminate these parking rights upon notice to the other party given at least thirty (30) days prior to the termination date.

3. The current rent for said Parking Spaces is $105.00 per month for each parking Space, payable on the first day of each calendar month. Landlord reserves the right to determine from time to time new rental rates for Parking Spaces. New rates shall become effective on the date specified in a notice to Tenant, which notice shall be delivered not less than thirty (30) days prior to the effective date. After receipt of such a notice, Tenant may terminate its rights and obligations under this Agreement upon notice to Landlord at least fifteen (15) days prior to the effective date of the new rental rates.

4. The failure of Tenant to pay timely the rent for said Parking Spaces or the breach by Tenant of any other term of condition of this Parking Agreement shall constitute a default under this Parking Agreement. Upon the occurrence of any such event of default, Tenant shall thereupon immediately lose all parking rights and privileges granted by this Parking Agreement.

5. (a) Persons using the lot/garage do so at their own risk. Landlord specifically disclaims all liability, except when caused solely by its gross negligence or willful misconduct, for personal injury incurred by users of the lot/garage their agents, employees, invitees, family, friends or guests, or as a result of damage to, thereof, or destruction of any vehicle or any contents thereof as a result of the operation or parking of any automobiles in the lot/garage.

(b) To insure safe traffic flow within the lot/garage, all traffic signs and signals must be obeyed. At no time will Tenant or its designated users alter or damage any traffic signs, signals, entry gates or other property.

(c) All automobiles must be parked solely within the striped stalls.

(d) Tenant and its designated users shall faithfully observe and comply with all reasonable rules and regulations for use of the lot/garage which Landlord or parking garage contracted vendor may from time to time put into effect once a copy of any rule or regulation has been delivered to Tenant.

(e) Landlord shall have the right to enter upon the Parking Spaces to inspect same, to perform maintenance services and to make repairs as Landlord deems necessary or desirable, without such entry constituting an eviction of Tenant in whole or in part, and the rent specified herein shall in no wise abate while said maintenance and/or repairs are being effected.

(f) This Parking Agreement is not transferable; the Parties hereto acknowledge and agree that they intend that the aforesaid parking shall be "Personal" to Tenant as set forth above and that in no event will any assignee or sublessee have any rights to the aforesaid parking.

LANDLORD:

BENJAMIN FRANKLIN PLAZA, INC., an Oregon corporation	ANTIVIRALS, INC., an Oregon corporation
By /s/ Keith K ***	By /s/ William H. Fleming
For Jun Kato	William H. Fleming
Title: President	Title: Dir. of Business Development
Dated 5/05/92	Dated 4/10/92

BENJAMIN FRANKLIN PLAZA

Portland, Oregon

OFFICE LEASE
REFERENCE PAGE

LANDLORD:	BENJAMIN FRANKLIN PLAZA, INC. an Oregon corporation
LANDLORD'S NOTICE ADDRESS:	111 S.W. Columbia - Suite 1380 Portland, OR 97201
TENANT:	ANTIVIRALS, INC., an Oregon corporation

TENANT'S NOTICE ADDRESS:	One S.W. Columbia, Suite 1105 Portland, OR 97258
LEASE REFERENCE DATE:	April 10, 1992
PREMISES:	Suite 1105, One S.W. Columbia, Portland, OR 97258 (See Exhibit A for outline for Premises, attached hereto and incorporated herein by reference)
PREMISES RENTABLE AREA:	approximately 2,373 square feet
USE:	General Office Purposes
COMMENCEMENT DATE:	May 1, 1992
TERMINATION DATE:	July 31, 1995
TERM OF LEASE:	3 years, 3 months, and 0 days beginning on the Commencement Date and ending on the Termination Date (unless sooner terminated pursuant to the Lease)
ANNUAL BASE RENT:	See Article 42 Rent Schedule
MONTHLY INSTALLMENT OF RENT:	See Article 42 Rent Schedule
TENANT'S PROPORTIONATE SHARE:	0.90%
BASE YEAR (DIRECT EXPENSES):	1992
BASE YEAR (TAXES):	1992
SECURITY DEPOSIT:	$3,658.50
REAL ESTATE BROKER DUE COMMISSION:	Melvin Mark Brokerage Company and Norris, Beggs & Simpson

The Reference Page information is incorporated into and made a part of the Lease. In the event of any conflict between any Reference Page information and the Lease, the Lease shall control. This Lease includes Exhibits through all of which are made a part hereof.

LANDLORD:

BENJAMIN FRANKLIN PLAZA, INC., an Oregon corporation	ANTIVIRALS, INC., an Oregon corporation
By /s/ Keith K ***	By /s/ William H. Fleming
Jun Kato	William H. Fleming
Title: President	Title: Dir. of Business Development
Dated 5/05/92	Dated 4/10/92

FIRST AMENDMENT TO LEASE

This FIRST AMENDMENT TO LEASE is dated Monday, July 24, 1995, by and between Benjamin Franklin Plaza, Inc., an Oregon Corporation, (hereinafter "Landlord") and Antivirals, Inc., an Oregon Corporation, (hereinafter "Tenant"), for premises located in the City of Portland, County of Multnomah, State of Oregon, commonly known as Suite #1105, One Southwest Columbia Street, Portland, Oregon 97258.

I. RECITALS:

Landlord and Tenant, being parties to that certain lease dated April 10, 1992 (hereinafter "the Lease"), hereby express their mutual desire and intent to amend the lease by changing the "RENT SCHEDULE," "TENANT IMPROVEMENTS," and "REPAIRS LANGUAGE," and adding "AMERICANS WITH DISABILITIES ACT," "ENVIRONMENTAL MATTERS," as herein provided. Unless otherwise noted herein, all of the terms set forth in Section 2 below are defined in the referenced page of the Lease.

II. AMENDMENT:

Landlord and Tenant agree that the Lease shall be amended as follows

1. RENTAL RATE: Effective August 1, 1995 through July 31, 1998, Suite #1105, an area consisting of approximately 2,373 rentable square feet, shall be leased to Tenant and the rent schedule shall be as follows:

Year 1	$3,361.75 per month	$17.00 per square foot, full-service
Year 2	$3,411.19 per month	$17.25 per square foot, full-service
Year 3	$3,460.63 per month	$17.50 per square foot, full-service

2. TENANT IMPROVEMENTS: The Landlord shall provide new building standard paint and new rubber base molding throughout the Premises. Landlord shall clean the existing carpet. Any other improvements in addition to this shall be at the Tenant's sole cost and expense.

3. REPAIR: By taking possession, Tenant accepts the Premises as being in good order, condition and repair, and in the condition in which Landlord is obligated to deliver them, and Tenant shall execute and deliver to Landlord, upon demand, a letter of acceptance of delivery of the Premises. Tenant shall, at all times during the Term, keep the Premises in good condition and repair, excepting damage thereto by fire, earthquake, act of God, or the elements; comply with all governmental laws, ordinances and regulations applicable to its use and occupancy of the Premises; and promptly comply with all governmental orders and directives for the corrective prevention and abatement of any violations or nuisances in or upon, or connected with, the Premises; all at Tenant's sole expense. It is hereby understood and agreed that Landlord has no obligation to alter, remodel, improve, repair, decorate or paint the Premises, except as specified in Exhibit B, if attached hereto, and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant, except as specifically set forth herein. Notwithstanding the above provisions of this Article, Landlord shall repair and maintain the structural portions of the Building, including the basic plumbing (excluding wet bars and sinks within the Tenant's space), air conditioning, heating and electrical systems, installed or furnished by Landlord. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after written notice of the need for such repairs or maintenance has been given to Landlord by Tenant. Additionally, Landlord may from time to time perform remodeling, renovation or other construction in, on or to the Building and its common areas, which work may render certain of such areas unavailable for use by Tenants, and which work may inconvenience Tenant's access to or quiet enjoyment of the Premises. Except as provided in Article 22, there shall be no abatement of rent and no liability of Landlord by reason of any injury to or interference with

Tenant's business arising from the making of any such repairs, alterations, improvements, remodeling, renovation or other construction in or to any portion of the Building or the Premises or in or to fixtures, appurtenances and equipment herein, and Tenant hereby waives any and all rights relating thereto. Additionally, Tenant waives the right to make repairs at Landlord's expense under any law, statute or ordinance now or hereafter in effect. Tenant may understand that Landlord is considering making improvements to the lobby and/or other common areas of the Building. Tenant expressly acknowledges that: (a) Landlord may or may not undertake all or part of such improvements; and (b) Tenant did not rely upon the occurrence of such improvements in executing this Lease.

4. AMERICANS WITH DISABILITIES ACT: From and after the execution date of this document, Tenant covenants and agrees to conduct its operations, at Tenant's sole cost and expense, in compliance with the ADA (as defined below).

   a. In the event Tenant undertakes any alterations or improvements to, for, or within the Premises, including initial build-out work if such work, pursuant to other terms of this Lease, is the responsibility of Tenant to perform, or if such alteration or improvements are necessitated by Tenant's particular employee(s) or change of use of the Premises to a public accommodation, then Tenant agrees to cause such alterations to be performed, at Tenant's sole cost and expense, in compliance with the ADA. Additionally, if Landlord reasonably determines, after consultation and discussion with Tenant, that the common areas of the Building must be altered under the ADA because of Tenant's change of use of the Premises, all such alterations shall be made in compliance with the ADA at Tenant's sole cost and expense.

   b. Tenant hereby agrees to indemnify and hold harmless Landlord and Landlord's officers, directors, shareholders and employees (and, if requested by Landlord, to defend Landlord or such other indemnified parties by employment of legal counsel acceptable to Landlord) from and against any and all claims, demands, causes of action, costs, expenses (including attorneys' fees and litigation costs), damages, fines, penalties and liabilities of whatsoever kind and nature which are asserted against or incurred by Landlord or other indemnified parties hereunder, which are based upon or arise out of or relate to a breach of the foregoing Tenant covenants. Landlord covenants that it shall implement within a reasonable time an ADA compliance plan with respect to alterations in the Building's common areas that are readily achievable.

   c. The additional rent payable under Article 28 shall include expenses of Landlord that are required to cause the Premises or the real property of which the premises are a part (including the land and common areas) to comply with the ADA, but shall exclude costs and expenses charged by Landlord to a specific tenant (other than Tenant) in accordance with provisions similar or comparable to sub-article (a) above.

   d. Pursuant to sub-articles (a), (b) and (c) above, Landlord and Tenant have allocated certain liabilities and obligations under the federal law commonly known as the Americans with Disabilities Act, 42 U.S.C. 12101 et seq., together with the regulations and accessibility guidelines thereunder, as supplemented and amended from time to time (collectively, the "ADA").

5. ENVIRONMENTAL MATTERS: Without limiting any other provisions of this Lease:

   a. Tenant agrees to comply with Environmental Laws (as defined below) and shall not cause or permit any Hazardous Substance (as defined below) to be used, stored, generated, or disposed of, on or in the Premises by Tenant, Tenant's agents, employees, contractors or invitees without

first obtaining Landlord's prior written consent.

b. As used herein, "Hazardous Substance" means any substance which is toxic, ignitable, reactive, or corrosive and which is regulated by the United States government, the State of Oregon or any local government, including without limitation any and all materials or substances which are defined as "hazardous wastes," "extremely hazardous wastes," radioactive materials," contaminants," "pollutants," or "hazardous substances" pursuant to Environmental Laws, including, but not limited to asbestos, polychlorinatedbiphenyls and petroleum.

c. As used herein, "Environmental Laws" means all federal, state and local statutes, laws, ordinances, orders and regulations relating to the use, generation, release, handling, storage, discharge, transportation, deposit or disposal or Hazardous Substances or otherwise related to protection of health or the environment.

d. To the best of Landlord's knowledge, there are not Hazardous Substances in, on or about the Building or its underlying land as of the date hereof. Landlord's knowledge is based solely on an Environmental Site Assessment Report on the Building dated August 10, 1990, prepared by SRH Environmental Management.

III. INCORPORATION:

Redress for any claims against Landlord under this FIRST AMENDMENT TO LEASE shall only be made against Landlord to the extent of Landlord's interest in the property to which the leased premises are a

part. The obligations of the Landlord under this FIRST AMENDMENT TO LEASE shall not be personally binding, nor shall any resort be had to the private properties of any its trustees or board of directors and officers, as the case may be, its investment manager, its investment manger, the partners hereof, or any employees or agents of Landlord.

The parties hereto have executed this FIRST AMENDMENT TO LEASE on the date specified immediately below their respective signatures.

LANDLORD:	TENANT:
BENJAMIN FRANKLIN PLAZA, INC., AN OREGON CORPORATION	ANTIVIRALS, INC. AN OREGON CORPORATION
BY: /s/ Jeffrey S. Debnam Jeffrey S. Debnam Senior Asset Manager	BY: /s/ Alan P. Timmins
DATE: 8/30/95	DATE: 8/25/95

BY: /s/ Terumitsu Takeuchi
Terumitsu Takeuchi
President

DATE: 8/30/95

Exhibit 23.2

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the use of our report and to all references to our firm included in this registration statement (No. 333-_____).

/s/ Arthur Andersen LLP
ARTHUR ANDERSEN LLP

Portland, Oregon,
January 24, 1997