AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JANUARY 10, 2000

REGISTRATION NO. 333-91747

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ANTIGENICS INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	2836	06-1562417
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

630 FIFTH AVENUE, SUITE 2100
NEW YORK, NEW YORK 10111
(212) 332-4774
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

GARO H. ARMEN, PH.D.
CHIEF EXECUTIVE OFFICER
ANTIGENICS INC.
630 FIFTH AVENUE, SUITE 2100
NEW YORK, NEW YORK 10111
(212) 332-4774
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

MICHAEL LYTTON, ESQ. PAUL KINSELLA, ESQ. PALMER & DODGE LLP ONE BEACON STREET BOSTON, MASSACHUSETTS 02108 (617) 573-0100	DANIELLE CARBONE, ESQ. SHEARMAN & STERLING 599 LEXINGTON AVENUE NEW YORK, NEW YORK 10022 (212) 848-4000

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

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 of 1933, check the following box. [ ]

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

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration 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, check the following box. [ ]

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE(3)
Common Stock, $0.01 par value per share	3,450,000 shares	$16.00	$55,200,000	$14,573

(1) Includes shares which the underwriters may purchase to cover over-allotments, if any.

(2) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(a) under the Securities Act of 1933.

(3) Includes $1,785 paid herewith in connection with an increase in the proposed maximum aggregate offering price and $12,788 paid on November 30, 1999 in connection with the initial filing of this registration statement.

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 WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER 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.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE SECURITIES AND EXCHANGE COMMISSION DECLARES OUR REGISTRATION STATEMENT EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED JANUARY 10, 2000

PRELIMINARY PROSPECTUS

3,000,000 SHARES

ANTIGENICS INC.

[ANTIGENICS INC. LOGO]

COMMON STOCK

$ PER SHARE

- - We anticipate that the initial public offering price will be between $14.00 and $16.00 per share.

- - This is a firm commitment initial public offering and no public market currently exists for our shares.

- - Proposed trading symbol: Nasdaq National Market - AGEN

THIS INVESTMENT INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 8.

	PER SHARE	TOTAL
Public offering price	$	$
Underwriting discount	$	$
Proceeds to Antigenics	$	$

The underwriters have a 30-day option to purchase up to 450,000 additional shares of common stock from us to cover over-allotments, if any.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

U.S. BANCORP PIPER JAFFRAY

ROBERTSON STEPHENS

THE DATE OF THIS PROSPECTUS IS , 2000.

[Antigenics Logo]

- - Technology platform broadly applicable to cancer, infectious diseases and autoimmune disorders

- - Evaluating lead product, Oncophage(R), in multiple phase II clinical trials including kidney cancer, melanoma and colorectal cancer

- - Phase III clinical trial to commence in mid-2000

- - Lead infectious disease products in preclinical testing for genital herpes

- - Commercial scale manufacturing capacity in place

- - Nine issued United States patents cover use of our technology in treatment of cancer, infectious diseases and autoimmune diseases

Personalized Medicine

[Photo of vial]

Product	Indication	Research	Preclinical	Clinical Phase I/II	Clinical Phase II
CANCER					
Oncophage(R)	Kidney Cancer	.....			
	Melanoma	.....			
	Colorectal Cancer	.....			
	Gastric Cancer	.....			
	Pancreatic Cancer	.....			
	NHL	.....			
	Sarcoma	.....			
HSPPC-70-C	Various Cancers	.....			
HSPPC-90-C	Various Cancers	.....			
HSPPC-56-C	Various Cancers	.....			
INFECTIOUS DISEASES					
HSPPC-96-GH	Genital Herpes	.....			
HSPPC-70-GH	Genital Herpes	.....			
HSPPC-56-I	Various Infectious Diseases	.....			
HSPPC-70-I	Various Infectious Diseases	.....			
AUTOIMMUNE DISORDERS					
gp96	Type 1 Diabetes	.....			
	Multiple Sclerosis	.....			

[ANTIGENICS LOGO]

[PHOTO OF OUTSIDE OF BUILDING]

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SUMMARY

We describe the items in the following summary in more detail later in this prospectus. This summary provides an overview of selected information and does not contain all the information you should consider. Therefore, you should also read the more detailed information set out in this prospectus, including the financial information. We present information in this prospectus, except in the consolidated financial statements or where we otherwise specify, to give effect to:

- the $39.2 million private placement we completed in November 1999; and
- our change from a limited liability company to a corporation which will occur concurrently with this offering.

In addition, except where we indicate otherwise, we present information in this prospectus assuming that the underwriters do not exercise their over-allotment option.

BUSINESS OF ANTIGENICS

Antigenics is engaged in the discovery and development of a family of novel immunotherapeutics for the treatment of life threatening and chronic medical conditions. Immunotherapeutics are drugs that work by modulating the immune system to fight disease. We are currently evaluating our lead immunotherapeutic, Oncophage, in six separate phase II or phase I/II clinical trials in four different cancers, and we expect to start a pivotal phase III trial by mid-2000. We are also developing immunotherapeutics to treat infectious diseases, such as genital herpes, and autoimmune disorders, such as diabetes and multiple sclerosis. Based upon our scientific and drug development skills, our technology platform and our strategic expertise, we intend to become a leader in drug discovery, development and commercialization.

Our immunotherapeutics are based on a specific class of proteins known as heat shock proteins. Heat shock proteins are present in all cells throughout the body and published research suggests that they play a central role in the generation of immune responses. Inside cells, heat shock proteins naturally bind to protein fragments called peptides. We refer to these combinations of heat shock proteins and peptides as heat shock protein-peptide complexes. These complexes are our immunotherapeutics. We believe that our immunotherapeutics elicit a powerful immune response that is capable of systemically targeting and killing cancers or other diseased cells from which the specific heat shock proteins originate.

We believe our heat shock protein technology is applicable to the treatment of a wide variety of diseases. Each of our immunotherapeutics includes a heat shock protein that is constant and a repertoire of peptides that varies depending on the target disease. For a disease such as cancer, which varies among individuals, we derive heat shock protein-peptide complexes from a patient's own cancer and therefore our cancer immunotherapeutics are patient-specific, or autologous. For each infectious disease, which is generally caused by a common pathogen such as a virus or bacterium, we intend to produce a disease-specific immunotherapeutic using that same common pathogen. In a wide range of preclinical studies, we have shown that our immunotherapeutics stimulate the immune system to target and destroy diseased cells. In addition, over one dozen scientific institutions world-wide have independently confirmed various aspects of our technology platform.

Our lead immunotherapeutic, Oncophage, consists of purified, patient-specific heat shock protein-peptide complexes. The manufacturing process for Oncophage begins when a surgeon removes a patient's tumor and ships it frozen by overnight courier to our manufacturing facility. Using our proprietary methods, we purify Oncophage from the tumor tissue in a process that takes less than 10 hours. We then ship Oncophage frozen to the hospital for administration to the patient. Four to six weeks after surgery, a doctor or nurse injects Oncophage into the patient. The typical course of treatment involves a series of injections into the skin once per week for four to six weeks.

To date, we have treated approximately 160 advanced stage cancer patients with Oncophage in our clinical trial programs. We have initially targeted cancers for which there are limited or no treatment alternatives and cancers and stages of disease that involve tumors that a doctor can surgically remove. Further, we have targeted cancers and stages of disease which allow us to evaluate our immunotherapeutics in clinical trials with near term endpoints. This should permit us to rapidly and efficiently complete clinical trials and submit regulatory filings. We are currently conducting separate phase II or phase I/II clinical trials with Oncophage for the treatment of:

- renal cell carcinoma, a type of kidney cancer;
- metastatic melanoma, a type of skin cancer;
- colorectal cancer, or cancer of the colon and rectum; and
- gastric cancer, or stomach cancer.

In addition, we are planning to start separate phase II clinical trials evaluating Oncophage as a treatment for sarcoma, a type of soft tissue cancer, and non-Hodgkin's lymphoma, a type of cancer that originates in the lymph tissue. We also expect to begin a pivotal phase III trial for Oncophage as a treatment for renal cell carcinoma by mid-2000.

Preliminary results from our completed and ongoing clinical trials indicate that Oncophage is generally safe and well tolerated. These results also demonstrate preliminary indications of clinical benefit in a number of patients. For example, in our renal cell carcinoma clinical trial, Oncophage has achieved a response rate, a common measure of clinical benefit, comparable to that of the existing approved treatment without the significant side effects associated with that treatment. We have also shown that in all patients who responded clinically, the number of immune cells increased after treatment with Oncophage. Moreover, we have shown that we can manufacture Oncophage consistently and in sufficient quantities from most tumor types.

In addition to cancer, we believe our immunotherapeutics may be effective in treating various infectious diseases and autoimmune disorders. Our immunotherapeutics for treating infectious diseases will consist of heat shock proteins complexed to peptides that are produced by disease-causing pathogens. Our first infectious disease immunotherapeutic is intended for the treatment of genital herpes. We anticipate filing an Investigational New Drug Application, or IND, with the United States Food and Drug Administration, or FDA, for our immunotherapeutic for genital herpes in 2000.

We are also researching the applicability of heat shock proteins to treat autoimmune disorders like diabetes and multiple sclerosis. We have demonstrated in a number of animal models that heat shock proteins administered in high doses can turn off the misguided immune responses responsible for several autoimmune disorders.

OFFICE LOCATION

We maintain our principal operations in Woburn, Massachusetts and our executive offices in New York, New York. The address for our executive offices is 630 Fifth Avenue, Suite 2100, New York, New York 10111 and our telephone number is (212) 332-4774.

THE OFFERING

Common stock offered.....	3,000,000 shares
Common stock outstanding after this offering.....	23,714,286 shares. This number excludes 1,716,007 shares of common stock issuable upon exercise of options outstanding at December 31, 1999, with a weighted average exercise price of $5.83 per share and 280,886 shares issuable upon exercise of warrants outstanding at December 31, 1999, with an exercise price of $13.96 per share.
Offering price.....	$ per share
Use of proceeds.....	To fund clinical trials; to fund research and development of our immunotherapeutics; to increase our manufacturing capacity; and for general corporate purposes. You should read our discussion under "Use of Proceeds."
Proposed Nasdaq National Market symbol.....	AGEN

CORPORATE BACKGROUND AND MERGER

We formed our business in March 1994. We currently operate as a limited liability company, Antigenics L.L.C. Concurrently with the completion of this offering, Antigenics L.L.C. will change its structure from a limited liability company to a corporation. This change will occur when we merge Antigenics L.L.C. with and into Antigenics Inc., a newly formed Delaware corporation. In the merger, equity holders, or members, of Antigenics L.L.C. will exchange membership units and options in Antigenics L.L.C. for shares of Antigenics Inc. common stock and options exercisable for shares of Antigenics Inc. common stock. Each holder of warrants issued by Antigenics L.L.C. will exchange them for warrants exercisable for shares of Antigenics Inc. common stock, unless the holder of the warrants elects to convert the warrants into shares of common stock in connection with the merger.

This prospectus contains our trademark, Oncophage(R). Each trademark, trade name or service mark of any other company appearing in this prospectus belongs to its holder.

SUMMARY CONSOLIDATED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION) TO DECEMBER 31, 1994	YEAR ENDED DECEMBER 31, 1995	1996	1997	1998	NINE MONTHS ENDED SEPTEMBER 30, 1998 (UNAUDITED)	1999 (UNAUDITED)	PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION) TO SEPTEMBER 30, 1999 (UNAUDITED)
CONSOLIDATED STATEMENT OF OPERATIONS DATA:								
Revenue	$ --	$ --	$ --	$ --	$ --	$ --	$ --	$ --
Operating expenses:								
Research and development	(112)	(742)	(2,017)	(2,563)	(6,102)	(4,196)	(7,232)	(18,770)
General and administrative	(56)	(2,453)	(1,781)	(1,549)	(3,178)	(2,242)	(4,016)	(13,031)
Depreciation and amortization	(15)	(40)	(79)	(202)	(360)	(273)	(726)	(1,422)
Loss from operations	(183)	(3,235)	(3,877)	(4,314)	(9,640)	(6,711)	(11,974)	(33,223)
Interest income, net	--	8	281	481	736	580	489	1,996
Non-operating income	--	--	250	--	--	--	--	250
Net loss(1)	$(183)	$(3,227)	$(3,346)	$(3,833)	$(8,904)	$(6,131)	$(11,485)	$(30,977)
UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS DATA:								
Pro forma net loss(2)					$(8,904)		$(11,485)	
Pro forma net loss per common share, basic and diluted(2)					$ (0.54)		$ (0.64)	
Pro forma weighted average shares outstanding, basic and diluted(2)					16,459		17,905	

	AS OF DECEMBER 31, 1996	1997	1998	AS OF SEPTEMBER 30, 1999 HISTORICAL (UNAUDITED)	PRO FORMA(3) (UNAUDITED)	PRO FORMA, AS ADJUSTED(4) (UNAUDITED)
CONSOLIDATED BALANCE SHEET DATA:						
Cash and cash equivalents	$9,588	$13,086	$22,168	$12,612	$51,535	$ 92,535
Total current assets	9,639	13,246	22,447	13,226	52,149	93,149
Total assets	10,041	14,090	26,636	21,280	60,203	101,203
Total current liabilities	883	878	2,285	2,170	2,170	2,170
Long-term liabilities, less current portion	--	--	709	2,368	2,368	2,368
Members' equity/stockholders' equity	9,158	13,212	23,641	16,742	55,665	96,665

(1)Since we have operated historically as a limited liability company, in accordance with federal, state and local income tax regulations which provide that no income taxes are levied on United States limited liability companies and each member of the company is individually responsible for reporting the member's share of our net income or loss, we do not provide for income taxes in our consolidated financial statements.

(2)The unaudited pro forma consolidated statement of operations data give effect to the change from a limited liability company to a corporation as though this event occurred as of January 1, 1998. Each unit of members' equity outstanding will be exchanged for 172.0336 shares of common stock. The unaudited pro forma consolidated statement of operations data are unaudited and reflect adjustments which are necessary, in our management's opinion, for a fair presentation of our consolidated results of operations on a pro forma basis. The number of pro forma weighted average shares outstanding used for computing pro forma diluted loss per common share is the same as that used for computing pro forma basic loss per common share because our options are not included in the calculation since the inclusion of such potential common shares would be antidilutive.

(3)The pro forma consolidated balance sheet data give effect to the unaudited pro forma adjustments as described in footnote (2), the private placement completed in November 1999 and the application of the $38.9 million net

proceeds from that private placement as though these events occurred as of September 30, 1999.

(4)The pro forma as adjusted consolidated balance sheet data give effect to the unaudited pro forma adjustments as described in footnote (3) and are adjusted to reflect the issuance of 3,000,000 shares of common stock at an assumed offering price of $15.00 per share, after deducting our estimated offering expenses and the underwriting discount, as though these events occurred as of September 30, 1999.

RISK FACTORS

You should carefully consider the following risk factors before you decide to buy our common stock. If any of these risks actually occur, our business, financial condition, operating results or cash flows could be materially adversely affected. This could cause the trading price of our common stock to decline, and you may lose part or all of your investment.

RISKS RELATED TO OUR BUSINESS

WE DO NOT CURRENTLY GENERATE ANY REVENUE, AND WE CANNOT GUARANTEE THAT WE WILL EVER COMMERCIALIZE ANY OF OUR IMMUNOTHERAPEUTICS AND GENERATE REVENUE IN THE FUTURE.

WE MUST RECEIVE SEPARATE REGULATORY APPROVAL FOR EACH OF OUR IMMUNOTHERAPEUTICS IN EACH INDICATION BEFORE WE CAN SELL THEM COMMERCIALLY IN THE UNITED STATES OR INTERNATIONALLY.

To obtain regulatory approvals, we must, among other requirements, complete clinical trials demonstrating that a particular immunotherapeutic is safe and effective. Because Oncophage is our only immunotherapeutic in clinical trials, any delays or difficulties we encounter in these clinical trials may have a significant adverse impact on our operations and cause our stock price to decline significantly. We have limited clinical data. Future clinical trials may not show that Oncophage is safe and effective. In addition, we might delay or halt our clinical trials of Oncophage for various reasons, including:

- Oncophage may not appear to be more effective than current therapies;
- Oncophage may have unforeseen adverse side effects;
- the time required to determine whether Oncophage is effective may be longer than expected;
- patients may die during a clinical trial because their disease is too advanced or because they experience medical problems that may not be related to Oncophage;
- sufficient number of patients may not enroll in the trials; or
- we may not be able to produce sufficient quantities of Oncophage to complete the trials.

We rely on third party clinical investigators to conduct our clinical trials. As a result, we may encounter delays outside of our control.

The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive and uncertain. It also can vary substantially, based on the type, complexity and novelty of the product involved. To date, the FDA and foreign regulatory agencies have approved only a limited number of cancer immunotherapeutics for commercial sale. Furthermore, the FDA and foreign regulatory agencies have relatively little experience with autologous therapies. This lack of experience may lengthen the regulatory review process for Oncophage, increase our development costs and delay commercialization. In addition, problems encountered with other companies' immunotherapeutic products may slow the regulatory approval for our immunotherapeutics. The FDA may not consider Oncophage to be an appropriate candidate for fast track designation should we choose to seek it. Accordingly, Oncophage or any of our other future drug candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval.

BECAUSE DEVELOPMENT OF OUR IMMUNOTHERAPEUTICS FOR INFECTIOUS DISEASES AND AUTOIMMUNE DISORDERS WILL INVOLVE A LENGTHY AND COMPLEX PROCESS, WE ARE NOT CERTAIN WE WILL BE ABLE TO DEVELOP ANY MARKETABLE IMMUNOTHERAPEUTICS FOR THESE INDICATIONS.

We have not completed the preclinical development of our immunotherapeutics for any infectious disease or autoimmune disorder. We will need to conduct extensive additional research, preclinical and clinical testing of these immunotherapeutics prior to commercialization. This development process takes several years and often fails to yield commercial products. Regulatory authorities may not permit human testing of

these immunotherapeutics and, even if they permit human testing, we may not demonstrate that an immunotherapeutic is safe and effective.

EVEN IF SOME OF OUR IMMUNOTHERAPEUTICS RECEIVE REGULATORY APPROVAL, THOSE IMMUNOTHERAPEUTICS MAY STILL FACE SUBSEQUENT REGULATORY DIFFICULTIES.

If we receive regulatory approval to sell any of our immunotherapeutics, the FDA or a comparable foreign regulatory agency may, nevertheless, limit the types of patients who can use that immunotherapeutic. In addition, regulatory agencies subject a marketed product, its manufacturer and the manufacturer's facilities to continual review and periodic inspections. Furthermore, the FDA and foreign regulatory agencies may require expensive post-approval trials. If we discover previously unknown problems with a product or our manufacturing and laboratory facility, a regulatory agency may impose restrictions on that product or on us, including requiring us to withdraw the product from the market. If we fail to comply with applicable regulatory approval requirements, a regulatory agency may:

- send us warning letters;
- impose fines and other civil penalties on us;
- suspend our regulatory approvals;
- refuse to approve pending applications or supplements to approved applications filed by us;
- refuse to permit exports of our products from the United States;
- require us to recall products;
- seize our products;
- impose restrictions on our operations; or
- criminally prosecute us.

WE MAY ENCOUNTER MANUFACTURING PROBLEMS THAT LIMIT OUR ABILITY TO SUCCESSFULLY COMMERCIALIZE OUR IMMUNOTHERAPEUTICS.

IF WE ARE UNABLE TO PURIFY HEAT SHOCK PROTEINS FROM SOME CANCER TYPES, THE SIZE OF OUR POTENTIAL MARKET WOULD DECREASE.

Our ability to successfully commercialize an immunotherapeutic for a particular cancer type depends on our ability to purify heat shock proteins from that type of cancer. Based on our clinical trials conducted to date, in renal cell carcinoma, we have been able to manufacture Oncophage from 98% of the tumors delivered to our manufacturing facility; for melanoma, 90%; for colorectal carcinoma, 100%; for gastric cancer, 71%; and for pancreatic cancer, 30%. The relatively low rate for pancreatic cancer is due to the abundance of proteases in pancreatic tissue. Proteases are enzymes that break down proteins. These proteases degrade the heat shock proteins during the purification process. We may encounter this problem or similar problems with other types of cancers as we expand our research. If we cannot overcome these problems, the number of cancer types that our immunotherapeutics could treat would be limited.

DELAYS IN OBTAINING REGULATORY APPROVAL OF OUR MANUFACTURING FACILITY AND DISRUPTIONS IN OUR MANUFACTURING PROCESS MAY DELAY OR DISRUPT OUR COMMERCIALIZATION EFFORTS.

Before we can begin commercially manufacturing our immunotherapeutics, we must obtain regulatory approval of our manufacturing facility and process. Manufacturing of our immunotherapeutics must comply with the FDA's current Good Manufacturing Practices requirements, commonly known as cGMP, and foreign regulatory requirements. The cGMP requirements govern quality control and documentation

policies and procedures. In complying with cGMP and foreign regulatory requirements, we will be obligated to expend time, money and effort in production, recordkeeping and quality control to assure that the product meets applicable specifications and other requirements. If we fail to comply with these requirements, we would be subject to possible regulatory action and may be limited in the jurisdictions in which we are permitted to sell our immunotherapeutics.

We recently transferred the manufacturing of Oncophage from our facility in Framingham, Massachusetts to our new facility in Woburn, Massachusetts. We have limited manufacturing experience in this facility and unforeseen circumstances may cause delays or disruptions in our manufacturing process. The FDA, The Commonwealth of Massachusetts and foreign regulatory authorities have the authority to continuously inspect this facility. Preparing this facility for commercial manufacturing may take longer than planned and the costs of complying with FDA regulations may be higher than those which we have budgeted. In addition, any material changes we make to the manufacturing process may require approval by the FDA, The Commonwealth of Massachusetts or foreign regulatory authorities. It could take longer than we expect for us to obtain these approvals. Any delays in obtaining these approvals could disrupt our manufacturing process.

We are the only manufacturer of our immunotherapeutics. For the next several years, we expect that we will conduct all of our manufacturing in our facility in Woburn, Massachusetts. If this facility or the equipment in the facility is significantly damaged or destroyed, we will not be able to quickly or inexpensively replace our manufacturing capacity. Due to the nature of our immunotherapeutics, a third party may not be able to manufacture our immunotherapeutics.

We have no experience manufacturing Oncophage in the volumes that will be necessary to support large clinical trials or commercial sales. Our present manufacturing process may not meet our initial expectations as to:

- scheduling;
- reproducibility;
- yield;
- purity;
- cost;
- potency;
- quality; and
- other measurements of performance.

In addition, we have not demonstrated the ability to manufacture our immunotherapeutics other than Oncophage in quantities sufficient for any clinical trials.

IF WE ARE UNABLE TO PROTECT OUR PROPRIETARY TECHNOLOGY, TRADE SECRETS OR KNOW-HOW, WE MAY NOT BE ABLE TO OPERATE OUR BUSINESS PROFITABLY.

IF WE FAIL TO SUSTAIN AND FURTHER BUILD OUR INTELLECTUAL PROPERTY RIGHTS, COMPETITORS WILL BE ABLE TO TAKE ADVANTAGE OF OUR RESEARCH AND DEVELOPMENT EFFORTS TO DEVELOP COMPETING THERAPIES.

Our success depends, in part, on our ability to maintain protection for our products and technologies under the patent laws of the United States and other countries, so that we can stop others from using our inventions. Our success also will depend on our ability to prevent others from using our trade secrets. In addition, we must operate in a way that does not infringe, or violate, the intellectual property rights of others.

We have exclusive rights to nine issued U.S. patents, and foreign counterpart patents and patent applications, relating to our heat shock protein technology. Our rights to these patents are as a result of an

exclusive worldwide license with Fordham University and one with Mount Sinai School of Medicine of New York University. In addition, we have licensed or optioned rights to 43 pending U.S. patent applications and foreign counterpart patents and patent applications. The standards which the U.S. Patent and Trademark Office uses to grant patents are not always applied predictably or uniformly and can change. Consequently, we cannot be certain as to the type and extent of patent claims that will be issued to us in the future. Any patents which are issued may not contain claims which will permit us to stop competitors from using similar technology. The standards which courts use to interpret patents are not always applied predictably or uniformly and can change, particularly as new technologies develop. Consequently, we cannot be certain as to how much protection, if any, will be given to our patents, if we attempt to enforce them and they are challenged in court. If we choose to go to court to stop someone else from using the inventions claimed in our patents, that individual or company has the right to ask the court to rule that our patents are invalid and should not be enforced against them. These lawsuits are expensive and would consume time and other resources, even if we were successful in stopping the violation of our patents. In addition, there is a risk that the court will decide that our patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of our patents were upheld, the court will refuse to stop the other party on the ground that its activities are not covered by, that is, do not infringe, our patents.

Furthermore, a third party may claim that we are using inventions covered by their patents and may go to court to stop us from engaging in our normal operations and activities. Such lawsuits are expensive and would consume time and other resources. There is a risk that a court would decide that we are violating the third party's patents and would order us to stop the activities covered by the patents. In addition, there is a risk that a court will order us to pay the other party's damages for having violated their patents.

We rely on certain proprietary trade secrets and know-how that are not patentable. We have taken measures to protect our unpatented trade secrets and know-how, including the use of confidentiality agreements with our employees, consultants and certain contractors. It is possible, however, that:

- these persons will breach the agreements;

- we would have inadequate remedies for any breach; or

- our competitors will independently develop or otherwise discover our trade secrets.

WE MAY INCUR SUBSTANTIAL COSTS AS A RESULT OF LITIGATION OR OTHER PROCEEDINGS RELATING TO PATENT AND OTHER INTELLECTUAL PROPERTY RIGHTS.

The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to continue our operations.

Should third parties file patent applications, or be issued patents claiming technology also claimed by us in pending applications, we may be required to participate in interference proceedings in the United States Patent and Trademark Office to determine priority of invention. We, or our licensors, may also need to participate in interference proceedings involving our issued patents and pending applications of another entity. An unfavorable outcome in an interference proceeding could require us to cease using the technology or to license rights from prevailing third parties. There is no guarantee that any prevailing party would offer us a license or that we could acquire any license made available to us on commercially acceptable terms.

We cannot guarantee that the practice of our technologies will not conflict with the rights of others. We are aware of a United States patent, issued to a third party, with claims directed to certain heat shock protein based immunotherapeutics and their use in the field of tissue grafting. We do not believe that our products or activities are infringing any valid claims of this patent. We also are aware of two United States

patents, issued to a different third party, with claims directed to certain methods of making heat shock protein products and related apparatuses. These patents do not claim any therapeutic applications. These patents also do not claim any of the methods we presently use to make our Oncophage product. Moreover, we do not believe that our methods of producing any of our heat shock protein-based immunotherapeutics would infringe any valid claim of either of these patents. However, we cannot guarantee that this third party, or any other third party, will not sue us for infringing these, or any other, patents. One of the patent applications licensed to us contains claims which are substantially the same as claims in one of this third party's patents. Therefore, there is a possibility that the U.S. Patent and Trademark Office will declare an interference proceeding between one or both of this third party's patents and our patent application. In an interference proceeding, the party with the earliest effective filing date has certain advantages. We believe that our claims have an earlier effective filing date than the claims of the other patents. However, we cannot guarantee that we would prevail in any interference proceeding. In the past and again recently, this third party has contacted us about licensing patents, but we have not yet responded to the recent inquiry.

In some foreign jurisdictions, we could become involved in opposition proceedings, either by opposing the validity of another's foreign patent or by third parties opposing the validity of our foreign patents. In 1995, the European Patent Office issued a European patent, with claims directed to the use of heat shock proteins to produce or enhance immune responses to cancer and infectious diseases, to the Whitehead Institute for Biomedical Research and to the Medical Research Council. This patent is exclusively licensed to StressGen Biotechnologies Corporation. The patent holders have made no attempt to enforce this patent against us. Nonetheless, we are seeking to have this patent revoked in its entirety in an opposition proceeding in the European Patent Office. The European Patent Office has issued a provisional, non-binding opinion that this patent should be revoked in its entirety. The patent owners, in response, amended the patent claims to exclude autologous treatment of tumors. We then argued that this third party patent still should be revoked in its entirety. Even if the European Patent Office changes its position and the patent is maintained with the amended claims, we still should be free to practice our autologous cancer business in Europe. However, the patent owners or their licensee might try to enforce the amended patent against our infectious disease business in Europe. We or the holders of this patent may appeal any decision to revoke the patent in its entirety, or to maintain the patent in any form. We may not obtain a final, non-appealable decision for several years, during which time, the patent, with any amendments made during the opposition proceedings, remains enforceable. We may incur significant costs by participating in the opposition proceedings and any appeals. Furthermore, if we are sued on this patent in Europe prior to any final decision of revocation, we may incur significant costs defending ourselves, even if we ultimately succeed in proving that we do not infringe any valid claims of this patent.

This European patent claims priority to a United States patent application filed in 1988. We do not know whether this application, or any related application, is still pending. We do not believe that any United States patent has issued from this application, and we do not know whether a United States patent will ever issue from this patent application. If a United States patent does issue, we do not know whether the patent will be enforceable, whether any valid claims will cover our activities or products, or whether the patent owner will attempt to assert the patent against us.

Earlier this year, we received correspondence from both Copernicus Therapeutics, Inc. and its counsel alleging similarity between the companies' respective logos and demanding that we cease using our logo. In July 1999, we sent a response to Copernicus stating that we have prior rights in our logo. In the response to Copernicus, we also stated that since the respective corporate names are vastly different, both companies should be able to continue the use of their respective logos without causing public confusion. At this time, we have not received any further communications from Copernicus or its counsel. Although we do not believe we are infringing any rights owned by Copernicus, Copernicus may proceed with a trademark lawsuit against us.

WE ARE AN EARLY STAGE BIOTECHNOLOGY COMPANY THAT MAY NEVER BE PROFITABLE.

IF WE INCUR OPERATING LOSSES FOR LONGER THAN WE EXPECT, WE MAY BE UNABLE TO CONTINUE OUR OPERATIONS.

We have not generated any revenues from sales, and we do not expect to generate significant revenues for several years. We have incurred losses since we were formed. From inception through September 30, 1999, we have generated losses totaling $31.0 million. We expect to incur increasing and significant losses over the next several years as we complete our Oncophage clinical trials, apply for regulatory approvals, continue development of our technology and expand our operations.

Our profitability will depend on the market acceptance of any of our immunotherapeutics that receive FDA or foreign regulatory approval. The commercial success of any of our immunotherapeutics will depend on whether:

- the immunotherapeutic is more effective than alternative treatments;
- side effects of the immunotherapeutic are acceptable to doctors and patients;
- we produce the immunotherapeutic at a competitive price;
- we obtain sufficient reimbursement for the immunotherapeutic; and
- we have sufficient capital to market the immunotherapeutic effectively.

Because Oncophage is autologous, or patient specific, it may be more expensive to manufacture than conventional therapeutic products. This increased expense may decrease our profit margins. Furthermore, because our autologous products are novel, some doctors and patients may be reluctant to use them.

IF WE FAIL TO OBTAIN THE CAPITAL NECESSARY TO FUND OUR OPERATIONS, WE WILL BE UNABLE TO ADVANCE OUR DEVELOPMENT PROGRAMS AND COMPLETE OUR CLINICAL TRIALS.

Developing immunotherapeutics and conducting clinical trials for multiple diseases is expensive. We plan to conduct clinical trials for many different cancer types simultaneously, which will increase our costs. We will need to raise additional capital:

- to fund operations;
- to continue the research and development of our immunotherapeutics; and
- to commercialize our immunotherapeutics.

Additional financing may not be available on favorable terms or at all. If we are unable to raise additional funds when we need them, we may be required to delay, reduce or eliminate some or all of our development programs and some or all of our clinical trials. We also may be forced to license technologies to others that we would prefer to develop internally.

On September 30, 1999, we had $12.6 million in cash and cash equivalents. We raised net proceeds of $38.9 million in a private placement in November 1999. We believe that, after this offering, we will have sufficient capital to fund our operations for the next two years. We may need to raise capital sooner, however, due to a number of factors, including:

- an acceleration of the number, size or complexity of our clinical trials;
- slower than expected progress in developing our immunotherapeutics;
- higher than expected costs to obtain regulatory approvals;
- higher than expected costs to pursue our intellectual property strategy;
- higher than expected costs to further develop our manufacturing capability; and
- higher than expected costs to develop our sales and marketing capability.

BECAUSE OF THE SPECIALIZED NATURE OF OUR BUSINESS, THE TERMINATION OF RELATIONSHIPS WITH OUR SCIENTIFIC ADVISORS OR THE DEPARTURE OF KEY MEMBERS OF MANAGEMENT MAY PREVENT US FROM ACHIEVING OUR OBJECTIVES.

IF PRAMOD K. SRIVASTAVA, PH.D. SEVERS HIS RELATIONSHIP WITH ANTIGENICS, WE MAY EXPERIENCE SIGNIFICANT DIFFICULTIES IN OUR FUTURE DEVELOPMENT EFFORTS.

Since our formation, Dr. Srivastava has played a significant role in our research efforts. Dr. Srivastava is a director of our company and acts as chairman of our scientific advisory board. In addition, we have licensed nearly all of our intellectual property from institutions at which Dr. Srivastava has worked. We sponsor research in Dr. Srivastava's laboratory at the University of Connecticut Health Center in exchange for the right to license discoveries made in that laboratory with our funding. Dr. Srivastava is a member of the faculty of the University of Connecticut School of Medicine. The regulations and policies of the University of Connecticut Health Center govern the relationship between a faculty member and a commercial enterprise. These regulations and policies prohibit Dr. Srivastava from becoming an employee of Antigenics. Furthermore, the University of Connecticut may modify these regulations and policies in the future to further limit Dr. Srivastava's relationship with us. While Dr. Srivastava has a consulting agreement with us, which includes financial incentives for him to remain associated with us, we cannot guarantee that he will remain associated with us even during the time covered by the consulting agreement. In addition, this agreement does not restrict his ability to compete with us after his association is terminated.

IF WE FAIL TO KEEP KEY MANAGEMENT AND SCIENTIFIC PERSONNEL, WE MAY BE UNABLE TO SUCCESSFULLY DEVELOP OUR IMMUNOTHERAPEUTICS, CONDUCT CLINICAL TRIALS AND OBTAIN FINANCING.

We are highly dependent on our senior management and scientific staff, particularly Garo H. Armen, Ph.D., our chairman and chief executive officer, and Gamil G. de Chadarevian, our vice chairman and executive vice president, international. The competition for qualified personnel in the biotechnology field is intense, and we rely heavily on our ability to attract and retain qualified scientific, technical and managerial personnel. Since our manufacturing process is unique, our manufacturing and quality control personnel are also very important.

THE COMMERCIAL SUCCESS OF ANY OF OUR IMMUNOTHERAPEUTICS WILL DEPEND UPON THE STRENGTH OF OUR SALES AND MARKETING EFFORT AND THE AVAILABILITY OF THIRD PARTY REIMBURSEMENT.

IF WE ARE UNABLE TO ESTABLISH SALES AND MARKETING CAPABILITIES OR ENTER INTO AGREEMENTS WITH PHARMACEUTICAL COMPANIES TO SELL AND MARKET OUR IMMUNOTHERAPEUTICS, WE MAY EXPERIENCE DIFFICULTY GENERATING REVENUES.

We do not have a sales organization and have no experience in the sales, marketing and distribution of pharmaceutical products. If Oncophage is approved for commercial sale, we plan to market it in the United States with our own sales force. Developing a sales force is expensive and time consuming and could delay any product launch. We cannot be certain that we would be able to develop this capacity. If we are unable to establish our sales and marketing capability, we will need to enter into sales and marketing agreements to market Oncophage in the United States. We plan to enter into these types of arrangements for sales outside the United States. If we are unable to establish successful distribution relationships with pharmaceutical companies, we may fail to realize the full sales potential of our immunotherapeutics.

IF WE FAIL TO OBTAIN ADEQUATE LEVELS OF REIMBURSEMENT FOR OUR IMMUNOTHERAPEUTICS FROM THIRD PARTY PAYORS, THE COMMERCIAL POTENTIAL OF OUR IMMUNOTHERAPEUTICS WILL BE SIGNIFICANTLY LIMITED.

Our profitability will depend on the extent to which government administration authorities, private health insurance providers and other organizations provide reimbursement for the cost of our immunotherapeutics. Many patients will not be capable of paying for our immunotherapeutics themselves. A primary trend in the United States health care industry is toward cost containment. Large private payors, managed care

organizations, group purchasing organizations and similar organizations are exerting increasing influence on decisions regarding the use of particular treatments. These organizations are becoming increasingly economically focused. Furthermore, many third party payors limit reimbursement for newly approved health care products. Cost containment measures may prevent us from becoming profitable.

In addition, healthcare reform is an area of significant government focus. Any reform measures, if adopted, could adversely affect:

- the pricing of immunotherapeutics in the United States or internationally; and

- the amount of reimbursement available from governmental agencies or other third party payors.

For example, recent proposals regarding Medicare coverage, if they take effect, may put novel cancer therapies like Oncophage at a competitive disadvantage compared to existing therapies.

PRODUCT LIABILITY AND OTHER CLAIMS AGAINST US MAY REDUCE DEMAND FOR OUR PRODUCTS OR RESULT IN SUBSTANTIAL DAMAGES.

We face an inherent risk of product liability exposure related to testing immunotherapeutics in human clinical trials and will face an even greater risk if we sell any of our therapeutic products commercially. An individual may bring a product liability claim against us if one of our immunotherapeutics causes, or merely appears to have caused, an injury. Regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for our immunotherapeutics;

- injury to our reputation;

- withdrawal of clinical trial volunteers;

- costs of related litigation; and

- substantial monetary awards to plaintiffs.

We manufacture Oncophage from a patient's tumor, and a medical professional must inject the Oncophage into that same patient. A patient may sue us if we, a hospital or a delivery company fail to deliver the removed tumor or that patient's Oncophage. We anticipate that the logistics of shipping will become more complex as the number of patients we treat increases, and we cannot assure that all shipments will be made without incident. In addition, administration of Oncophage at a hospital poses another chance for delivery to the wrong patient. Currently, we do not have insurance that covers loss of or damage to Oncophage and do not know whether insurance will be available to us at a reasonable price or at all.

WE MAY INCUR SIGNIFICANT COSTS COMPLYING WITH ENVIRONMENTAL LAWS AND REGULATIONS.

We use hazardous, infectious and radioactive materials that could be dangerous to human health, safety or the environment. As appropriate, we store these materials and various wastes resulting from their use at our facility pending ultimate use and disposal. We are subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials and wastes resulting from their use. We may incur significant costs complying with both existing and future environmental laws and regulations. In particular, we are subject to regulation by the Occupational Safety and Health Administration and the Environmental Protection Agency and to regulation under the Toxic Substances Control Act and the Resource Conservation and Recovery Act. OSHA or the EPA may adopt regulations that may affect our research and development programs. We are unable to predict whether any agency will adopt any regulations which could have a material adverse effect on our operations.

Although we believe our safety procedures for handling and disposing of these materials comply with federal, state and local laws and regulations, we cannot entirely eliminate the risk of accidental injury or contamination from these materials. In the event of an accident, we could be held liable for any resulting damages which could be substantial.

OUR COMPETITORS IN THE BIOTECHNOLOGY AND PHARMACEUTICAL INDUSTRIES MAY HAVE SUPERIOR PRODUCTS, MANUFACTURING CAPABILITY OR MARKETING EXPERTISE.

Our business may fail because we face intense competition from major pharmaceutical companies and specialized biotechnology companies engaged in the development of immunotherapeutics and other therapeutic products directed at cancer, infectious diseases and autoimmune disorders. Many of our competitors have greater financial and human resources and more experience. Our competitors may:

- develop safer or more effective immunotherapeutics and other therapeutic products;
- implement more effective approaches to sales and marketing; or
- establish superior proprietary positions.

More specifically, if we receive regulatory approvals, some of our immunotherapeutics will compete with well-established, FDA approved therapies that have generated substantial sales over a number of years.

We anticipate that we will face increased competition in the future as new companies enter our markets and scientific developments surrounding immunotherapy and other cancer therapies continue to accelerate.

WE MAY NOT BE ABLE TO KEEP UP WITH THE RAPID TECHNOLOGICAL CHANGES IN THE BIOTECHNOLOGY AND PHARMACEUTICAL INDUSTRIES WHICH COULD MAKE OUR IMMUNOTHERAPEUTICS OBSOLETE.

The field of biotechnology is characterized by significant and rapid technological change. Research and discoveries by others may result in medical insights or breakthroughs which may render our immunotherapeutics obsolete even before they generate any revenue.

OUR BUSINESS MAY BE DISRUPTED IF WE EXPERIENCE ANY PROBLEMS WITH Y2K COMPLIANCE.

The date fields coded in certain software products and computer systems need to be able to distinguish 21st century dates from 20th century dates. The failure to be able to do so is commonly known as the year 2000 or Y2K problem.

While we have yet to experience problems, our installed computer systems, software products or other business systems, or those of our suppliers or service providers, working either alone or in conjunction with other software systems, may experience errors or interruptions due to the Y2K problem.

Some risks associated with the Y2K problem are beyond our ability to control, including the extent to which our suppliers and service providers can address the Y2K problem. The failure by a third party to adequately address the Y2K issue may have an adverse effect on their operations, which, in turn, may have an adverse impact on us. If, for instance, our supply of electricity and/or water is interrupted, our freezers may not be able to adequately preserve our immunotherapeutics and our scientific experiments may be interrupted.

RISKS RELATING TO THE OFFERING

OUR OFFICERS AND DIRECTORS MAY BE ABLE TO BLOCK PROPOSALS FOR A CHANGE IN CONTROL.

After this offering, Antigenics Holdings L.L.C. will control approximately 47.0% of our outstanding common stock. Due to this concentration of ownership, Antigenics Holdings may be able to prevail on all matters requiring a stockholder vote, including:

- the election of directors;
- the amendment of our organizational documents; or
- the approval of a merger, sale of assets or other major corporate transaction.

Our directors and officers, if they elect to act together, can control Antigenics Holdings. See "Principal Stockholders."

WE MAY ALLOCATE THE NET PROCEEDS FROM THIS OFFERING IN WAYS WHICH YOU AND OTHER STOCKHOLDERS MAY NOT APPROVE.

Management will have significant flexibility in applying the net proceeds of this offering and could use these proceeds for purposes other than those contemplated at the time of the offering.

ANTI-TAKEOVER PROVISIONS IN OUR CHARTER DOCUMENTS AND UNDER DELAWARE LAW MAY MAKE AN ACQUISITION OF US MORE DIFFICULT.

We are incorporated in Delaware. Anti-takeover provisions of Delaware law and our charter documents may make a change in control more difficult, even if the stockholders desire a change in control. Our anti-takeover provisions include provisions in our certificate of incorporation providing that stockholders' meetings may only be called by the president or the majority of the board of directors and a provision in our by-laws providing that our stockholders may not take action by written consent. Additionally, our board of directors has the authority to issue 1,000,000 shares of preferred stock and to determine the terms of those shares of stock without any further action by our stockholders. The rights of holders of our common stock are subject to the rights of the holders of any preferred stock that may be issued. The issuance of preferred stock could make it more difficult for a third party to acquire a majority of our outstanding voting stock. Our charter also provides for the classification of our board of directors into three classes. This "staggered board" generally may prevent stockholders from replacing the entire board in a single proxy contest. In addition, our directors may only be removed from office for cause. Delaware law also prohibits a corporation from engaging in a business combination with any holder of 15% or more of its capital stock until the holder has held the stock for three years unless, among other possibilities, the board of directors approves the transaction. The board may use this provision to prevent changes in our management. Also, under applicable Delaware law, our board of directors may adopt additional anti-takeover measures in the future.

OUR COMMON STOCK MAY HAVE A VOLATILE PUBLIC TRADING PRICE AND LOW TRADING VOLUME.

Prior to this offering, our equity did not trade in a public market. An active public market for our common stock may not develop or be sustained after this offering. We and the underwriters, through negotiations, will determine the initial public offering price. The initial public offering price is not necessarily indicative of the market price at which the common stock will trade after this offering. The market prices for securities of companies comparable to us have been highly volatile, and the market has experienced significant price and volume fluctuations that are unrelated to the operating performance of the individual

companies. Many factors may have a significant adverse effect on the market price of the common stock, including:

- results of our preclinical and clinical trials;
- announcement of technological innovations or new commercial products by us or our competitors;
- developments concerning proprietary rights, including patent and litigation matters;
- publicity regarding actual or potential results with respect to products under development by us or by our competitors;
- regulatory developments; and
- quarterly fluctuations in our revenues and other financial results.

THE SALE OF A SUBSTANTIAL NUMBER OF SHARES COULD CAUSE THE MARKET PRICE OF OUR COMMON STOCK TO DECLINE.

After this offering, we will have 23,714,286 shares of common stock outstanding. In connection with the private placement completed in November 1999, we are obligated to file, approximately 90 days after the date of this prospectus, a registration statement covering up to 2,808,857 shares for resale. When this registration statement is declared effective by the Securities and Exchange Commission, these stockholders will be permitted to resell their shares on the Nasdaq National Market. Sales of these shares or anticipation of those sales may depress our stock price.

The sale by our company or the resale by stockholders of shares of our common stock after this offering could cause the market price of the common stock to decline. The 20,714,286 shares of common stock outstanding after this offering but not offered by this prospectus will be available for resale on the Nasdaq National Market as follows:

- 2,808,857 shares when a resale registration statement to be filed approximately 90 days after the date of this prospectus is declared effective, and
- 17,905,429 shares one year following this offering, some of which are subject to volume and other limitations.

We intend to file a registration statement following the offering to permit the sale of approximately 4,800,000 shares of common stock under our equity incentive plan and 300,000 shares of common stock under our employee stock purchase plan. As of December 31, 1999, options to purchase 1,716,007 shares of our common stock upon exercise of options with a weighted average exercise price per share of $5.83 were outstanding. Many of these options are subject to vesting that generally occurs over a period of up to five years following the date of grant. Substantially all outstanding options are subject to agreements with the underwriters not to sell the shares issuable upon their exercise for one year after the offering. As of December 31, 1999, warrants to purchase 280,886 shares of our common stock with an exercise price per share of $13.96 were outstanding.

HISTORY OF ANTIGENICS

We formed our business in March 1994 through the creation of a Delaware corporation. We subsequently formed Antigenics L.L.C., a Delaware limited liability company. In December 1995, we raised capital and concurrently transferred to Antigenics L.L.C. all of the assets, properties and rights of the Delaware corporation in exchange for a portion of the total initial equity interests in Antigenics L.L.C. When we complete this offering, we will merge Antigenics L.L.C. with and into Antigenics Inc., a newly formed Delaware corporation. As part of the merger, holders will exchange membership units and options in Antigenics L.L.C. for shares of Antigenics Inc. common stock and options exercisable for shares of Antigenic Inc. common stock. Each holder of warrants issued by Antigenics L.L.C. will exchange them for warrants exercisable for shares of Antigenics Inc. common stock, unless the holder of the warrants elects to convert the warrants into common stock in connection with the merger.

Since inception, we have used our technology platform to develop heat shock protein-based immunotherapeutics. Based on extensive research and preclinical studies, we focused initially on the development of products for the treatment of human cancer. We filed an IND in November 1996 to start clinical trials in the United States and began our first phase I clinical trial for pancreatic cancer patients at Memorial Sloan-Kettering Cancer Center in November 1997. We subsequently began clinical trials in renal cell carcinoma, melanoma, colorectal cancer and gastric cancer. During the next several years, we intend to conduct clinical trials in additional cancer types and to further research and develop immunotherapeutics for the treatment of infectious diseases and autoimmune disorders.

USE OF PROCEEDS

We estimate the net proceeds from the sale of 3,000,000 shares of common stock in this offering at an assumed public offering price of $15.00 per share will be $41.0 million after deducting the underwriting discount and estimated offering expenses payable by us. Our net proceeds are estimated to be $47.3 million if the underwriters' exercise their over-allotment option in full.

We intend to use the net proceeds of this offering to fund clinical trials, research, preclinical and development activities for our immunotherapeutics and general corporate purposes, including working capital and an increase in our administrative staff. We may also use a portion of the net proceeds to increase our manufacturing capacity or to acquire complementary businesses or products. As of the date of this prospectus, we have no specific understandings, commitments or agreements with respect to any acquisition.

We have not determined the amount of net proceeds that we will use for each of these purposes. Accordingly, we will have broad discretion to use the proceeds as we see fit. Prior to spending the funds, we will invest the net proceeds in short-term, investment grade, interest-bearing securities or guaranteed obligations of the United States government.

RECENT FINANCING

In November 1999, we raised an aggregate of $39.2 million in a private placement. We incurred approximately $293,000 in related costs, so we received net proceeds of about $38.9 million. In the private placement, we sold member interests and warrants to purchase member interests. When we reorganize into a corporation, the member interests will convert into approximately 2,808,857 shares of our common stock. Each warrant holder has the option to convert its warrants into shares of common stock or into warrants to purchase common stock. If all the warrant holders elect to convert their warrants into common stock and the initial public offering price is $15.00 per share, we will issue approximately 19,445 shares of common stock to the warrant holders. If all of the warrant holders elect to receive warrants to purchase common stock, the warrant holders will have the right to acquire approximately 280,886 shares of common stock at $13.96 per share based on an assumed initial public offering price of $15.00 per share of common stock.

DIVIDEND POLICY

We have never paid cash dividends. We currently intend to retain any future earnings to finance the growth and development of our business. We do not intend to pay cash dividends on our common stock in the foreseeable future.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements, principally in the sections entitled "Management's Discussion and Analysis of Financial Conditions and Results of Operations" and "Business." Generally, these statements can be identified by the use of phrases like "believe," "expect," "anticipate," "plan," "may," "will," "could," "estimate," "potential," "opportunity," "future," "project" and similar terms and include statements about our:

- product research and development activities and projected expenditures;
- the efficacy of our immunotherapeutics in treating diseases;
- receipt of regulatory approvals;
- spending the proceeds from this offering;
- cash needs;
- plans for sales and marketing;
- results of scientific research;
- implementation of our corporate strategy; and
- financial performance.

These forward-looking statements involve risks and uncertainties. Our actual results could differ significantly from the results discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed in "Risk Factors." You should carefully consider that information before you make an investment decision. You should not place undue reliance on our forward-looking statements.

CAPITALIZATION
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

The following table sets forth, as of September 30, 1999, our historical and pro forma capitalization and cash and cash equivalents. The pro forma capitalization gives effect to the following transactions as if they occurred on September 30, 1999:

- the $39.2 million private placement completed in November 1999 less $293,000 of private placement expenses; and

- the change from a limited liability company to a corporation and the exchange of each unit of members' equity into 172.0336 shares of common stock.

The pro forma as adjusted capitalization reflects the pro forma adjustments described in the previous sentence and the sale in this offering of 3,000,000 shares of common stock at an assumed initial public offering price of $15.00 per share and the application of the estimated net proceeds from this offering, after deducting the underwriting discount and estimated offering expenses payable by us. This table does not include an aggregate of 1,716,007 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 1999 with a weighted average exercise price of $5.83 per share. This table does not include an aggregate of 280,886 shares of common stock issuable upon exercise of outstanding warrants at an exercise price of $13.96 per share. This table should be read in conjunction with our consolidated financial statements and the other financial information included in this prospectus.

	AS OF SEPTEMBER 30, 1999		
	HISTORICAL	PRO FORMA	PRO FORMA AS ADJUSTED
	(UNAUDITED)	(UNAUDITED)	(UNAUDITED)
Cash and cash equivalents	$ 12,612	$ 51,535	$ 92,535
Long-term debt, including current portion	$ 3,149	3,149	3,149
Members' capital	48,278	--	--
Stockholders' equity			
Common stock, par value $0.01 per share; 100,000,000 shares authorized, 20,714,286 shares issued and outstanding, pro forma, 23,714,286 shares issued and outstanding, pro forma as adjusted	--	207	237
Preferred stock, par value $0.01 par value per share; 1,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	--	--	--
Additional paid-in capital	--	86,994	127,964
Deferred compensation	(559)	(559)	(559)
Deficit accumulated during the development stage	(30,977)	(30,977)	(30,977)
Total members'/stockholders' equity	16,742	55,665	96,665
Total capitalization	$ 19,891	$ 58,814	$ 99,814

DILUTION

Our pro forma net tangible book value as of September 30, 1999, was $55.7 million or $2.69 per share of common stock. Pro forma net tangible book value per share before this offering represents the amount of our pro forma stockholders' equity, less intangible assets, divided by the pro forma number of shares of common stock outstanding as of September 30, 1999 after giving effect to:

- the application of net proceeds from the $39.2 million private placement completed in November 1999; and

- the change from a limited liability company to a corporation and the exchange of each unit of members' equity into 172.0336 shares of common stock.

Pro forma net tangible book value per share after this offering gives effect to the adjustments described above and to the application of net proceeds from the sale of 3,000,000 shares of our common stock at an assumed initial public offering price of $15.00 per share. As of September 30, 1999, our pro forma net tangible book value after this offering would have been $96.7 million or $4.08 per share.

This represents an immediate increase in net tangible book value to existing stockholders of $1.39 per share and an immediate dilution to new investors of $10.92 per share. The following table illustrates the per share dilution:

Assumed initial public offering price per share.....		$15.00
Pro forma net tangible book value per share before this offering.....	$2.69	
Increase in net tangible book value per share attributable to new investors.....	$1.39	
Pro forma net tangible book value per share after this offering.....		$ 4.08
Dilution per share to new investors.....		$10.92

Assuming the exercise in full of the underwriters' over-allotment option, our adjusted pro forma net tangible book value after this offering at September 30, 1999 would have been approximately $4.26 per share, representing an immediate increase in pro forma tangible book value of $1.57 per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of $10.74 per share to purchasers in this offering.

The following table enumerates the number of shares of common stock purchased, the total consideration paid and the average price per share paid by our existing stockholders. The following table also enumerates the number of shares of common stock purchased and the total consideration paid, calculated before deduction of the underwriting discount and estimated offering expenses, and the average price per share paid by the new investors in this offering assuming the sale of 3,000,000 shares of our common stock at an assumed initial offering price of $15.00 per share.

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE
	NUMBER	PERCENT	AMOUNT	PERCENT	PER SHARE
Existing stockholders.....	20,714,286	87.3%	$ 79,244,995	63.8%	$ 3.83
New investors.....	3,000,000	12.7%	$ 45,000,000	36.2%	$15.00
Total.....	23,714,286	100%	$124,244,995	100%	$ 5.24

The table above is calculated on a pro forma basis as of September 30, 1999 and gives effect to the November 1999 private placement and the change from a limited liability company to a corporation as described above.

The tables above assume no exercise of the underwriters' over-allotment option and no exercise of stock options outstanding at September 30, 1999. As of September 30, 1999, there were options outstanding to purchase a total of 1,716,007 shares, at a weighted average exercise price of $5.83 per share. These tables also do not reflect the warrants we issued in November 1999. To the extent that any of these options or warrants are exercised, there will be further dilution to new investors. Please see "Capitalization," "Management -- Director Compensation," "-- Executive Compensation," Note 5 to Antigenics' audited consolidated financial statements and Note C to Antigenics' unaudited consolidated financial statements.

SELECTED CONSOLIDATED FINANCIAL DATA

(IN THOUSANDS, EXCEPT PER SHARE, PER UNIT AND UNIT DATA)

We have derived the selected consolidated balance sheet data set forth below, as of December 31, 1997 and 1998, and the consolidated statement of operations data for each of the years in the three-year period ended December 31, 1998, from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the selected consolidated balance sheet data as of December 31, 1994, 1995 and 1996 and selected consolidated statement of operations data for the period from March 31, 1994 (date of inception) to December 31, 1994 and the year ended December 31, 1995 from our audited consolidated financial statements which are not included in this prospectus. These consolidated financial statements of Antigenics L.L.C. have been audited by KPMG LLP, independent certified public accountants.

We have derived the selected consolidated financial data as of September 30, 1999 and for the nine months ended September 30, 1998 and 1999 and for the period from March 31, 1994 (date of inception) to September 30, 1999 from our unaudited consolidated financial statements which are included elsewhere in this prospectus. The unaudited financial data includes, in our opinion, all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair presentation of our financial position and the results of our operations for those periods. Operating results for the nine months ended September 30, 1999 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 1999. You should read the selected consolidated financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the notes to those consolidated financial statements included elsewhere in this prospectus.

Since we have operated historically as a limited liability company, in accordance with federal, state and local income tax regulations which provide that no income taxes are levied on United States limited liability companies and each member of the limited liability company is individually responsible for reporting the member's share of our net income or loss, we do not provide for income taxes in our consolidated financial statements.

The unaudited pro forma information set forth below reflects adjustments which are necessary, in our management's opinion, for a fair presentation of our consolidated financial condition and results of operations on a pro forma basis. The unaudited pro forma net loss, basic and diluted net loss per common share and weighted average shares outstanding for the year ended December 31, 1998 and the nine months ended September 30, 1999 give effect to the change from a limited liability company to a corporation and the exchange of each unit of members' equity into 172.0336 shares of common stock as if they occurred on January 1, 1998.

The unaudited pro forma selected balance sheet data as of September 30, 1999 reflect the events described above as if these events occurred as of September 30, 1999 as well as the $39.2 million private placement completed in November 1999 less $293,000 of private placement expenses.

Increases in cash and cash equivalents, total current assets, total assets and members' equity in the years presented below include the effects of the receipt of net proceeds from our equity offerings that totalled approximately $10.6 million, $7.4 million and $20.1 million in 1996, 1997 and 1998, respectively.

	PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION) TO DECEMBER 31, 1994	YEAR ENDED DECEMBER 31, 1995	1996	1997	1998	NINE MONTHS ENDED SEPTEMBER 30, 1998 (UNAUDITED)	1999 (UNAUDITED)	PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION) TO SEPTEMBER 30, 1999 (UNAUDITED)
CONSOLIDATED STATEMENT OF OPERATIONS DATA:								
Revenue	$ --	$ --	$ --	$ --	$ --	$ --	$ --	$ --
Operating expenses:								
Research and development	(112)	(742)	(2,017)	(2,563)	(6,102)	(4,196)	(7,232)	(18,770)
General and administrative	(56)	(2,453)	(1,781)	(1,549)	(3,178)	(2,242)	(4,016)	(13,031)
Depreciation and amortization	(15)	(40)	(79)	(202)	(360)	(273)	(726)	(1,422)
Loss from operations	(183)	(3,235)	(3,877)	(4,314)	(9,640)	(6,711)	(11,974)	(33,223)
Interest income, net	--	8	281	481	736	580	489	1,996
Non-operating income	--	--	250	--	--	--	--	250
Net loss	$ (183)	$(3,227)	$(3,346)	$(3,833)	$(8,904)	$(6,131)	$ (11,485)	$(30,977)
Net loss per members' equity unit, basic and diluted	$(10.97)	$(40.92)	$(39.42)	$(42.81)	$(93.07)	$(68.10)	$ (110.35)	
Weighted average number of units outstanding, basic and diluted	16,675	78,854	84,876	89,525	95,673	90,032	104,079	
UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS DATA:								
Pro forma net loss					$(8,904)		$ (11,485)	
Pro forma net loss per common share, basic and diluted					$ (0.54)		$ (0.65)	
Pro forma weighted average shares outstanding, basic and diluted					16,459		17,905	

	AS OF DECEMBER 31, 1994	1995	1996	1997	1998	AS OF SEPTEMBER 30, 1999 HISTORICAL (UNAUDITED)	PRO FORMA (UNAUDITED)
CONSOLIDATED BALANCE SHEET DATA:							
Cash and cash equivalents	$ 129	$ 791	$ 9,588	$13,086	$22,168	$12,612	$ 51,535
Total current assets	163	876	9,639	13,246	22,447	13,226	52,149
Total assets	239	1,124	10,041	14,090	26,636	21,280	60,203
Total current liabilities	22	584	883	878	2,285	2,170	2,170
Long-term liabilities, less current portion	--	--	--	--	709	2,368	2,368
Members' equity/stockholders' equity	217	540	9,158	13,212	23,641	16,742	55,665

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

You should read the following discussion of the financial condition and results of operations in conjunction with our consolidated financial statements and their notes appearing elsewhere in this prospectus.

OVERVIEW

Since our inception in March 1994, our activities have primarily been associated with the development of our heat shock protein technology and our lead immunotherapeutic, Oncophage. Our business activities have included:

- establishing manufacturing capabilities;
- product research and development;
- manufacturing immunotherapeutics for clinical trials;
- regulatory and clinical affairs; and
- intellectual property prosecution.

We have incurred significant losses since our inception because we have not generated any revenues. As of September 30, 1999, we had an accumulated deficit of $30,977,000. We expect to continue to incur net losses over the next several years as we complete our Oncophage clinical trials, apply for regulatory approvals, continue development of our technology and expand our operations. We have been dependent on funding from equity and debt financings to finance our business activities. Our financial results may vary depending on many factors, including:

- the progress of Oncophage in the regulatory process;
- the acceleration of our other immunotherapeutic candidates into preclinical and clinical trials;
- our investment in manufacturing process development and in manufacturing capacity for Oncophage and other product candidates;
- development of a sales and marketing staff and initial sales activities if Oncophage is approved for commercialization; and
- the progress of our other additional research and development efforts.

In December 1999, we accelerated the vesting on some options granted to outside advisors. As a result, we recognized a charge of $2,093,000 in the fourth quarter of 1999. In addition, we have issued unvested options to acquire shares of our common stock for which the exercise price will be set at the time of vesting. We will take a compensation charge equal to the fair market value of the options at the time these options vest.

HISTORICAL RESULTS OF OPERATIONS

NINE MONTHS ENDED SEPTEMBER 30, 1999 COMPARED TO THE NINE MONTHS ENDED SEPTEMBER 30, 1998

Revenue: We generated no revenue during the nine months ended September 30, 1999 or during the nine months ended September 30, 1998.

Research and Development: Research and development expense increased 72.4% to $7,232,000 for the nine months ended September 30, 1999 from $4,196,000 for the nine months ended September 30, 1998. This increase was partially attributable to the increase in the non-cash charge for options granted and earned by outside advisors, directors and employees to $1,104,000 for the nine months ended September 30, 1999 from $248,000 for the nine months ended September 30, 1998. The remainder of the increase was primarily due to the number of later stage Oncophage clinical trials in process that increased

costs by $680,000, an increase in our staff to support our expanded business activities that increased costs by $900,000 and other ongoing development activities that increased costs by $602,000. Research and development expenses consisted primarily of compensation for our employees and outside advisors conducting research and development work, funding paid to the University of Connecticut, where we sponsor research, costs associated with the operation of our manufacturing and laboratory facility and funding paid to support our Oncophage clinical trials.

General and Administrative: General and administrative expenses increased 79.1% to $4,016,000 for the nine months ended September 30, 1999 from $2,242,000 for the nine months ended September 30, 1998. This increase was partially due to the increase in the non-cash charge for options granted and earned by outside advisors, directors and employees to $1,232,000 for the nine months ended September 30, 1999 from $478,000 for the nine months ended September 30, 1998. The remainder of the increase was primarily due to the growth in the number of our employees to support our expanded business operations that increased costs by $340,000. General and administrative expenses consisted primarily of personnel compensation, office expenses and professional fees.

Depreciation and Amortization: Depreciation and amortization expense increased 165.9% to $726,000 for the nine months ended September 30, 1999 from $273,000 for the nine months ended September 30, 1998. This increase was due to the depreciation expense of our new 30,225 square foot manufacturing and laboratory facility and related equipment.

Interest Income, net: Interest income increased 10.5% to $641,000 for the nine months ended September 30, 1999 from $580,000 for the nine months ended September 30, 1998. This increase was principally attributable to a higher average cash and cash equivalents balance during the nine months ended September 30, 1999 as compared to the nine months ended September 30, 1998 due to a $28,000,000 private equity financing completed in January 1999. Changes in interest rates had an immaterial effect on the change in interest income. Interest expense was $152,000 during the nine months ended September 30, 1999 due to borrowings under a credit facility to fund the construction of our manufacturing and laboratory facility. We incurred no interest expense during the nine months ended September 30, 1998.

YEAR ENDED DECEMBER 31, 1998 COMPARED TO YEAR ENDED DECEMBER 31, 1997

Revenue: We generated no revenue during the year ended December 31, 1998 or during the year ended December 31, 1997.

Research and Development: Research and development expenses increased 138.1% to $6,102,000 for the year ended December 31, 1998 from $2,563,000 for the year ended December 31, 1997. This increase was due primarily to an increase of $1,777,000 in salary cost due to an increase in the number of our employees as we expanded our business and clinical activities, an increase of $190,000 in expense to support our Oncophage clinical trials, an increase in professional fees of $126,000 related to expansion of our intellectual property and patent activities, and the non-cash charge for options granted to and earned by outside advisors, employees and directors of $275,000.

General and Administrative: General and administrative expenses increased 105.2% to $3,178,000 for the year ended December 31, 1998 from $1,549,000 for the year ended December 31, 1997. This increase was due primarily to an increase of $196,000 in costs related to increased personnel necessary to support our expanding business and clinical operations and the non-cash charge for options granted and earned by outside advisors, employees and directors of $583,000.

Depreciation and Amortization: Depreciation and amortization expense increased 78.2% to $360,000 for the year ended December 31, 1998 from $202,000 for the year ended December 31, 1997. This increase was due to the depreciation expense of our manufacturing and laboratory equipment.

Interest Income, net: Interest income increased 53.0% to $736,000 for the year ended December 31, 1998 from $481,000 for the year ended December 31, 1997. This increase was primarily attributable to a higher

average cash and cash equivalents balance during the year ended December 31, 1998 as compared to the year ended December 31, 1997. Changes in interest rates had an immaterial effect on the change in interest income. There was no interest expense during the years ended December 31, 1998 and 1997.

YEAR ENDED DECEMBER 31, 1997 COMPARED TO THE YEAR ENDED DECEMBER 31, 1996

Revenue: We generated no revenue during the year ended December 31, 1997 or during the year ended December 31, 1996.

Research and Development: Research and development expenses increased 27.1% to $2,563,000 for the year ended December 31, 1997 from $2,017,000 for the year ended December 31, 1996. This increase was primarily due to an increase of $359,000 in the fee to the research laboratory we sponsor at the University of Connecticut, an increase of $260,000 in costs related to additional personnel in our clinical and preclinical programs and in an increase of $55,000 in professional fees related to the expansion of our intellectual property and patent activities, partially offset by a decrease in the non-cash charge for options granted to outside advisors of $457,000.

General and Administrative: General and administrative expenses decreased 13.0% to $1,549,000 for the year ended December 31, 1997 from $1,781,000 for the year ended December 31, 1996. This decrease was primarily due to a decrease in the non-cash charge for options granted to and earned by outside advisors employees and directors of $700,000, partially offset by costs related to increased personnel necessary to support our expanding business and clinical operations of $309,000.

Depreciation and Amortization: Depreciation and amortization expense increased 155.7% to $202,000 for the year ended December 31, 1997 from $79,000 for the year ended December 31, 1996. This increase was due to the depreciation expense of our manufacturing and laboratory equipment.

Interest Income, net: Interest income increased 71.2% to $481,000 for the year ended December 31, 1997 from $281,000 for the year ended December 31, 1996. This increase was primarily attributable to a higher average cash and cash equivalents balance during the year ended December 31, 1997 as compared to the year ended December 31, 1996. We incurred no interest expense during the years ended December 31, 1997 and 1996.

Non-operating Income: We recorded a non-recurring, non-operating fee of $250,000 for the year ended December 31, 1996 relating to a potential collaboration.

INCOME TAXES

We have not recorded a benefit for federal, state or local income taxes for the net losses we incurred in the years ended December 31, 1996, 1997 and 1998, and we have not recorded a benefit for income taxes for the period from March 31, 1994 (date of inception) through December 31, 1995. In addition, we will not record net losses incurred prior to the closing of this offering on our federal, state or local income tax returns. Because we operated as a limited liability company for tax purposes during these periods, and will continue to do so until the closing of this offering, we have allocated and will allocate all taxable losses to the members for reporting on their income tax returns. As a result, we will not be able to offset future taxable income, if any, against losses incurred prior to the closing of this offering. Upon conversion from a limited liability company to a corporation, we expect to recognize a valuation allowance equal to any gross deferred tax assets as we believe that it is more likely than not that we will not realize these deferred tax assets.

LIQUIDITY AND CAPITAL RESOURCES

We have incurred annual operating losses since inception, and at September 30, 1999, we had incurred an accumulated deficit of $30,977,000. Since our inception, we have financed our operations primarily through various private placements of equity, interest income earned on cash and cash equivalent balances and debt provided through a credit line secured by some of our manufacturing and laboratory assets. From our

inception through September 30, 1999, we raised aggregate equity proceeds of $40,322,000 and borrowed $3,424,000 under our $5,000,000 credit facility. In addition, in November 1999, we raised gross proceeds of $39,216,000 through a private placement of equity. As part of the November 1999 private placement, we issued warrants that expire September 30, 2002. The exercise price of these warrants is $13.96 per share. See "Description of Capital Stock -- Warrants" for a more detailed descripton of the warrants. We expect that we will fund our capital expenditures and growing operations over the next two years with the net proceeds from the November 1999 private placement of equity, the net proceeds from this offering, and current working capital. Our future capital requirements include, but are not limited to, supporting our Oncophage clinical trial efforts and continuing our other research and development programs. Satisfying our long-term liquidity needs will require the successful commercialization of Oncophage or other products and may require additional capital.

Our cash and cash equivalents at September 30, 1999 were $12,612,000, a decrease of $9,556,000 from December 31, 1998. During the nine months ended September 30, 1999 we used cash primarily to finance operations, including our Oncophage clinical trials, and to make capital expenditures related to the establishment of our manufacturing and laboratory facility.

Net cash used in operating activities for the years ended December 31, 1996, 1997 and 1998 was $1,473,000, $3,518,000 and $6,377,000, and for the nine months ended September 30, 1999 was $9,416,000 compared to $5,508,000 for the nine months ended September 30, 1998. The increase resulted from the increase in the number and size of our Oncophage clinical trials and general expansion of our operations.

Net cash used in investing activities for the years ended December 31, 1996, 1997 and 1998 was $231,000, $619,000 and $3,676,000, and for the nine months ended September 30, 1999 was $4,592,000 compared to $1,047,000 for the nine months ended September 30, 1998. The investments were primarily for the construction of our manufacturing and laboratory facility and equipment, furniture and fixtures. We partially financed our new manufacturing and laboratory facility in Woburn, Massachusetts through the $5,000,000 credit facility discussed below and available cash balances.

Net cash provided by financing activities was $10,500,000, $7,635,000 and $19,134,000 for the years ended December 31, 1996, 1997 and 1998, and $4,451,000 for the nine months ended September 30, 1999 compared to $6,525,000 for the nine months ended September 30, 1998. Since inception, our primary source of financing has been from equity investments. During 1996, 1997 and 1998, equity contributions from private placements and, in 1998, exercises of options, totaled approximately $10,500,000, $7,635,000 and $18,225,000 and $2,212,000 for the nine months ended September 30, 1999 compared to $6,525,000 for the nine months ended September 30, 1998. We raised gross proceeds of $39,216,000 in November 1999 through a private placement of equity. At September 30, 1999, we had outstanding $3,149,000 under a $5,000,000 credit facility to finance the construction of our manufacturing and laboratory facility and the purchase of related equipment. Loans that are drawn down on the credit facility are secured by specific assets, including leasehold improvements, which they finance.

YEAR 2000 COMPLIANCE

The following constitutes "Year 2000 Readiness Disclosure" under the Year 2000 Information and Readiness Disclosure Act of 1998.

The year 2000 issue, or Y2K, refers to potential problems with computer systems or any equipment with computer chips or software that use dates where the date has been stored as just two digits. After January 1, 2000, any clock or date recording mechanism incorporating date sensitive software which uses only two digits to represent the year may recognize a date using "00" as the year 1900 rather than the year 2000. This could result in a system failure or miscalculations causing disruption of operations, including, among other things, a temporary inability to process transactions, perform laboratory analyses, or engage in similar business activities.

We are a biopharmaceutical company and our proposed product candidates are not software or computer based. Therefore, our proposed products are not directly impacted by the Y2K problem. Our exposure to

potential risks from this problem involves computer and information technology systems, and other systems which include embedded technology using date sensitive programs such as for:

- heating, ventilation, air conditioning, or HVAC;
- scientific instrumentation;
- manufacturing and laboratory equipment; and
- laboratory facilities.

Our internal information systems consist of off-the-shelf accounting and e-mail systems, off-the-shelf application programs such as spreadsheet, word processing, graphics, database management, and presentation software, and some instrumentation/data acquisition software. Non-informational technology systems consist of HVAC and telecommunications.

Prior to December 31, 1999, we completed the process of determining whether there were any critical areas of our business that were not year 2000 compliant. We estimate that the total cost of addressing any year 2000 problems will be immaterial. We believe our worst case scenario relating to year 2000 risks includes a power interruption and a lack of supplies to support our clinical trials. We have implemented a contingency plan to cover these situations including expanding our supplies inventory and maintaining a generator at our manufacturing facility for the supply of electrical power. As of the date of this prospectus, we have not yet encountered year 2000 related problems. We continue to monitor developments in this area.

Any year 2000 compliance problems that arise could materially and adversely affect our business, results of operations or cash flow.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, we are exposed to fluctuations in interest rates as we seek debt financing to make capital expenditures. We do not employ specific strategies, such as the use of derivative instruments or hedging, to manage our interest rate exposures. There has been no change since the fiscal year ended December 31, 1998 with respect to our interest rate exposures or our approach toward those exposures. Further, we do not expect our market risk exposures to change in the near term.

The information below summarizes our market risks associated with debt obligations as of September 30, 1999. Fair values included herein have been estimated taking into consideration the nature and terms of each instrument and the prevailing economic and market conditions at September 30, 1999. The table presents cash flows by year of maturity and related interest rates based on the terms of the debt.

	ESTIMATED FAIR VALUE	CARRYING AMOUNT	YEAR OF MATURITY 1999	2000	2001	2002
Long-term debt(1).....	$3,351,000	$3,149,000	$781,000	$906,000	$1,050,000	$412,000

- ---

(1) Fixed interest rates from 13.954% to 15.084%

RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities", which establishes accounting and reporting standards for derivative instruments, including derivatives instruments embedded in other contracts, and for hedging activities. SFAS No. 133 is effective for all of our fiscal quarters beginning January 1, 2001. We do not expect this statement to affect us as we currently do not use derivative instruments or engage in hedging activities.

BUSINESS

OVERVIEW

Antigenics is engaged in the discovery and development of novel immunotherapeutic drugs for the treatment of life threatening and chronic medical conditions. Our immunotherapeutics are based on a specific class of proteins known as heat shock proteins and their ability to modulate the immune system. We are currently evaluating our lead immunotherapeutic, Oncophage, in six clinical trials for the treatment of four different cancers, and we expect to start our first pivotal clinical trial by mid-2000. We are also developing immunotherapeutics to treat infectious diseases, such as genital herpes, and autoimmune diseases, such as diabetes and multiple sclerosis. Based upon our scientific and drug development skills, our technology platform and our strategic expertise, we intend to become a leader in drug discovery, development and commercialization.

THE IMMUNE SYSTEM

The immune system is the body's natural defense mechanism to prevent and combat disease. The immune system differentiates between normal tissue, or "self," versus diseased tissue or "non-self." When a competent immune system recognizes diseased cells, the immune system initiates a series of steps that results in the elimination of these cells. There are two types of immune response: antibody-based and T cell-based.

Antibody-based immune response is primarily involved in the prevention of diseases. Antibodies are proteins produced by the body in response to disease causing agents known as pathogens. Antibodies bind to pathogens, such as viruses and bacteria, and block their ability to infect cells. Preventive vaccines that trigger an antibody-based immune response have been very successful in reducing the incidence of several deadly diseases, including smallpox, polio and measles. These vaccines consist of weakened or attenuated pathogens that stimulate the production of antibodies. However, these types of vaccines have not been effective in the prevention or treatment of many serious diseases, including cancer, herpes, tuberculosis, hepatitis and HIV.

T cell-based immune response, on the other hand, is primarily involved in combating diseases, such as cancers or infections. T cells are specialized white blood cells that are normally produced by the body to kill cancer cells and infected cells. T cell-based immune response begins when specialized immune cells called dendritic cells capture antigens, which are the identifying structural components of cancers and pathogens. Once inside dendritic cells, antigens are broken down into small fragments called peptides that are subsequently displayed on the surface of the dendritic cell. T cells continually scan the surface of dendritic cells for peptides. If T cells recognize displayed peptides as foreign or non-self, they replicate rapidly and then search for and kill other diseased cells containing those same peptides. Hormones known as cytokines enhance this T cell-based immune response by activating various components of the immune system.

Significant scientific evidence suggests that cancers and infections trigger a T cell-based immune response during the initial course of their progression. This immune response, however, is not always sufficient to eradicate the disease. Tumor cells, for example, hide their antigens and produce substances that suppress the patient's immune response.

To date, efforts to develop immunotherapeutics that sufficiently overcome this suppression of the immune system and stimulate T cells to selectively and accurately target and kill diseased cells have failed due to one or both of the following:

- the inability of drug developers to discover the appropriate antigens that identify diseases such as a particular person's cancer; and

- the inability to present these relevant antigens to activate T cells to selectively destroy diseased cells.

We believe our immunotherapeutics specifically address these issues.

OUR TECHNOLOGY PLATFORM

INTRODUCTION

We are the pioneers in activating T cells using purified heat shock protein-peptide complexes. In individuals who develop cancer, infections and autoimmune disorders, the immune system fails in its normal function. Our immunotherapeutics are designed to restore this function and treat these life threatening or chronic disease conditions.

We believe our immunotherapeutics will be applicable to the treatment of all cancer types and several types of infectious diseases and autoimmune disorders. Our immunotherapeutics consist of two components: a variable component, consisting of small protein fragments called peptides, which is necessary for the targeting of specific diseases; and a constant component, consisting of a heat shock protein, which is necessary for the activation of a T cell-based immune response to the targeted disease. In the case of cancer, which is a highly variable disease from one patient to another, we purify, from each patient's own tumor tissue, heat shock proteins that are bound, or complexed, to peptides. Our cancer immunotherapeutics are therefore specific to each patient. In contrast, for each infectious disease which is generally caused by a common pathogen, we use a human heat shock protein complexed to peptides derived from the target pathogen. Our immunotherapeutics for infectious diseases therefore will be disease-specific rather than patient-specific. Our immunotherapeutic for autoimmune disorders will be generic, meaning it will be intended for the treatment of all disorders that result in T cells attacking healthy tissue.

The principle upon which our technology platform is based extends back over 50 years when scientists began using genetically identical laboratory animals to study the immune response to cancer. Researchers demonstrated that animals vaccinated with attenuated, or weakened, tumor cells are immune to subsequent injections of live tumor cells. Further, researchers have shown that this immunity to cancer is tumor-specific, meaning that animals are immune only to the cancer used for immunization and not to any other kind of cancer. Twenty years ago, the chairman of our scientific advisory board, Pramod Srivastava, discovered that cancers harbor molecular factors known as heat shock proteins, which are responsible for conferring immunity to cancer. Consistent with the observation that immunity generated with attenuated tumor cells is tumor-specific, we discovered that heat shock proteins generate immunity only to the tumor from which they are purified.

HEAT SHOCK PROTEINS

Heat shock proteins are a class of proteins that play a major role in transporting peptides, including antigens, within a cell and are thus often called chaperones. In this capacity, heat shock proteins bind to the entire antigenic repertoire or fingerprint of the cell in which they reside. Heat shock proteins are present in all cells of all organisms from bacteria to mammals and their structure and function are similar across these diverse life forms.

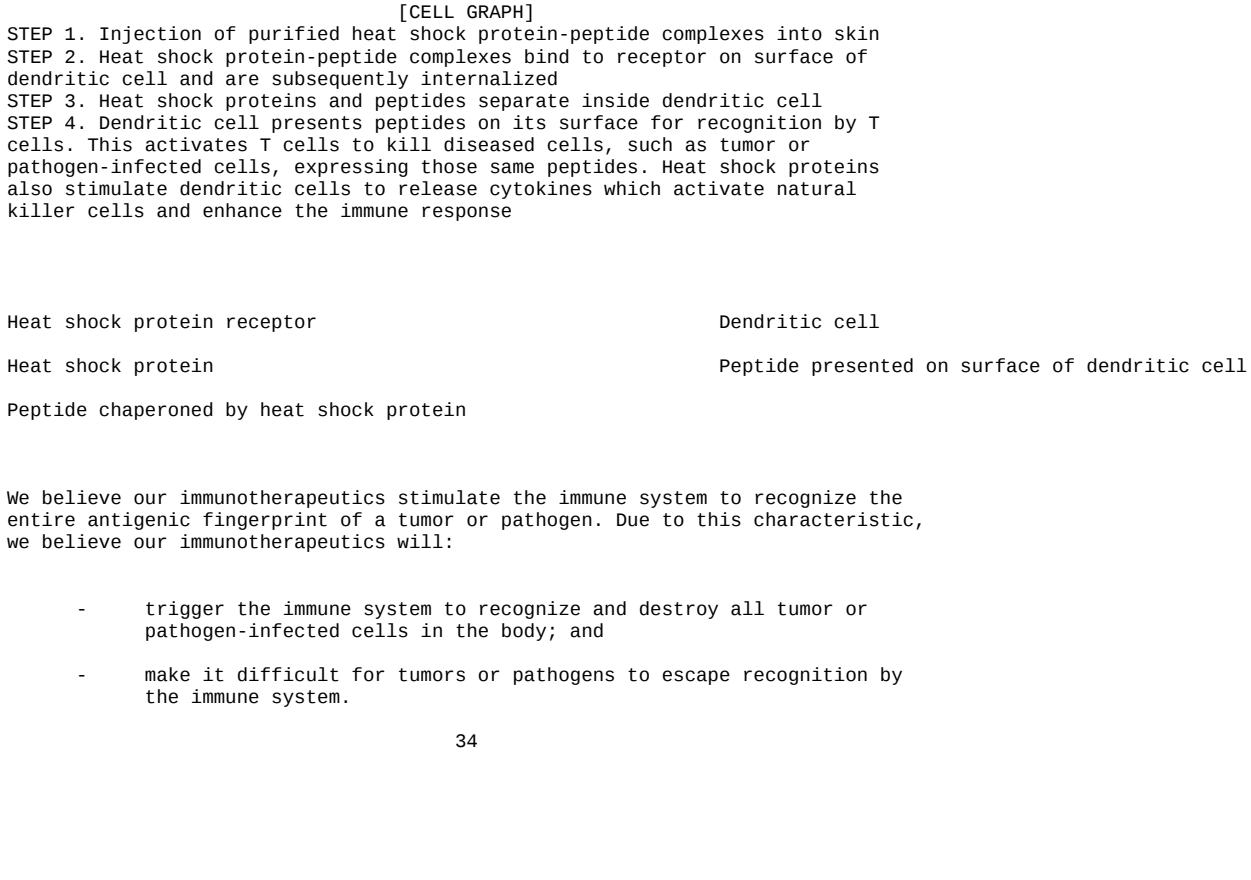
Published research suggests that heat shock proteins play a central role in the generation of immune responses. This role includes coordinating the breakdown and transport of peptides from the point of their generation inside cells to their ultimate display on the cell's surface for recognition by T cells. Although heat shock proteins inside tumor cells and pathogen-infected cells help display antigens to the immune system, tumors and pathogens simultaneously employ strategies to evade immune responses. In some cases, this evasion of immune responses results in disease progression.

The ability of heat shock proteins to chaperone peptides is key to our technology platform. When we purify heat shock proteins from tumor cells or pathogen-infected cells according to our manufacturing protocols, the heat shock proteins remain complexed to the entire repertoire of peptides produced by the tumor or pathogen. These purified heat shock protein-peptide complexes isolated from diseased cells are our immunotherapeutics.

We believe that when purified heat shock protein-peptide complexes are injected into the skin, they stimulate a powerful T cell-based immune response capable of targeting and killing cancers and pathogen-infected cells from which these complexes originated. Doctors or nurses inject our immunotherapeutics into the skin to take advantage of the high concentration of dendritic cells in this region. These dendritic cells express receptors that specifically recognize heat shock proteins; therefore, dendritic cells efficiently capture and process our immunotherapeutics. Once inside dendritic cells, heat shock protein-peptide complexes separate and the dendritic cell displays the peptides on its surface where T cells can recognize the peptides.

Dendritic cells expressing cancer-specific or pathogen-specific peptides activate T cells that are capable of specifically targeting and killing diseased cells throughout the body that express those same peptides. The interaction of heat shock proteins with their receptors on dendritic cells also leads to secretion of cytokines by the dendritic cells that further stimulate the immune system.

THE MECHANISM OF HEAT SHOCK PROTEIN-INDUCED IMMUNE RESPONSE



We believe our immunotherapeutics stimulate the immune system to recognize the entire antigenic fingerprint of a tumor or pathogen. Due to this characteristic, we believe our immunotherapeutics will:

- trigger the immune system to recognize and destroy all tumor or pathogen-infected cells in the body; and
- make it difficult for tumors or pathogens to escape recognition by the immune system.

We believe that the dendritic cells displaying these peptides trigger a more potent immune response than that achieved by the presentation of these same peptides by the tumor or pathogen-infected cell.

Our preclinical studies with heat shock protein immunotherapeutics have demonstrated a beneficial effect in preventing or treating 13 types of cancer in three different species. The cancer types tested include cancers of the skin, colon, lung and other tissues. Further, our immunotherapeutics show therapeutic benefit in animals with metastatic disease, which is when cancer has spread beyond the primary tumor to distant regions of the body. Metastatic disease is often responsible for the relapse and ultimate death of patients with cancer.

OUR PRODUCTS UNDER DEVELOPMENT

INTRODUCTION

The chart below summarizes the indications and status for each of our products and development programs. We use "HSPPC" as an abbreviation for "heat shock protein-peptide complex." The number following HSPPC is the molecular weight of the heat shock protein used in the product. For cancer applications, we call HSPPC-96 "Oncophage."

PRODUCT	INDICATION	STATUS
CANCER		
Oncophage	Renal cell carcinoma	Phase II trial ongoing
		Phase I/II trial completed
	Melanoma	Phase II trial ongoing
		Phase I/II trial completed
	Colorectal cancer	Phase II trial enrollment completed
	Gastric cancer	Phase I/II trial ongoing
	Pancreatic cancer	Phase I trial completed
	Non-Hodgkin's lymphoma	Phase II trial planned
	Sarcoma	Phase II trial planned
HSPPC-70-C	Various cancers	Research
HSPPC-90-C	Various cancers	Research
HSPPC-56-C	Various cancers	Research
INFECTIOUS DISEASES		
HSPPC-96-GH	Genital herpes	Preclinical
HSPPC-70-GH	Genital herpes	Preclinical
HSPPC-56-I	Various infectious diseases	Research
HSPPC-70-I	Various infectious diseases	Research
AUTOIMMUNE DISORDERS		
gp96	Type 1 diabetes	Research
	Multiple sclerosis	Research

OUR CANCER IMMUNOTHERAPEUTICS

Background. The American Cancer Society estimated that doctors would diagnose approximately 1.2 million new cases of cancer in the United States in 1999. Cancer is the second leading cause of death in the United States, resulting in an estimated 563,100 deaths in 1999. The American Cancer Society reports that since 1990 medical professionals have diagnosed nearly 12 million cases of cancer, and cancer has killed nearly 5 million people in the United States.

Cancer results from the uncontrolled proliferation of abnormal cells. Eventually, these cells form a mass referred to as a tumor. As the tumor grows, it pushes outward, often invading adjacent tissues and organs and interfering with their normal function. In addition, small groups of cells may break away from the primary tumor and spread or metastasize. Tumors produced at distant sites are referred to as metastatic tumors.

The uncontrolled proliferation of cancer cells is due to alterations, or mutations, in a cell's DNA. Mutations can take place when a gene is exposed to radiation or particular drugs or chemicals, or when some as yet unexplained internal change occurs. The mutations in DNA also lead to production of antigens. Because mutations occur randomly, the antigenic fingerprint of each person's cancer is unique.

Studies in animals have confirmed that a unique repertoire of antigens is associated with each primary tumor. As cancers metastasize, they continue to mutate, potentially producing new antigens not found in the primary tumor of the same patient. However, we believe that a significant overlap exists between the antigenic fingerprint of the metastatic cells and the primary tumor of the same patient.

Current Treatments. Surgery, chemotherapy and radiotherapy are the three most commonly used methods for treating cancer. Medical professionals often administer a combination of these treatments to a cancer patient, depending upon the type of cancer and the extent of the disease. Surgery is curative only when a doctor detects a tumor at a relatively early stage of growth and is able to completely remove the tumor. Unfortunately, most tumors metastasize when they are very small, ultimately causing relapse and death in many cancer patients. The use of chemotherapy or radiotherapy sometimes improves survival rates; however, these treatments have significant limitations.

High rates of treatment failure and limitations posed by severe side effects and tumor resistance have compelled researchers to focus on alternative strategies of cancer treatment. Immunotherapeutics have the ability to target and destroy widely disseminated disease without damaging normal tissue. In addition, immunotherapeutics do not have many of the shortcomings of traditional cancer treatments.

Our Approach. We purify our cancer immunotherapeutics from portions of a patient's tumor that a doctor has surgically removed. Our cancer immunotherapeutics are patient-specific and therefore incorporate the entire antigenic fingerprint of each patient's own tumor. Because our cancer immunotherapeutics contain overlapping antigens present in both the primary and metastatic tumors, we believe they will be effective in treating all the tumor cells that remain in the body that are derived from the primary tumor.

ONCOPHAGE

Oncophage is our lead cancer immunotherapeutic. We are evaluating Oncophage in four different cancers in six separate phase II or phase I/II clinical trials. Oncophage consists of purified, patient-specific heat shock protein-peptide complexes designed to elicit a T cell-based immune response to a patient's cancer. After a surgeon removes a patient's tumor, the hospital or clinic ships a portion of the tumor tissue frozen by overnight courier to our facility. We purify Oncophage from the tumor tissue using our proprietary manufacturing process in less than ten hours. Depending on the dose, we require a minimum of one to three grams of tumor tissue to yield a sufficient amount of Oncophage for a typical course of treatment.

We formulate Oncophage in sterile saline solution and package it in standard single injection vials in our manufacturing facility. We subject the final immunotherapeutic to extensive quality control testing, including sterility testing of each lot. We ship the product frozen via overnight courier back to the hospital. We have developed sophisticated tracking systems and procedures designed to ensure correct delivery of Oncophage to the appropriate patient.

ONCOPHAGE MANUFACTURING PROCESS

[CHART]

STARTING MATERIAL	MANUFACTURING		FINAL PRODUCT
Tumor tissue removed by surgery	Sample of tissue shipped frozen to our manufacturing facility	Heat shock protein-peptide complexes purified from tumor tissue at our facility	Product frozen and shipped to hospital/clinic for patient treatment

There are several benefits associated with the production and administration of our autologous product:

- we can sterilize Oncophage through simple filtration; sterility is required for FDA approval of a product that will be injected into humans;

- the scheduling of production at our central facility is flexible because we purify Oncophage from frozen tumor samples;

- doctors can administer Oncophage when the patient is ready to begin treatment because Oncophage is frozen and has a current shelf-life of at least six months; and

- Oncophage consists of a purified protein which can be consistently produced from most tumor types.

A medical professional initially administers Oncophage to a patient four to six weeks after a doctor surgically removes the patient's primary or metastatic tumor. The typical course of treatment consists of a series of injections into the skin administered once per week for four to six weeks. An oncologist may recommend treating a patient with more than one course of Oncophage.

ONCOPHAGE COURSE OF TREATMENT

[CHART]

	4-6 week recovery		Repeat course of Oncophage treatment upon request	
Surgery		Oncophage once per week for 4-6 weeks		Follow up

Although we believe Oncophage will be applicable to the treatment of all cancer types, our initial focus is on cancers that are resistant to available treatment options. Further, we have chosen types of cancer and stages of disease that typically yield tumors that doctors can surgically remove. Additionally, in order to

complete clinical trials rapidly and file for regulatory approvals, we have selected cancers and stages of disease which allow us to evaluate our immunotherapeutics in clinical trials with near term endpoints.

We filed an IND for Oncophage in November 1996 that the FDA allowed on December 20, 1996. To date, we have treated approximately 160 advanced stage, metastatic cancer patients with Oncophage in our clinical programs. We started enrolling patients in our first clinical trial at the Memorial Sloan-Kettering Cancer Center in New York, New York in November 1997.

We believe the collective results from these clinical trials show that Oncophage is generally safe and well tolerated. These results also demonstrate preliminary indications of clinical benefit in a number of these patients. Moreover, we have shown that Oncophage can generate an anti-tumor immunological response. In addition, we believe we can manufacture Oncophage consistently and in sufficient quantities from most human cancer tissue.

The investigators participating in our clinical programs have documented tumor regressions using standard response criteria. A complete response means that all tumor tissue has disappeared and the patient appears to be disease free. A partial response means that evaluable tumor tissue has shrunk by at least 50%. A minor response means that the tumor has shrunk by 25-50%. Stable disease means that the tumor has either shrunk or grown by less than 25%. Progressive disease means that the tumor has grown by more than 25%.

The investigators also document survival. Median survival refers to the time at which 50% of patients diagnosed with a particular cancer are alive.

Renal Cell Carcinoma

Background. Renal cell carcinoma is the most common type of kidney cancer. The American Cancer Society estimated that doctors would diagnose about 30,000 new cases of kidney cancer in the United States in 1999 and that the disease would kill approximately 11,900 people during 1999. Of the 30,000 patients diagnosed with kidney cancer, approximately 85% have the specific type of kidney cancer known as renal cell carcinoma. By the time renal cell carcinoma is diagnosed in these patients, about one-third of them have developed metastatic disease.

The median survival of patients with metastatic renal cell carcinoma is approximately 12 months. For patients with metastatic disease, the only FDA approved treatment is intravenous high-dose interleukin-2, a human cytokine. The response rate, which includes partial responses and complete responses, of patients who are treated with high-dose interleukin-2 is approximately 15%. Treatment with high-dose interleukin-2 is generally associated with severe adverse effects. These side effects often can lead to discontinuation of treatment. Although not FDA-approved for the treatment of renal cell carcinoma, a lower-dose of interleukin-2 injected underneath the skin, or subcutaneously, either alone or in combination with other cytokines, has become a treatment option. This treatment regimen has been the subject of a number of small studies with widely varying outcomes. Generally, side effects using the subcutaneous route of administration have been milder than those associated with high-dose, intravenous treatment.

Our Clinical Program. In our phase I/II trial, we enrolled patients with measurable metastatic renal cell carcinoma. We conducted this trial with clinical investigators at the M.D. Anderson Cancer Center in Houston, Texas. These patients did not receive prior or concurrent cancer therapy. After surgical removal of their primary tumors, patients were treated at one of three dose levels of Oncophage: 2.5 micrograms, 25 micrograms or 100 micrograms. The clinical investigators treated 38 patients, of whom 34 could be evaluated with standard radiology measurements.

Of the 34 evaluable patients, 13 patients responded or had stable disease. Four patients had a partial response and one patient had a minor response. The other eight patients showed stabilization of their disease. Three of these patients had been stable in excess of 10 months. The response rate in this trial, which does not include patients with a minor response or stable disease, was 12% and no adverse events were associated with treatment with Oncophage.

The median survival in this trial has not yet been reached; this means that more than half of the patients are still alive with an average follow up time of 12 months.

While the analysis of immunological results is still ongoing, testing to date shows that in four out of five patients who responded clinically, the number of T cells increased after treatment with Oncophage. Further, in all patients who responded clinically, the number of natural killer cells increased after treatment with Oncophage.

In the phase I/II trial, clinical investigators found that Oncophage is generally safe and well tolerated. Sixty-three percent of our patients received more than one course of treatment with Oncophage.

We were able to prepare Oncophage successfully from approximately 98% of renal cancer carcinoma samples we received at our manufacturing facility for this phase I/II trial. Based on this result, we believe we will be able to manufacture Oncophage for nearly all renal cell carcinoma patients whose tumors a surgeon can remove.

Based on the results from our phase I/II clinical trial, we have initiated a 60 patient phase II trial for patients with metastatic renal cell carcinoma at the M.D. Anderson Cancer Center. For this trial, the dose of Oncophage has been set at 25 micrograms and patients receive one dose once a week for four weeks, followed by one dose every two weeks. Some patients may also receive an injection of subcutaneous interleukin-2 if they have not had an adequate response after three months of treatment with Oncophage. We anticipate that we will complete this phase II trial in the first quarter of 2000. Based on the analysis of the results from the phase I/II and phase II trials, we anticipate that we will start a pivotal trial for renal cell carcinoma by the middle of 2000.

Melanoma

Background. Melanoma is the most serious form of skin cancer. The American Cancer Society estimated that doctors would diagnose about 44,200 new cases of melanoma in the United States in 1999 and that the disease would kill approximately 7,300 people during 1999. The incidence of melanoma is growing at 5-7% per year, which is substantially faster than the growth in incidence rates of most other cancers. Oncologists treat advanced or metastatic melanoma, also known as stage III or IV, with surgery, radiation therapy, immunotherapy, or chemotherapy depending on the case. Approximately 20% of all melanoma patients at the time of their first diagnosis have stage III or stage IV disease. Existing treatments have not significantly improved overall survival of patients with melanoma. The median survival of patients with stage III melanoma varies widely according to published literature. At the M.D. Anderson Cancer Center, the median survival of patients with late stage III melanoma is 24 months. According to published literature, patients with stage IV melanoma have a median survival of about seven months. Although oncologists use various treatment options, the only FDA approved drug therapies for patients with metastatic melanoma are high dose intravenous interleukin-2 and alpha interferon, another human cytokine.

Our Clinical Program. We have treated 36 patients in a phase I/II clinical trial, evaluating Oncophage as a treatment for late stage III and early stage IV metastatic melanoma. Eighty-three percent of the patients in our trial were previously treated with chemotherapy, radiotherapy, and alpha interferon. We are conducting the trial with clinical investigators at the M.D. Anderson Cancer Center. After surgery to remove a portion of the tumor, the clinical investigators treated patients with 2.5 micrograms, 25 micrograms or 100 micrograms of Oncophage.

In this trial, the clinical investigators treated 25 patients with stage IV disease and 11 patients with stage III disease. Among the 25 patients with stage IV disease, 12 patients were "adjuvant patients." This means that these patients had all of their detectable melanoma tissue surgically removed before the clinical investigators treated them with Oncophage. Of these 12 patients, 11 patients are free of disease at a median of 13 months after surgery. Not enough time has elapsed to appropriately report on the eight patients in the adjuvant setting with stage III disease.

In our melanoma trial, the clinical investigators also treated 16 stage III and stage IV patients with "residual disease." These are patients who have had only part of their disease surgically removed, leaving them with visible disease at the time of Oncophage treatment. In this group of patients, there was one stage IV patient who, after initial progression of his disease, experienced a mixed response. This patient's largest metastatic tumor disappeared completely but the smaller tumors progressed. There were also two other stage IV patients who experienced stabilization of their disease following initial progression of disease.

At the time of this analysis, 81% of all the patients who our clinical investigators treated in this study are alive. We are continuing to analyze the results from this trial.

To date, the trial has shown Oncophage to be generally safe and well tolerated by patients. In addition, we have been able to successfully prepare Oncophage from approximately 92% of melanoma samples we received at our manufacturing facility for this phase I/II trial. Based on this result, we believe we will be able to manufacture our product for nearly all melanoma patients from whom a surgeon can remove an adequate amount of tumor tissue.

In addition to our phase I/II trial at the M.D. Anderson Cancer Center, we are also currently enrolling patients in a phase II trial for melanoma at the Istituto dei Tumori in Milan, Italy. We anticipate our clinical investigators will treat 40 patients in this trial at 5 or 50 micrograms of Oncophage. The purpose of this trial is to confirm the route of administration of Oncophage.

Colorectal Cancer

Background. Colorectal cancer is cancer of the colon or rectum. The American Cancer Society estimated that doctors would diagnose about 129,400 new cases of colorectal cancer in the United States in 1999 and that this disease would kill approximately 56,600 people during 1999.

For patients whose disease has not spread to other parts of the body, surgery remains the most common treatment and can be curative in about two thirds of these cases. For patients whose disease has metastasized to other parts of the body, treatment options are limited and the patients' prognosis is poor. Patients with recurrence of advanced disease may have their metastatic lesions removed by surgery. The median survival for these patients is approximately 12 months. Conventional cancer treatments such as chemotherapy and radiation have shown limited benefit in treating colorectal cancer.

Our Clinical Program. We have completed enrollment of a 30 patient phase II clinical trial evaluating Oncophage as a treatment for metastatic colorectal cancer. We are conducting the trial at the Istituto dei Tumori. The clinical investigators will treat patients with 2.5 micrograms, 25 micrograms or 100 micrograms of Oncophage after a surgeon removes the patients' metastatic tumors.

We are continuing to analyze the results from this trial. To date, the trial has shown Oncophage to be generally safe and well tolerated by patients. In addition, we have successfully prepared Oncophage from 100% of colorectal cancer samples we received at our manufacturing facility for this trial. Based on this result, we believe we will be able to manufacture our product for nearly all colorectal cancer patients whose tumors a surgeon can remove.

Gastric Cancer

Background. Gastric cancer is cancer of the stomach. The American Cancer Society estimated that doctors would diagnose about 21,900 new cases of gastric cancer in the United States in 1999 and that the disease would kill approximately 13,500 people during 1999. The treatment options for gastric cancer are surgery, chemotherapy and radiation. Biological therapies are currently in clinical trials. For patients with surgically removable tumors, improvements in surgical techniques have led to increased survival. Despite these advances, as well as the development of multi-drug chemotherapy regimens, the median survival for patients with advanced gastric cancer, according to published research, is approximately seven months.

Our Clinical Program. We are currently enrolling patients in a 30 patient phase I/II clinical trial evaluating Oncophage as a treatment for metastatic gastric cancer. We are conducting this trial with clinical investigators at the Johannes Gutenberg-University Hospital in Mainz, Germany. After clinical investigators surgically remove a patient's tumor, the clinical investigators treat the patient with 2.5 micrograms or 15 micrograms of Oncophage. Although enrollment is still ongoing, to date, the trial has shown Oncophage to be generally safe and well tolerated by patients. In addition, we have been able to successfully prepare Oncophage from approximately 71% of gastric cancer samples we received at our manufacturing facility for this trial. Based on this result, we believe we will be able to manufacture our product for the majority of gastric cancer patients whose tumors a surgeon can remove.

Pancreatic Cancer

Background. Pancreatic cancer is the fourth leading cause of cancer death in the United States. The American Cancer Society estimated that doctors would diagnose about 28,600 new cases of pancreatic cancer in the United States in 1999 and that the disease would kill approximately 28,600 people during 1999.

The treatment options for pancreatic cancer are surgery and chemotherapy. Doctors at the Memorial Sloan-Kettering Cancer Center report that patients who have had tumors surgically removed have a median survival of 14 months. Doctors treat patients with tumors that cannot be surgically removed, or resected, with chemotherapy. The median survival time for patients with unresectable disease is less than six months.

Our Clinical Program. In early 1999, we completed a pilot phase I clinical trial evaluating Oncophage as a treatment for resectable pancreatic cancer. We conducted the trial with clinical investigators at the Memorial Sloan-Kettering Cancer Center and enrolled 15 patients. The clinical investigators treated five of the 15 patients with five micrograms of Oncophage after doctors had removed the patient's primary tumor.

Two out of five patients generated a T cell response to their tumor after treatment with Oncophage. These two patients are alive and disease free at 11 and 22 months, respectively, since surgery. A third patient is known to be free of disease at 24 months after surgery. The fourth patient is alive with recurrent disease at 11 months, and the fifth patient died seven months after surgery.

The trial showed Oncophage to be generally safe and well tolerated by patients. We successfully prepared Oncophage from 5 of 15 pancreatic cancer samples we received in our manufacturing facility. We were not able to prepare Oncophage from the remaining tumor samples due to the presence of enzymes in the pancreatic tissue that break down proteins, including heat shock proteins. Based upon our process development advances, we anticipate that a modified process will improve our rate of success for purifying Oncophage from pancreatic tumors.

Non-Hodgkin's Lymphoma

Background. Non-Hodgkin's lymphoma is cancer that originates in lymph tissue. The American Cancer Society estimated that doctors would diagnose about 56,800 new cases of non-Hodgkin's lymphoma in the United States in 1999 and that the disease would kill approximately 25,700 people during 1999. Approximately 40% of patients with non-Hodgkin's lymphoma have low grade indolent disease, which is a slow growing, often fatal, lymphoma.

Doctors have traditionally treated patients with non-Hodgkin's lymphoma with chemotherapy. Recently, the FDA approved one new antibody therapy for low grade non-Hodgkin's lymphoma.

Our Clinical Program. We are in the process of initiating a 35 patient phase II clinical trial evaluating Oncophage as a treatment for low grade indolent non-Hodgkin's lymphoma. We will conduct this trial with clinical investigators at the M.D. Anderson Cancer Center. We anticipate that the clinical investigators will treat patients with 25 micrograms of Oncophage after a surgeon removes the patients' tumor tissue.

Sarcoma

Background. Soft tissue sarcomas are cancerous tumors that can develop from fat, muscle, nerve, joint, blood vessel or deep skin tissues. The American Cancer Society estimated that doctors would diagnose about 7,800 new cases of soft tissue sarcomas in the United States in 1999 and that the disease would kill approximately 4,400 people during 1999.

Doctors treat sarcoma with surgery, chemotherapy or targeted radiotherapy. For resectable disease, doctors perform surgery and administer chemotherapy or targeted radiotherapy as follow up treatments. For unresectable disease, doctors treat patients with a combination of chemotherapy and radiotherapy.

Our Clinical Program. We are in the process of initiating a 35 patient phase II clinical trial evaluating Oncophage as a treatment for soft tissue sarcomas. We will conduct the trial with clinical investigators at Memorial Sloan-Kettering Cancer Center and may expand it to include other sites. We anticipate that the clinical investigators will treat patients with 25 micrograms of Oncophage after a surgeon removes the patients' tumor tissue.

Other Cancer Immunotherapeutics

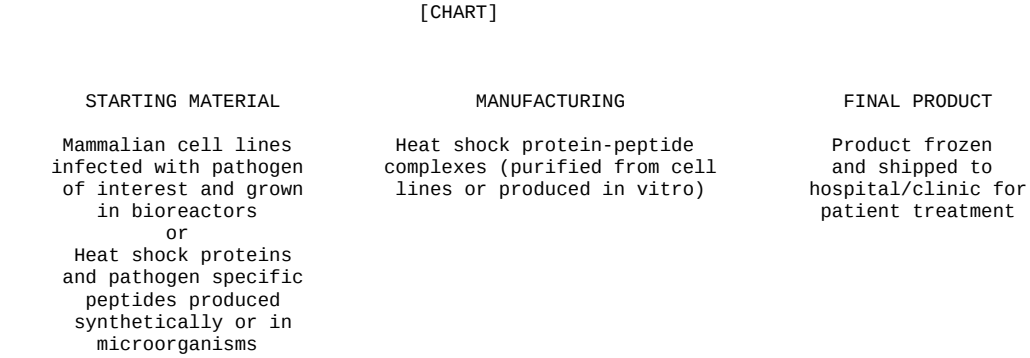
In addition to Oncophage, we are currently researching several other autologous cancer immunotherapeutics using different heat shock proteins, including HSPPC-70, HSPPC-90, and HSPPC-56. These immunotherapeutics have demonstrated efficacy in animal cancer models.

OUR INFECTIOUS DISEASE IMMUNOTHERAPEUTICS

Background. Infectious diseases are illnesses caused by microorganisms, or pathogens, like viruses, bacteria and parasites, and include tuberculosis, hepatitis, genital herpes and HIV. While doctors use antiviral agents and antibiotics to treat a number of viral and bacterial diseases effectively, medical professionals are concerned about the emergence of new strains of pathogens that have developed resistance to all available drugs.

Our Approach. Our immunotherapeutics for treating infectious diseases will consist of heat shock proteins complexed, or bound, to peptides that are produced by the pathogen causing the infection. Typically, each infectious disease is caused by a specific pathogen. Consequently, our infectious disease immunotherapeutics will be common to all patients with a particular infection and will not be patient-specific. We currently produce these immunotherapeutics from cells infected with the target pathogen. This manufacturing procedure has enabled us to test our immunotherapeutics in preclinical studies and should enable us to produce sufficient quantities to begin human clinical trials. Another technique to manufacture our immunotherapeutics involves binding specific peptides with heat shock proteins in vitro. We can generate the peptides in microorganisms or produce them synthetically.

OUR INFECTIOUS DISEASE IMMUNOTHERAPEUTIC MANUFACTURING PROCESS



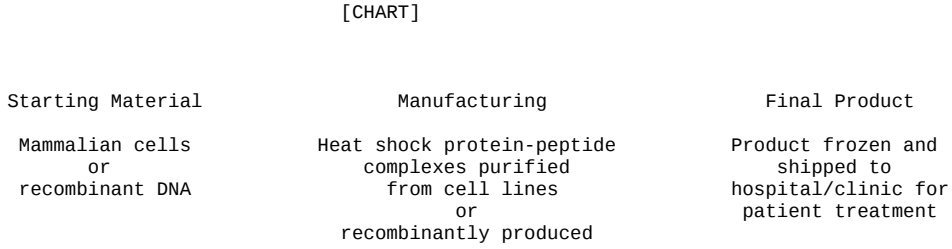
Genital Herpes. Genital herpes is a contagious viral infection that affects an estimated 45 million Americans. Doctors estimate that as many as 500,000 new cases may occur each year in the United States. Genital herpes is currently treated with palliative antiviral agents that reduce further replication of the virus. The challenge of antiviral therapy lies not only in treatment of the symptoms during the first and recurrent episodes but also in the long-term suppression of the herpes virus in patients with frequent recurrences. We expect to file an IND for this indication in 2000.

OUR AUTOIMMUNE DISORDER IMMUNOTHERAPEUTIC

Background. Autoimmune disorders result from an inappropriate immune response that targets and destroys normal tissue. While researchers have not definitively determined what triggers autoimmune responses, many believe that both genetic and environmental factors are probably involved in this process. Several autoimmune disorders, including diabetes and multiple sclerosis, result in the proliferation of misdirected T cells that attack normal tissues. We believe that a therapeutic product that can turn off misdirected T cell responses could treat these disorders.

Our Approach. We have demonstrated in animal models that heat shock proteins administered at higher doses than those required for treating cancer and infectious diseases can turn off misguided T cells that destroy healthy tissue in animals with some autoimmune disorders. We are currently researching the application of heat shock proteins to treat autoimmune diseases like diabetes and multiple sclerosis. The source of heat shock proteins used in our autoimmune disorders immunotherapeutic will be human cells. Our immunotherapeutic could also be made using recombinant DNA techniques.

OUR AUTOIMMUNE DISORDER IMMUNOTHERAPEUTIC MANUFACTURING PROCESS



MANUFACTURING

We manufacture our own immunotherapeutic products in a 30,225 square foot manufacturing and research and development facility located in Woburn, Massachusetts. We are in the process of preparing this facility for the commercialization of Oncophage.

Our process development group is currently working on improving the process by which we manufacture heat shock protein-based immunotherapeutics. Efforts in this area to date have resulted in a 50% reduction in the time required to purify Oncophage from individual patients' tumors and a 40% increase in the quantity of Oncophage we can produce from tumor tissue. These efforts in our cancer program should also benefit preparation of our heat shock protein-based immunotherapeutics for treatment of infectious diseases.

SALES AND MARKETING

To commercially market our immunotherapeutic products once we obtain the necessary regulatory approvals, we must either develop our own sales and marketing force or enter into arrangements with third parties. Currently, our sales and marketing plans consist of the following:

- Commercialize cancer immunotherapeutics in the United States through our own sales force. We believe that we can build a United States sales force to market our cancer immunotherapeutics due to the concentration of the United States oncology market.

- Form collaborations with pharmaceutical companies for commercializing cancer immunotherapeutics outside the United States. For example, we have entered into an agreement with Sigma-Tau Industrie Farmaceutiche Riunite S.p.A., under which they have agreed to pay for two clinical trials in return for rights which include an option to enter into an agreement to market Oncophage in Italy, Spain, Portugal and Switzerland. We have also signed an agreement with Medison Pharma Ltd. for marketing Oncophage in Israel.

- Form collaborations with pharmaceutical companies for infectious diseases and autoimmune disorders. Unlike cancer, the number of doctors and health care institutions prescribing treatments for infectious diseases and autoimmune disorders is large and fragmented, and we will need a large sales force to effectively market our products.

OUR INTELLECTUAL PROPERTY PORTFOLIO

We devote significant resources to protecting and expanding our intellectual property portfolio. We seek to protect our core technologies through a combination of patents, trade secrets and know-how. As a result of an exclusive worldwide license with Fordham University and one with Mount Sinai School of Medicine,

we have exclusive rights to nine issued U.S. patents, and foreign counterpart patents and patent applications, relating to our heat shock protein technology. Prior to directing the Center for Immunotherapy of Cancer at the University of Connecticut, Dr. Srivastava, the Chairman of our Scientific Advisory Board, was an assistant professor of immunology at Mount Sinai School of Medicine, and, then, a professor of immunology at Fordham University.

We also have licensed rights to 43 pending U.S. patent applications, and corresponding foreign counterpart patents and applications, from Mount Sinai School of Medicine of New York University, Fordham University, Duke University and the University of Miami. Under the license agreements with these institutions, we have exclusive, worldwide rights to inventions using heat shock proteins in the treatment and prevention of cancer, infectious diseases, autoimmune disorders and other indications. If we commercialize any of the inventions, we will pay the licensors a royalty on sales of the commercialized product. In addition, pursuant to a research agreement with the University of Connecticut Health Center, we will fund the laboratory directed by Dr. Srivastava at the University through December 31, 2002. In return, we have an option to obtain an exclusive license to new inventions as that term is defined in the research agreement, with the royalty rates and other terms to be determined by negotiation between the parties. We also have an option to obtain an exclusive license to certain types of "improvement" inventions as that term is defined in the research agreement, at already-determined royalty rates, but with the other terms to be determined by negotiation between the parties. To date, we have exercised options to license three patent applications.

It is worth noting that:

- patent applications in the United States are maintained in secrecy until patents are issued;

- patent applications in other countries generally are not published until 18 months after they are first filed in any country;

- publication of technological developments in the scientific or patent literature often lags behind the date of these developments; and

- searches of prior art may not reveal all relevant prior inventions.

Although we have licensed nine issued United States patents and 43 pending United States patent applications, we cannot be certain that our licensors' inventors were the first to invent the subject matter covered by these patent and patent applications or that they were the first to file patent applications for those inventions or that a court or patent authority will not determine that these patent rights are invalid or unpatentable.

REGULATORY CONSIDERATIONS

Governmental authorities in the United States and other countries extensively regulate the preclinical and clinical testing, manufacturing, labeling, storage, record keeping, advertising, promotion, export, marketing and distribution, among other things, of our immunotherapeutics. In the United States, the FDA under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations subject pharmaceutical products to rigorous review. If we do not comply with applicable requirements we may be fined, our products may be recalled or seized, our production may be totally or partially suspended, the government may refuse to approve our marketing applications or allow us to enter into supply contracts, and we may be criminally prosecuted. The FDA also has the authority to revoke previously granted marketing authorizations.

In order to obtain approval of a new product from the FDA, we must, among other requirements, submit proof of safety and efficacy as well as detailed information on the manufacture and composition of the product. In most cases, this proof entails extensive preclinical, clinical and laboratory tests. This testing, the preparation of necessary applications and processing of those applications by the FDA are expensive and typically take several years to complete. We cannot assure that the FDA will act quickly or favorably in reviewing these applications, and we may encounter significant difficulties or costs in our efforts to

obtain FDA approvals that could delay or preclude us from marketing any products we may develop. The FDA may also require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which we will have the exclusive right to exploit them.

The first stage of the FDA approval process for a new biologic or drug involves completion of preclinical studies and the submission of the results of these studies to the FDA, together with proposed clinical protocols, manufacturing information, analytical data and other information, in an investigational new drug application, which must become effective before human clinical trials may commence. The investigational new drug application is automatically effective 30 days after receipt by the FDA, unless the FDA before that time requests an extension to review the application, or raises concerns or questions about the conduct of the trials as outlined in the application. In the latter case, the sponsor of the application and the FDA must resolve any outstanding concerns before clinical trials can proceed. We cannot guarantee that submission of an investigational new drug application will result in the FDA authorizing us to commence clinical trials in any given case.

Preclinical studies involve laboratory evaluation of product characteristics and animal studies to assess the efficacy and safety of the product. The FDA regulates preclinical studies under a series of regulations called the current "Good Laboratory Practices" regulations. If the sponsor violates these regulations, in some cases, the FDA may invalidate the studies and require that the sponsor replicate those studies.

After the investigational new drug application becomes effective, a sponsor may commence human clinical trials. The sponsor typically conducts human clinical trials in three sequential phases, but the phases may overlap. In phase I trials, the sponsor tests the product in a small number of patients or healthy volunteers, primarily for safety at one or more doses. In phase II, in addition to safety, the sponsor evaluates the efficacy of the product in a patient population somewhat larger than phase I trials. Phase III trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. The sponsor must submit to the FDA a clinical plan, or "protocol," accompanied by the approval of the institution participating in the trials, prior to commencement of each clinical trial. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

The sponsor must submit to the FDA the results of the preclinical and clinical testing, together with, among other things, detailed information on the manufacture and composition of the product, in the form of a new drug application or, in the case of a biologic, a biologics license application. In a process which generally takes several years, the FDA reviews this application and, when and if it decides that adequate data is available to show that the new compound is both safe and effective and that other applicable requirements have been met, approves the drug or biologic for marketing. The amount of time taken for this approval process is a function of a number of variables, including the quality of the submission and studies presented, the potential contribution that the compound will make in improving the treatment of the disease in question, and the workload at the FDA. We cannot guarantee that any of our immunotherapeutics will successfully proceed through this approval process or that the FDA will approve them in any specific period of time, or at all.

Congress enacted the Food and Drug Administration Modernization Act of 1997, in part, to ensure the availability of safe and effective drugs, biologics and medical devices by expediting the FDA review process for new products. The Modernization Act establishes a statutory program for the approval of fast track products, including biologics. A fast track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. Under the fast track program, the sponsor of a new drug or biologic may

request the FDA to designate the drug or biologic as a fast track product at any time during the clinical development of the product.

The Modernization Act specifies that the FDA must determine if the product qualifies for fast track designation within 60 days of receipt of the sponsor's request. The FDA can base approval of a marketing application for a fast track product on an effect on a clinical endpoint or on another endpoint that is reasonably likely to predict clinical benefit. The FDA may subject approval of an application for a fast track product to:

- post-approval studies to validate the surrogate endpoint or confirm the effect on the clinical endpoint; and
- prior review of all promotional materials.

If a preliminary review of the clinical data suggests that a fast track product may be effective, the FDA may initiate review of sections of a marketing application for a fast track product before the sponsor completes the application. This rolling review is available if the applicant provides a schedule for submission of remaining information and pays applicable user fees. However, the time periods specified under the Prescription Drug User Fee Act concerning timing goals to which the FDA has committed in reviewing an application, do not begin until the sponsor submits the application.

We may request fast track designation for our immunotherapeutics. We cannot predict whether the FDA will grant that designation, nor can we predict the ultimate impact, if any, of the fast track process on the timing or likelihood of FDA approval of our immunotherapeutics.

The FDA may, during its review of a new drug application or biologics license application, ask for additional test data. If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive phase IV studies, and surveillance to monitor the safety and effectiveness of the drug. In addition, the FDA may in some circumstances impose restrictions on the use of the drug that may be difficult and expensive to administer, and may require prior approval of promotional materials.

Before approving a new drug application or biologics license application, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities are in compliance with current Good Manufacturing Practices. In addition, the manufacture, holding, and distribution of a product must be in compliance with current Good Manufacturing Practices. Manufacturers must continue to expend time, money and effort in the area of production and quality control and record keeping and reporting to ensure full compliance with those requirements. The labeling, advertising, promotion, marketing and distribution of a drug or biologic product must be in compliance with FDA regulatory requirements. Failure to comply with applicable requirements can lead to the FDA demanding that production and shipment cease, and, in some cases, that the manufacturer recall products, or to enforcement actions that can include seizures, injunctions and criminal prosecution. These failures can also lead to FDA withdrawal of approval to market the product.

We are also subject to regulation by the Occupational Safety and Health Administration and the Environmental Protection Agency and to regulation under the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other regulatory statutes, and may in the future be subject to other federal, state or local regulations. Either or both of OSHA or the EPA may promulgate regulations that may affect our research and development programs. We are unable to predict whether any agency will adopt any regulation which could have a material adverse effect on our operations.

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Whether or not we have obtained FDA approval, we must obtain approval of a product by comparable regulatory authorities of foreign countries prior to the commencement of marketing the product in those countries. The time required to obtain this approval may be longer or

shorter than that required for FDA approval. The foreign regulatory approval process includes all the risks associated with FDA regulation set forth above as well as country-specific regulations.

COMPETITION

Competition in the pharmaceutical and biotechnology industries is intense. Many pharmaceutical or biotechnology companies have products on the market and are actively engaged in the research and development of products for the treatment of cancer, infectious diseases and autoimmune disorders. In addition, many competitors focus on immunotherapy as a treatment for cancer, infectious diseases and autoimmune disorders. In particular, some of these companies are developing autologous cancer vaccines. Others are focusing on developing heat shock protein products. We compete for funding, access to licenses, personnel and third-party collaborations. In addition, many competitors have substantially greater financial, manufacturing, marketing, sales, distribution and technical resources, and more experience in research and development, clinical trials and regulatory matters, than we do. A competing company developing, or acquiring rights to, a more efficacious therapeutic product for the same diseases targeted by us, or one which offers significantly lower costs of treatment, could render our products noncompetitive or obsolete.

Academic institutions, governmental agencies and other public and private research institutions conduct significant amounts of research in biotechnology, medicinal chemistry and pharmacology. These entities have become increasingly active in seeking patent protection and licensing revenues for their research results. They also compete with us in recruiting and retaining skilled scientific talent.

FACILITIES

We lease approximately 30,225 square feet of laboratory space in Woburn, Massachusetts under a lease agreement that terminates in August 2003. We have an option to renew for an additional five-year period with the landlord's consent. We maintain our executive offices in New York, New York, in an office building in which we lease approximately 8,000 square feet from an affiliated party. The agreement terminates in December 2006. You should read the discussion under "Certain Relationships and Related Transactions" regarding our executive offices.

EMPLOYEES

As of December 31, 1999, we had 71 employees, of whom 11 have Ph.D.s and one has an M.D.; three are clinical staff, 21 are manufacturing and quality control staff, 24 are research and development staff, and 23 are management or administrative staff. None of our employees is subject to a collective bargaining agreement. We believe that we have good relations with our employees.

LEGAL PROCEEDINGS

Other than our opposition of a European patent discussed under "Risk Factors," we are not currently a party to any material legal proceedings or claims. You should read the discussion of our opposition of this European patent under "Risk Factors."

MANAGEMENT

EXECUTIVE OFFICERS, DIRECTORS AND KEY EMPLOYEES

Set forth below is certain information regarding our executive officers, directors and key employees, including their age as of December 31, 1999:

NAME	AGE	TITLE
Garo Armen, Ph.D.	46	Chairman of the Board, Chief Executive Officer
Pramod Srivastava, Ph.D.	44	Director, Chairman of Scientific Advisory Board
Gamil de Chadarevian	47	Vice Chairman of the Board, Executive Vice President International
Elma Hawkins, Ph.D.	43	Senior Vice President
Dirk Reitsma, M.D.	50	Vice President of Clinical Affairs
Neal Gordon, Ph.D.	38	Vice President of Operations
Donald Panoz	64	Director, Honorary Chairman
Noubar Afeyan, Ph.D.(1)(2)	37	Director
Edward Brodsky(1)	70	Director
Tom Dechaene(2)	40	Director
Martin Taylor(1)(2)	47	Director

(1)Member of the Compensation Committee

(2)Member of the Audit Committee

The size of the board of directors is currently set at eight members.

Our certificate of incorporation provides for a classified board of directors consisting of three classes, with each class being as nearly equal in number as possible. The term of one class expires and their successors are elected for a term of three years at each annual meeting of the stockholders. We have designated three class I directors, Messrs. de Chadarevian, Brodsky and Taylor; three class II directors, Messrs. Panoz, Afeyan and Srivastava; and two class III directors, Messrs. Armen and Dechaene. These class I, class II and class III directors will serve until the annual meetings of stockholders to be held in 2000, 2001 and 2002, respectively, and until their respective successors are duly elected and qualified, or until their earlier resignation or removal. The board of directors appoints officers until the next annual meeting of the board of directors.

GARO ARMEN, PH.D. co-founded Antigenics in 1994 and has been the Chairman of the board and Chief Executive Officer since inception. Dr. Armen was previously a Senior Vice President of Research for Dean Witter Reynolds, focusing on the chemical and pharmaceutical industries. Dr. Armen has also served as an Associate Professor at the Merchant Marine Academy and as a research associate at the Brookhaven National Laboratory. He currently serves as a director of Elan Corporation, Plc. and Color Kinetics Inc. Dr. Armen received his Ph.D. degree in physical chemistry from the City University of New York in 1979. Since 1990, Dr. Armen has been the managing general partner of Armen Partners, L.P., an investment partnership specializing in public and private healthcare and biotechnology investments.

PRAMOD SRIVASTAVA, PH.D. co-founded Antigenics in 1994 and has served as the Chairman of the scientific advisory board since inception. Dr. Srivastava is the Director of the Center for Immunotherapy of Cancer and Infectious Diseases at the University of Connecticut. Dr. Srivastava has held positions at Fordham University and the Mount Sinai School of Medicine. He performed his postdoctoral training at Yale University and the Sloan-Kettering Institute for Cancer Research. Dr. Srivastava serves on the Scientific Advisory Council of the Cancer Research Institute, New York, and has been a member of the Experimental Immunology Study Section of the National Institutes of Health of the United States

Government since 1994. Dr. Srivastava is a past recipient of the First Independent Research Support & Transition Award of the National Institutes of Health (1987), the Irma T. Hirschl Scholar Award (1988), the Investigator Award of the Cancer Research Institute, New York (1991), the Mildred Scheel Lectureship (1994), and the Sigma Tau Foundation Speakership (1996). In 1997, he was inducted into the Roll of Honor of the International Union against Cancer and was listed in the Who's Who in Science and Engineering. He is among the twenty founding members of the Academy of Cancer Immunology. Dr. Srivastava earned his Ph.D. in Biochemistry from the Centre for Cellular and Molecular Biology, Hyderabad, India. Dr. Srivastava is a director of Iconics, Inc.

GAMIL DE CHADAREVIAN has served as the Vice Chairman of the Board since 1995 and as Executive Vice President International since 1998. Until April of 1998, he was Managing Director of Special Projects at Alza International, responsible for creating new business opportunities in Europe. From 1992 to 1993, Mr. de Chadarevian was the Vice President of Corporate Development for Corange London Limited. Prior to 1992, Mr. de Chadarevian held positions at Pasfin Servizi Finanziara SpA, GEA Consulenza and Credit Suisse. He is also co-founder and serves as an advisor to several private health care companies in the United States and Europe. Mr. de Chadarevian received a Lic. Oec. Publ. Degree from the University of Zurich in Switzerland. Mr. de Chadarevian is the co-founder and currently the Vice Chairman of Iconics, Inc. and Cambria Tech. Ltd.

ELMA HAWKINS, PH.D. has served as Senior Vice President since August 1998. From July 1996 through August 1998, Dr. Hawkins served as our Chief Operating Officer. Prior to her employment with us, Dr. Hawkins served in a number of senior positions at Genzyme Corporation, including Director of Corporate Development. Dr. Hawkins has also held positions in preclinical and clinical research at Warner-Lambert/Parke-Davis and at the Center for the Study of Drug Development at Tufts Medical School. Dr. Hawkins holds a Ph.D. in Medicinal Chemistry from the University of Alabama and an M.B.A. from Boston University. Dr. Hawkins is a director of Nalari Computing Corporation.

DIRK REITSMA, M.D. has served as Vice President of Clinical Affairs and Medical Director since April 1997. From 1990 to 1997, Dr. Reitsma was employed by Ciba-Geigy, where he managed the clinical development of several biologic compounds and other new drugs. Dr. Reitsma was responsible for the phase III trials of Aredia in breast cancer, and for their regulatory submissions to the FDA. Prior to that, Dr. Reitsma was employed by Organon in Rockville, Maryland, where he worked on various biologics, including human monoclonal antibodies and on the submission of the regulatory filing for Bacillus Calmette Guerin, also known as BCG, for superficial bladder cancer. Dr. Reitsma practiced internal medicine and oncology at the Bergwegiekenhuis in Rotterdam prior to joining Organon. He received his M.D. from the Erasmus University in Rotterdam, The Netherlands.

NEAL GORDON, PH.D. has served as Vice President of Operations since May 1999. Prior to this position he served as Vice President Process Development from July 1998. Previously, he was Senior Director of Chromatography R&D at PerSeptive Biosystems, a division of PE Corp., formerly Perkin-Elmer Corporation. Over his ten-year career at PerSeptive, Dr. Gordon was involved in the development and application of innovative technologies for the purification and analysis of biopolymers, most notably the development of the BioCAD(R) Chromatography Workstation. Dr. Gordon received his Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology and a Bachelors degree in Chemical Engineering from McGill University.

DONALD PANOZ has been a director since 1995 and is the Honorary Chairman of the board of directors. In 1969, Mr. Panoz founded Elan Corporation, Plc., a pharmaceutical research and development company. Mr. Panoz was Chairman and Chief Executive Officer of Elan Corporation from 1969 until his retirement in 1996. Mr. Panoz is currently a Lecturer of Pharmacy at the University of Georgia. In January 1995, Mr. Panoz was named Honorary Irish Consul General to Bermuda. Mr. Panoz attended Pittsburgh University and Duquesne University in Pennsylvania.

NOUBAR AFEYAN, PH.D. has been a director since 1998. Dr. Afeyan is Chairman and CEO of the NewcoGen Group and is also a partner at One Liberty Ventures. Dr. Afeyan was Senior Vice President

and Chief Business Officer of PE Corp. until August 1999. Prior to its acquisition by PE Corp., Dr. Afeyan was the Chairman and Chief Executive Officer of PerSeptive Biosystems, a company that he founded in 1987 to develop, manufacture and market instruments and chemical reagents used to purify, analyze and synthesize biomolecules. Dr. Afeyan served as Chairman of the Board of ChemGenics Pharmaceuticals, Inc. during 1996 and 1997. He is also a member of the board of directors of two private companies. Dr. Afeyan received his undergraduate degree in Chemical Engineering from McGill University and his Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology.

EDWARD BRODSKY has been a director since 1995. Mr. Brodsky has been a partner of the law firm of Proskauer Rose LLP since 1992 and was previously a partner at the firm of Spengler Carlson Gubar Brodsky & Frisching. Mr. Brodsky and his firm represent us in legal matters. Mr. Brodsky is currently a director of Giant Cement Holding, Inc. and UIS, Inc.. He received his LL.B. from New York University School of Law.

TOM DECHAENE has been a director since 1999. Mr. Dechaene is currently the Chief Financial Officer of ServeCast Inc. He was with Deutsche Bank from 1991 through 1999, most recently as a director in the Principal Investments Group within the Equity Capital Markets division. Mr. Dechaene is a director of Color Kinetics Inc. and Iconics, Inc. Mr. Dechaene holds a law degree from Ghent University, Belgium, an MBA from INSEAD, France and a degree in Applied Economics from the University of Antwerp.

MARTIN TAYLOR has been a director since June 1999. From 1993 until 1998, Mr. Taylor held the position of Chief Executive Officer of Barclays Bank Plc. Mr. Taylor is presently a member of the Council for Science and Technology and, since November 1999, has been chairman of the W.H. Smith Group Plc. In October 1999, he became an advisor to Goldman Sachs International. He was educated at Balliol College, Oxford University.

SCIENTIFIC ADVISORY BOARD

Our scientific advisory board is comprised of internationally recognized scientists in the fields of immunology, oncology, genetics and drug delivery. The scientific advisory board advises our management on strategic issues related to our scientific development program. Dr. Srivastava chairs the board which consists of the following other individuals:

JOSHUA LEDERBERG, PH.D. has been a member of the scientific advisory board since 1996 and is the board's Honorary Chairman. In 1958, at the age of 33, Dr. Lederberg received the Nobel Prize in Physiology of Medicine for his work in the field of bacterial genetics. Dr. Lederberg is currently the Sackler Foundation Scholar and Professor- and President-Emeritus at The Rockefeller University, in New York City, where he is researching the interrelationships of DNA conformation and mutagenesis. Previously, Dr. Lederberg was a professor of genetics at Stanford University. A member of the National Academy of Sciences and a charter member of its Institute of Medicine, Dr. Lederberg has served as chairman of the President's Cancer Panel and has chaired a comprehensive study of emergent infections sponsored by the Institute of Medicine, intended to counteract complacency about the threats from many infectious diseases. He has also received the United States National Medal of Science. Dr. Lederberg has served on the board of the Procter & Gamble Co., and continues as a part-time consultant to several financial and pharmaceutical research and development institutions. He received his Ph.D. from Yale University.

SIR WALTER BODMER, PH.D. has been a member of the scientific advisory board since 1996 and he is currently the board's Vice Chairman. Sir Walter currently serves as the Principal of Herford College, Oxford University. Previously, he was the Director-General of the Imperial Cancer Research Fund and was Director of Research at the Fund from 1979 to 1991. He is a Foreign Associate of the United States National Academy of Sciences and a Foreign Honorary Member of the American Academy of Arts and Sciences. He is also a Trustee of Sir John Soane's Museum and the first President of the International Federation of Associations for the Advancement of Science and Technology. In 1995, Sir Walter was appointed Chancellor of the University of Salford. Sir Walter was the second President of the Human

Genome Organization and is a past President of the British Association for the Advancement of Science and of the Royal Statistics Society. He has served as Chairman of the BBC Science Consultative Group and as Vice-President of the Royal Institution. Sir Walter has recently completed his term as Chairman of the Trustees of the Natural History Museum, having served as a Trustee for ten years. He received a Ph.D. from Cambridge University.

HANS-GEORG RAMMENSEE, PH.D. has been a member of the scientific advisory board since 1999. Dr. Rammensee is currently the Chair of Immunology at the University of Tubingen, where he has served in various capacities since 1987. From 1993 until 1996, he was Head, Department of Tumorvirus-Immunology, German Cancer Research Center, Heidelberg, where he was also on the faculty of Theoretical Medicine. From 1987 until 1993, Dr. Rammensee was Head, Laboratory for Immunology at the Max Planck Institute for Biology. Since 1987, Dr. Rammensee has been Coeditor of Immunogenetics and, since 1991, Coeditor of European Journal of Immunology. Dr. Rammensee is also Speaker for the Graduate Committee for Cell Biology in Medicine at the University of Tubingen and a Member of the Evaluation Committee for the Cooperation Program in Cancer Research between the German Cancer Research Center in Heidelberg and the Ministry of Science in Israel. From 1992 through 1997, Dr. Rammensee was a Member of the "Hinterzartener Kreis", a committee of the German Research Council. Dr. Rammensee has been the recipient of numerous awards including the Heinz Maier Leibnitz Award of the German Federal Ministry of Science (1988), the Wilhelm and Maria Meyenburg Award of the German Cancer Research Center (1991), the Gottfried Wilhelm Leibnitz Award of the German Research Council (1991), the Avery Landsteiner Award of the Society for Immunology (1992), the Robert Koch Award of the Robert Koch Foundation (1993), the Paul Ehrlich and Ludwig Darmstaedter Award of the Paul Ehrlich Foundation (1996) and the Rose Payne Distinguished Scientist Award of the American Society for Histocompatibility and Immunogenetics (1997). Dr. Rammensee received his Ph.D. from the University of Tubingen in 1982, where he studied minor histocompatibility antigens in immune response.

FELIX THEEUWES, PH.D. has been a member of the scientific advisory board since 1996. Dr. Theeuwes is currently the Chairman and Chief Scientist of Durect Corporation, which is an affiliate of Alza Corporation. Prior to his current position, Dr. Theeuwes was Chief Scientist at Alza Corporation. Dr. Theeuwes was with Alza from 1970, directing research, technology development and product development for a variety of controlled drug delivery systems. Dr. Theeuwes holds more than 220 United States patents and has published more than 80 articles and book chapters. In 1980, Dr. Theeuwes was named Inventor of the Year by the Peninsula Patent Law Association. In 1983, he was the recipient of the Award for the Advancement of Industrial Pharmacy. He was the Busse Lecturer at the University of Wisconsin in 1981 and, in 1985, the Third Annual Sidney Riegelman Lecturer at the University of California, San Francisco. He is a Fellow of the American Association of Pharmaceutical Scientists, and, in 1993, he became the first recipient of Alza Corporation's Founder's Award. Dr. Theeuwes is currently a member of the board of directors of both Vinifera, Inc. and Durect Corporation. He received his undergraduate and graduate education in physics at the University of Leuven, Belgium, with a D.Sc. degree in 1966. From 1966 to 1970 he served as a post-doctoral fellow and visiting research assistant professor in the Department of Chemistry, University of Kansas.

AUDIT COMMITTEE

The audit committee makes recommendations to the board of directors about the selection of independent auditors, reviews the results and scope of the audit and other services provided by our independent auditors, and evaluates our internal controls. The audit committee consists of Messrs. Taylor, Dechaene and Afeyan.

COMPENSATION COMMITTEE

The compensation committee reviews and approves the compensation and benefits for our executive officers, administers our stock option plans and makes recommendations to the board of directors about compensation matters. The compensation committee consists of Messrs. Taylor, Brodsky and Afeyan.

EXECUTIVE COMPENSATION

The following table summarizes the compensation paid to or earned during the fiscal year ended December 31, 1999 by our chief executive officer and all of our other executive officers whose salary and bonus exceeded $100,000. We refer to these persons as the named executive officers.

SUMMARY COMPENSATION TABLE

	1999 ANNUAL COMPENSATION		LONG-TERM COMPENSATION
NAME AND PRINCIPAL POSITION	SALARY($)	BONUS($)	SHARES UNDERLYING OPTIONS(#)
Garo H. Armen, Ph.D., Chief Executive Officer.....	$150,000	--	254,682
Elma Hawkins, Ph.D., Senior Vice President.....	$200,000	$25,000	--
Neal Gordon, Ph.D., Vice President of Operations....	$136,282	$20,000	9,634

1999 OPTION GRANTS

The following table contains certain information regarding stock option grants during the twelve months ended December 31, 1999 by us to the named executive officers:

OPTION GRANTS IN LAST FISCAL YEAR

					POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(1)		
NAME	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED(#)	PERCENT OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE OR BASE PRICE ($/SHARE)	EXPIRATION DATE	0%($)	5%($)	10%($)
Garo H. Armen, Ph.D., Chief Executive Officer.....	254,682	83.3%	$12.07	2/09-4/09	--	$3,148,740	$6,834,681
Elma Hawkins, Ph.D., Senior Vice President.....	--	--	--	--	--	--	--
Neal Gordon, Ph.D., Vice President of Operations.....	9,634	3.2%	$ 6.50	1/09	$45,052	$ 172,771	$ 312,201

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(1)The dollar amounts under these columns are the result of calculations at the 5% and 10% rates set by the SEC and, therefore, are not intended to forecast possible future appreciation, if any, in the price of the underlying common stock. The potential realizable values are calculated by assuming the initial public offering price is $15.00 per share and that the market price appreciates from this price at the indicated rate for the entire term of each option and that each option is exercised and sold on the last day of its term at the appreciated price.

OPTION EXERCISES AND YEAR-END OPTION VALUES

The following table provides information about the number of shares issued upon option exercises by the named executive officers during the year ended December 31, 1999, and the value realized by the named executive officers. The table also provides information about the number and value of options held by the named executive officers at December 31, 1999. As our common stock is not publicly traded, a readily ascertainable market value is not available.

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

NAME	SHARES ACQUIRED ON EXERCISE(#)	VALUE REALIZED($)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT FISCAL YEAR-END(#)		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT FISCAL YEAR END($)(1)	
			EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Garo H. Armen, Ph.D., Chief Executive Officer	--	--	134,431	171,862	$ 941,548	$503,000
Elma Hawkins, Ph.D., Senior Vice President	--	--	137,627	--	$1,864,403	--
Neal Gordon, Ph.D., Vice President of Operations	--	--	3,785	24,773	$ 32,186	$210,673

(1)Based on the difference between the option exercise price and an assumed initial public offering price of $15.00 per share of common stock.

EMPLOYMENT AND CONSULTING AGREEMENTS

Under an employment agreement dated June 1, 1998, we agreed to employ Elma Hawkins, Ph.D. as Senior Vice President for one year at an annual base salary of $200,000, which is subject to performance and merit based increases. Pursuant to the agreement, we issued Dr. Hawkins options to purchase 137,627 shares of the company's common stock at an exercise price of $1.45 per share vesting over three years. The agreement is automatically renewed for successive one-year periods unless either party terminates the agreement. If we terminate Dr. Hawkins without cause, as that term is defined in the agreement, she is entitled to her base salary through the end of the one-year term during which the termination occurs. If we terminate Dr. Hawkins either because we eliminate her position of Senior Vice President or because there is a change in control of Antigenics, we are obligated to pay her cash or Antigenics common stock equal to one year's base salary.

In March 1995, in exchange for Dr. Pramod Srivastava's consulting services, we agreed to pay him $1,500 per day for up to three days per month. This obligation expires in March 2005 but will be automatically extended for additional one-year periods unless either we or Dr. Srivastava decide not to extend the agreement.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

As a limited liability company, a compensation committee consisting of Messrs. Afeyan and Brodsky reviewed salaries and incentive compensation for our employees and consultants. The compensation committee of the board of directors of Antigenics Inc. consists of Messrs. Taylor, Brodsky and Afeyan. Although none of the compensation committee members are officers or employees of Antigenics, each of Garo Armen, our chairman and chief executive officer, and Gamil de Chadarevian, our vice chairman and executive vice president international, have previously participated in compensation discussions with the committee. None of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our compensation committee. Mr. Brodsky, however, is a partner of Proskauer Rose LLP, a law firm that provides legal services to us.

DIRECTOR COMPENSATION

We reimburse directors for out-of-pocket and travel expenses incurred while attending board of director and committee meetings. We have generally granted to each director 17,203 shares when that director has joined our board.

EMPLOYEE BENEFIT PLANS

1999 EQUITY INCENTIVE PLAN

Our equity plan authorizes the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and nonqualified stock options for the purchase of an aggregate of 4,800,000 shares, subject to adjustment for stock splits and similar capital changes, of common stock to our employees and, in the case of non-qualified stock options, to consultants or any affiliate, as defined in the equity plan. The board of directors has appointed the compensation committee to administer the equity plan. Upon the closing of this offering, we will have issued options to purchase 1,716,007 shares of common stock under the equity plan, leaving 3,083,993 shares available for issuance under future grants under the equity plan.

1999 EMPLOYEE STOCK PURCHASE PLAN

We have also adopted an employee stock purchase plan under which employees may purchase shares of common stock at a discount from fair market value. We have reserved 300,000 shares of common stock for issuance under the purchase plan. The purchase plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Internal Revenue Code of 1986, as amended. The compensation committee grants rights to purchase common stock under the purchase plan. The compensation committee also determines the frequency and duration of individual offerings under the plan and the dates when employees may purchase stock. Eligible employees participate voluntarily and may withdraw from any offering at any time before they purchase stock. Participation terminates automatically upon termination of employment. The purchase price per share of common stock in an offering will not be less than 85% of the lesser of its fair market value at the beginning of the offering period or on the applicable exercise date and employees may pay through payroll deductions, periodic lump sum payments or a combination of both. The purchase plan terminates on November 15, 2009. As of December 31, 1999, we had issued no shares of common stock under the purchase plan.

401(K) PLAN

We sponsor a 401(k) plan for all of our employees. Employees are eligible to participate after they have completed one year of service with us. Participants may contribute up to 15% of their current compensation, with a maximum of $10,000 each year. Each participant is fully vested in his or her salary contributions and related earnings and losses. We match 100% of the participant's contribution and our matching contributions vest over four years. We have discretion to change that amount at any time.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We currently lease office space at cost from GHA Management Corporation which is wholly owned by Garo Armen, Ph.D. Dr. Armen is our chairman and chief executive officer, and we use the office space for our corporate headquarters. We incurred an expense of approximately $77,000, $143,000 and $211,000 for the years ended December 31, 1996, 1997 and 1998, respectively in connection with that lease. Under the current agreement, we will pay approximately $312,000 annually until the agreement expires in December 2006. We believe that the terms of the current agreement are at least as favorable as terms we could have obtained in an arm's length transaction with an independent third party. In addition, as of December 31, 1999, we have letters of credit for the benefit of GHA Management Corporation in connection with this lease in the amount of $375,000. These letters of credit expire in January 2000. You should also read the discussion regarding Mr. Brodsky's relationship with the law firm of Proskauer Rose LLP under "Management -- Compensation Committee Interlocks and Insider Participation."

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of December 31, 1999, and as adjusted to reflect the sale of 3,000,000 shares of common stock in this offering, by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of the common stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and current executive officers as a group.

Except as otherwise noted, the persons or entities in this table have sole voting and investing power with respect to all the shares of common stock beneficially owned by them, subject to community property laws, where applicable.

The "Number of Shares Beneficially Owned" column below is based on an assumed 20,714,286 shares of common stock outstanding before the offering, and 23,714,286 shares of common stock outstanding after the offering. For purposes of the table below, we deem shares of common stock subject to options that are currently exercisable or exercisable within 60 days of December 31, 1999, to be outstanding and to be beneficially owned by the person holding the options for the purpose of computing the percentage ownership of the person but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person.

	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF TOTAL	
		BEFORE OFFERING	AFTER OFFERING
BENEFICIAL OWNER(1)			
Antigenics Holdings L.L.C.(2)	11,154,275	53.9%	47.0%
Garo H. Armen, Ph.D.(2)	134,431(3)	*	*
Pramod Srivastava, Ph.D.(2)	182,478(3)	*	*
Gamil de Chadarevian	1,625,839(4)	7.8%	6.8%
Elma Hawkins, Ph.D	137,627(3)	*	*
Neal Gordon, Ph.D	5,712(3)	*	*
Donald Panoz	270,612(5)	1.3%	1.1%
Noubar Afeyan, Ph.D	174,614(3)	*	*
Edward Brodsky(2)	17,203(3)	*	*
Tom Dechaene	--	*	*
Martin Taylor	54,363(6)	*	*
All current executive officers and directors as a group(2) (10 persons)	2,602,878(7)	11.2%	9.9%

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*Indicates less than 1%

(1)The address of each stockholder is Antigenics Inc., 630 Fifth Avenue, New York, New York 10111.

(2)Founder Holdings Inc. owns about 79.1% of the outstanding common stock of Antigenics Holdings. Antigenics Holdings owns 53.9% of our common stock before this offering and will own 47.0% after this offering. Messrs. Armen, Srivastava and Brodsky are managers of Antigenics Holdings. Messrs. Armen and Brodsky are directors of Founder Holdings. The following individuals own the indicated percentages of Founder Holdings outstanding common stock on a fully diluted basis:

INDIVIDUAL	PERCENTAGE
Garo Armen	43.1%
Pramod Srivastava	24.2%
Edward Brodsky	2.8%
Lawrence Feinberg	19.4%

The following individuals own the indicated percentage interests in Antigenics Holdings on a fully diluted basis:

INDIVIDUAL	PERCENTAGE
Garo Armen	13.6%
Pramod Srivastava	6.2%
Edward Brodsky	0.6%

(3)Consists solely of shares of common stock issuable upon exercise of options currently exercisable or exercisable within 60 days of December 31, 1999.

(4)Includes 146,351 shares of common stock issuable upon exercise of options currently exercisable or exercisable within 60 days of December 31, 1999.

(5)Consists of (a) 17,203 shares of common stock issuable upon exercise of options currently exercisable or exercisable within 60 days of December 31, 1999 and (b) 253,409 shares of common stock held by Fountainhead Holdings Ltd., all of the capital stock of which is held by trusts, the beneficiaries of which are the children and grandchildren of Mr. Panoz.

(6)Includes 17,203 shares of common stock issuable upon exercise of options currently exercisable or exercisable within 60 days of December 31, 1999.

(7)Includes 832,821 shares of common stock issuable upon exercise of options currently exercisable or exercisable within 60 days of December 31, 1999. See footnotes (3), (4), (5) and (6).

DESCRIPTION OF CAPITAL STOCK

Immediately following the closing of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, $0.01 par value per share, and 1,000,000 shares of preferred stock, $0.01 par value per share. After the closing of this offering, if we give effect to the issuance of 3,000,000 shares of common stock and the merger of Antigenics L.L.C. with and into Antigenics Inc. and assume no warrant holders elect to convert warrants into shares of common stock at the closing of this offering, there will be:

- 23,714,286 shares of common stock outstanding;
- options to purchase 1,716,007 shares of common stock outstanding of which options to purchase 1,010,773 shares will be exercisable upon the closing of this offering;
- warrants to purchase 280,886 shares of common stock outstanding, all of which will be exercisable upon the closing of this offering; and
- no shares of preferred stock outstanding.

COMMON STOCK

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available for payment of dividends, as the board may from time to time determine. Each stockholder is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Our certificate of incorporation does not provide for cumulative voting for the election of directors, which means that the holders of a majority of the shares voted can elect all of the directors then standing for election. The common stock is not entitled to preemptive rights and is not subject to conversion or redemption. Each outstanding share of common stock is, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and nonassessable.

PREFERRED STOCK

Pursuant to our certificate of incorporation, our board of directors has the authority, without further action by the stockholders, to issue up to 1,000,000 shares of preferred stock in one or more series and to fix the designations, powers, preferences, privileges and relative participating, optional or special rights as well as the qualifications, limitations or restrictions of those shares, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights of the common stock. Our board of directors, without stockholder approval, is able to issue preferred stock with voting, conversion or other rights that could adversely affect the voting power and other rights of the holders of common stock. We could therefore issue preferred stock quickly with terms calculated to delay or prevent a change in control 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, and may adversely affect the voting and other rights of the holders of common stock. At present, we have no shares of preferred stock outstanding.

WARRANTS

In a private placement in November 1999, we issued warrants to purchase member interest in Antigenics L.L.C. In connection with this offering, each warrant holder has the option to:

- convert the warrants into shares of common stock or
- exchange the warrants for warrants to purchase shares of Antigenics common stock.

If all the warrant holders elect to convert into common stock and the initial public offering price is $15.00 per share, we will issue approximately 19,445 shares of common stock to the warrant holders. If all of the warrant holders elect to receive warrants to purchase common stock, the warrant holders will have the right to acquire approximately 280,886 shares of common stock. The per share exercise price for warrants

that remain outstanding will be $13.96. If not previously exercised or converted, each warrant will expire on September 30, 2002. Holders may not transfer the warrants without our consent.

ANTI-TAKEOVER PROVISIONS

Delaware Law

Section 203 of the Delaware General Corporation Law is applicable to corporate takeovers of Delaware corporations. Subject to exceptions enumerated in Section 203, Section 203 provides that a corporation shall not engage in any business combination with any "interested stockholder" for a three-year period following the date that the stockholder becomes an interested stockholder unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, though some shares may be excluded from the calculation; and

- on or subsequent to that date, the business combination is approved by the board of directors of the corporation and by the affirmative votes of holders of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Except as specified in Section 203, an interested stockholder is generally defined to include any person who, together with any affiliates or associates of that person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation, any time within three years immediately prior to the relevant date. Under some circumstances, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with a corporation for a three-year period, although the stockholders may elect not to be governed by this section, by adopting an amendment to our certificate of incorporation or by-laws, effective 12 months after adoption. Our certificate of incorporation and by-laws do not exclude us from the restrictions imposed under Section 203. We expect that the provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with our board of directors. These provisions may have the effect of deterring hostile takeovers or delaying changes in control of us, which could depress the market price of the common stock and which could deprive stockholders of opportunities to realize a premium on shares of the common stock held by them.

Charter and By-law Provisions

Our certificate of incorporation and by-laws contain provisions that could discourage potential takeover attempts and make more difficult attempts by stockholders to change management. Our certificate of incorporation provides that stockholders may not take action by written consent but may only act at a stockholders' meeting, and that only our president or a majority of our board may call special meetings of the stockholders. Our by-laws also require that stockholders provide advance notice of business to be brought by a stockholder before the annual meeting. Our certificate of incorporation includes provisions classifying the board of directors into three classes with staggered three-year terms. In addition, our directors may only be removed from office for cause. Under our certificate of incorporation and by-laws, the board of directors may enlarge the size of the board and fill any vacancies on the board. The by-laws provide that stockholders may not make nominations for directors at any annual or special meeting unless the stockholder intending to make a nomination notifies us of its intention a specified period in advance and furnishes certain information.

REGISTRATION RIGHTS

In connection with the private placement completed in November 1999, we granted registration rights with respect to 2,808,857 shares of common stock sold in that private placement. Pursuant to these registration rights, we are obligated to file, approximately 90 days after the date of this prospectus, a registration statement covering these shares of common stock for resale. We will bear all expenses incurred in connection with this registration, other than any underwriters' discounts and commissions.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no market for the common stock, and we cannot assure you that a liquid trading market for the common stock will develop or be sustained after this offering. Future sales of substantial amounts of common stock, including shares issued upon exercise of outstanding options and warrants, in the public market after this offering or the anticipation of those sales could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through sales of our equity securities.

After the closing of this offering, we will have outstanding 23,714,286 shares of common stock, which assumes warrant holders do not convert any warrants issued in November 1999; the underwriters do not exercise their over-allotment option; and option holders do not exercise any outstanding options. Of these shares, the shares sold in this offering will be freely tradable without restriction under the Securities Act unless purchased by our "affiliates", as that term is defined in Rule 144 under the Securities Act. We expect to register an additional 2,808,857 shares under a registration statement we will file approximately 90 days following this offering. Substantially all the remaining 17,905,429 restricted shares held by existing stockholders are subject to various lock-up agreements providing that, with limited exceptions, the stockholder will not offer, sell, contract to sell, grant an option to purchase, effect a short sale or otherwise dispose of or engage in any hedging or other transaction that is designed or reasonably expected to lead to a disposition of any shares of common stock or any option to purchase common stock or any securities exchangeable for or convertible into common stock for a period of one year after the date of this prospectus. Though these shares may be eligible for earlier sale under the provisions of the Securities Act, none of these shares will be saleable until 365 days after the date of this prospectus as a result of these lock-up agreements. In addition, as of December 31, 1999, we had outstanding options to purchase 1,716,007 shares of common stock, none of which we expect the option holders to exercise prior to the closing of this offering. In addition, we have outstanding warrants to purchase 280,886 shares of common stock. Warrant holders have the right to convert these warrants into 19,445 shares of common stock at the closing of this offering, assuming an initial public offering price of $15.00 per share.

In general, under Rule 144 as currently in effect, a person, or persons whose shares are aggregated, who has beneficially owned restricted shares for at least one year is entitled to sell within any three-month period up to that number of shares that does not exceed the greater of: (1) 1% of the number of shares of common stock then outstanding, which will be approximately 237,143 shares after this offering, or (2) the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a Form 144 with respect to the sale. Sales under Rule 144 are also subject to certain "manner of sale" provisions and notice requirements and to the requirement that the issuer has made current public information about itself available. Under Rule 144(k), a person who is not deemed to have been an affiliate of the issuer at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner except an affiliate, is entitled to sell those shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

Rule 701 permits resales of qualified shares held by some affiliates in reliance upon Rule 144 but without compliance with some restrictions, including the holding period requirement, of Rule 144. Any of our

employees, officers, directors or consultants who purchased his or her shares pursuant to a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701. Rule 701 further provides that non-affiliates may sell shares in reliance on Rule 144 without having to comply with the holding period, public information, volume limitation or notice provisions of Rule 144. All holders of Rule 701 shares of common stock are required to wait until 90 days after the date of this prospectus before selling shares. However, all shares issued pursuant to Rule 701 are subject to lock-up agreements and will only become eligible for sale at the expiration of the 365-day lock-up.

UNDERWRITING

Subject to certain terms and conditions contained in an underwriting agreement, the underwriters named below, for whom U.S. Bancorp Piper Jaffray Inc. and FleetBoston Robertson Stephens Inc. are acting as representatives, have severally agreed to purchase the number of shares of common stock from us set forth opposite their names below:

UNDERWRITERS	NUMBER OF SHARES
U.S. Bancorp Piper Jaffray Inc.....	
FleetBoston Robertson Stephens Inc.....	
Total.....	========

The underwriting agreement provides that the obligations of the several underwriters to purchase shares of common stock are subject to the approval of certain legal matters by counsel and to certain other conditions. If any of the shares of common stock are purchased by the underwriters pursuant to the underwriting agreement, all such shares of common stock (other than the shares of common stock covered by the over-allotment option described below) must be so purchased.

We have been advised by the underwriter representatives that the underwriters propose to offer the shares of common stock to the public initially at the price to the public set forth on the cover page of this prospectus and to certain dealers (who may include the underwriters) at such price less a concession not to exceed $ per share. The underwriters may allow, and such dealers may reallow, discounts not in excess of $ per share to any other underwriter and certain other dealers.

We have granted to the underwriters an option to purchase up to 450,000 additional shares of common stock at the initial public offering price less the underwriting discount solely to cover over-allotments. Such option may be exercised in whole or in part from time to time during the 30-day period after the date of this prospectus. To the extent that the underwriters exercise such option, each of the underwriters will be committed, subject to certain conditions, to purchase a number of option shares proportionate to such underwriter's initial commitment as indicated in the preceding table. If the underwriters exercise their option in full, the total price to the public would be $, the total underwriting discount would be $ and total proceeds to us would be $.

We, together with certain of our stockholders and our executive officers and directors, have agreed not to directly or indirectly offer, pledge, sell, contract to sell, sell any option or contract to purchase or grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock, or enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of such common stock, or to cause a registration statement covering any shares of common stock to be filed, for a period of one year after the date of this prospectus without the prior written consent of the underwriters, subject to limited exceptions. See "Shares Eligible for Future Sale."

Prior to this offering, there has been no established trading market for the common stock. The initial price to the public for the common stock offered by us will be determined by negotiation among and the underwriter representatives and us. The factors to be considered in determining the initial price to the public will include the history of and the prospects for the industry in which we compete, the ability of our management, our past and present operations, our prospects for future earnings, the general condition of the securities markets at the time of this offering and the recent market prices of securities of generally comparable companies. We will apply to list our common stock on the Nasdaq National Market.

The underwriters do not intend to make sales to accounts over which they exercise discretionary authority in excess of 5% of the number of shares of common stock offered hereby.

In connection with this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may over-allot this offering, creating a syndicate short position. Underwriters may bid for and purchase shares of common stock in the open market to cover syndicate short positions. In addition, the underwriters may bid for and purchase shares of common stock in the open market to stabilize the price of the common stock. These activities may stabilize or maintain the market price of the common stock above independent market levels. These transactions may be effected on the Nasdaq National Market or otherwise. The underwriters are not required to engage in these activities and may end these activities at any time.

In connection with this offering, some underwriters and selling group members may also engage in passive market making transactions in the common stock on the Nasdaq National Market. Passive market making consists of displaying bids on the Nasdaq National Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

At our request, the underwriters have reserved for sale, at the initial public offering price, up to 150,000 shares of common stock for our directors, officers, employees and business associates. The number of shares of common stock available for sale to the general public will be reduced to the extent those persons purchase any of the reserved shares. Any reserved shares that are not purchased will be offered by the underwriters to the general public on the same basis as the other shares in this offering.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

Each underwriter has represented and agreed to the following:

- - it has not offered or sold, and for six months after the date we issue the common stock, will not offer or sell any shares of common stock to persons in the United Kingdom except to persons who are ordinarily involved in acquiring, holding, managing or disposing of investments, as principal or agent, for business purposes or in other circumstances which have not resulted and will not result in a public offer in the United Kingdom within the Public Offers of Securities Regulations 1995;

- - it has complied and will comply with all applicable provisions of the Financial Services Act 1986 and the Public Offers of Securities Regulations 1995 in any act it has taken or will take with respect to the common stock in, from or otherwise involving the United Kingdom; and

- - it has only distributed and will only distribute to any person in the United Kingdom any document received by it in connection with the issuance of the common stock if that person is of a kind described in Article 11(3) of the Financial Services Act 1986 (Investment Advertisements) (Exemptions) Order 1996 or is a person to whom such document may otherwise be distributed.

The common stock offered has not been and will not be registered with the Comision Nacional del Mercado de Valores (Spanish Securities Market Commission) according to the requirements of Act 24/1988 and R.D. 291/1992. Consequently, the common stock may not be publicly offered, subscribed, sold or distributed in Spain.

LEGAL MATTERS

Palmer & Dodge LLP, Boston, Massachusetts will pass upon the validity of the common stock offered by this prospectus for us. Shearman & Sterling, New York, New York, will pass upon certain legal matters in connection with this offering for the underwriters.

EXPERTS

We have included in this prospectus and in the registration statement the consolidated financial statements of Antigenics L.L.C. and subsidiary as of December 31, 1997 and 1998, and for each of the years in the three-year period ended December 31, 1998, and for the period from March 31, 1994 (date of inception) to December 31, 1998, in reliance upon the report of KPMG LLP, independent certified public accountants, appearing elsewhere in this prospectus, and upon the authority of that firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the SEC for the stock we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. While we have disclosed the material terms of any of our contracts, agreements or other documents referenced in this prospectus, you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document. When we complete this offering, we will also be required to file annual, quarterly and special reports, proxy statements and other information with the SEC.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's web site at http://www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 450 Fifth Street, NW, Washington, DC 20549, 7 World Trade Center, Suite 1300, New York, New York 10048 and Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 450 Fifth Street, NW, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. Our SEC filings are also available at the office of the Nasdaq National Market. For further information on obtaining copies of our public filings at the Nasdaq National Market you should call (212) 656-5060.

You should rely only on the information contained in the registration statement, including its exhibits. We have not, and the underwriters have not, authorized any other person to provide you with different information. This prospectus is not an offer to sell, nor is it seeking an offer to buy, the securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date in the front cover, but the information may have changed since that date.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT

The Members and Board of Managers
Antigenics L.L.C.:

We have audited the accompanying consolidated balance sheets of Antigenics L.L.C. and subsidiary (a Delaware limited liability company in the development stage and a successor operating company) as of December 31, 1997 and 1998, and the related consolidated statements of operations, members' equity and cash flows for each of the years in the three-year period ended December 31, 1998 and the period from March 31, 1994 (date of inception) to December 31, 1998. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Antigenics L.L.C. and subsidiary as of December 31, 1997 and 1998, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 1998 and the period from March 31, 1994 (date of inception) to December 31, 1998, in conformity with generally accepted accounting principles.

/s/ KPMG LLP

Short Hills, New Jersey
October 28, 1999

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 1997 AND 1998

	1997	1998
ASSETS		
Cash and cash equivalents	$13,086,402	$ 22,168,049
Prepaid expenses	138,994	230,632
Other assets	20,138	21,189
Due from related party	--	27,605
Total current assets	13,245,534	22,447,475
Plant and equipment, net	783,655	4,106,183
Other assets	46,237	74,071
Organization costs, less accumulated amortization of $21,587 and $28,174 in 1997 and 1998, respectively	14,472	7,885
Total assets	$14,089,898	$ 26,635,614
LIABILITIES AND MEMBERS' EQUITY		
Accounts payable	$ 245,602	$ 2,036,814
Accrued liabilities	570,869	48,134
Due to related party	61,658	--
Current portion, long-term debt	--	200,497
Total current liabilities	878,129	2,285,445
Long-term debt	--	709,006
Members' capital -- no stated value; 93,354 and 104,024 units issued	24,189,844	45,849,184
Subscription notes receivable	--	(2,102,000)
Deferred compensation	(389,631)	(613,545)
Deficit accumulated during development stage	(10,588,444)	(19,492,476)
Total members' equity	13,211,769	23,641,163
Commitments and contingencies		
Total liabilities and members' equity	$14,089,898	$ 26,635,614

See accompanying notes to consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 1996, 1997 AND 1998 AND
FOR THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO DECEMBER 31, 1998

	1996	1997	1998	MARCH 31, 1994 (DATE OF INCEPTION) TO DECEMBER 31, 1998
Revenue	$ --	$ --	$ --	$ --
Expenses:				
Research and development:				
Related party	--	(39,630)	--	(39,630)
Other	(2,017,445)	(2,523,041)	(6,102,362)	(11,497,890)
	(2,017,445)	(2,562,671)	(6,102,362)	(11,537,520)
General and administrative:				
Related party	(292,392)	(518,011)	(211,152)	(1,021,555)
Other	(1,488,438)	(1,030,934)	(2,966,011)	(7,993,763)
	(1,780,830)	(1,548,945)	(3,177,163)	(9,015,318)
Depreciation and amortization	(78,856)	(202,090)	(360,285)	(696,347)
Total operating loss	(3,877,131)	(4,313,706)	(9,639,810)	(21,249,185)
Other income:				
Non-operating income	249,988	--	--	249,988
Interest income	281,245	481,179	735,778	1,506,721
Net loss	$(3,345,898)	$(3,832,527)	$(8,904,032)	$(19,492,476)
Net loss per members' equity unit, basic and diluted	$ (39.42)	$ (42.81)	$ (93.07)	
Weighted average members' units outstanding, basic and diluted	84,876	89,525	95,673	

See accompanying notes to consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF MEMBERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 1996, 1997 AND 1998 AND
THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO DECEMBER 31, 1998

	UNITS	MEMBERS' CAPITAL	SUBSCRIPTION NOTES RECEIVABLE	DEFERRED COMPENSATION	DEFICIT ACCUMULATED DURING DEVELOPMENT STAGE	TOTAL
Balance at March 31, 1994	--	$ --	$ --	$ --	$ --	$ --
Net loss	--	--	--	--	(183,440)	(183,440)
Issuance of units to founders during 1994, for cash, $6 per unit	65,200	400,010	--	--	--	400,010
Balance at December 31, 1994	65,200	400,010	--	--	(183,440)	216,570
Net loss	--	--	--	--	(3,226,579)	(3,226,579)
Issuance of units in connection with the recapitalization in December 1995, $250 per unit	6,000	1,500,000	(150,000)	--	--	1,350,000
Grant of members' equity units	8,800	2,200,000	--	--	--	2,200,000
Balance at December 31, 1995	80,000	4,100,010	(150,000)	--	(3,410,019)	539,991
Net loss	--	--	--	--	(3,345,898)	(3,345,898)
Payment of subscription notes receivable	--	--	150,000	--	--	150,000
Deferred compensation on options	--	781,200	--	(781,200)	--	--
Grant and recognition of options	--	1,116,815	--	347,200	--	1,464,015
Issuance of units in private placement from March 13, 1996 to December 31, 1996, $1,118 per unit	9,512	10,600,000	(250,000)	--	--	10,350,000
Balance at December 31, 1996	89,512	16,598,025	(250,000)	(434,000)	(6,755,917)	9,158,108
Net loss	--	--	--	--	(3,832,527)	(3,832,527)
Payment of subscription notes receivable	--	--	250,000	--	--	250,000
Deferred compensation on options	--	144,004	--	(144,004)	--	--
Grant and recognition of options	--	62,815	--	188,373	--	251,188
Issuance of units in private placement from September 8, 1997 to December 31, 1997, $1,922 per unit	3,842	7,385,000	--	--	--	7,385,000
Balance at December 31, 1997	93,354	24,189,844	--	(389,631)	(10,588,444)	13,211,769
Net loss	--	--	--	--	(8,904,032)	(8,904,032)
Deferred compensation on options	--	493,701	--	(493,701)	--	--
Grant and recognition of options	--	838,654	--	269,787	--	1,108,441
Exercise of options	224	250,000	--	--	--	250,000
Issuance of units in private placement from January 1, 1998 to December 31, 1998, $1,922 per unit	10,446	20,076,985	(2,102,000)	--	--	17,974,985
Balance at December 31, 1998	104,024	$45,849,184	$(2,102,000)	$(613,545)	$(19,492,476)	$23,641,163

See accompanying notes to consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 1996, 1997 AND 1998 AND
FOR THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO DECEMBER 31, 1998

	1996	1997	1998	MARCH 31, 1994 (DATE OF INCEPTION) TO DECEMBER 31, 1998
Cash flows from operating activities:				
Net loss	$(3,345,898)	$(3,832,527)	$(8,904,032)	$(19,492,476)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	78,856	202,090	360,285	696,347
Members' equity options and Predecessor Company options	1,464,015	251,188	1,108,441	2,823,644
Members' equity grant	--	--	--	2,200,000
Changes in operating assets and liabilities:				
Other assets	(1,792)	(64,583)	(28,885)	(95,260)
Prepaid assets	(10,734)	(87,927)	(91,638)	(230,632)
Organization costs	--	--	--	(32,934)
Accounts payable	246,357	(553,263)	1,791,212	2,036,814
Accrued liabilities	66,865	504,004	(522,735)	48,134
Due to/from related party, net	29,788	63,361	(89,263)	(27,605)
Net cash used in operating activities	(1,472,543)	(3,517,657)	(6,376,615)	(12,073,968)
Cash flows from investing activities:				
Purchase of plant and equipment	(231,262)	(622,504)	(3,704,168)	(4,809,423)
Proceeds from the sale of plant and equipment	--	4,000	27,942	31,942
Net cash used in investing activities	(231,262)	(618,504)	(3,676,226)	(4,777,481)
Cash flows from financing activities:				
Members' equity contributions	10,500,000	7,635,000	17,974,985	37,859,995
Exercise of members' equity options	--	--	250,000	250,000
Proceeds from debt	--	--	909,503	909,503
Net cash provided by financing activities	10,500,000	7,635,000	19,134,488	39,019,498
Net increase in cash and cash equivalents	8,796,195	3,498,839	9,081,647	22,168,049
Cash and cash equivalents at beginning of period	791,368	9,587,563	13,086,402	--
Cash and cash equivalents at end of period	$ 9,587,563	13,086,402	22,168,049	22,168,049
Non-cash investing and financing activities:				
Members' equity contributions financed by notes receivable	$ 250,000	$ --	$ 2,102,000	$ 2,102,000

See accompanying notes to consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) ORGANIZATION AND BUSINESS

The business was formed on March 31, 1994 through the creation of a Delaware corporation (the Predecessor Company). In July 1995, the founders of the Delaware corporation formed Antigenics L.L.C. (together with its subsidiary, Antigenics or the Company), a Delaware limited liability company, and subsequently transferred to the Company all of the assets, liabilities, properties and rights of the Delaware corporation in exchange for an initial 81.5% equity interest in the Company. The accounting for this recapitalization was recorded at the Delaware corporation's historical cost. In connection with the recapitalization, the Company also raised $1,500,000 (including $150,000 of subscription notes receivable) in a private equity transaction in exchange for a 7.5% initial ownership interest and a further 11% initial ownership interest was exchanged for services rendered to the Company by certain outside advisors, the value of which was recognized as a non-cash expense of $2,200,000 during 1995.

The Company is developing immunotherapeutics for the treatment of cancer, infectious diseases and autoimmune disorders based on the Company's proprietary heat shock protein technology. The Company's research has demonstrated that when purified heat shock protein-peptide complexes are injected into the skin, they trigger an immune response against cancers and infectious diseases. Antigenics seeks to create immunotherapeutics to stimulate patients' immune systems into destroying diseased cells in the body.

Antigenics is primarily engaged in the development of its heat shock protein technology and its lead immunotherapeutic product, Oncophage(R). The related business activities include product research and development activities, regulatory and clinical affairs, establishing manufacturing capabilities, pilot stage production for clinical trials, and administrative and corporate development activities. As of December 31, 1998, the Company has not commenced commercial operations and, accordingly, is in the development stage. Consequently, the Company is subject to all the risks inherent in the establishment of a new business. The Company has incurred annual operating losses since inception and, as a result, at December 31, 1998 has a deficit accumulated during the development stage of approximately $17.5 million. The Company's operations during development have been funded principally by members' equity. While the Company believes that its working capital resources are sufficient to satisfy its liquidity requirements over the next 12 months, satisfying the Company's long-term liquidity needs will require the successful commercialization of Oncophage or other products and additional members' equity.

The Company's immunotherapeutics require clinical trials and approvals from regulatory agencies as well as acceptance in the marketplace. The Company is conducting clinical trials in various cancer indications. Although the Company believes its patents, patent rights and patent applications are valid, the invalidation of its patents or failure of certain of its pending patent applications to issue as patents could have a material adverse effect upon its business. The Company competes with specialized biotechnology companies, major pharmaceutical and chemical companies and universities and research institutions. Many of these competitors have substantially greater resources than does the Company.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) BASIS OF PRESENTATION

The Company's consolidated financial statements include the accounts of Antigenics L.L.C. and its wholly-owned subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation.

ANTIGENICS L.L.C.
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

(b) 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 disclosures 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.

(c) CASH AND CASH EQUIVALENTS

The Company considers all highly liquid investments purchased with maturities at acquisition of three months or less to be cash equivalents. Cash equivalents at December 31, 1997 and 1998 consist of investments in money market accounts which are unrestricted as to withdrawal or use.

(d) PLANT AND EQUIPMENT

Plant and equipment are carried at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Amortization of leasehold improvements is computed over the shorter of the lease term or estimated useful life of the asset. Additions and improvements are capitalized, while repairs and maintenance are charged to expense as incurred.

(e) ORGANIZATION COSTS

Organization costs, consisting primarily of legal fees, are being amortized using the straight-line method over a five-year period.

(f) LONG-LIVED ASSETS

The Company's policy is to record long-lived assets at cost, amortizing these costs over the expected useful lives of the related assets. In accordance with Statement of Financial Accounting Standards (SFAS) No. 121, "Accounting for the Impairment of Long-lived Assets and for Long-lived Assets to be Disposed of," these assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. The assets are evaluated for continuing value and proper useful lives by comparison to expected undiscounted future cash flows. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceed the fair value of the assets, calculated as expected discounted future cash flows. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(g) FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair value of a financial instrument represents the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced sale or liquidation. Significant differences can arise between the fair value and carrying amounts of financial instruments that are recognized at historical cost amounts. The estimated fair values of all of the Company's financial instruments, excluding debt, approximate their carrying amounts in the consolidated balance sheets. The fair value of the Company's long-term debt was derived by evaluating the nature and terms of each term note and considering the prevailing economic and market conditions at the balance sheet date. The carrying amount of debt, including current portions, is approximately $910,000 at December 31, 1998 and the fair value is estimated to be approximately this amount.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

(h) ACCRUED LIABILITIES

Accrued liabilities consist of the following at December 31, 1997 and 1998:

	1997	1998
Sponsored research	$475,000	$ --
Other	95,869	48,134
	$570,869	$ 48,134

(i) MEMBERS' EQUITY OPTION PLAN

The Company accounts for options granted to employees and directors in accordance with Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. As such, compensation expense is recorded on fixed members' equity option grants only if the current fair value of the underlying unit exceeds the exercise price of the option at the date of grant.

The Company accounts for members' equity options granted to non-employees on a fair value basis in accordance with SFAS No. 123, "Accounting for Stock-Based Compensation" and Emerging Issues Task Force Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services". As a result, the non-cash charge to operations for non-employee options with vesting or other performance criteria is affected each reporting period by changes in the fair value of the Company's members' equity units.

As required, the Company also provides pro forma net loss and pro forma net loss per members' equity unit disclosures for employee and director members' equity option grants as if the fair-value-based method defined in SFAS No. 123 had been applied (see Note 5).

(j) RESEARCH AND DEVELOPMENT

Research and Development expenses include the costs associated with internal research and development by the Company and research and development conducted for the Company by outside advisors, sponsored university-based research partners, and clinical study partners. All research and development costs discussed above are expensed as incurred. Amounts received under research and development contracts, which are not refundable, are recorded as a reduction to research and development expense in the consolidated statement of operations.

(k) INCOME TAXES

As a Delaware limited liability company, no federal, state and local income taxes are levied on the Company. Each member of the Company is individually responsible for reporting his or her share of the Company's net income or loss on their personal tax returns. Therefore, no provision for income taxes and no deferred tax assets or liabilities are recognized in the accompanying consolidated financial statements.

(l) NET LOSS PER MEMBERS' EQUITY UNIT

Basic earnings or loss per members' equity unit (EPU) is computed using the weighted average number of members' equity units outstanding during the period being reported on. Diluted EPU reflects the potential dilution that could occur if securities or other contracts to issue members' equity units were exercised or converted into members' equity units at the beginning of the period being reported on and the effect was dilutive. Net loss and weighted average members' equity units used for computing diluted EPU were the

same as that used for computing basic EPU for each of the years ended December 31, 1996, 1997 and 1998 because the Company's members' equity options were not included in the calculation since the inclusion of such potential members' equity units would be antidilutive.

(m) SEGMENT INFORMATION

The Company is managed and operated as one business. The entire business is managed by a single management team that reports to the chief executive officer. The Company does not operate separate lines of business or separate business entities with respect to any of its product candidates. Accordingly, the Company does not prepare discrete financial information with respect to separate product areas or by location and does not have separately reportable segments as defined by SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information".

(n) RECENT ACCOUNTING PRONOUNCEMENTS

In April 1998, the American Institute of Certified Public Accountants issued Statement of Position (SOP) 98-5, "Reporting on the Costs of Start-Up Activities", which requires the costs of start-up activities and organization costs be expensed as incurred. The adoption of SOP 98-5 by the Company effective January 1, 1999 will be immaterial to the Company's consolidated financial statements.

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities", which establishes accounting and reporting standards for derivative instruments, including derivatives instruments embedded in other contracts, and for hedging activities. SFAS No. 133 is effective for all the Company's fiscal quarters beginning January 1, 2001. This statement is not expected to affect the Company as it currently does not have derivative instruments or engage in hedging activities.

(3) PLANT AND EQUIPMENT, NET

Plant and equipment, net at December 31, 1997 and 1998 consists of the following:

	1997	1998	ESTIMATED DEPRECIABLE LIVES
Furniture, fixtures and other.....	$ 299,580	$ 486,933	3 to 10 years
Laboratory and manufacturing equipment.....	621,187	1,426,427	3 to 10 years
Leasehold improvements.....	180,128	224,580	2 to 5 years
Construction in progress.....	--	2,639,181	
	1,100,895	4,777,121	
Less accumulated depreciation and amortization.....	317,240	670,938	
	$ 783,655	$4,106,183	

(4) MEMBERS' EQUITY

Antigenics has one class of members' equity. All equity members' vote their equity interests in proportion to their respective unit interest in the Company. Net profits and losses of the Company for each fiscal year are allocated to the capital accounts of the members as described in the limited liability company agreement, generally in proportion to their respective unit ownership interests. No members are liable for

any obligations of the Company or are required to contribute any additional capital related to the deficits incurred.

Since the formation of the Company in 1995 (see note 1), the Company has raised capital through private placement equity transactions. During 1996, the Company completed a private placement offering of approximately 9,500 members' equity units in exchange for $10,600,000. Subscription notes receivable of $250,000 at December 31, 1996, which represent promissory notes from members in consideration of their equity contributions, were satisfied in full during 1997.

During 1997, the Company commenced a private placement offering, which resulted in approximately 3,800 members' equity units being sold for approximately $7,385,000 during 1997 and approximately 10,400 members' equity units being sold for approximately $20,077,000 during 1998. This offering was completed during early 1999 and resulted in an aggregate of approximately $27,572,000 being received by the Company over the three-year period.

Subscription notes receivable of $2,102,000 at December 31, 1998, which represent promissory notes from members in consideration of their equity contributions, were satisfied in full during 1999.

(5) EQUITY OPTIONS

In March 1996, the board of managers approved an equity-based incentive compensation plan (the Plan). Pursuant to the provisions of the Plan, the board of managers may grant options to directors, employees and outside advisors to purchase members' equity units of the Company. At the date of grant, the board of managers sets the terms of the options including the exercise price and vesting period. The options granted through December 31, 1998 have vesting periods ranging up to five years. Options generally have a contractual life of ten years. A maximum of 7% of total equity, inclusive of the options granted, may be granted as options (approximately 7,800 options as of December 31, 1998).

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

The following summarizes activity for options granted to directors and employees, including those with an exercise price equal to the fair value of the underlying members' equity unit at the date of grant ("at-the-money exercise price") and those with an exercise price less than the fair value of the underlying members' equity unit at the date of grant ("in-the-money exercise price"):

	MEMBERS' EQUITY OPTIONS	OPTIONS EXERCISABLE AT END OF YEAR	WEIGHTED AVERAGE GRANT-DATE FAIR VALUE	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding December 31, 1995.....	--			
Granted:				
At-the-money exercise price.....	1,300		$ 120	$ 250
In-the-money exercise price.....	900		948	250
Exercised.....	--		--	--
Outstanding December 31, 1996.....	2,200	1,500		
Granted:				
At-the-money exercise price.....	110		687	1,118
In-the-money exercise price.....	166		1,113	522
Exercised.....	--		--	--
Outstanding December 31, 1997.....	2,476	1,733		
Granted:				
At-the-money exercise price.....	154		1,158	1,922
In-the-money exercise price.....	536		1,441	1,001
Exercised.....	--		--	--
Outstanding December 31, 1998.....	3,166	2,022		

During 1996, 1997 and 1998, 900, 166 and 536 options, respectively, were granted to employees and directors at exercise prices which were less than the fair value of the underlying members' equity units on the grant date. Compensation expense recognized with respect to such options totaled approximately $347,000, $188,000 and $270,000 for the years ended December 31, 1996, 1997 and 1998, respectively. Deferred compensation at December 31, 1998 of approximately $614,000 will be recognized over the vesting period of the options.

ANTIGENICS L.L.C.
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

The following summarizes activity for options granted to outside advisors:

	MEMBER EQUITY OPTIONS	OPTIONS EXERCISABLE AT END OF YEAR	WEIGHTED AVERAGE GRANT-DATE FAIR VALUE	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding December 31, 1995	--			
Granted	2,574		$ 577	$ 344
Exercised	--		--	--
Outstanding December 31, 1996	2,574	1,449		
Granted	--		--	--
Exercised	--		--	--
Outstanding December 31, 1997	2,574	1,857		
Granted	1,115		1,649	549
Exercised	(224)		1,422	250
Outstanding December 31, 1998	3,465	1,921		

The 1996 options grants include 517 options granted to outside advisors with an exercise price which is determined based on fair value of the underlying units beginning on the second anniversary of the grant date as the options vest. Compensation expense for these options is recognized when the exercise price becomes known and performance has been completed. In 1998, approximately $199,000 was charged to operations for 138 of such options that vested at an exercise price of approximately $1,922 per unit.

The charge to operations related to options granted to outside advisors, including the amount described in the previous paragraph, totaled approximately $696,000, $63,000 and $839,000 for the years ended December 31, 1996, 1997 and 1998, respectively. At December 31, 1998, unrecognized expense for options granted to outside advisors for which performance has not yet been completed is approximately $1,271,000; such amount is subject to change each reporting period based upon changes in the fair value of the Company's members' equity units, estimated volatility and the risk free interest rate until the outside advisor completes his or her performance under the option agreement.

A summary of the Company's options outstanding and exercisable, excluding the 1996 options described above, as of December 31, 1998, follows:

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING	WEIGHTED AVE. REMAINING LIFE (YEARS)	WEIGHTED AVE. EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVE. EXERCISE PRICE
$ 250 - $ 750	5,258	7.73	$ 301	3,972	$ 250
$ 751 - $1,250	840	8.92	1,118	171	1,118
$ 1,251 - $1,750	--	--	--	--	--
$ 1,751 - $2,250	154	9.74	2,077	--	--
	6,252			4,143	

Since the 1995 reorganization described in Note 1, the Predecessor Company has directly or indirectly owned a majority of the Company's members' equity units. During 1996, the Predecessor Company

approved a stock option plan (the Predecessor Plan). In accordance with generally accepted accounting principles, the Predecessor Plan is accounted for as if it had been adopted by Antigenics and treated as a contribution to members' capital. Pursuant to the provisions of the Predecessor Plan, the Predecessor Company may grant options to officers, directors, employees and consultants to purchase common stock of the Predecessor Company. The terms of the options, including exercise price and vesting period, are set at the date of grant. The options have a contractual life of ten years and may not have an exercise price less than the fair value of a share of common stock of the Predecessor Company at date of grant. A maximum of 300 options may be granted under the Predecessor Plan.

During 1996, the Predecessor Company granted approximately 160 options to directors and employees at a weighted average exercise price of $9,006 per share of Predecessor Company common stock and a weighted average grant-date fair value of approximately $4,301 per share. During 1997, the Predecessor Company granted approximately 14 options to a director at a weighted average exercise price of $26,666 per share of Predecessor Company common stock and a weighted average grant-date fair value of $16,407 per share. All the options are immediately vested and exercisable. All of the options remain outstanding and none have been exercised. No compensation expense was recognized by Antigenics during 1996 and 1997 as the exercise price of the options is equal to the fair value of the common stock of the Predecessor Company at the date of the option grant.

During 1996, the Predecessor Company granted approximately 76 options to consultants at a weighted average exercise price of $9,006 per share and a weighted average grant-date fair value of approximately $5,535 per share. All of the consultants' options are immediately vested and exercisable. All of the consultants' options remain outstanding and none have been exercised. During 1996, Antigenics recognized a charge to operations related to options granted to consultants by the Predecessor Company of approximately $421,000.

The Company accounts for options granted to employees and directors under APB Opinion No. 25. Had compensation cost for options granted to employees and directors by Antigenics and the Predecessor Company been determined consistent with SFAS No. 123, the Company's pro forma net loss and pro forma net loss per members' equity unit would have been as follows:

	YEAR ENDED DECEMBER 31, 1996	YEAR ENDED DECEMBER 31, 1997	YEAR ENDED DECEMBER 31, 1998
Net loss:			
As reported	$(3,345,898)	$(3,832,527)	$(8,904,032)
Pro forma	(4,468,170)	(4,293,389)	(9,248,441)
Net loss per members' equity unit:			
As reported	$ (39.42)	$ (42.81)	$ (93.07)
Pro forma	(52.64)	(47.96)	(96.67)

The effects of applying SFAS No. 123, for either recognizing or disclosing compensation cost under such pronouncement, may not be representative of the effects on reported net income or loss for future years.

ANTIGENICS L.L.C.
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

The fair value of each option granted is estimated on the date of grant using an option-pricing model with the following weighted average assumptions:

	1996	1997	1998
Estimated volatility	38%	57%	61%
Expected life in years -- employee and director options	6	6	6
Risk-free interest rate	6.3%	6.3%	5.4%
Dividend yield	0%	0%	0%

The Company estimates volatility for purposes of computing compensation expense on outside advisor options and for disclosure purposes using the volatility of public companies that the Company considers comparable. The expected life used to estimate the fair value of outside advisor options is equal to the contractual life of the option granted.

(6) COMMITMENTS

In November 1994, the Predecessor Company entered into a Patent License Agreement (Mount Sinai Agreement) with the Mount Sinai School of Medicine (Mount Sinai). Through the Mount Sinai Agreement, the Company has obtained the exclusive licenses to the patent rights which resulted from the research and development performed by Dr. Pramod Srivastava, a director of the Company. Under the Mount Sinai Agreement, the Company agreed to pay Mount Sinai a nominal royalty on related product sales (as defined in the Mount Sinai Agreement) through the last expiration date of the patents under the Mount Sinai Agreement (2015). In addition to these royalty payments, Mount Sinai was issued a nominal equity interest.

During 1995, Dr. Srivastava moved his research to Fordham University (Fordham). The Predecessor Company entered into a Patent License Agreement (Fordham Agreement) with Fordham, agreeing to reimburse Fordham for all approved costs incurred in the performance of the research. The Predecessor Company has also agreed to pay Fordham a nominal royalty on related product sales, as defined, through the last expiration date of the patents under the Fordham Agreement. This agreement ended in mid-1997. During 1995, 1996 and 1997, the direct and indirect costs incurred by the Company related to this agreement were approximately $546,000, $926,000 and $902,000, respectively, and are included in research and development expenses in the consolidated statements of operations for such years.

In February 1998, the Company entered into a research agreement with the University of Connecticut Health Center (UConn) and Dr. Srivastava. The agreement has a term of approximately five years and calls for payments to UConn totaling a minimum of $5,000,000, payable quarterly at the rate of $250,000 (contingent on the continuing employment of Dr. Srivastava by UConn). In addition, as research was begun by Dr. Srivastava in 1997, the Company agreed to pay approximately $475,000 for these previous services and expensed such amount as research and development during 1997. Research and development expense in the accompanying 1998 consolidated statement of operations includes approximately $1,000,000 of costs incurred under the UConn agreement. Royalties at varying rates are due to UConn upon commercialization of a product utilizing technology discovered during the research agreement.

In 1996, Antigenics entered into an agreement with Sloan-Kettering Institute for Cancer Research (Sloan Kettering) to conduct clinical studies. The Company is required to pay Sloan Kettering $10,000 for administration and start up costs and $4,000 per patient in the study.

On December 2, 1997, Antigenics entered into two agreements with The University of Texas M.D. Anderson Cancer Center (M.D. Anderson) to conduct clinical studies. The Company is required to pay M.D. Anderson a total of approximately $538,000 for expenses for the clinical study of approximately

90 patients and other related costs payable in four installments. In addition, on March 20, 1998 the Company entered into another clinical study with M.D. Anderson. Under such 1998 agreement, the Company is required to pay M.D. Anderson a total of approximately $118,000 for the study of 30 patients and other related costs payable in four installments.

In 1998, Antigenics entered into an agreement with the Johannes Gutenberg Universitat Mainz Klinikum (Universitat) to conduct additional clinical studies. The Company is required to pay the Universitat approximately $279,000 for expenses for the clinical study of approximately 30 patients. The first installment was paid upon signing the agreement.

In 1998, Antigenics entered into an agreement, as amended, with Sigma-Tau Industrie Farmaceutiche Riunite S.p.A (Sigma-Tau) to conduct clinical studies in Italy, Spain, Portugal and Switzerland. Under the agreement, Sigma-Tau is required to reimburse Antigenics for all costs incurred on behalf of Sigma-Tau in relation to the clinical studies. In return, Antigenics has granted Sigma-Tau the exclusive right to negotiate a marketing and development agreement (the Development Agreement) for the exclusive use of Antigenics' patent rights and their product, and the right of first offer to negotiate licenses for other medical uses of their product, in Italy, Spain, Portugal and Switzerland. The Development Agreement has not been finalized. No costs associated with these clinical studies were incurred during 1998. Amounts received under this agreement are non-refundable even if the research effort is unsuccessful. In addition, Antigenics does not incur any future performance commitments in relation to amounts recorded for Sigma-Tau.

For the years ended December 31, 1996, 1997 and 1998, approximately $10,000, $4,000 and $255,000, respectively, has been expensed in the accompanying consolidated statements of operations related to the above mentioned clinical studies.

(7) RELATED PARTY TRANSACTIONS

The Company rents office space for its New York City headquarters on a month-to-month basis and utilizes certain office services of an entity which is wholly-owned by the Company's chief executive officer and chairman of the board. Rent and office services, which are recorded at the affiliate's cost, are allocated to the Company based on square footage and clerical staff usage, respectively, which management believes is reasonable. Such transactions amounted to approximately $293,000, $557,000 and $211,000 for the years ended December 31, 1996, 1997 and 1998, respectively. From time to time the Company also pays general and administrative costs on behalf of the affiliated entity for which the Company is reimbursed on a current basis. As of December 31, 1998, the affiliated entity was indebted to the Company for $27,605 of costs paid on the affiliated entity's behalf. As of December 31, 1997, the Company was indebted to the affiliated entity for $61,658 for rent and administrative services.

During 1997 and renewed each year thereafter, the Company obtained stand by letters of credit for the benefit of the related party in the amount of $375,000 in connection with the related party's lease of the New York City office space. These letters expire in January 2000.

(8) LEASES

The Company leases administrative (see Note 7), laboratory and office facilities under various month-to-month and long-term lease arrangements. Rent expense, exclusive of the amounts included in Note 7, was approximately $134,000 and $685,000 for the years ended December 31, 1997 and 1998, respectively.

ANTIGENICS L.L.C.
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED)

The future minimum rental payments under the Company's lease of its Woburn, Massachusetts manufacturing and laboratory facility, which expires in 2003, are as follows:

Year ending December 31:	
1999	$ 447,516
2000	447,516
2001	447,516
2002	447,516
2003	279,698
	$2,069,762

(9) DEBT

In November 1998, the Company entered into a $3 million credit facility (increased to $5 million in May 1999) with a financial institution pursuant to which the Company can draw down amounts to make or refinance certain capital expenditures. As the Company utilizes the credit facility, separate term notes will be executed. Each term loan will have a term of forty-two months and the interest rate is fixed at the closing of each term loan. Each loan is collateralized by the equipment, fixtures, and improvements acquired with the proceeds of the loan.

On December 30, 1998, the Company closed its first term loan under the credit facility for approximately $910,000; the loan bears interest on the remaining balance at 13.954%.

The aggregate maturities of the term loan for each of the five years subsequent to December 31, 1998 are as follows: 1999 -- $200,497; 2000 -- $230,335; 2001 -- $264,613; 2002 -- $214,059.

(10) SUBSEQUENT EVENT

On June 21, 1999, Antigenics entered into another agreement with M.D. Anderson to conduct clinical studies. The Company is required to pay M.D. Anderson a total of approximately $277,000 for the clinical study of approximately 40 patients and other related costs payable in installments of over two years.

(11) PRO FORMA INCOME TAX PROVISION (UNAUDITED)

As discussed in Note 2(k), the Company is not subject to income taxes and therefore does not provide for income taxes in its consolidated financial statements. Had the Company been organized as a tax paying entity for the year ended December 31, 1998, there would be no pro forma income tax provision because of a loss before income taxes and the need to recognize a valuation allowance on all gross deferred tax assets. Given the Company's past history of incurring operating losses, management believes that it is more likely than not that any deferred tax assets will not be realized.

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CONSOLIDATED BALANCE SHEET
SEPTEMBER 30, 1999
(UNAUDITED)

	SEPTEMBER 30, 1999
ASSETS	
Cash and cash equivalents	$ 12,611,690
Prepaid expenses	196,424
Other assets	418,065
Total current assets	13,226,179
Plant and equipment, net	7,979,666
Other assets	74,071
Total assets	$ 21,279,916
LIABILITIES AND MEMBERS' EQUITY	
Accounts payable	$ 986,552
Accrued liabilities	394,502
Due to related party	7,994
Current portion, long-term debt	781,061
Total current liabilities	2,170,109
Long-term debt	2,367,578
Members' capital -- no stated value; 104,086 units issued	48,278,060
Deferred compensation	(558,707)
Deficit accumulated during development stage	(30,977,124)
Total members' equity	16,742,229
Commitments and contingencies	
Total liabilities and members' equity	$ 21,279,916

See accompanying notes to unaudited consolidated financial statements.

ANTIGENICS L.L.C.
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CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 1998 AND 1999, AND
FOR THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO SEPTEMBER 30, 1999
(UNAUDITED)

	NINE MONTHS ENDED SEPTEMBER 30,		MARCH 31, 1994 (DATE OF INCEPTION) TO SEPTEMBER 30, 1999
	1998	1999	
Revenue	$ --	$ --	$ --
Expenses:			
Research and development:			
Related party	--	--	(39,630)
Other	(4,196,360)	(7,232,138)	(18,730,028)
	(4,196,360)	(7,232,138)	(18,769,658)
General and administrative:			
Related party	(188,811)	(202,445)	(1,224,000)
Other	(2,053,637)	(3,813,046)	(11,806,809)
	(2,242,448)	(4,015,491)	(13,030,809)
Depreciation and amortization	(272,822)	(726,038)	(1,422,385)
Total operating loss	(6,711,630)	(11,973,667)	(33,222,852)
Other income/(expense):			
Non-operating income	--	--	249,988
Interest expense	--	(151,653)	(151,653)
Interest income	580,352	640,672	2,147,393
Net loss	$(6,131,278)	$(11,484,648)	$(30,977,124)
Net loss per members' equity unit, basic and diluted	$ (68.10)	$ (110.35)	
Weighted average members' units outstanding, basic and diluted	90,032	104,079	

See accompanying notes to unaudited consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF MEMBERS' EQUITY
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 1999 AND
THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO SEPTEMBER 30, 1999
(UNAUDITED)

	UNITS	MEMBERS' CAPITAL	SUBSCRIPTION NOTES RECEIVABLE	DEFERRED COMPENSATION	DEFICIT ACCUMULATED DURING DEVELOPMENT STAGE	TOTAL
Balance at March 31, 1994	--	$ --	$ --	$ --	$ --	$ --
Net loss	--	--	--	--	(183,440)	(183,440)
Issuance of units to founders during 1994, for cash, $6 per unit	65,200	400,010	--	--	--	400,010
Balance at December 31, 1994	65,200	400,010	--	--	(183,440)	216,570
Net loss	--	--	--	--	(3,226,579)	(3,226,579)
Issuance of units in connection with the recapitalization in December 1995, $250 per unit	6,000	1,500,000	(150,000)	--	--	1,350,000
Grant of members' equity units	8,800	2,200,000	--	--	--	2,200,000
Balance at December 31, 1995	80,000	4,100,010	(150,000)	--	(3,410,019)	539,991
Net loss	--	--	--	--	(3,345,898)	(3,345,898)
Payment of subscription notes receivable	--	--	150,000	--	--	150,000
Deferred compensation on options	--	781,200	--	(781,200)	--	--
Grant and recognition of options	--	1,116,815	--	347,200	--	1,464,015
Issuance of units in private placement from March 13, 1996 to December 31, 1996, $1,118 per unit	9,512	10,600,000	(250,000)	--	--	10,350,000
Balance at December 31, 1996	89,512	16,598,025	(250,000)	(434,000)	(6,755,917)	9,158,108
Net loss	--	--	--	--	(3,832,527)	(3,832,527)
Payment of subscription notes receivable	--	--	250,000	--	--	250,000
Deferred compensation on options	--	144,004	--	(144,004)	--	--
Grant and recognition of options	--	62,815	--	188,373	--	251,188
Issuance of units in private placement from September 8, 1997 to December 31, 1997, $1,922 pre unit	3,842	7,385,000	--	--	--	7,385,000
Balance at December 31, 1997	93,354	24,189,844	--	(389,631)	(10,588,444)	13,211,769
Net loss	--	--	--	--	(8,904,032)	(8,904,032)
Deferred compensation on options	--	493,701	--	(493,701)	--	--
Grant and recognition of options	--	838,654	--	269,787	--	1,108,441
Exercise of options	224	250,000	--	--	--	250,000
Issuance of units in private placement from January 1, 1998 to December 31, 1998, $1,922 per unit	10,446	20,076,985	(2,102,000)	--	--	17,974,985
Balance at December 31, 1998	104,024	45,849,184	(2,102,000)	(613,545)	(19,492,476)	23,641,163
Net loss	--	--	--	--	(11,484,648)	(11,484,648)
Payment of subscription notes receivable	--	--	2,102,000	--	--	2,102,000
Deferred compensation on options	--	139,398	--	(139,398)	--	--
Grant and recognition of options	--	2,179,478	--	194,236	--	2,373,714
Issuance of units in private placement in January 1999, $1,922 per unit	57	110,000	--	--	--	110,000
Balance at September 30, 1999	104,081	$48,278,060	$ --	$(558,707)	$(30,977,124)	$ 16,742,229

See accompanying notes to unaudited consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 1998 AND 1999 AND
FOR THE PERIOD FROM MARCH 31, 1994 (DATE OF INCEPTION)
TO SEPTEMBER 30, 1999
(UNAUDITED)

	SEPTEMBER 30,		MARCH 31, 1994 (DATE OF INCEPTION) TO SEPTEMBER 30,
	1998	1999	1999
Cash flows from operating activities:			
Net loss	$(6,131,278)	$(11,484,648)	$(30,977,124)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	272,822	726,038	1,422,384
Members' equity options	725,526	2,373,714	5,197,358
Members' equity grant	--	--	2,200,000
Changes in operating assets and liabilities:			
Other assets	(28,536)	(396,876)	(492,136)
Prepaid assets	21,631	34,208	(196,424)
Organization costs	--	--	(32,934)
Accounts payable	109,740	(1,050,262)	986,552
Accrued liabilities	(497,572)	346,368	394,502
Due to/from related party, net	19,409	35,599	7,994
Net cash used in operating activities	(5,508,258)	(9,415,859)	(21,489,828)
Cash flows from investing activities:			
Purchase of plant and equipment	(1,047,274)	(4,591,636)	(9,401,059)
Proceeds from the sale of plant and equipment	--	--	31,942
Net cash used in investing activities	(1,047,274)	(4,591,636)	(9,369,117)
Cash flows from financing activities:			
Members' equity contributions	6,525,000	2,212,000	40,071,995
Exercise of members' equity options	--	--	250,000
Proceeds from debt	--	2,514,656	3,424,160
Repayments of debt	--	(275,520)	(275,520)
Net cash provided by financing activities	6,525,000	4,451,136	43,470,635
Net (decrease) increase in cash and cash equivalents	(30,532)	(9,556,359)	12,611,690
Cash and cash equivalents at beginning of period	13,086,402	22,168,049	--
Cash and cash equivalents at end of period	$13,055,870	12,611,690	12,611,690
Supplemental cash flow information:			
Interest paid	$ --	$ 151,653	$ 151,653

See accompanying notes to unaudited consolidated financial statements.

ANTIGENICS L.L.C.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 1999

(A) BASIS OF PRESENTATION

The accompanying unaudited consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, considered necessary for a fair presentation have been included. Operating results for the nine-month period ended September 30, 1999 are not necessarily indicative of the results that may be expected for the year ended December 31, 1999. For further information, refer to the Company's consolidated financial statements for the year ended December 31, 1998 and footnotes thereto included elsewhere in this prospectus.

(B) ACCOUNTING FOR ORGANIZATIONAL COSTS

In April 1998, the American Institute of Certified Public Accountants issued Statement of Position (SOP) 98-5, "Reporting on the Costs of Start-Up Activities", which requires that the costs of start-up activities and organization costs be expensed as incurred. The Company adopted the provisions of SOP 98-5 effective January 1, 1999; the adoption had an immaterial effect on the Company's consolidated financial statements.

(C) EQUITY OPTIONS

During the nine months ended September 30, 1998, the Company granted 536 members' equity options to employees and directors with exercise prices ranging from $493 to $1,118 per unit. In addition, the Company granted 971 members' equity options to outside advisors which vest over five years. The outside advisors' options were granted at exercise prices ranging from $493 to $1,118 per unit.

During the nine months ended September 30, 1999, the Company granted 1,620 members' equity options to employees and directors with exercise prices ranging from $1,118 to $2,077 per unit. In addition, the Company granted 1,321 members' equity options to outside advisors of which 482 options vested immediately and the remainder will vest over periods of up to three years as performance is completed. The outside advisors' options were granted at exercise prices ranging from $1,118 to $2,402 per unit.

During the nine months ended September 30, 1998 and 1999, 536 and 140 options were granted to employees and directors at exercise prices which were less than the fair value of the underlying members' equity units on the grant date. Compensation expense recognized for options granted to employees and directors totaled approximately $202,000 and $194,000 for the nine months ended September 30, 1998 and 1999, respectively. Deferred compensation at September 30, 1999 of $559,000 will be recognized over the vesting period of the options.

In 1996, the Company granted certain options to outside advisors with an exercise price which is determined based on fair value of the underlying units at the date the options vest. Compensation expense for these options is recognized when the exercise price becomes known and performance has been completed. For the nine months ended September 30, 1998 and 1999, approximately $199,000 and $189,000 was charged to operations for 138 of such options which vested each period at exercise prices of approximately $1,922 per unit.

For the nine months ended September 30, 1998 and 1999, the charge to operations related to options granted to outside advisors, exclusive of certain 1996 options described in the previous paragraph, totaled approximately $113,000 and $2,263,000, respectively. At September 30, 1999, unrecognized expense for

options granted to outside advisors for which performance has not yet been completed is approximately $1,756,000; such amount is subject to change each reporting period based upon changes in the fair value of the Company's members' equity units, estimated volatility and the risk free interest rate until the outside advisor completes his or her performance under the option agreement.

(D) COMMITMENTS

On June 21, 1999, Antigenics entered into another agreement with M.D. Anderson to conduct clinical studies. The Company is required to pay M.D. Anderson a total of approximately $277,000 for the clinical study of approximately 40 patients and other related costs payable in installments over two years.

Under Antigenics' agreement with Sigma-Tau Farmaceutiche Riunite SpA (Sigma-Tau) to conduct clinical studies in Italy, Sigma-Tau is required to reimburse Antigenics for all costs incurred in relation to the clinical studies. During 1999, Antigenics incurred approximately $266,000 of costs on behalf of Sigma-Tau associated with this agreement. This amount is included in other assets in the accompanying consolidated balance sheet. Amounts received under this agreement are non-refundable, even if the research effort is unsuccessful. In addition, Antigenics does not incur any future performance commitments in relation to the amounts recorded for Sigma-Tau.

(E) RELATED PARTY TRANSACTIONS

In November 1999, the Company signed a long-term lease agreement for its New York City headquarters with an entity wholly-owned by the Company's chief executive officer and chairman of the board. The lease expires in December 2006 and requires annual rental payments of approximately $312,000 equal to the related party's cost.

(F) SUBSEQUENT EVENTS

Private Placement of Members' Equity

In November 1999, the Company raised gross proceeds of approximately $39.2 million from the sale of approximately 16,327 members' equity units through a private equity placement and incurred approximately $293,000 of private placement expenses. Each member participating in this private placement received a warrant to purchase an additional 10% of the units acquired in this offering, rounded to the nearest whole number, at a price of approximately $2,402 per unit. The warrants expire September 30, 2002. Each warrant holder has the option to convert its warrants into warrants to purchase common stock of Antigenics Inc. on a cashless basis upon the completion of an initial public offering (IPO) of the Company's equity, the amount of which is effected by the offering price of stock. Each member participating in this private placement also received registration rights in the event of an IPO.

Initial Public Offering

In November 1999, the Company created a subsidiary, Antigenics Inc. in contemplation of the Company's IPO. The board of directors of Antigenics Inc. authorized the filing of a registration statement with the Securities and Exchange Commission (SEC) to sell shares of its common stock in connection with the proposed IPO. Concurrently with the completion of the IPO, the Company will be converted from a limited liability company to a corporation through a merger with and into Antigenics Inc. All members will exchange their respective member interests for shares of common stock in Antigenics Inc. based on an assumed exchange ratio of 172.0336 shares of common stock for each members' equity unit. If the IPO is not completed, the conversion to the corporation will not take place.

Adoption of Employee Stock Purchase Plan

In connection with the proposed IPO, the board of directors of Antigenics Inc. approved an employee stock purchase plan. Under the plan, employees may purchase shares of common stock at a discount from fair market value. There are 300,000 shares of common stock reserved for issuance under the purchase plan. The purchase plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Internal Revenue Code of 1986, as amended. Rights to purchase common stock under the purchase plan are granted at the discretion of the compensation committee, which determines the frequency and duration of individual offerings under the plan and the dates when stock may be purchased. Eligible employees participate voluntarily and may withdraw from any offering at any time before stock is purchased. Participation terminates automatically upon termination of employment. The purchase price per share of common stock in an offering will not be less than 85% of the lesser of its fair market value at the beginning of the offering period or on the applicable exercise date and may be paid through payroll deductions, periodic lump sum payments or a combination of both. The plan terminates on November 15, 2009.

Adoption of Equity Incentive Plan

In connection with the proposed IPO, the board of directors of Antigenics Inc. approved an employee equity incentive plan. Antigenics' equity incentive plan authorizes the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and nonqualified stock options for the purchase of an aggregate of 4,800,000 shares (subject to adjustment for stock splits and similar capital changes) of common stock to Antigenics' employees and, in the case of non-qualified stock options, to consultants and directors of Antigenics Inc. or any affiliate, as defined in the equity plan. The board of directors has appointed the compensation committee to administer the equity plan. Members' equity options outstanding under the Company's current equity-based incentive compensation plan will be exchanged for stock options under the new equity incentive plan at the closing of the IPO.

Accelerated Vesting of Outside Advisor Options

In December 1999, the board of managers accelerated the remaining vesting requirements on 1,562 members' equity options granted to outside advisors. As a result, the Company recognized a charge to operations in the fourth quarter of 1999 of approximately $2,093,000.

(G) PRO FORMA INCOME TAX PROVISION

The Company is not subject to income taxes and therefore does not provide for income taxes in its consolidated financial statements. Had the Company been organized as a tax paying entity for the nine-month period ended September 30, 1999, there would be no pro forma income tax provision because of a loss before income taxes and the need to recognize a valuation allowance on all gross deferred tax assets. Given the Company's past history of incurring operating losses, management believes that it is more likely than not that any deferred tax assets will not be realized.

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3,000,000 SHARES

ANTIGENICS INC.

COMMON STOCK

[ANTIGENICS INC. LOGO]

PROSPECTUS

Until 2000, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

U.S. BANCORP PIPER JAFFRAY

ROBERTSON STEPHENS

, 2000

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by the Registrant in connection with the sale of common stock being registered. All amounts are estimates except the registration fee and the NASD filing fee.

	AMOUNT TO BE PAID
Registration fee	$ 14,573
NASD filing fee	6,200
Nasdaq National Market listing fee	95,000
Printing and engraving	150,000
Legal fees and expenses	300,000
Accounting fees and expenses	250,000
Transfer Agent fees	3,500
Miscellaneous	30,727
Total	$850,000

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify any person who was or is a party or is threatened to be made a 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 the fact that the person is or was a director, officer, employee or agent of the corporation or is or was serving at the corporation's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The power to indemnify applies to actions brought by or in the right of the corporation as well, but only to the extent of expenses, including attorneys' fees but excluding judgments, fines and amounts paid in settlement, actually and reasonably incurred by the person in connection with the defense or settlement of the action or suit. And with the further limitation that in these actions no indemnification shall be made in the event of any adjudication of negligence or misconduct in the performance of his duties to the corporation, unless a court believes that in light of all the circumstances indemnification should apply.

Article V of Antigenics' By-laws provides that Antigenics shall, to the extent legally permitted, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of the fact that he is or was, or has agreed to become, a director or officer of Antigenics, or is or was serving, or has agreed to serve, at the request of Antigenics, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprises. The indemnification provided for in Article V is expressly not exclusive of any other rights to which those seeking indemnification may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and shall inure to the benefit of the heirs, executors and administrators of such persons.

Section 145(g) of the Delaware General Corporation Law and Article V of By-laws of Antigenics provide that the company shall have the power to purchase and maintain insurance on behalf of its officers, directors, employees and agents, against any liability asserted against and incurred by such persons in any such capacity.

Antigenics has entered into indemnification agreements with each of its directors and executive officers and has obtained insurance covering its directors and officers against losses and insuring Antigenics against certain of its obligations to indemnify its directors and officers.

Section 102(b)(7) of the General Corporation Law of the State of Delaware provides that a corporation may eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provisions shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision becomes effective.

Pursuant to the Delaware General Corporation Law, Section 7 of Article FIFTH of the Certificate of Incorporation of Antigenics eliminates a director's personal liability for monetary damages to Antigenics and its shareholders for breach of fiduciary duty as a director, except in circumstances involving a breach of the director's duty of loyalty to Antigenics or its shareholders, acts or omissions not in good faith, intentional misconduct, knowing violations of the law, self-dealing or the unlawful payment of dividends or repurchase of stock.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

We have sold and issued the following securities in the previous three years.

In 1996, we completed a private placement offering of equity interests in Antigenics L.L.C. equal to 10.6% of the total post-offering equity interests in the L.L.C. for an aggregate sale price of $10,600,000.

In January 1999, we completed a private placement offering of equity interests in Antigenics L.L.C. equal to 13.8% of the total post-offering equity interests in the L.L.C. for an aggregate sales price of $27,572,000.

In November 1999, we completed a private placement offering of (i) equity interests in Antigenics L.L.C. equal to 13.56% of the total post-offering equity interests in the L.L.C. and (ii) warrants to purchase equity interests in the L.L.C. equal to 1.36% of the total post-offering equity interests in the L.L.C. The equity interests and warrants were sold for an aggregate of approximately $39,200,000.

All of the above sales of L.L.C. equity interests were made in reliance on the exemption from registration under Section 4(2) of the Securities Act of 1933, as amended, as transactions not involving a public offering.

The registrant has from time to time granted options to purchase equity interests in Antigenics L.L.C. As of December 31, 1999, following the company's reorganization into a corporation, the registrant will have options with a weighted average exercise price of $5.83 per share that are, in the aggregate, exercisable for 7.6% of the total common stock of the registrant, assuming all of these options are exercised. The options were issued in reliance upon exemptions from registration pursuant to either Section 4(2) of the Securities Act of 1933, as amended, or Rule 701 promulgated under the Securities Act of 1933, as amended.

Concurrently with the closing of this offering, the registrant will merge with Antigenics, L.L.C. Members of the L.L.C. will receive shares of the registrant's common stock in exchange for their equity interests at a rate of 172.0336 shares per percentage equity interest, for an aggregate of approximately 20,714,286 shares of common stock. The issuance of the registrant's common stock upon contribution of the equity interests in the L.L.C. will be made in reliance on the exemption from registration under Section 4(2) of the Securities Act of 1933 and Rule 506 thereunder as a transaction not involving a public offering.

The registrant retained two placement agents in connection with the November 1999 private placement who received aggregate compensation of $217,769 in cash and $76,298 in members' equity for their

services. There were no underwriters employed in connection with any of the other transactions set forth in Item 15.

For additional information concerning these equity investment transactions, reference is made to the information contained under the caption "Certain Relationships and Related Transactions" in the form of prospectus included herein.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Exhibits

See the Exhibit Index, which is incorporated herein by reference.

(b) Financial Statement Schedules

None.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this Registration Statement 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 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 whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, 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 registrant pursuant to 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Woburn, Commonwealth of Massachusetts, as of January 10, 2000.

ANTIGENICS INC.

By: /s/ GARO ARMEN

Garo H. Armen
Chief Executive Officer and
Chairman of
the Board of Directors

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and as of the dates indicated.

SIGNATURE	TITLE	DATE
*	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer and Principal Financial and Accounting Officer)	January 10, 2000
Garo Armen, Ph.D.		
*	Director	January 10, 2000
Pramod Srivastava, Ph.D.		
*	Director	January 10, 2000
Noubar Afeyan, Ph.D.		
*	Director	January 10, 2000
Edward Brodsky		
*	Director	January 10, 2000
Gamil de Chadarevian		
*	Director	January 10, 2000
Tom Dechaene		
*	Director	January 10, 2000
Donald Panoz		
*	Director	January 10, 2000
Martin Taylor		

*By: /s/ GARO ARMEN

As Attorney-in-Fact

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1	Form of Underwriting Agreement. Filed herewith.
3.1	Certificate of Incorporation of Antigenics Inc. Previously filed.
3.2	By-laws of Antigenics Inc. Previously filed.
4.1	Form of Common Stock Certificate. Previously filed.
4.2	Form of Warrant to purchase Common Stock, together with a list of holders. To be filed by amendment.
5.1	Opinion of Palmer & Dodge LLP. Filed herewith.
10.1*	1999 Equity Incentive Plan. Filed herewith.
10.2*	1999 Employee Stock Purchase Plan. Previously filed.
10.3	Founding Scientist's Agreement between Antigenics and Pramod K. Srivastava dated March 28, 1995. Previously filed.
10.4	Form of Indemnification Agreement between Antigenics and its directors and executive officers. These agreements are materially different only as to the signatories and the dates of execution. Previously filed.
10.5	Lease Agreement between Antigenics and Cummings Property Management, Inc. dated May 28, 1998, as amended on December 10, 1998. Previously filed.
10.6	License Agreement between GHA Management Corporation and Antigenics dated November 12, 1999. Previously filed.
10.7	Master Loan and Security Agreement between Antigenics and Finova Technology Finance, Inc. dated November 19, 1998. (Schedules to be filed by amendment.)
10.8	Patent License Agreement between Antigenics and Mount Sinai School of Medicine dated November 1, 1994, as amended on June 5, 1995. Previously filed.(2)
10.9	Sponsored Research and Technology License Agreement between Antigenics and Fordham University dated March 28, 1995, as amended on March 22, 1996. Previously filed.(2)
10.10	Research Agreement between Antigenics and The University of Connecticut Health Center dated February 18, 1998. Previously filed.(2)
10.11	License Agreement between Antigenics and Duke University dated March 4, 1999. Previously filed.(2)
10.12	License Agreement between Antigenics and University of Miami dated April 12, 1999. Previously filed.(2)
10.13	Letter Agreement between Antigenics and Sigma-Tau Industrie Farmaceutiche Riunite SpA dated June 3, 1998. Previously filed.(2)
10.14	Letter Agreement between Antigenics and Medison Pharma Ltd. dated November 15, 1999. Previously filed.(2)
10.15	Amendment to Letter Agreement between Antigenics and Sigma-Tau Industrie Farmaceutiche Riunite SpA dated October 20, 1999. Filed herewith.
10.16*	Employment Agreement between Antigenics and Elma Hawkins, Ph.D. dated June 1, 1998. Previously filed.
10.17*	Antigenics 401(k) Plan. Filed herewith.
23.1	Consent of KPMG LLP. Filed herewith.
23.2	Consent of Palmer & Dodge LLP. Included in the opinion filed as Exhibit 5.1.
24.1	Power of Attorney. Included on the signature page of the initial filing of this Registration Statement.
27.1	Financial Data Schedule (available in EDGAR format only). Filed herewith.

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* Indicates a management contract or compensatory plan.

(1)As proposed to be filed with the Secretary of State of the State of Delaware concurrently with the closing of the offering.

(2)This Exhibit has been filed separately with the Commission pursuant to an application for confidential treatment. The confidential portions of this Exhibit have been omitted and are marked by an asterisk.

3,000,000 SHARES(1)

ANTIGENICS INC.

COMMON STOCK

PURCHASE AGREEMENT

_____, 2000

U.S. BANCORP PIPER JAFFRAY INC.
FLEETBOSTON ROBERTSON STEPHENS INC.
As Representatives of the several
Underwriters named in Schedule I hereto
c/o U.S. Bancorp Piper Jaffray Inc.
Piper Jaffray Tower
222 South Ninth Street
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

Antigenics Inc., a Delaware corporation (the "Company"), proposes to sell to the several Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of 3,000,000 shares (the "Firm Shares") of Common Stock, $.01 par value per share (the "Common Stock"), of the Company. The Firm Shares consist of 3,000,000 authorized but unissued shares of Common Stock to be issued and sold by the Company. The Company has also granted to the several Underwriters an option to purchase up to 450,000 additional shares of Common Stock, on the terms and for the purposes set forth in Section 3 hereof (the "Option Shares"). The Firm Shares and any Option Shares purchased pursuant to this Purchase Agreement are herein collectively called the "Securities."

Concurrently with the issuance and sale of the Securities on the First Closing Date (as defined below), the Company and Antigenics L.L.C. will consummate a merger whereby Antigenics L.L.C. will merge with and into the Company (the "Merger").

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(1) Plus an option to purchase up to 450,000 additional shares to cover over-allotments.

The Company and Antigenics L.L.C. hereby confirm their agreement with respect to the sale of the Securities to the several Underwriters, for whom you are acting as Representatives (the "Representatives").

1. Registration Statement and Prospectus. A registration statement on Form S-1 (File No. 333-91747) with respect to the Securities, including a preliminary form of prospectus, has been prepared by the Company in conformity in all material respects with the requirements of the Securities Act of 1933, as amended (the "Act"), and the rules and regulations ("Rules and Regulations") of the Securities and Exchange Commission (the "Commission") thereunder and has been filed with the Commission; one or more amendments to such registration statement have also been so prepared and have been, or will be, so filed; and, if the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering registered under the Act, the Company will prepare and file with the Commission a registration statement with respect to such increase pursuant to Rule 462(b). Copies of such registration statement(s) and amendments and each related preliminary prospectus have been, or in the case of a registration statement pursuant to Rule 462(b) will be, delivered to you.

If the Company has elected not to rely upon Rule 430A of the Rules and Regulations, the Company has prepared and will promptly file an amendment to the registration statement and an amended prospectus (including a term sheet meeting the requirements of Rule 434 of the Rules and Regulations). If the Company has elected to rely upon Rule 430A of the Rules and Regulations, it will prepare and file a prospectus (or a term sheet meeting the requirements of Rule 434) pursuant to Rule 424(b) that discloses the information previously omitted from the prospectus in reliance upon Rule 430A. Such registration statement as amended at the time it is or was declared effective by the Commission, and, in the event of any amendment thereto after the effective date and prior to the First Closing Date (as hereinafter defined), such registration statement as so amended (but only from and after the effectiveness of such amendment), including a registration statement (if any) filed pursuant to Rule 462(b) of the Rules and Regulations increasing the size of the offering registered under the Act and information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rules 430A(b) and 434(d) of the Rules and Regulations, is hereinafter called the "Registration Statement." The prospectus included in the Registration Statement at the time it is or was declared effective by the Commission is hereinafter called the "Prospectus," except that if any prospectus (including any term sheet meeting the requirements of Rule 434 of the Rules and Regulations provided by the Company for use with a prospectus subject to completion within the meaning of Rule 434 in order to meet the requirements of Section 10(a) of the Rules and Regulations) filed by the Company with the Commission pursuant to Rule 424(b) (and Rule 434, if applicable) of the Rules and Regulations or any other such prospectus provided to the Underwriters by the Company for use in connection with the offering of the Securities (whether or not required to be filed by the Company with the Commission pursuant to Rule 424(b) of the Rules and Regulations) differs from the prospectus on file at the time the Registration Statement is or was declared effective by the Commission, the term "Prospectus" shall refer to such differing prospectus (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) from and after the time such prospectus is filed with the Commission or transmitted to the Commission for

filing pursuant to such Rule 424(b) (and Rule 434, if applicable) or from and after the time it is first provided to the Underwriters by the Company for such use. The term "Preliminary Prospectus" as used herein means the preliminary prospectus included in Amendment No. 1 to the Registration Statement, as such prospectus shall have been amended or supplemented prior to the time the Registration Statement becomes or became effective under the Act and any prospectus subject to completion as described in Rule 430A or 434 of the Rules and Regulations.

As part of the offering contemplated by this Agreement, U.S. Bancorp Piper Jaffray Inc. ("Piper Jaffray") has agreed to reserve out of the Securities set forth opposite its name on Schedule I to this Agreement, up to 150,000 shares, for sale to the Company's employees, officers and directors and other parties associated with the Company (collectively, "Participants"), as set forth in the Prospectus under the heading "Underwriting" (the "Directed Share Program"). The Securities to be sold by Piper Jaffray pursuant to the Directed Share Program (the "Directed Shares") will be sold by Piper Jaffray pursuant to this Agreement at the public offering price. Any Directed Shares not orally confirmed for purchase by any Participants by the end of the business day on which this Agreement is executed will be offered to the public by Piper Jaffray as set forth in the Prospectus.

2. Representations and Warranties of the Company and Antigenics L.L.C.

(a) Each of the Company and Antigenics L.L.C. represents and warrants to, and agrees with, the several Underwriters as follows:

(i) No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission and each Preliminary Prospectus, at the time of filing thereof, did not contain an untrue statement of a material fact or omit to state a 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; except that the foregoing shall not apply to statements in or omissions from any Preliminary Prospectus in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof.

(ii) As of the time the Registration Statement (or any post-effective amendment thereto, including a registration statement (if any) filed pursuant to Rule 462(b) of the Rules and Regulations increasing the size of the offering registered under the Act) is or was declared effective by the Commission, upon the filing or first delivery to the Underwriters of the Prospectus (or any supplement to the Prospectus (including any term sheet meeting the requirements of Rule 434 of the Rules and Regulations)) and at the First Closing Date and Second Closing Date (as hereinafter defined), (A) the Registration Statement and Prospectus (in each case, as so amended and/or supplemented) conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations, (B) the Registration Statement (as so amended) did not or will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and (C) the Prospectus (as so supplemented) did not

or will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they are or were made, not misleading; except that the foregoing shall not apply to statements in or omissions from any such document in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof. If the Registration Statement has been declared effective by the Commission, no stop order suspending the effectiveness of the Registration Statement has been issued, and no proceeding for that purpose has been initiated or, to the Company's knowledge, threatened by the Commission.

(iii) The financial statements of Antigenics L.L.C., together with the notes thereto, set forth in the Registration Statement and Prospectus comply in all material respects with the requirements of the Act and fairly present the financial condition of Antigenics L.L.C. as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with generally accepted accounting principles consistently applied throughout the periods involved (except as otherwise stated therein); and the supporting schedules included in the Registration Statement present fairly the information required to be stated therein. No other financial statements or schedules are required to be included in the Registration Statement or Prospectus. KPMG LLP, which has expressed its opinion with respect to the financial statements and schedules filed as a part of the Registration Statement and included in the Registration Statement and Prospectus, are independent public accountants as required by the Act and the Rules and Regulations.

(iv) Each of the Company, Antigenics L.L.C. and its subsidiary has been duly organized and is validly existing as a corporation or limited liability company, as the case may be, in good standing under the laws of its jurisdiction of incorporation or organization. Each of the Company, Antigenics L.L.C. and its subsidiary has full power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement and Prospectus, and is duly qualified to do business as a foreign entity in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify would have a material adverse effect upon its business, condition (financial or otherwise) or properties, taken as a whole. The Company has no subsidiaries.

(v) Except as contemplated in the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, none of the Company nor Antigenics L.L.C. or its subsidiary has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its equity capital or capital stock; and there has not been any change in the equity capital or capital stock (other than a change in the number of outstanding shares of Common Stock or members' equity units of Antigenics L.L.C. due to the issuance of shares or units upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt,

or any issuance of options, warrants, convertible securities or other rights to purchase the equity capital or capital stock, of the Company, Antigenics L.L.C. or its subsidiary, or any material adverse change, or any development involving a prospective material adverse change, in the general affairs, condition (financial or otherwise), business, key personnel, property, prospects, net worth or results of operations of the Company or Antigenics L.L.C. and its subsidiary, taken as a whole.

(vi) Except as set forth in the Prospectus, there is not pending or, to the knowledge of the Company or Antigenics L.L.C., threatened or contemplated, any action, suit or proceeding to which the Company, Antigenics L.L.C. or its subsidiary is a party before or by any court or governmental agency, authority or body, or any arbitrator, which might result in any material adverse change in the condition (financial or otherwise), business, prospects, net worth or results of operations of the Company and its subsidiaries, taken as a whole.

(vii) There are no contracts or documents of the Company, Antigenics L.L.C. or its subsidiary that are required to be filed as exhibits to the Registration Statement by the Act or by the Rules and Regulations that have not been so filed.

(viii) This Agreement has been duly authorized, executed and delivered by each of the Company and Antigenics L.L.C., and constitutes a valid, legal and binding obligation of the Company and Antigenics L.L.C., enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity. The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, any statute, any agreement or instrument to which the Company or Antigenics L.L.C. is a party or by which either of them is bound or to which any of their respective property is subject, the Company's or Antigenics L.L.C.'s charter or by-laws or similar organizational documents, or any order, rule, regulation or decree of any court or governmental agency or body having jurisdiction over the Company or Antigenics L.L.C. or any of their respective properties; no consent, approval, authorization or order of, or filing with, any court or governmental agency or body is required for the execution, delivery and performance of this Agreement or for the consummation of the transactions contemplated hereby, including the Merger and the issuance or sale of the Securities by the Company, except such as may be required under the Act or state securities or blue sky laws and, with respect to the Merger, the filings contemplated by the Merger Agreement, which filings will be made on or prior to the First Closing Date; and each of the Company and Antigenics L.L.C. has full power and authority to enter into this Agreement and the Company has full power and authority to authorize, issue and sell the Securities as contemplated by this Agreement.

(ix) All of the issued and outstanding shares of capital stock of the Company, including the outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities, and the holders thereof are not subject to personal liability by reason of being such holders; the Securities which may be sold hereunder by the Company have been duly authorized and, when issued, delivered and paid for in accordance with the terms hereof, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders; and the capital stock of the Company, including the Common Stock, conforms to the description thereof in the Registration Statement and Prospectus. Except as otherwise stated in the Registration Statement and Prospectus, there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by-laws or any agreement or other instrument to which the Company is a party or by which the Company is bound. Except as described in the Registration Statement and the Prospectus, neither the filing of the Registration Statement nor the offering or sale of the Securities as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company. All of the issued and outstanding shares of capital stock of Antigenics L.L.C.'s subsidiary have been duly and validly authorized and issued and are fully paid and nonassessable, and, except as otherwise described in the Registration Statement and Prospectus and except for any directors' qualifying shares, Antigenics L.L.C. owns of record and beneficially, free and clear of any security interests, claims, liens, proxies, equities or other encumbrances, all of the issued and outstanding shares of such stock. Except as described in the Registration Statement and the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company, Antigenics L.L.C. or its subsidiary any shares of the capital stock or equity interests in the Company, Antigenics L.L.C. or its subsidiary. The Company has an authorized and outstanding capitalization as set forth in the Registration Statement and the Prospectus.

(x) As of the date hereof, in the case of Antigenics L.L.C. and its subsidiary, and as of the date hereof and after giving effect to the Merger, in the case of the Company, (a) the Company, Antigenics L.L.C. and its subsidiary hold, and are operating in compliance in all material respects with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders of any governmental or self-regulatory body required for the conduct of their business and all such franchises, grants, authorizations, licenses, permits, easements, consents, certifications and orders are valid and in full force and effect and (b) the Company, Antigenics L.L.C. and its subsidiary are in compliance in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees.

(xi) As of the date hereof, in the case of Antigenics L.L.C. and its subsidiary, and as of the date hereof and after giving effect to the Merger, in the case of the Company, the

Company and its subsidiaries have good and marketable title to all property described in the Registration Statement and Prospectus as being owned by them, in each case free and clear of all liens, claims, security interests or other encumbrances except such as are described in the Registration Statement and the Prospectus; the property held under lease by the Company, Antigenics L.L.C. and its subsidiary is held by them under valid, subsisting and enforceable leases with only such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company, Antigenics L.L.C. or its subsidiary.

(xii) Except as described in the Registration Statement and Prospectus, as of the date hereof, in the case of Antigenics L.L.C. and its subsidiary, and as of the date hereof and after giving effect to the Merger, in the case of the Company, the Company, Antigenics L.L.C. and its subsidiary own or possess all patents, patent applications, trademarks, service marks, tradenames, trademark registrations, service mark registrations, copyrights, licenses, inventions, trade secrets and rights necessary for the conduct of the business of the Company, Antigenics L.L.C. and its subsidiary as currently carried on by Antigenics L.L.C. and as described in the Registration Statement and Prospectus; except as stated in the Registration Statement and Prospectus, no name which the Company, Antigenics L.L.C. or its subsidiary uses and, to the best knowledge of the Company and Antigencis L.L.C., no other aspect of the business of the Company, Antigenics L.L.C. or its subsidiary will involve or give rise to any infringement of, or license or similar fees for, any patents, patent applications, trademarks, service marks, tradenames, trademark registrations, service mark registrations, copyrights, licenses, inventions, trade secrets or other similar rights of others material to the business or prospects of the Company or Antigenics L.L.C., and none of the Company, Antigenics L.L.C. or its subsidiary has received any notice alleging any such infringement or fee.

(xiii) None of the Company, Antigenics L.L.C. or its subsidiary is in violation of its respective charter or by-laws or similar organizational documents or in breach of or otherwise in default in the performance of any material obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which any of them may be bound, or to which any of the material property or assets of the Company, Antigenics L.L.C. or its subsidiary is subject.

(xiv) The Company, Antigenics L.L.C. and its subsidiary have filed all federal, state, local and foreign income and franchise tax returns required to be filed prior to the date hereof and are not in default in the payment of any taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company, Antigenics L.L.C. or its subsidiary is contesting in good faith.

(xv) Neither the Company nor Antigenics L.L.C. has distributed nor will they distribute any prospectus or other offering material in connection with the offering and sale

of the Securities other than any Preliminary Prospectus or the Prospectus or other materials permitted by the Act to be distributed by the Company or Antigenics L.L.C.

(xvi) On the date the Registration Statement became or becomes effective, the Company's Registration Statement on Form 8-A or other applicable form under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), became or will become effective.

(xvii) Other than Adjucine Therapeutics, Inc., a wholly owned subsidiary of Antigenics L.L.C., neither Antigenics L.L.C. nor the Company owns any capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity.

(xviii) Each of the Company and Antigenics L.L.C. maintains a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(xix) Other than as contemplated by this Agreement, neither the Company nor Antigenics L.L.C. has incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(xx) Neither Antigenics L.L.C. nor the Company is and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Registration Statement and the Prospectus, the Company will not be, an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(xxi) No material labor dispute with the employees of the Company, Antigenics L.L.C. or its subsidiary exists, except as described in the Registration Statement and the Prospectus, or, to the knowledge of the Company or Antigenics L.L.C., is imminent; and neither the Company nor Antigenics L.L.C. is aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that could have a material adverse effect on the Company or on Antigenics L.L.C. and its subsidiary, taken as a whole.

(xxii) The Company, Antigenics L.L.C. and its subsidiary are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; none of the

Company, Antigenics L.L.C. or its subsidiary has been refused any insurance coverage sought or applied for; and none of the Company, Antigenics L.L.C. or its subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a material adverse effect on the Company or on Antigenics L.L.C. and its subsidiary, taken as a whole, except as described in the Prospectus.

(xxiii) Neither the Company nor Antigenics L.L.C. has offered, or caused the Underwriters to offer, Securities to any person pursuant to the Directed Share Program with the specific intent to unlawfully influence (A) a customer or supplier of the Company or Antigenics L.L.C. to alter the customer's or supplier's level or type of business with the Company or Antigenics L.L.C., or (B) a trade journalist or publication to write or publish favorable information about the Company or Antigenics L.L.C. or their products.

(xxiv) (i) The Registration Statement, the Prospectus and any Preliminary Prospectus comply in all material respects, and any further amendments or supplements thereto will comply in all material respects, with any applicable laws or regulations of foreign jurisdictions in which the Prospectus or any Preliminary Prospectus, as amended or supplemented, if applicable, are distributed in connection with the Directed Share Program, and (ii) no authorization, approval, consent, license, order, registration or qualification of or with any government, governmental instrumentality or court, other than such as have been obtained, is necessary under the securities laws and regulations of foreign jurisdictions in which the Directed Shares are offered outside the United States.

(xxv) As of the date hereof, in the case of Antigenics L.L.C. and its subsidiary, and as of the date hereof and after giving effect to the Merger, in the case of the Company, the Company, Antigenics L.L.C. and its subsidiary (A) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (B) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (C) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, have a material adverse effect on the Company or on Antigenics L.L.C. and its subsidiary, taken as a whole.

(xxvi) There has been no storage, disposal, generation, manufacture, refinement, transportation, handling or treatment of medical wastes, toxic wastes, hazardous wastes or hazardous substances by the Company, Antigenics L.L.C. or its subsidiary (or, to the knowledge of the Company and Antigenics L.L.C., any of their predecessors in interest) at,

upon or from any of the property now or previously owned or leased by the Company, Antigenics L.L.C. or its subsidiary in violation of any applicable law, ordinance, rule, regulation, order, judgment, decree or permit or which would require remedial action under any applicable law, ordinance, rule, regulation, order, judgment, decree or permit, except for any violation or remedial action which would not have, or could not be reasonably likely to have, singularly or in the aggregate with all such violations and remedial actions a material adverse effect on the Company or on Antigenics L.L.C. and its subsidiary, taken as a whole; there has been no material spill, discharge, leak, emission, injection, escape, dumping or release of any kind onto such property or of any medical wastes, toxic wastes, hazardous wastes or hazardous substances due to or caused by the Company, Antigenics L.L.C. or its subsidiary or with respect to which the Company, Antigenics L.L.C. or its subsidiary had knowledge, except for any such spill, discharge, leak, emission, injection, escapes, dumpings or releases which would not have or would not be reasonably likely to have, singularly or in the aggregate with all such spills, discharges, leaks, emissions, injections, escapes, dumpings or releases, a material adverse effect on the Company or on Antigenics L.L.C. and its subsidiary, taken as a whole; and the terms "hazardous substances," "toxic wastes," "hazardous wastes" and "medical wastes" shall have the meanings specified in any applicable local, state, federal and foreign laws or regulations with respect to environmental protection.

(xxvii) The Merger Agreement dated as of _____, 2000, between the Company and Antigenics L.L.C. has been duly authorized, executed and delivered by each of the Company and Antigenics L.L.C. and constitutes a legal, valid and binding obligation of each of the Company and Antigenics L.L.C. enforceable in accordance with its terms (except as such enforceability may be limited by bankruptcy, insolvency or similar laws affecting the rights of creditors generally and subject to general principles of equity). All conditions to the consummation of the Merger other than the issuance and sale of the Securities on the First Closing Date have been either satisfied or validly waived on or prior to the date hereof.

(b) Any certificate signed by any officer of the Company or Antigenics L.L.C. and delivered to you or to counsel for the Underwriters shall be deemed a representation and warranty by the Company or Antigenics L.L.C. to each Underwriter as to the matters covered thereby.

3. Purchase, Sale and Delivery of Securities.

(a) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell 3,000,000 Firm Shares to the several Underwriters, and each Underwriter agrees, severally and not jointly, to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto. The purchase price for each Firm Share shall be $ per share. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraph (c) of this Section 3 and in Section 8 hereof, the agreement of each Underwriter is to purchase only the respective number of Firm Shares specified in Schedule I.

The Firm Shares will be delivered by the Company to you for the accounts of the several Underwriters against payment of the purchase price therefor by same day funds payable to the order of the Company at the offices of U.S. Bancorp Piper Jaffray, Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, Minnesota, or such other location as may be mutually acceptable, at 9:00 a.m. Central time on the third (or if the Securities are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time, the fourth) full business day following the date hereof, or at such other time and date as you and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, such time and date of delivery being herein referred to as the "First Closing Date." If the Representatives so elect, delivery of the Firm Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives. Certificates representing the Firm Shares, in definitive form and in such denominations and registered in such names as you may request upon at least two business days' prior notice to the Company, will be made available for checking and packaging not later than 10:30 a.m., Central time, on the business day next preceding the First Closing Date at the offices of U.S. Bancorp Piper Jaffray, Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, Minnesota, or such other location as may be mutually acceptable.

(b) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company hereby grants to the several Underwriters an option to purchase all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any over-allotments made by the Underwriters in the sale and distribution of the Firm Shares. The option granted hereunder may be exercised at any time (but not more than once) within 30 days after the effective date of this Agreement upon notice (confirmed in writing) by the Representatives to the Company setting forth the aggregate number of Option Shares as to which the several Underwriters are exercising the option, the names and denominations in which the certificates for the Option Shares are to be registered and the date and time, as determined by you, when the Option Shares are to be delivered, such time and date being herein referred to as the "Second Closing" and "Second Closing Date," respectively; provided, however, that the Second Closing Date shall not be earlier than the First Closing Date nor earlier than the second business day after the date on which the option shall have been exercised. The number of Option Shares to be purchased by each Underwriter shall be the same percentage of the total number of Option Shares to be purchased by the several Underwriters as the number of Firm Shares to be purchased by such Underwriter is of the total number of Firm Shares to be purchased by the several Underwriters, as adjusted by the Representatives in such manner as the Representatives deem advisable to avoid fractional shares. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

The Option Shares will be delivered by the Company to you for the accounts of the several Underwriters against payment of the purchase price therefor by same day funds payable to the order of the Company at the offices of U.S. Bancorp Piper Jaffray, Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, Minnesota, or such other location as may be mutually acceptable at 9:00 a.m., Central time, on the Second Closing Date. If the Representatives so elect, delivery of the Option

Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives. Certificates representing the Option Shares in definitive form and in such denominations and registered in such names as you have set forth in your notice of option exercise, will be made available for checking and packaging not later than 10:30 a.m., Central time, on the business day next preceding the Second Closing Date at the office of U.S. Bancorp Piper Jaffray, Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, Minnesota, or such other location as may be mutually acceptable.

(c) It is understood that you, individually and not as Representatives of the several Underwriters, may (but shall not be obligated to) make payment to the Company on behalf of any Underwriter for the Securities to be purchased by such Underwriter. Any such payment by you shall not relieve any such Underwriter of any of its obligations hereunder. Nothing herein contained shall constitute any of the Underwriters an unincorporated association or partner with the Company.

4. Covenants.

(a) The Company and Antigenics L.L.C. covenant and agree with the several Underwriters as follows:

(i) If the Registration Statement has not already been declared effective by the Commission, the Company will use its best efforts to cause the Registration Statement and any post-effective amendments thereto to become effective as promptly as possible; the Company will notify you promptly of the time when the Registration Statement or any post-effective amendment to the Registration Statement has become effective or any supplement to the Prospectus (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or additional information; if the Company has elected to rely on Rule 430A of the Rules and Regulations, the Company will prepare and file a Prospectus (or term sheet within the meaning of Rule 434 of the Rules and Regulations) containing the information omitted therefrom pursuant to Rule 430A of the Rules and Regulations with the Commission within the time period required by, and otherwise in accordance with the provisions of, Rules 424(b), 430A and 434, if applicable, of the Rules and Regulations; if the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering registered under the Act, the Company will prepare and file a registration statement with respect to such increase with the Commission within the time period required by, and otherwise in accordance with the provisions of, Rule 462(b); the Company will prepare and file with the Commission, promptly upon your request, any amendments or supplements to the Registration Statement or Prospectus (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) that, in your reasonable opinion, may be necessary or advisable in connection with the distribution of the Securities by the Underwriters; and the Company will not file any amendment or supplement to the Registration Statement or

Prospectus (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) to which you shall reasonably object by notice to the Company after having been furnished a copy a reasonable time prior to the filing.

(ii) The Company will advise you, promptly after it shall receive notice or obtain knowledge thereof, of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and the Company will promptly use its best efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(iii) Within the time during which a prospectus (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) relating to the Securities is required to be delivered under the Act, the Company will comply as far as it is able with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof and the Prospectus. If during such period any event occurs as a result of which the Prospectus would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend the Registration Statement or supplement the Prospectus to comply with the Act, the Company will promptly notify you and will amend the Registration Statement or supplement the Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance.

(iv) The Company will use its best efforts to qualify the Securities for sale under the securities laws of such jurisdictions as you reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or to execute a general consent to service of process in any state.

(v) The Company will furnish to the Underwriters copies of the Registration Statement (two of which will be signed and will include all exhibits), each Preliminary Prospectus, the Prospectus, and all amendments and supplements (including any term sheet within the meaning of Rule 434 of the Rules and Regulations) to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.

(vi) During a period of five years commencing with the date hereof, the Company will furnish to the Representatives, and to each Underwriter who may so request in writing, copies of all periodic and special reports furnished to the stockholders of the Company and

all information, documents and reports filed with the Commission, the National Association of Securities Dealers, Inc., NASDAQ or any securities exchange.

(vii) The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period beginning after the effective date of the Registration Statement that shall satisfy the provisions of Section 11(a) of the Act and Rule 158 of the Rules and Regulations.

(viii) The Company and Antigenics L.L.C., whether or not the transactions contemplated hereunder are consummated or this Agreement is prevented from becoming effective under the provisions of Section 9(a) hereof or is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel but, except as otherwise provided below, not including fees of the Underwriters' counsel) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Prospectus, and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, (C) all filing fees and fees and disbursements of the Underwriters' counsel incurred in connection with the qualification of the Securities for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which you shall designate in accordance with Section 4(a)(iv) hereof, (D) the fees and expenses of any transfer agent or registrar, (E) the filing fees and other fees and expenses (including, without limitation, the reasonable fees and disbursements of the Underwriters' counsel) incident to any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the Securities, (F) listing fees, if any, (G) all fees and disbursements of special or local counsel incurred by the Underwriters in connection with the Directed Share Program and stamp duties, similar taxes or duties or other taxes, if any, incurred by the Underwriters in connection with the Directed Share Program and (H) all other costs and expenses incident to the performance of their obligations hereunder that are not otherwise specifically provided for herein. If the sale of the Securities provided for herein is not consummated by reason of action by the Company pursuant to Section 9(a) hereof which prevents this Agreement from becoming effective, or by reason of any failure, refusal or inability on the part of the Company or Antigenics L.L.C. to perform any agreement on their part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company and Antigenics L.L.C. will reimburse the several Underwriters for all reasonable out-of-pocket disbursements (including fees and disbursements of counsel) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder. Neither the Company nor Antigenics L.L.C. shall

in any event be liable to any of the Underwriters for loss of anticipated profits from the transactions covered by this Agreement.

(ix) The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Prospectus and will file such reports or provide such information to the Commission with respect to the sale of the Securities and the application of the proceeds therefrom as may be required in accordance with Rule 463 of the Rules and Regulations.

(x) Neither the Company nor Antigenics L.L.C. will, without your prior written consent, offer for sale, sell, contract to sell, grant any option for the sale of or otherwise issue or dispose of any Common Stock or any securities convertible into (as a result of the Merger or otherwise) or exchangeable for, or any options or rights to purchase or acquire, Common Stock, except (i) for the sale by the Company of the Securities to the Underwriters pursuant to this Agreement, (ii) for the issuance by the Company of shares of Common Stock pursuant to the Merger Agreement, (iii) for the issuance by the Company of shares of Common Stock upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof of which the Underwriters have been advised in writing, (iv) for the grant by the Company of any option or right to purchase up to an aggregate of [ ] shares of Common Stock pursuant to the Company's 1999 Equity Incentive Plan or 1999 Employee Stock Purchase Plan, each as in effect on the date of this Agreement; provided that no such options or rights shall be exercisable prior to the expiration of the 365-day period referred to in this Section, and (v) for the issuance by the Company of shares of Common Stock in connection with a merger with or acquisition of a corporation or entity that is not an affiliate of the Company or an acquisition of the assets or property of a corporation or entity that is not an affiliate of the Company, for a period of 365 days after the commencement of the public offering of the Securities by the Underwriters.

(xi) The Company and Antigenics L.L.C. either have caused to be delivered to you or will cause to be delivered to you prior to the effective date of the Registration Statement a letter from each of Antigenics L.L.C.'s directors and officers and the equityholders listed on Schedule II, substantially in the form of Exhibit A hereto, stating that such person agrees that he or she will not, without your prior written consent, offer for sale, sell, contract to sell or otherwise dispose of any shares of Common Stock, equity interests in Antigenics L.L.C. or rights to purchase Common Stock or equity interests in Antigenics L.L.C. for a period of 365 days after commencement of the public offering of the Securities by the Underwriters.

(xii) Neither the Company nor Antigenics L.L.C. has taken nor will take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities, and has not effected any sales of equity interests or Common Stock which are required to be disclosed in response to

Item 701 of Regulation S-K under the Act which have not been so disclosed in the Registration Statement.

(xiii) Neither the Company nor Antigenics L.L.C. will incur any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(xiv) That in connection with the Directed Share Program, the Company will ensure that the Directed Shares will be restricted to the extent required by the NASD or the NASD rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of the effectiveness of the Registration Statement. Piper Jaffray will notify the Company as to which Participants will need to be so restricted. The Company will direct the transfer agent to place stop transfer restrictions upon such securities for such period of time.

(xv) To comply with all applicable securities and other applicable laws, rules and regulations in each foreign jurisdiction in which the Directed Shares are offered in connection with the Directed Share Program.

5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the First Closing Date and the Second Closing Date (as if made at such Closing Date), of and compliance with all representations, warranties and agreements of the Company and Antigenics L.L.C. contained herein, to the performance by the Company and Antigenics L.L.C. of their respective obligations hereunder and to the following additional conditions:

(a) The Registration Statement shall have become effective not later than 5:00 p.m., Central time (and any registration statement pursuant to Rule 462(b) shall have become effective not later than 10 p.m., Central time), on the date of this Agreement, or such later time and date as you, as Representatives of the several Underwriters, shall approve and all filings required by Rules 424, 430A and 434 of the Rules and Regulations shall have been timely made; no stop order suspending the effectiveness of the Registration Statement or any amendment thereof shall have been issued; no proceedings for the issuance of such an order shall have been initiated or threatened; and any request of the Commission for additional information (to be included in the Registration Statement or the Prospectus or otherwise) shall have been complied with to your satisfaction.

(b) No Underwriter shall have advised the Company that the Registration Statement or the Prospectus, or any amendment thereof or supplement thereto (including any term sheet within the meaning of Rule 434 of the Rules and Regulations), contains an untrue statement of fact which, in your reasonable opinion, is material, or omits to state a fact which, in your reasonable opinion, is material and is required to be stated therein or necessary to make the statements therein not misleading.

(c) Except as contemplated in the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, none of the Company, Antigenics L.L.C. or its subsidiary shall have incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the equity capital or capital stock (other than a change in the number of outstanding shares of Common Stock or members' equity units of Antigenics L.L.C. due to the issuance of shares or units upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt of the Company or Antigenics L.L.C., or any issuance of options, warrants, convertible securities or other rights to purchase the equity capital or capital stock of the Company, Antigenics L.L.C. or its subsidiary, or any material adverse change or any development involving a prospective material adverse change (whether or not arising in the ordinary course of business), in the general affairs, condition (financial or otherwise), business, key personnel, property, prospects, net worth or results of operations of the Company or Antigenics L.L.C. and its subsidiary, taken as a whole, that, in your judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Prospectus.

(d) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Palmer & Dodge LLP, counsel for the Company, dated such Closing Date and addressed to you, to the effect that:

(i) Each of the Company, Antigenics L.L.C. and its subsidiary has been duly organized and is validly existing as a corporation or limited liability company, as the case may be, in good standing under the laws of its jurisdiction of incorporation or organization. Each of the Company, Antigenics L.L.C. and its subsidiary has full corporate power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement and Prospectus, and is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify would have a material adverse effect upon the business, condition (financial or otherwise) or properties of the Company or Antigenics L.L.C. and its subsidiary, taken as a whole.

(ii) The capital stock of the Company conforms as to legal matters to the description thereof contained in the Prospectus under the caption "Description of Capital Stock." All of the issued and outstanding shares of the capital stock of the Company have been duly authorized and validly issued and are fully paid and nonassessable, and the holders thereof are not subject to personal liability by reason of being such holders. The Securities to be issued and sold by the Company hereunder have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders. Except as otherwise stated in the Registration Statement and Prospectus, there are no preemptive rights or other rights to

subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by-laws or any agreement or other instrument known to such counsel to which the Company is a party or by which the Company is bound. Except as described in the Registration Statement and the Prospectus, to the best of such counsel's knowledge, neither the filing of the Registration Statement nor the offering or sale of the Securities as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company.

(iii) The Registration Statement has become effective under the Act and, to the best of such counsel's knowledge, no stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose has been instituted or, to the knowledge of such counsel, threatened by the Commission.

(iv) The descriptions in the Registration Statement and Prospectus of statutes, legal and governmental proceedings, contracts and other documents are accurate and fairly present the information required to be shown in all material respects; and such counsel does not know of any statutes or legal or governmental proceedings required to be described in the Prospectus that are not described as required in all material respects, or of any contracts or documents of a character required to be described in the Registration Statement or Prospectus or included as exhibits to the Registration Statement that are not described or included as required.

(v) Each of the Company and Antigenics L.L.C. has full corporate power and authority to enter into this Agreement, and this Agreement has been duly authorized, executed and delivered by each of the Company and Antigenics L.L.C. and constitutes a valid, legal and binding obligation of the Company and Antigenics L.L.C. enforceable in accordance with its terms (except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity); the execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, any statute, rule or regulation, any agreement or instrument known to such counsel to which the Company or Antigenics L.L.C. is a party or by which either of them is bound or to which any of their respective property is subject, the Company's or Antigenics L.L.C.'s charter or by-laws or similar organizational documents, or any order or decree known to such counsel of any court or governmental agency or body having jurisdiction over the Company or Antigenics L.L.C. or any of their respective properties; and no consent, approval, authorization or order of, or filing with, any court or governmental agency or body is required for the execution, delivery and performance of this Agreement or for the consummation of the transactions contemplated hereby, including the issuance or sale of the

Securities by the Company, except such as may be required under the Act or state securities laws.

(vi) To the best of such counsel's knowledge, none the Company, Antigenics L.L.C. or its subsidiary is in violation of its respective charter or by-laws or other organizational documents. To the best of such counsel's knowledge, none of the Company, Antigenics L.L.C. or its subsidiary is in breach of or otherwise in default in the performance of any material obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which any of them may be bound, or to which any of the material property or assets of the Company, Antigenics L.L.C. or its subsidiary is subject.

(vii) Neither Antigenics L.L.C. nor the Company is and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Registration Statement and the Prospectus, the Company will not be an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(viii) The Merger Agreement dated as of _____, 2000, between the Company and Antigenics L.L.C. has been duly authorized, executed and delivered by each of the parties thereto and constitutes a legal valid and binding obligation of each of the parties thereto enforceable in accordance with its terms (except as such enforceability may be limited by bankruptcy, insolvency or similar laws affecting the rights of creditors generally and subject to general principles of equity).

(ix) The Registration Statement and the Prospectus, and any amendment thereof or supplement thereto (including any term sheet within the meaning of Rule 434 of the Rules and Regulations), comply as to form in all material respects with the requirements of the Act and the Rules and Regulations; and on the basis of conferences with officers of the Company, examination of documents referred to in the Registration Statement and Prospectus and such other procedures as such counsel deemed appropriate, nothing has come to the attention of such counsel that causes such counsel to believe that the Registration Statement or any amendment thereof, at the time the Registration Statement became effective and as of such Closing Date (including any Registration Statement filed under Rule 462(b) of the Rules and Regulations), contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus (as of its date and as of such Closing Date), as amended or supplemented, includes any untrue statement of material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; it being understood that such counsel need express no opinion as to the financial statements or other financial data included in any of the documents mentioned in this clause.

(x) The offering, sale and delivery of members' equity units and warrants by Antigenics L.L.C. completed in November 1999 was exempt from the registration requirements of the Securities Act.

In rendering such opinion such counsel may rely (i) as to matters of law other than the Delaware General Corporation Law and federal law, upon the opinion or opinions of local counsel provided that the extent of such reliance is specified in such opinion and that such counsel shall state that such opinion or opinions of local counsel are satisfactory to them and that they believe they and you are justified in relying thereon and (ii) as to matters of fact, to the extent such counsel deems reasonable upon certificates of officers of the Company, Antigenics L.L.C. and its subsidiary provided that the extent of such reliance is specified in such opinion.

(e) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Pennie & Edmonds, special patent counsel for the Company and Antigenics L.L.C., dated such Closing Date and addressed to you, to the effect that:

(i) The statements made in the Registration Statement and the Prospectus under the captions "Risk Factors--Risks Related to Our Business--If we are unable to protect our proprietary technology, trade secrets or know-how, we may not be able to operate our business profitably and "Business--Our Intellectual Property Portfolio" (collectively, the "Patent Sections") insofar as such statements constitute a summary of statutes, regulations, rules, legal matters, documents or proceedings referred to therein, fairly present the information set forth therein with respect to such statutes, regulations, rules, legal matters, documents or proceedings.

(ii) Except as described in the Registration Statement and the Prospectus and except for patent applications pending, there are no legal or governmental proceedings relating to patent rights of the Company to which the Company is a party, and to such counsel's knowledge, no such proceedings are threatened or contemplated by governmental authorities or others.

(iii) Except as described in the Registration Statement and the Prospectus, to the knowledge of such counsel, the Company has not received any communications in which it is alleged that the Company is infringing or violating the patents or other intellectual property rights of third parties.

(iv) Nothing has come to the attention of such counsel that causes such counsel to believe that the Patent Sections in (A) the Registration Statement or any amendment thereof, at the time the Registration Statement became effective and as of such Closing Date (including any Registration Statement filed under Rule 462(b) of the Rules and Regulations), contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary to make the statements therein not misleading or

(B) the Prospectus (as of its date and as of such Closing Date) as amended or supplemented, included any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Venable, Baetjer, Howard & Civiletti, LLP, special regulatory counsel for the Company and Antigenics L.L.C., dated such Closing Date and addressed to you, to the effect that:

(i) The statements made in the Registration Statement and the Prospectus under the captions "Risk Factors--Risks Related to Our Business--We do not currently generate any revenue, and we cannot guarantee that we will ever commercialize any of our immunotheraputics and generate revenue in the future," "-- Delays in obtaining regulatory approval of our manufacturing facility and disruptions in our manufacturing process may cause delays in our commercialization efforts" and "Business--Regulatory Considerations" (collectively, the "Regulatory Sections") insofar as such statements constitute a summary of statutes, regulations, rules, legal matters, documents or proceedings referred to therein, are accurate summaries and fairly present the information set forth therein with respect to such statutes, regulations, rules, legal matters, documents or proceedings.

(ii) Nothing has come to the attention of such counsel that causes such counsel to believe that the Regulatory Sections in (A) the Registration Statement or any amendment thereof, at the time the Registration Statement became effective and as of such Closing Date (including any Registration Statement filed under Rule 462(b) of the Rules and Regulations), contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary to make the statements therein not misleading or (B) the Prospectus (as of its date and as of such Closing Date) as amended or supplemented, included any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(g) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, such opinion or opinions from Shearman & Sterling, counsel for the several Underwriters, dated such Closing Date and addressed to you, with respect to the due incorporation of the Company, the validity of the Securities, the Registration Statement, the Prospectus and other related matters as you reasonably may request, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.

(h) On each Closing Date you, as Representatives of the several Underwriters, shall have received a letter of KPMG LLP, dated such Closing Date and addressed to you, confirming that they are independent public accountants within the meaning of the Act and are in compliance with the applicable requirements relating to the qualifications of accountants under

Rule 2-01 of Regulation S-X of the Commission, and stating, as of the date of such letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than three days prior to the date of such letter), the conclusions and findings of said firm with respect to the financial information and other matters covered by its letter delivered to you concurrently with the execution of this Agreement, and the effect of the letter so to be delivered on such Closing Date shall be to confirm the conclusions and findings set forth in such prior letter.

(i) On each Closing Date, there shall have been furnished to you, as Representatives of the Underwriters, a certificate, dated such Closing Date and addressed to you, signed by the chief executive officer of each of the Company and Antigenics L.L.C., to the effect that:

(i) The representations and warranties of the Company and Antigenics L.L.C. in this Agreement are true and correct, in all material respects, as if made at and as of such Closing Date, and the Company and Antigenics L.L.C. have complied with all the agreements and satisfied all the conditions on their part to be performed or satisfied at or prior to such Closing Date;

(ii) No stop order or other order suspending the effectiveness of the Registration Statement or any amendment thereof or the qualification of the Securities for offering or sale has been issued, and no proceeding for that purpose has been instituted or, to the best of their knowledge, is contemplated by the Commission or any state or regulatory body; and

(iii) The signers of said certificate have carefully examined the Registration Statement and the Prospectus, and any amendments thereof or supplements thereto (including any term sheet within the meaning of Rule 434 of the Rules and Regulations), and (A) such documents contain all statements and information required to be included therein, the Registration Statement, or any amendment thereof, does not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, as amended or supplemented, does not include any untrue statement of material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, (B) since the effective date of the Registration Statement, there has occurred no event required to be set forth in an amended or supplemented prospectus which has not been so set forth, (C) subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, none of the Company, Antigenics L.L.C. or its subsidiary has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, not in the ordinary course of business, or declared or paid any dividends or made any distribution of any kind with respect to its equity capital or capital stock, and except as disclosed in the Prospectus, there has not been any change in the equity capital or capital stock (other than a change in the number of outstanding shares of Common Stock or members' equity units of Antigenics

L.L.C. due to the issuance of shares or units upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the equity capital or capital stock, of the Company, Antigenics L.L.C. or its subsidiary, or any material adverse change or any development involving a prospective material adverse change (whether or not arising in the ordinary course of business), in the general affairs, condition (financial or otherwise), business, key personnel, property, prospects, net worth or results of operations of the Company or Antigenics L.L.C. and its subsidiary, taken as a whole, and (D) except as stated in the Registration Statement and the Prospectus, there is not pending, or, to the knowledge of the Company or Antigenics L.L.C., threatened or contemplated, any action, suit or proceeding to which the Company, Antigenics L.L.C. or its subsidiary is a party before or by any court or governmental agency, authority or body, or any arbitrator, which might result in any material adverse change in the condition (financial or otherwise), business, prospects or results of operations of the Company and its subsidiary, taken as a whole.

(j) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between you and the directors, officers and the equityholders of Antigenics L.L.C. listed on Schedule II relating to sales and certain other dispositions of Common Stock or certain other securities, delivered to you, shall be in full force and effect.

(k) The Common Stock shall have been approved for listing on the NASDAQ National Market, subject only to official notice of issuance.

(l) The Merger shall have been consummated.

(m) The Company shall have furnished to you and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to you and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

6. Indemnification and Contribution.

(a) Each of the Company and Antigenics L.L.C., jointly and severally, agrees to indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company) and Antigenics L.L.C., insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information

deemed to be a part of the Registration Statement at the time of effectiveness pursuant to Rules 430A and 434(d) of the Rules and Regulations, if applicable, any Preliminary Prospectus, the Prospectus, or any amendment or supplement thereto (including any term sheet within the meaning of Rule 434 of the Rules and Regulations), 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, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action; provided, however, that neither the Company nor Antigenics L.L.C. shall be liable in any such case to the extent that any such loss, claim, damage, liability or action 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 any such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company and Antigenics L.L.C. by you, or by any Underwriter through you, specifically for use in the preparation thereof.

Each of the Company and Antigenics L.L.C., jointly and severally, agrees to indemnify and hold harmless Piper Jaffray against any losses, claims, damages or liabilities, joint or several, to which Piper Jaffray may become subject (including in settlement of any litigation if such settlement is effected with the written consent of the Company and Antigenics L.L.C.), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the prospectus wrapper material prepared by or with the consent of the Company and Antigenics L.L.C. for distribution in foreign jurisdictions in connection with the Directed Share Program attached to the Prospectus or any preliminary prospectus, or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, when considered in conjunction with the Prospectus or any applicable preliminary prospectus, not misleading; (ii) the failure of any Participant to pay for and accept delivery of the shares which, immediately following the effectiveness of the Registration Statement, were subject to a properly confirmed agreement to purchase; or (iii) relating to, arising out of, or in connection with the Directed Share Program, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action; provided, that neither the Company nor Antigenics L.L.C. shall be responsible under this subparagraph (iii) for any losses, claim, damages or liabilities (or expenses relating thereto) that are finally judicially determined to have resulted from the bad faith or gross negligence of Piper Jaffray.

In addition to its other obligations under this Section 6(a) and subject to Section 6(c) of this Agreement, each of the Company and Antigenics L.L.C. agrees that, as an interim measure during the pendency of any claim, action, investigation, inquiry or other proceeding in respect of which indemnity may be sought pursuant to this Section 6(a), it will reimburse each Underwriter on a monthly basis for all reasonable legal fees or other expenses incurred in connection with investigating or defending any such claim, action, investigation, inquiry or other proceeding, notwithstanding the absence of a judicial determination as to the propriety and enforceability of the Company's or Antigenics L.L.C.'s obligation to reimburse the Underwriters for such expenses and

the possibility that such payments might later be held to have been improper by a court of competent jurisdiction. To the extent that any such interim reimbursement payment is so held to have been improper, the Underwriter that received such payment shall promptly return it to the party that made such payment, together with interest, compounded daily, determined on the basis of the prime rate (or other commercial lending rate for borrowers of the highest credit standing) announced from time to time by _____ (the "Prime Rate"). Any such interim reimbursement payments which are not made to an Underwriter within 30 days of a request for reimbursement shall bear interest at the Prime Rate from the date of such request. This indemnity agreement shall be in addition to any liabilities which the Company or Antigenics L.L.C. may otherwise have.

(b) Each Underwriter will indemnify and hold harmless the Company and Antigenics L.L.C. against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus, or any amendment or supplement thereto (including any term sheet within the meaning of Rule 434 of the Rules and Regulations), 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, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Prospectus, or any such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company and Antigenics L.L.C. by you, or by such Underwriter through you, specifically for use in the preparation thereof, and will reimburse the Company and Antigenics L.L.C. for any legal or other expenses reasonably incurred by the Company and Antigenics L.L.C. in connection with investigating or defending against any such loss, claim, damage, liability or action.

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall relieve the indemnifying party from any liability that it may have to any indemnified party only to the extent the indemnifying party is materially prejudiced as a result of such omission and in any event shall not relieve it from any liability which it may have otherwise than on account of this agreement. In case any such action 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 in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense

thereof other than reasonable costs of investigation; provided, however, that if, due to the fact that named parties to any such proceeding (including any impleaded parties) include both the indemnifying and indemnified parties, it is advisable for the Underwriters to be represented as a group by separate counsel due to actual or potential differing interests between the Underwriters and the Company and Antigencis L.L.C., the Representatives shall have the right to employ a single counsel to represent the Representatives and all Underwriters who may be subject to liability arising from any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred (in accordance with the provisions of the third paragraph in subsection (a) above). Notwithstanding anything contained herein to the contrary, if indemnity may be sought pursuant to the second paragraph of Section 6(a) hereof in respect of such action or proceeding, then in addition to such separate firm for the indemnified parties, the indemnifying party shall be liable for the reasonable fees and expenses of not more than one separate firm (in addition to any local counsel) for Piper Jaffray for the defense of any losses, claims, damages and liabilities arising out of the Directed Share Program, and all persons, if any, who control Piper Jaffray within the meaning of the Act. An indemnifying party shall not be obligated under any settlement agreement relating to any action under this Section 6 to which it has not agreed in writing.

(d) If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and Antigenics L.L.C. on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and Antigenics L.L.C. on the one hand and the Underwriters on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company and Antigenics L.L.C. 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 bear 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 or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company, Antigenics L.L.C. and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be 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 in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of

the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. 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 subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) The obligations of the Company and Antigenics L.L.C. under this Section 6 shall be in addition to any liability which the Company and Antigenics L.L.C. may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Underwriter within the meaning of the Act; and the obligations of the Underwriters under this Section 6 shall be in addition to any liability that the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each director of the Company and Antigenics L.L.C. (including any person who, with his consent, is named in the Registration Statement as about to become a director of the Company), to each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company and Antigenics L.L.C. within the meaning of the Act.

7. Representations and Agreements to Survive Delivery. All representations, warranties, and agreements of the Company and Antigenics L.L.C. herein or in certificates delivered pursuant hereto, and the agreements of the several Underwriters and the Company and Antigenics L.L.C. contained in Section 6 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company, Antigenics L.L.C. or any of their respective officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder.

8. Substitution of Underwriters.

(a) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased does not aggregate more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, the remaining Underwriters shall be obligated to take up and pay for (in proportion to their respective underwriting obligations hereunder as set forth in Schedule I hereto except as may otherwise be determined by you) the Firm Shares that the withdrawing or defaulting Underwriters agreed but failed to purchase.

(b) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased aggregates more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, and arrangements satisfactory to you for the purchase of such Firm Shares by other persons are not made within 36 hours thereafter, this Agreement shall terminate. In the event of any such termination neither the Company nor Antigenics L.L.C. shall be under any liability to any Underwriter (except to the extent provided in Section 4(a)(viii) and Section 6 hereof) nor shall any Underwriter (other than an Underwriter who shall have failed, otherwise than for some reason permitted under this Agreement, to purchase the amount of Firm Shares agreed by such Underwriter to be purchased hereunder) be under any liability to the Company or Antigenics L.L.C. (except to the extent provided in Section 6 hereof).

If Firm Shares to which a default relates are to be purchased by the non-defaulting Underwriters or by any other party or parties, the Representatives or the Company shall have the right to postpone the First Closing Date for not more than seven business days in order that the necessary changes in the Registration Statement, Prospectus and any other documents, as well as any other arrangements, may be effected. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 8.

9. Effective Date of this Agreement and Termination.

(a) This Agreement shall become effective at 10:00 a.m., Central time, on the first full business day following the effective date of the Registration Statement, or at such earlier time after the effective time of the Registration Statement as you in your discretion shall first release the Securities for sale to the public; provided, that if the Registration Statement is effective at the time this Agreement is executed, this Agreement shall become effective at such time as you in your discretion shall first release the Securities for sale to the public. For the purpose of this Section, the Securities shall be deemed to have been released for sale to the public upon release by you of the publication of a newspaper advertisement relating thereto or upon release by you of telexes offering the Securities for sale to securities dealers, whichever shall first occur. By giving notice as hereinafter specified before the time this Agreement becomes effective, you, as Representatives of the several Underwriters, or the Company may prevent this Agreement from becoming effective without liability of any party to any other party, except that the provisions of Section 4(a)(viii) and Section 6 hereof shall at all times be effective.

(b) You, as Representatives of the several Underwriters, shall have the right to terminate this Agreement by giving notice as hereinafter specified at any time at or prior to the First Closing Date, and the option referred to in Section 3(b), if exercised, may be cancelled at any time prior to the Second Closing Date, if (i) either the Company or Antigenics L.L.C. shall have failed, refused or been unable, at or prior to such Closing Date, to perform any agreement on its part to be performed hereunder in any material respect, (ii) any other condition of the Underwriters' obligations hereunder in any material respect is not fulfilled, (iii) trading on the New York Stock Exchange, the American Stock

Exchange or the NASDAQ National Market System shall have been wholly suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on the New York Stock Exchange or the American Stock Exchange, by such Exchange or by order of the Commission or any other governmental authority having jurisdiction, (v) a banking moratorium shall have been declared by Federal or New York authorities, or (vi) there has occurred any material adverse change in the financial markets in the United States or an outbreak of major hostilities (or an escalation thereof) in which the United States is involved, a declaration of war by Congress, any other substantial national or international calamity or any other event or occurrence of a similar character shall have occurred since the execution of this Agreement that, in your judgment, makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4(a)(viii) and Section 6 hereof shall at all times be effective.

(c) If you elect to prevent this Agreement from becoming effective or to terminate this Agreement as provided in this Section, the Company shall be notified promptly by you by telephone or telegram, confirmed by letter. If the Company elects to prevent this Agreement from becoming effective, you shall be notified by the Company by telephone or telegram, confirmed by letter.

10. Default by the Company. If the Company shall fail at the First Closing Date to sell and deliver the number of Securities which it is obligated to sell hereunder, then this Agreement shall terminate without any liability on the part of any non-defaulting party.

No action taken pursuant to this Section shall relieve the Company from liability, if any, in respect of such default.

11. Information Furnished by Underwriters. The statements set forth in (I) the third paragraph of text under the caption "Underwriting" concerning the terms of the offering by the Underwriters, (ii) the seventh paragraph of text under the caption "Underwriting" concerning the terms of the offering by the Underwriters and (iii) the eighth paragraph of text under the caption "Underwriting" concerning stabilization and over-allotment in the Prospectus constitute the written information furnished by or on behalf of the Underwriters referred to in Section 2 and Section 6 hereof.

12. Notices. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters, shall be mailed or delivered to the Representatives c/o U.S. Bancorp Piper Jaffray, Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, Minnesota 55402, except that notices given to an Underwriter pursuant to Section 6 hereof shall be sent to such Underwriter at the address stated in the Underwriters' Questionnaire furnished by such Underwriter in connection with this offering; if to the Company, shall be mailed or delivered to it at 630 Fifth Avenue, Suite 2100, New York, NY 10011 Attention: Garo H. Armen; or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may

change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

13. Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 6. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from any of the several Underwriters.

14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

[Signature Page Follows]

Please sign and return to the Company and Antigenics L.L.C. the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company, Antigenics L.L.C. and the several Underwriters in accordance with its terms.

Very truly yours,

ANTIGENICS INC.

By: _____
Title:

ANTIGENICS L.L.C.

By: _____
Title:

Confirmed as of the date first above mentioned, on behalf of themselves and the other several Underwriters named in Schedule I hereto.

U.S. BANCORP PIPER JAFFRAY INC.

By: _____
Title:

FLEETBOSTON ROBERTSON STEPHENS INC.

By: _____
Title:

SCHEDULE I

Underwriter	Number of Firm Shares (1)
U.S. Bancorp Piper Jaffray Inc.....	
FleetBoston Robertson Stephens Inc.....	
Total	3,000,000

(1) The Underwriters may purchase up to an additional 450,000 Option Shares, to the extent the option described in Section 3(b) of the Agreement is exercised, in the proportions and in the manner described in the Agreement.

SCHEDULE II

[List of Persons Subject to Lock-up]

EXHIBIT A

[FORM OF LOCK-UP AGREEMENT]

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U.S. Bancorp Piper Jaffray Inc.
FleetBoston Robertson Stephens Inc.
as Representatives of the several Underwriters
c/o U.S. Bancorp Piper Jaffray Inc.
Piper Jaffray Tower
222 South Ninth Street
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

The undersigned understands that U.S. Bancorp Piper Jaffray Inc. ("Piper Jaffray") proposes to enter into a Purchase Agreement (the "Purchase Agreement") with Antigenics, Inc., a Delaware corporation (the "Company"), and Antigenics L.L.C., a Delaware limited liability company, providing for the public offering (the "Public Offering") by the several Underwriters, including Piper Jaffray (the "Underwriters"), of shares of the Common Stock, par value $0.01 per share, of the Company (the "Common Stock").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of Piper Jaffray on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 365 days after the date of the final prospectus relating to the Public Offering (the "Lock-Up Period"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, including any equity interest in Antigenics L.L.C., or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock or equity interests in Antigenics L.L.C., whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock, equity interests in Antigenics L.L.C. or such other securities, in cash or otherwise; provided however, that securities acquired by the undersigned in the November 1999 private placement of Antigencis L.L.C. are not subject to this agreement. The foregoing sentence shall not apply to (a) if the undersigned is an individual, he or she may transfer Common Stock or equity interests in Antigenics L.L.C. during his or her lifetime or upon death by gift, will or intestacy pursuant to the laws of descent and distribution, (b) transfers to affiliates (as defined in Regulation C under the Securities Act of 1933, as amended) of the undersigned, (c) transfers as a distribution to limited partners, members or shareholders of the

undersigned, (d) transfers occurring by operation of law or (e) transactions relating to shares of Common Stock or other securities acquired in open market transactions after the completion of the Public Offering; provided that any transferee pursuant to clauses (a), (b), (c) or (d) of this sentence shall execute a lock-up agreement in substantially the form hereof covering the remainder of the Lock-Up Period under this Agreement. In addition, the undersigned agrees that, without the prior written consent of Piper Jaffray on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 365 days after the date of the prospectus relating to the Public Offering, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock, including any equity interest in Antigenics L.L.C.

The undersigned confirms that the agreements of the undersigned are irrevocable and shall be binding upon the undersigned's legal representatives successors and assigns. The undersigned agrees and consents to the entry of stop transfer instructions with the Company's transfer agent against the transfer of any Common Stock held by the undersigned except in compliance with the terms and conditions of this Agreement. The undersigned also understands that the Company and the Underwriters will proceed with the Public Offering in reliance on this Agreement. Notwithstanding anything else herein, in the event the registration statement relating to the Public Offering is not declared effective by the Securities and Exchange Commission on or prior to April 30, 2000, the terms and provisions of this Agreement shall be of no further force or effect.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to the Purchase Agreement, the terms of which are subject to negotiation between the Company, Antigenics L.L.C.
and the Underwriters.

Very truly yours,

(Name)

(Address)

EXHIBIT 5.1

PALMER & DODGE LLP
ONE BEACON STREET, BOSTON, MA 02108-3190

TELEPHONE: (617) 573-0100 FACSIMILE: (617) 227-4420

January 7, 2000

Antigenics Inc.
630 Fifth Avenue, Suite 2100
New York, New York 10111

Ladies and Gentlemen:

We are rendering this opinion in connection with the Registration Statement on Form S-1 (the "Registration Statement") filed by Antigenics Inc. (the "Company") with the U.S. Securities and Exchange Commission under the Securities Act of 1933, as amended, on or about the date hereof. The Registration Statement relates to up to 3,450,000 shares of the Company's Common Stock, $0.01 par value (the "Shares"), being sold by the Company, including 450,000 Shares issuable upon exercise of the overallotment option granted by the Company. We understand that the Shares are to be offered and sold in the manner described in the Registration Statement.

We have acted as your counsel in connection with the preparation of the Registration Statement. We are familiar with the proceedings of the Board of Directors in connection with the authorization, issuance and sale of the Shares (the "Resolutions"). We have examined such other documents as we consider necessary to render this opinion.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and delivered by the Company against payment therefor at the price to be determined pursuant to the Resolutions, will be validly issued, fully paid and non-assessable.

The foregoing opinion is limited to Delaware General Corporation Law and the federal laws of the United States.

We hereby consent to the filing of this opinion as a part of the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus filed as part thereof.

Very truly yours,

/s/ Palmer & Dodge LLP

Palmer & Dodge LLP

EXHIBIT 10.1

ANTIGENICS INC.

1999 EQUITY INCENTIVE PLAN

Section 1. PURPOSE

The purpose of the Antigenics Inc. 1999 Equity Incentive Plan (the "Plan") is to attract and retain directors, key employees and consultants of the Company and its Affiliates, to provide an incentive for them to achieve long-range performance goals, and to enable them to participate in the long-term growth of the Company.

Section 2. DEFINITIONS

"Affiliate" means any business entity that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the Company. For purposes hereof, "Control" (and with correlative meanings, the terms "controlled by" and "under common control with") shall mean the possession of the power to direct or cause the direction of the management and policies of the Company, whether through the ownership of voting stock, by contract or otherwise. In the case of a corporation "control" shall mean, among other things, the direct or indirect ownership of more than fifty percent (50%) of its outstanding voting stock.

"Award" means any Option, Stock Appreciation Right or Restricted Stock awarded under the Plan.

"Board" means the Board of Directors of the Company.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and any successor to such Code.

"Committee" means a committee of not less than two members of the Board appointed by the Board to administer the Plan. If a Committee is authorized to grant Options to a Reporting Person or a "covered employee" within the meaning of Section 162(m) of the Code, each member shall be a "non-employee director" or the equivalent within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934, as amended from time to time, or any successor law, and an "outside director" or the equivalent within the meaning of Section 162(m) of the Code, respectively. Until such committee is appointed, "Committee" means the Board.

"Common Stock" or "Stock" means the Common Stock, $0.01 par value, of the Company.

"Company" means Antigenics Inc.

"Designated Beneficiary" means the beneficiary designated by a Participant, in a manner determined by the Committee, to receive amounts due or exercise rights of the Participant in the event of the Participant's death. In the absence of an effective designation by a Participant, "Designated Beneficiary" shall mean the Participant's estate.

"Effective Date" means November 15, 1999.

"Fair Market Value" means, with respect to Common Stock or any other property, the fair market value of such property as determined by the Committee in good faith or in the manner established by the Committee from time to time.

"Incentive Stock Option" means an option to purchase shares of Common Stock awarded to a Participant under Section 6 that is intended to meet the requirements of Section 422 of the Code or any successor provision.

"Nonstatutory Stock Option" means an option to purchase shares of Common Stock awarded to a Participant under Section 6 that is not intended to be an Incentive Stock Option.

"Option" means an Incentive Stock Option or a Nonstatutory Stock Option.

"Participant" means a person selected by the Committee to receive an Award under the Plan.

"Reporting Person" means a person subject to Section 16 of the Securities Exchange Act of 1934 or any successor provision.

"Restricted Period" means the period of time selected by the Committee during which an Award may be forfeited to the Company pursuant to the terms and conditions of such Award.

"Restricted Stock" means shares of Common Stock subject to forfeiture awarded to a Participant under Section 8.

"Stock Appreciation Right" or "SAR" means a right to receive any excess in value of shares of Common Stock over the exercise price awarded to a Participant under Section 7.

Section 3. ADMINISTRATION

The Plan shall be administered by the Committee. The Committee shall have authority to adopt, alter and repeal such administrative rules, guidelines and practices governing the operation of the Plan as it shall from time to time consider advisable, and to interpret the provisions of the Plan. The Committee's decisions shall be final and binding. To the extent permitted by applicable law, the Committee may delegate to one or more executive officers of the Company the power to make Awards to Participants who are not Reporting Persons or covered employees and all determinations under the Plan with respect thereto, provided that the Committee shall fix the maximum amount of such Awards for all such Participants and a maximum for any one Participant.

Section 4. ELIGIBILITY

All employees, directors and consultants of the Company or any Affiliate capable of contributing significantly to the successful performance of the Company, other than a person who has irrevocably elected not to be eligible, are eligible to be Participants in the Plan.

Incentive Stock Options may be granted only to persons eligible to receive such Options under the Code.

Section 5. STOCK AVAILABLE FOR AWARDS

(a) Subject to adjustment under subsection (b), Awards may be made under the Plan for up to 4,800,000 shares of Common Stock. If any Award in respect of shares of Common Stock expires or is terminated unexercised or is forfeited without the Participant having had the benefits of ownership (other than voting rights), the shares subject to such Award, to the extent of such expiration, termination or forfeiture, shall again be available for award under the Plan. Common Stock issued through the assumption or substitution of outstanding grants from an acquired company shall not reduce the shares available for Awards under the Plan. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) In the event that the Committee determines that any stock dividend, extraordinary cash dividend, creation of a class of equity securities, recapitalization, reorganization, merger, consolidation, split-up, spin-off, combination, exchange of shares, warrants or rights offering to purchase Common Stock at a price substantially below fair market value, or other similar transaction affects the Common Stock such that an adjustment is required in order to preserve the benefits or potential benefits intended to be made available under the Plan, then the Committee (subject, in the case of Incentive Stock Options, to any limitation required under the Code) shall equitably adjust any or all of (i) the number and kind of shares in respect of which Awards may be made under the Plan, (ii) the number and kind of shares subject to outstanding Awards, and (iii) the award, exercise or conversion price with respect to any of the foregoing, and if considered appropriate, the Committee may make provision for a cash payment with respect to an outstanding Award, provided that the number of shares subject to any Award shall always be a whole number.

(c) Subject to adjustment under Subsection (b): (i) the maximum number of shares of Common Stock with respect to which Options and Stock Appreciation Rights may be granted to any Participant in the aggregate in any calendar year shall not exceed 1,000,000 shares, and (ii) the maximum number of shares of Common Stock that may be granted as Restricted Stock, with respect to which performance goals apply, to any Participant in the aggregate in any calendar year shall not exceed 1,000,000 shares.

Section 6. STOCK OPTIONS

(a) Subject to the provisions of the Plan, the Committee may award Incentive Stock Options and Nonstatutory Stock Options and determine the number of shares to be covered by each Option, the option price therefor and the conditions and limitations applicable to the exercise of the Option. The terms and conditions of Incentive Stock Options shall be subject to and comply with Section 422 of the Code or any successor provision and any regulations thereunder, and no Incentive Stock Option may be granted hereunder more than ten years after the Effective Date.

(b) The Committee shall establish the option price at the time each Option is awarded, which price shall not be less than 100% of the Fair Market Value of the Common Stock on the date of award with respect to Incentive Stock Options. Nonstatutory Stock Options may be granted at such prices as the Committee may determine.

(c) Each Option shall be exercisable at such times and subject to such terms and conditions as the Committee may specify in the applicable Award or thereafter. The Committee may impose such conditions with respect to the exercise of Options, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.

(d) No shares shall be delivered pursuant to any exercise of an Option until payment in full of the option price therefor is received by the Company. Such payment may be made in whole or in part in cash or, to the extent permitted by the Committee at or after the award of the Option, by delivery of a note or shares of Common Stock owned by the optionee, including Restricted Stock, or by retaining shares otherwise issuable pursuant to the Option, in each case valued at their Fair Market Value on the date of delivery or retention, or such other lawful consideration as the Committee may determine.

Section 7. STOCK APPRECIATION RIGHTS

(a) Subject to the provisions of the Plan, the Committee may award SARs in tandem with an Option (at or after the award of the Option), or alone and unrelated to an Option. SARs in tandem with an Option shall terminate to the extent that the related Option is exercised, and the related Option shall terminate to the extent that the tandem SARs are exercised.

(b) The Committee shall fix the exercise price of each SAR or specify the manner in which the price shall be determined. SARs granted in tandem with Options shall have an exercise price not less than the exercise price of the related Option. SARs granted alone and unrelated to an Option may be granted at such exercise prices as the Committee may determine.

Section 8. RESTRICTED STOCK

(a) Subject to the provisions of the Plan, the Committee may award shares of Restricted Stock and determine the duration of the Restricted Period during which, and the conditions under which, the shares may be forfeited to the Company and the other terms and conditions of such Awards. The Committee may establish performance goals for the granting or lapse of risk of forfeiture of Restricted Stock. Such performance goals may be based on earnings per share, revenues, sales or expense targets of the Company or any subsidiary, division or product line thereof, stock price or such other business criteria as the Committee may determine. Shares of Restricted Stock may be issued for no cash consideration or such minimum consideration as may be required by applicable law.

(b) Shares of Restricted Stock may not be sold, assigned, transferred, pledged or otherwise encumbered, except as permitted by the Committee, during the Restricted Period. Shares of Restricted Stock shall be evidenced in such manner as the Committee may determine. Any certificates issued in respect of shares of Restricted Stock shall be registered in the name of the Participant and unless otherwise determined by the Committee, deposited by the Participant, together with a stock power endorsed in blank, with the Company. At the expiration of the

Restricted Period, the Company shall deliver such certificates to the Participant or if the Participant has died, to the Participant's Designated Beneficiary.

Section 9. GENERAL PROVISIONS APPLICABLE TO AWARDS

(a) Documentation. Each Award under the Plan shall be evidenced by a writing delivered to the Participant or agreement executed by the Participant specifying the terms and conditions thereof and containing such other terms and conditions not inconsistent with the provisions of the Plan as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable tax and regulatory laws and accounting principles.

(b) Committee Discretion. Each type of Award may be made alone, in addition to or in relation to any other type of Award. The terms of each type of Award need not be identical, and the Committee need not treat Participants uniformly. Except as otherwise provided by the Plan or a particular Award, any determination with respect to an Award may be made by the Committee at the time of award or at any time thereafter.

(c) Settlement. The Committee shall determine whether Awards are settled in whole or in part in cash, Common Stock, other securities of the Company, Awards or other property. The Committee may permit a Participant to defer all or any portion of a payment under the Plan, including the crediting of interest on deferred amounts denominated in cash and dividend equivalents on amounts denominated in Common Stock.

(d) Dividends and Cash Awards. In the discretion of the Committee, any Award under the Plan may provide the Participant with (i) dividends or dividend equivalents payable currently or deferred with or without interest, and (ii) cash payments in lieu of or in addition to an Award.

(e) Termination of Employment or Service on the Board. The Committee shall determine the effect on an Award of the disability, death, retirement or other termination of employment or service on the Board of a Participant and the extent to which, and the period during which, the Participant's legal representative, guardian or Designated Beneficiary may receive payment of an Award or exercise rights thereunder.

(f) Change in Control. In order to preserve a Participant's rights under an Award in the event of a change in control of the Company (as defined by the Committee), the Committee in its discretion may, at the time an Award is made or at any time thereafter, take one or more of the following actions: (i) provide for the acceleration of any time period relating to the exercise or realization of the Award, (ii) provide for the purchase of the Award upon the Participant's request for an amount of cash or other property that could have been received upon the exercise or realization of the Award had the Award been currently exercisable or payable, (iii) adjust the terms of the Award in a manner determined by the Committee to reflect the change in control, (iv) cause the Award to be assumed, or new rights substituted therefor, by another entity, or (v) make such other provision as the Committee may consider equitable to Participants and in the best interests of the Company.

(g) Loans. The Committee may authorize the making of loans or cash payments to Participants in connection with any Award under the Plan, which loans may be secured by any

security, including Common Stock, underlying or related to such Award (provided that such Loan shall not exceed the Fair Market Value of the security subject to such Award), and which may be forgiven upon such terms and conditions as the Committee may establish at the time of such loan or at any time thereafter.

(h) Withholding Taxes. The Participant shall pay to the Company, or make provision satisfactory to the Committee for payment of, any taxes required by law to be withheld in respect of Awards under the Plan no later than the date of the event creating the tax liability. In the Committee's discretion, the minimum tax obligations required by law to be withheld in respect of Awards may be paid in whole or in part in shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value on the date of retention or delivery. The Company and its Affiliates may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to the Participant.

(i) Foreign Nationals. Awards may be made to Participants who are foreign nationals or employed outside the United States on such terms and conditions different from those specified in the Plan as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable laws.

(j) Amendment of Award. The Committee may amend, modify or terminate any outstanding Award, including substituting therefor another Award of the same or a different type, changing the date of exercise or realization and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Participant's consent to such action shall be required unless the Committee determines that the action, taking into account any related action, would not materially and adversely affect the Participant.

(k) Transferability. In the discretion of the Committee, any Award may be made transferable upon such terms and conditions and to such extent as the Committee determines, provided that Incentive Stock Options may be transferable only to the extent permitted by the Code. The Committee may in its discretion waive any restriction on transferability.

Section 10. MISCELLANEOUS

(a) No Right To Employment or Service on the Board. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or service on the Board. The Company expressly reserves the right at any time to dismiss a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed under the Plan until he or she becomes the holder thereof. A Participant to whom Common Stock is awarded shall be considered the holder of the Stock at the time of the Award except as otherwise provided in the applicable Award.

(c) Effective Date. Subject to the approval of the stockholders of the Company, the Plan shall be effective on the Effective Date. Before such approval, Awards may be made under the Plan expressly subject to such approval.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time, subject to any stockholder approval that the Board determines to be necessary or advisable.

(e) Governing Law. The provisions of the Plan shall be governed by and interpreted in accordance with the laws of Delaware.

This Plan was approved by the Board of Directors on November 15, 1999.
This Plan must be approved by the stockholders prior to November 15, 2000.

EXHIBIT 10.15

AMENDMENT AGREEMENT

The Letter Agreement of June 3, 1998 between Antigenics L.L.C. and Sigma-Tau Industrie Farmaceutiche Riunite S.p.A. is hereby amended as follows:

- -ON PAGE 1, THE INITIAL SIX LINES:

"Gentlemen:

We refer to our recent discussions regarding a potential scientific and business cooperation between Antigenics L.L.C. ("Antigenics") and Sigma-Tau Industrie Farmaceutiche Riunite S.p.A. (the "Company") in Italy (the "Territory") with regard to Antigenics' proprietary technology on the use of Heat Shock Proteins ("HSP") for the use of HSP to boost and modulate the immune system against cancer (the "Technology")."

are deleted and replaced by the following:

"Gentlemen:

We refer to our recent discussions regarding a potential scientific and business cooperation between Antigenics L.L.C. ("Antigenics") and Sigma-Tau Industrie Farmaceutiche Riunite S.p.A. (the "Company") in Italy, Spain, Portugal and Switzerland (the "Territory") with regard to Antigenics' proprietary technology on the use of Heat Shock Proteins ("HSP") for the use of HSP to boost and modulate the immune system against cancer (the "Technology")."

- -ON PAGE 1, PARAGRAPH 2, 10TH LINE:

"by the Company, within 12 (twelve) months from the date of this Letter Agreement; it being"

is deleted and replaced by the following:

"by the Company, within 30 (thirty) months from the date of this Letter Agreement; it being"

- -ON PAGE 1, PARAGRAPH 3., 3RD LINE:

"parties, (ii) six months from the completion of the second Trial, if the parties agree to only"

is deleted and replaced by the following:

"PARTIES, (ii) TWELVE MONTHS FROM THE COMPLETION OF THE SECOND TRIAL, IF THE PARTIES AGREE TO ONLY"

IN WITNESS WHEREOF, the parties have executed this Amendment Agreement by their duly authorized representatives in duplicate as of the day and year below written.

ANTIGENICS, L.L.C.	SIGMA-TAU INDUSTRIE FARMACEUTICHE RUINITE S.p.A.
By: /s/ Garo Armen	By: /s/ Emilio Plate
Name/Title: Garo Armen	Name/Title: Emilio Plate - Chief Operating Officer
Date: 10/14/99	Date: 20-10-99

FLEXIBLE STANDARDIZED 401(k) PROFIT SHARING PLAN
ADOPTION AGREEMENT

SECTION 1. EMPLOYER INFORMATION

Name of Employer Antigenics, LLC

Address 630 Fifth Avenue, Suite 2170

City New York State NY Zip 10111

Telephone 212-332-4774 Employer's Federal Tax Identification Number 13-3769335

Type of Business (Check only one) [ ] Sole Proprietorship [ ] Partnership [ ] Corporation [ ] Corporation

[X] Other (Specify) Limited Liability Company

[ ] Check here if Related Employers may participate in this Plan and attach a Related Employer Participation Agreement for each Related Employer who will participate in this Plan.

Business Code

Name of Plan Antigenics 401(k)

Name of Trust (if different from Plan name)

Plan Sequence Number 001 (Enter 001 if this is the first qualified plan the Employer has ever maintained, enter 002 if it is the second, etc.)

Trust Identification Number (if applicable) Account Number (Optional) 41145

SECTION 2. EFFECTIVE DATES

COMPLETE PARTS A AND B

PART A. GENERAL EFFECTIVE DATES (Check and Complete Option 1 or 2):

OPTION 1: [X] This is the initial adoption of a profit sharing plan by the Employer.

The Effective Date of this Plan is 01-01-1997.

NOTE: The effective date is usually the first day of the Plan Year in which this Adoption Agreement is signed.

OPTION 2: [ ] This is an amendment and restatement of an existing profit sharing plan (a Prior Plan).

The Prior Plan was initially effective on _____ .

The Effective Date of this amendment and restatement is _____ .

NOTE: The effective date is usually the first day of the Plan Year in which this Adoption Agreement is signed.

PART B. COMMENCEMENT OF ELECTIVE DEFERRALS:

Elective Deferrals may commence on 06-12-1997.

NOTE: This date may be no earlier than the date this Adoption Agreement is signed because Elective Deferrals cannot be made retroactively.

SECTION 3. RELEVANT TIME PERIODS

COMPLETE PARTS A THROUGH C

PART A. EMPLOYER'S FISCAL YEAR:

The Employer's fiscal year ends (Specify month and date) 12-31

PART B. PLAN YEAR MEANS:

OPTION 1: [ ] The 12-consecutive month period which coincides with the Employers fiscal year.

OPTION 2: [X] The calendar year.

OPTION 3: [ ] Other 12-consecutive month period (Specify) ----------

NOTE: If no option is selected, Option 1 will be deemed to be selected.

If the initial Plan Year is less than 12 months (a short Plan Year) specify such Plan Year's beginning and ending dates.

PART C. LIMITATION YEAR MEANS:

OPTION 1: [X] The Plan Year.

OPTION 2: [ ] The calendar year.

OPTION 3: [ ] Other 12-consecutive month period (Specify) ----------

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 4. ELIGIBILITY REQUIREMENTS

COMPLETE PARTS A THROUGH F

PART A. YEARS OF ELIGIBILITY SERVICE REQUIREMENT:

1. ELECTIVE DEFERRALS.

An Employee will be eligible to become a Contributing Participant in the Plan (and thus be eligible to make Elective Deferrals) and receive Matching Contributions (including Qualified Matching Contributions, if applicable) after completing 1 (enter 0, 1 or any fraction less than 1) Years of Eligibility Service.

2. EMPLOYER PROFIT SHARING CONTRIBUTIONS.

An Employee will be eligible to become a Participant in the Plan for purposes of receiving an allocation of any Employer Profit Sharing Contribution made pursuant to Section 10 of the Adoption Agreement after completing 1 (enter 0, 1, 2 or any fraction less than 2) Years of Eligibility Service.

NOTE: If more than 1 year is selected for Item 2, the immediate 100% vesting schedule of Section 12 will automatically apply for contributions described in such item. If either item is left blank, the Years of Eligibility Service required for such item will be deemed to be 0. If a fraction is selected, an Employee will not be required to complete any specified number of Hours of Service to receive credit for a fractional year. If a single Entry Date is selected in Section 4, Part F for an item, the Years of Eligibility Service required for such item cannot exceed 1 1/2 (1/2 for Elective Deferrals).

PART B. AGE REQUIREMENT:

1. ELECTIVE DEFERRALS.

An Employee will be eligible to become a Contributing Participant (and thus be eligible to make Elective Deferrals) and receive Matching Contributions (including Qualified Matching Contributions, if applicable) after attaining age 21 (no more than 21).

2. EMPLOYER PROFIT SHARING CONTRIBUTIONS.

An Employee will be eligible to become a Participant in the Plan for purposes of receiving an allocation of any Employer Profit Sharing Contribution made pursuant to Section 10 of the Adoption Agreement after attaining age 21 (no more than 21).

NOTE: If either of the above items in this Section 4, Part B is left blank, it will be deemed there is no age requirement for such item. If a single Entry Date is selected in Section 4, Part F for an item, no age requirement can exceed 20 1/2 for such item.

PART C. EMPLOYEES EMPLOYED AS OF EFFECTIVE DATE:

Will all Employees employed as of the Effective Date of this Plan who have not otherwise met the requirements of Part A or Part B above be considered to have met those requirements as of the Effective Date?
[X] Yes [ ] No

NOTE: If a box is not checked for any item in this Section 4, Part C, "No" will be deemed to be selected.

PART D. EXCLUSION OF CERTAIN CLASSES OF EMPLOYEES:

All Employees will be eligible to become Participants in the Plan except:

a. [X] Those Employees included in a unit of Employees covered by a collective bargaining agreement between the Employer and Employee representatives, if retirement benefits were the subject of good faith bargaining and if two percent or less of the Employees who are covered pursuant to that agreement are professionals as defined in Section 1.410(b)-9 of the regulations. For this purpose, the term "employee representatives" does not include any organization more than half of whose members are Employees who are owners, officers, or executives of the Employer.

b. [X] Those Employees who are non-resident aliens (within the meaning of Section 7701(b)(1)(B) of the Code) and who received no earned income (within the meaning of Section 911(d)(2) of the Code) from the Employer which constitutes income from sources within the United States (within the meaning of Section 861(a)(3) of the Code).

PART E. HOURS REQUIRED FOR ELIGIBILITY PURPOSES:

1. 1000 Hours of Service (no more than 1,000) shall be required to constitute a Year of Eligibility Service.

2. 500 Hours of Service (no more than 500 but less than the number of specified in Section 4, Part E, Item 1, above) must be exceeded to avoid a Break in Eligibility Service.

3. For purposes of determining Years of Eligibility Service, Employees shall be given credit for Hours of Service with the following predecessor employer(s): (Complete if applicable)

PART F. ENTRY DATES:

The Entry Dates for participation shall be (Choose one):

OPTION 1: [ ] The first day of the Plan Year and the first day of the seventh month of the Plan Year.

OPTION 2: [X} Other (Specify) THE FIRST DAY OF EACH MONTH

NOTE: If no option is selected, Option 1 will be deemed to be selected Option 2 can be selected for an item only if the eligibility requirements and Entry Dates are coordinated such that each Employee will become a Participant in the Plan no later than the earlier of: (1) the first day of the Plan Year beginning after the date the Employee satisfies the age and service requirements of Section 410(a) of the Code; or (2) 6 months after the date the Employee satisfies such requirements..

SECTION 5. METHOD OF DETERMINING SERVICE

COMPLETE PART A OR B

PART A. HOURS OF SERVICE EQUIVALENCIES:

Service will be determined on the basis of the method selected below. Only one method may be selected. The method selected will be applied to all Employees covered under the Plan. (Choose one):

OPTION 1: [X] On the basis of actual hours for which an Employee is paid or entitled to payment.

OPTION 2: [ ] On the basis of days worked. An Employee will be credited with 10 Hours of Service if under Section 1.24 of the Plan such Employee would be credited with at least 1 Hour of Service during the day.

OPTION 3: [ ] On the basis of weeks worked. An Employee will be credited with 45 Hours of Service if under Section 1.24 of the Plan such Employee would be credited with at least 1 Hour of Service during the week.

OPTION 4: [ ] On the basis of months worked. An Employee will be credited with 190 Hours of Service if under Section 1.24 of the Plan such Employee would be credited with at least 1 Hour of Service during the month.

NOTE: If no option is selected, Option 1 will be deemed to be selected. This Section 5, Part A will not apply if the Elapsed Time Method of Section 5, Part B is selected.

PART B. ELAPSED TIME METHOD:

In lieu of tracking Hours of Service of Employees, will the elapsed time method described in Section 2.07 of the Plan be used? (Choose one):

OPTION 1: [ ] No.

OPTION 2: [ ] Yes.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 6. ELECTIVE DEFERRALS

PART A. AUTHORIZATION OF ELECTIVE DEFERRALS:

Will Elective Deferrals be permitted under this Plan? (Choose one):

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

NOTE: If no option is selected, Option 1 will be deemed to be selected. Complete the remainder of Section 6 only if Option 1 is selected.

PART B. LIMITS ON ELECTIVE DEFERRALS:

If Elective Deferrals are permitted under the Plan, a contributing Participant may elect under a salary reduction agreement to have his or her Compensation reduced by an amount as described below (Choose one):

OPTION 1: [X] An amount equal to a percentage of the Contributing Participant's Compensation from 1% to 15% in increments of 1%.

OPTION 2: [ ] An amount of the Contributing Participant's Compensation not less than _____ and not more than _____.

The amount of such reduction shall be contributed to the Plan by the Employer on behalf of the Contributing Participant. For any taxable year, a Contributing Participant's Elective Deferrals shall not exceed the limit contained in Section 402(g) of the Code in effect at the beginning of such taxable year.

PART C. ELECTIVE DEFERRALS BASED ON BONUSES:

Instead of or in addition to making Elective Deferrals through payroll deduction, may a Contributing Participant elect to contribute to the Plan, as an Elective Deferral, part or all of a bonus rather than receive such bonus in cash? (Choose one):

OPTION 1: [ ] Yes.

OPTION 2: [X] No.

NOTE: If no option is selected, Option 2 will be deemed to be selected.

PART D. RETURN AS A CONTRIBUTING PARTICIPANT AFTER CEASING ELECTIVE DEFERRALS:

A Participant who ceases Elective Deferrals by revoking a salary reduction agreement may return as a Contributing Participant as of such times established by the Plan Administrator in a uniform and nondiscriminatory manner.

PART E. CHANGING ELECTIVE DEFERRALS AMOUNTS:

A Contributing Participant may modify a salary reduction agreement to prospectively increase or decrease the amount of his or her Elective Deferrals as of such times established by the Plan Administrator in a uniform and nondiscriminatory manner.

PART F. CLAIMING EXCESS ELECTIVE DEFERRALS:

Participants who claim Excess Elective Deferrals for the preceding calendar year must submit their claims in writing to the Plan Administrator by (Choose one):

OPTION 1: [X] March 1.

OPTION 2: [ ] Other (Specify a date not later than April 15)_____

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 7. MATCHING CONTRIBUTIONS

PART A. AUTHORIZATION OF MATCHING CONTRIBUTIONS:

Will the Employer make Matching Contributions to the Plan on behalf of Qualifying Contributing Participants? (Choose one):

OPTION 1: [X] Yes, but only with respect to a Contributing Participant's Elective Deferrals.

OPTION 2: [ ] Yes, but only with respect to a Participant's Nondeductible Employee Contributions.

OPTION 3: [ ] Yes, with respect to both Elective Deferrals and Nondeductible Employee Contributions.

OPTION 4: [ ] No.

NOTE: If no option is selected, Option 4 will be deemed to be selected. Complete the remainder of Section 7 only if Option 1, 2 or 3 is selected.

PART B. MATCHING CONTRIBUTION FORMULA:

If the Employer will make Matching Contributions, then the amount of such Matching Contributions made on behalf of a Qualifying Contributing Participant each Plan Year shall be (Choose one):

OPTION 1: [X] An amount equal to 100% of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable).

OPTION 2: [ ] An amount equal to the sum of _____% of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed _____% of the Contributing Participant's Compensation plus _____% of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which exceeds _____% of the Contributing Participant's Compensation.

OPTION 3: [ ] Such amount, if any, equal to that percentage of each Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which the Employer, in its sole discretion, determines from year to year.

OPTION 4: [ ] Other Formula. (Specify)

NOTE: If Option 4 is selected, the formula specified can only allow Matching Contributions to be made with respect to a Contributing Participant's Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable).

PART C. LIMIT ON MATCHING CONTRIBUTIONS:

Notwithstanding the Matching Contribution formula specified above, no Matching Contribution will be made with respect to a Contributing Participant's Elective Deferrals (and/or Nondeductible Employee Contributions, if applicable) in excess of _____ or _____% of such Contributing Participant's Compensation.

PART D. QUALIFYING CONTRIBUTING PARTICIPANTS:

A Contributing Participant who satisfies the eligibility requirements described in Section 4 will be a Qualifying Contributing Participant and thus entitled to share in Matching Contribution for any Plan Year only in the Participant is a Contributing Participant and satisfies the following additional conditions (Check one or more Options):

OPTION 1: [ ] No Additional Conditions.

OPTION 2: [X] Hours of Service Requirement. The Contributing Participant completes at least 500 (not more than 500) Hours of Service during the Plan Year. However, this condition will be waived for the following reasons (Check at least one):

[X] The Contributing Participant's Death.

[X] The Contributing Participant's Termination of Employment after having incurred a Disability.

[X] The Contributing Participant's Termination of Employment after having reached Normal Retirement Age.

[ ] This condition will not be waived.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 8. QUALIFIED NONELECTIVE CONTRIBUTIONS

PART A. AUTHORIZATION OF QUALIFIED NONELECTIVE CONTRIBUTIONS:

Will the Employer make Qualified Nonelective Contributions to the Plan? (Choose one):

OPTION 1: [ ] Yes.

OPTION 2: [X] No.

If the Employer elects to make Qualified Nonelective Contributions, then the amount, if any, of such contribution to the Plan for each Plan Year shall be an amount determined by the Employer.

NOTE: If no option is selected, Option 1 will be deemed to be selected. Complete the remainder of Section 8 only if Option 1 is selected.

PART B. PARTICIPANTS ENTITLED TO QUALIFIED NONELECTIVE CONTRIBUTIONS:

Allocation of Qualified Nonelective Contributions shall be made to the Individual Accounts of (Choose one):

OPTION 1: [ ] Only Participants who are not Highly Compensated Employees.

OPTION 2: [ ] All Participants.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART C. ALLOCATION OF QUALIFIED NONELECTIVE CONTRIBUTIONS:

Allocation of Qualified Nonelective Contributions to Participants entitled thereto shall be made (Choose one):

OPTION 1: [ ] In the ratio which each Participant's Compensation for the Plan Year bears to the total Compensation of all Participants for such Plan Year.

OPTION 2: [ ] In the ratio which each Participant's Compensation not in excess of _____ for the Plan Year bears to the total Compensation of all Participants not in excess of _____ for such Plan Year.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 9. QUALIFIED MATCHING CONTRIBUTIONS

PART A. AUTHORIZATION OF QUALIFIED MATCHING CONTRIBUTIONS:

Will the Employer make Qualified Matching Contributions to the Plan on behalf of Qualifying Contributing Participants? (Choose one):

OPTION 1: [ ] Yes, but only with respect to a Contributing Participant's Elective Deferrals.

OPTION 2: [ ] Yes, but only with respect to a Participant's Nondeductible Employee Contributions.

OPTION 3: [ ] Yes, with respect to both Elective Deferrals and Nondeductible Employee Contributions.

OPTION 4: [X] No.

NOTE: If no option is selected, Option 3 will be deemed to be selected. Complete the remainder of Section 9 only if Option 1, 2 or 3 is selected.

PART B. QUALIFIED MATCHING CONTRIBUTION FORMULA:

If the Employer will make Qualified Matching Contributions, then the amount of such Qualified Matching Contributions made on behalf of a Qualifying Contributing Participant each Plan Year shall be (Choose one):

OPTION 1: [ ] An amount equal to _____% of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable).

OPTION 2: [ ] An amount equal to the sum of _____% of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed _____% of the Contributing Participant's Compensation plus _____% of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which exceeds _____% of the Contributing Participant's Compensation.

OPTION 3: [ ] Such amount, if any, as determined by the Employer in its sole discretion, equal to that percentage of the Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable) of each Contributing Participant entitled thereto which would be sufficient to cause the Plan to satisfy the Actual Contribution Percentage tests (described in Section 11.402 of the Plan) for the Plan Year.

OPTION 4: [ ] Other Formula. (Specify)

NOTE: If no option is selected, Option 3 will be deemed to be selected.

PART C. PARTICIPANTS ENTITLED TO QUALIFIED MATCHING CONTRIBUTIONS:

Qualified Matching Contributions, if made to the Plan, will be made on behalf of (Choose one):

OPTION 1: [ ] Only Contributing Participants who make Elective Deferrals who are not Highly Compensated Employees.

OPTION 2: [ ] All Contributing Participants who make Elective Deferrals.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART D. LIMIT ON QUALIFIED MATCHING CONTRIBUTIONS:

Notwithstanding the Qualified Matching Contribution formula specified above, the Employer will not match a Contributing Participant's Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable) in excess of _____ or _____% of such Contributing Participant's Compensation.

SECTION 10. EMPLOYER PROFIT SHARING CONTRIBUTIONS

COMPLETE PARTS A, B AND C

PART A. CONTRIBUTION FORMULA:

For each Plan Year the Employer will contribute an Amount to be determined from year to year.

PART B. ALLOCATION FORMULA: (Choose one)

OPTION 1: [ ] Pro Rata Formula. Employer Profit Sharing Contributions shall be allocated to the Individual Accounts of Qualifying Participants in the ratio that each Qualifying Participant's Compensation for the Plan Year bears to the total Compensation of all Qualifying Participants for the Plan Year.

OPTION 2: [X] Integrated Formula. Employer Profit Sharing Contributions shall be allocated as follows (Start with Step 3 if this Plan is not a Top-Heavy Plan):

Step 1. Employer Profit Sharing Contributions shall first be allocated pro rata to Qualifying Participants in the manner described in Section 10, Part B, Option 1. The percent so allocated shall not exceed 3% of each Qualifying Participant's Compensation.

Step 2. Any Employer Profit Sharing Contributions remaining after the allocation in Step 1 shall be allocated to each Qualifying Participant's Individual Account in the ratio that each Qualifying Participant's Compensation for the Plan Year in Excess of the integration level bears to all Qualifying Participants' Compensation in excess of the integration level, but not in excess of 3%.

Step 3. Any Employer Profit Sharing Contributions remaining after the allocation in Step 2 shall be allocated to each Qualifying Participant's Individual Account in the ratio that the sum of each Qualifying Participant's total Compensation and Compensation in excess of the integration level bears to the sum of all Qualifying Participants' total Compensation and Compensation in excess of the integration level, but not in excess of the profit sharing maximum disparity rate as described in Section 3.01(B)(3) of the Plan.

Step 4. Any Employer Profit Sharing Contributions remaining after the allocation in Step 3 shall be allocated pro rata to Qualifying Participants in the manner described in Section 10, Part B, Option 1.

The integration level shall be (Choose one):

SUBOPTION (a): [X] The Taxable Wage Base.

SUBOPTION (b): [ ] _____ (a dollar amount less than the Taxable Wage Base).

SUBOPTION (c): [ ] _____% (not more than 100%) of the Taxable Wage Base.

NOTE: If no option is selected, Suboption (a) will be deemed to be selected.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART C. QUALIFYING PARTICIPANTS:

A Participant will be a Qualifying Participant and thus entitled to share in the Employer Profit Sharing Contribution for any Plan Year only if the Participant is a Participant on at least one day of such Plan Year and satisfies the following additional conditions (Check one or more Options):

OPTION 1: [ ] No Additional Conditions.

OPTION 2: [X] Hours of Service Requirement. The Participant completes at least 500 (not more than 500) Hours of Service during the Plan Year. However, this condition will be waived for the following reasons (Check at least one):

[X] The Participant's Death.

[X] The Participant's Termination of Employment after having incurred a Disability.

[X] The Participant's Termination of Employment after having reached Normal Retirement Age.

[ ] This condition will not bewaived.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 11. COMPENSATION

COMPLETE PARTS A THROUGH D

PART A. BASIC DEFINITION:

Compensation will mean all of each Participant's (Choose one):

OPTION 1: [X] W-2 wages.

OPTION 2: [ ] Section 3401(a) wages.

OPTION 3: [ ] 415 safe-harbor compensation.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART B. MEASURING PERIOD FOR COMPENSATION:

Compensation shall be determined over the following applicable period (Choose one):

OPTION 1: [ ] The Plan Year.

OPTION 2: [X] The calendar year ending with or within the Plan Year.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART C. INCLUSION OF ELECTIVE DEFERRALS:

Does Compensation include Employer Contributions made pursuant to a salary reduction agreement which are not includible in the gross income of the Employee under Section 125, 402(e)(3), 402(h)(1)(B), and 403(b) of the Code? [X] Yes [ ] No

NOTE: If neither box is checked, "Yes" will be deemed to be selected.

PART D. PRE-ENTRY DATE COMPENSATION:

For the Plan Year in which an Employee enters the Plan, the Employee's Compensation which shall be taken into account for purposes of the Plan shall be (Choose one):

OPTION 1: [ ] The Employee's Compensation only from the time the Employee became a Participant in the Plan.

OPTION 2: [X] The Employee's Compensation for the whole of such Plan Year.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 12. VESTING AND FORFEITURES

COMPLETE PARTS A THROUGH G

PART A. VESTING SCHEDULE FOR EMPLOYER PROFIT SHARING CONTRIBUTIONS. A Participant shall become Vested in his or her Individual Account derived from Profit Sharing Contributions made pursuant to Section 10 of the Adoption Agreement as follows (Choose one):

==========

YEARS OF VESTING SERVICE	VESTED PERCENTAGE Option 1 [ ]	Option 2 [ ]	Option 3 [ ]	Option 4 [ ]	Option 5 [X]	(Complete if Chosen)
1	0%	0%	100%	0%	0%	
2	0%	20%	100%	0%	25%	
3	0%	40%	100%	20%	50%	(not less than 20%)
4	0%	60%	100%	40%	75%	(not less than 40%)
5	100%	80%	100%	60%	100%	(not less than 60%)
6	100%	100%	100%	80%	100%	(not less than 80%)
7	100%	100%	100%	100%	100%	(not less than 100%)

NOTE: If no option is selected, Option 3 will be deemed to be selected.

PART B. VESTING SCHEDULE FOR MATCHING CONTRIBUTIONS. A Participant shall become Vested in his or her Individual Account derived from Matching Contributions made pursuant to Section 7 of the Adoption Agreement as follows (Choose one):

YEARS OF VESTING SERVICE	VESTED PERCENTAGE Option 1 [ ]	Option 2 [ ]	Option 3 [ ]	Option 4 [ ]	Option 5 [X]	(Complete if Chosen)
1	0%	0%	100%	0%	0%	
2	0%	20%	100%	0%	25%	
3	0%	40%	100%	20%	50%	(not less than 20%)
4	0%	60%	100%	40%	75%	(not less than 40%)
5	100%	80%	100%	60%	100%	(not less than 60%)
6	100%	100%	100%	80%	100%	(not less than 80%)
7	100%	100%	100%	100%	100%	(not less than 100%)

NOTE: If no option is selected, Option 3 will be deemed to be selected.

PART C. HOURS REQUIRED FOR VESTING PURPOSES:

1. 1000 Hours of Service (no more than 1,000) shall be required to constitute a Year of Vesting Service.

2. 500 Hours of Service (no more than 500 but less than the number of specified in Section 12, Part C, Item 1, above) must be exceeded to avoid a Break in Vesting Service.

3. For purposes of determining Years of Vesting Service, Employees shall be given credit for Hours of Service with the following predecessor employer(s): (Complete if applicable)

PART D. EXCLUSION OF CERTAIN YEARS OF VESTING SERVICE:

All of an Employee's Years of Vesting Service with the Employer are counted to determine the vesting percentage in the Participant's Individual Account except (Check any that apply):

[ ] Years of Vesting Service before the Employee reaches age 18.

[ ] Years of Vesting Service before the Employer maintained this Plan or a predecessor plan.

PART E. ALLOCATION OF FORFEITURES OF EMPLOYER PROFIT SHARING CONTRIBUTIONS:

Forfeitures of Employer Profit Sharing Contributions shall be (Choose one):

OPTION 1: [ ] Allocated to the Individual Accounts of the Participants specified below in the manner as described in Section 10, Part B (for Employer Profit sharing Contributions).

The Participants entitled to receive allocations of such Forfeitures shall be (Choose one):

SUBOPTION (a): [ ] Only Qualifying Participants.

SUBOPTION (b): [ ] All Participants.

OPTION 2: [X] Applied to reduce Employer Profit Sharing Contributions (Choose one):

SUBOPTION (a): [X] For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): [ ] For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

OPTION 3: [ ] Applied first to the payment of the Plan's administrative expenses and any excess applied to reduce Employer Profit Sharing Contributions (Choose one):

SUBOPTION (a): [ ] For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): [ ] For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

NOTE: If no option is selected, Option 1 and Suboption (a) will be deemed to be selected.

PART F. ALLOCATION OF FORFEITURES OF MATCHING CONTRIBUTIONS:

Forfeitures of Matching Contributions shall be (Choose one):

OPTION 1: [ ] Allocated, after all other Forfeitures under the Plan, to each Participant's Individual Account in the ratio which each Participant's Compensation for the Plan Year bears to the total Compensation of all Participants for such Plan Year.

The Participants entitled to receive allocations of such Forfeitures shall be (Choose one):

SUBOPTION (a): [ ] Only Qualifying Contributing Participants.

SUBOPTION (b): [ ] Only Qualifying Participants.

SUBOPTION (c): [ ] All Participants.

OPTION 2: [X] Applied to reduce Matching Contributions (Choose one):

SUBOPTION (a): [X] For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): [ ] For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

OPTION 3: [ ] Applied first to the payment of the Plan's administrative expenses and any excess applied to reduce Matching Contributions (Choose one):

SUBOPTION (a): [ ] For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): [ ] For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

NOTE: If no option is selected, Option 1 and Suboption (a) will be deemed to be selected.

PART G. ALLOCATION OF FORFEITURES OF EXCESS AGGREGATE CONTRIBUTIONS:

Forfeitures of Excess Aggregate Contributions shall be (Choose one):

OPTION 1: [ ] Allocated, after all other Forfeitures under the Plan, to each Contributing Participant's Matching Contribution account in the ratio which each Contributing Participant's Compensation for the Plan Year bears to the total Compensation of all Contributing Participants for such Plan Year. Such Forfeitures will not be allocated to the account of any Highly Compensated Employee.

OPTION 2: [X] Applied to reduce Matching Contributions (Choose one):

SUBOPTION (a): [X] For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): [ ] For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

OPTION 3: [ ] Applied first to the payment of the Plan's administrative expenses and any excess applied to reduce Matching Contributions (Choose one):

SUBOPTION (a): For the Plan Year for which the Forfeiture arises.

SUBOPTION (b): For any Plan Year subsequent to the Plan Year for which the Forfeiture arises.

NOTE: If no option is selected, Option 2 and Suboption (a) will be deemed to be selected.

SECTION 13. NORMAL RETIREMENT AGE AND EARLY RETIREMENT AGE

PART A. THE NORMAL RETIREMENT AGE UNDER THE PLAN SHALL BE (Check and complete one option):

OPTION 1: [X] Age 65.

OPTION 2: [ ] Age _____ (not to exceed 65).

OPTION 3: [ ] The later of age _____ (not to exceed 65) or the ____ (not to exceed 5th) anniversary of the first day of the first Plan Year in which the Participant commenced participation in the Plan.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART B. EARLY RETIREMENT AGE (Choose one option):

OPTION 1: [X] An Early Retirement Age is not applicable under the Plan.

OPTION 2: [ ] Age _____ (not less than 55 nor more than 65).

OPTION 3: [ ] A Participant satisfies the Plan's Early Retirement Age conditions by attaining age _____ (not less than 55) and completing _____ Years of Vesting Service.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 14. DISTRIBUTIONS

DISTRIBUTABLE EVENTS. ANSWER EACH OF THE FOLLOWING ITEMS.

A. Termination of Employment Before Normal Retirement Age. May a Participant who has not reached Normal Retirement Age request a distribution from the Plan upon Termination of Employment? [X] Yes [ ] No

B. Disability. May a Participant who has incurred a Disability request a distribution from the Plan? [X] Yes [ ] No

C. Attainment of Normal Retirement Age. May a Participant who has attained Normal Retirement Age but has not incurred a Termination of Employment request a distribution from the Plan? [X] Yes [ ] No

D. Attainment of Age 59 1/2. Will Participants who have attained age 59 1/2 be permitted to withdraw Elective Deferrals while still employed by the Employer? [ ] Yes [X] No

E. Hardship Withdrawals of elective Deferrals. will Participants be permitted to withdraw Elective Deferrals on account of hardship pursuant to Section 11.503 of the Plan? [X] Yes [ ] No

F. In-Service Withdrawals. Will Participants be permitted to request a distribution during service pursuant to Section 6.01(A)(3) of the Plan? [ ] Yes [X] No

G. Hardship Withdrawals. Will Participants be permitted to make hardship withdrawals pursuant to Section 6.01(A)(4) of the Plan? [ ] Yes [X] No

H. Withdrawals of Rollover or Transfer Contributions. Will Employees be permitted to withdraw their Rollover or Transfer Contributions at any time? [X] Yes [ ] No

NOTE: If a box is not checked for an item, "Yes" will be deemed to be selected for that item. Section 411(d)(6) of the Code prohibits the elimination of protected benefits. In general, protected benefits include the forms and timing of payout options. If the Plan is being adopted to amend and replace a Prior Plan that permitted a distribution option described above, you must answer "Yes" to that item.

SECTION 15. JOINT AND SURVIVOR ANNUITY

PART A. RETIREMENT EQUITY ACT SAFE HARBOR:

OPTION 1: [ ] Yes.

OPTION 2: [X] No.

NOTE: You must select "No" if you are adopting this Plan as an amendment and restatement of a Prior Plan that was subject to the joint and survivor annuity requirements.

PART B. SURVIVOR ANNUITY PERCENTAGE: (Complete only if your answer in Section 15, Part A is "No")

The survivor annuity portion of the Joint and Survivor Annuity shall be a percentage equal to 50% (at least 50% but no more than 100%) of the amount paid to the Participant prior to his or her death.

SECTION 16. OTHER OPTIONS

ANSWER "YES" OR "NO" TO EACH OF THE FOLLOWING QUESTIONS BY CHECKING THE APPROPRIATE BOX. IF A BOX IS NOT CHECKED FOR A QUESTION, THE ANSWER WILL BE DEEMED TO BE "NO.

A.	Loans: Will loans to Participants pursuant to Section 6.08 of the Plan be permitted?	[X] Yes [ ] No
B.	Insurance: Will the Plan allow for the investment in insurance policies pursuant to Section 5.13 of the Plan?	[X] Yes [ ] No
C.	Employer Securities: Will the Plan allow for the investment in qualifying Employer securities or qualifying Employer real property?	[ ] Yes [X] No
D.	Rollover Contributions: Will Employees be permitted to make rollover contributions to the Plan pursuant to Section 3.03 of the Plan?	[X] Yes [ ] No [ ] Yes, but only after becoming a Participant.
E.	Transfer Contributions: Will Employees be permitted to make transfer contributions to the Plan pursuant to Section 3.04 of the Plan?	[ ] Yes [X] No [ ] Yes, but only after becoming a Participant.
F.	Nondeductible Employee Contributions: Will Employees be permitted to make Nondeductible Employee Contributions pursuant to Section 11.305 of the Plan?	[ ] Yes [X] No
	Check here if such contributions will be mandatory.	[ ]
G.	Will Participants be permitted to direct the investment of their Plan assets pursuant to Section 5.14 of the Plan?	[X] Yes [ ] No

SECTION 17. LIMITATION ON ALLOCATIONS MORE THAN ONE PLAN.

If you maintain or ever maintained another qualified plan (other than a paired standardized money purchase pension plan using the same Basic Plan Document as this Plan) in which any Participant in this Plan is (or was) a Participant or could become a Participant, you must complete this section. You must also complete this section if you maintain a welfare benefit fund, as defined in Section 419(e) of the Code, or an individual medical account, as defined in Section 415(1)(2) of the Code, under which amounts are treated as annual additions with respect to any Participant in this Plan.

PART C. INDIVIDUALLY DESIGNED DEFINED CONTRIBUTION PLAN:

If the Participant is covered under another qualified defined contribution plan maintained by the Employer, other than a master or prototype plan:

1. [X] The provisions of Section 3.05(B)(1) through 3.05(B)(6) of the Plan will apply as if the other plan were a master or prototype plan.

2. [ ] Other method. (Provide the method under which the plans will limit total annual additions to the maximum permissible amount, and will properly reduce any excess amounts, in a manner that precludes Employer discretion.) _____
_____
_____

PART D. DEFINED BENEFIT PLAN:

If the Participant is or has ever been a participant in a defined benefit plan maintained by the Employer, the Employer will provide below the language which will satisfy the 1.0 limitation of Section 415(e) of the Code.

1. [X] If the projected annual addition to this Plan to the account of a Participant for any limitation year would cause the 1.0 limitation of Section 415(e) of the Code to be exceeded, the annual benefit of the defined benefit plan for such limitation year shall be reduced so that the 1.0 limitation shall be satisfied.

   If it is not possible to reduce the annual benefit of the defined benefit plan and the projected annual addition to this Plan to the account of a Participant for a limitation year would cause the 1.0 limitation to be exceeded, the Employer shall reduce the Employer Contribution which is to be allocated to this Plan on behalf of such Participant so that the 1.0 limitation will be satisfied. (The provisions of Section 415(e) of the Code are incorporated herein by reference under the authority of Section 1106(h) of the Tax Reform Act of 1986.)

2. [ ] Other method. (Provide language describing another method. Such language must preclude Employer discretion.) _____
_____
_____

SECTION 18. TOP-HEAVY MINIMUM COMPLETE PARTS A AND B

PART E. MINIMUM ALLOCATION OR BENEFIT:

For any Plan Year with respect to which this Plan is a Top-Heavy Plan, any minimum allocation required pursuant to Section 3.01(E) of the Plan shall be made (Choose one):

OPTION 1: [X] To this Plan.

OPTION 2: [ ] To the following other plan maintained by the Employer (Specify name and plan number of plan)

OPTION 3: [ ] In accordance with the method described on an attachment to this Adoption Agreement. (Attach language describing the method that will be used to satisfy Section 416 of the Code. Such method must preclude Employer discretion.)

NOTE: If no option is selected, Option 1 will be deemed to be selected.

PART F. TOP-HEAVY VESTING SCHEDULE:

Pursuant to Section 6.01(C) of the Plan, the vesting schedule that will apply when this Plan is a Top-Heavy Plan (unless the Plan's regular vesting schedule provides for more rapid vesting) shall be (Choose one):

OPTION 1: [X] 6 Year Graded.

OPTION 2: [ ] 3 Year Cliff.

NOTE: If no option is selected, Option 1 will be deemed to be selected.

SECTION 19. PROTOTYPE SPONSOR

Name of Prototype Sponsor TRAVELERS INSURANCE COMPANY

Address ONE TOWER SQUARE, HARTFORD, CT 06183

Telephone Number 888-822-4710

PERMISSIBLE INVESTMENTS

The assets of the Plan shall be invested only in those investments described below (To be completed by the Prototype Sponsor):

VARIABLE ANNUITY CONTRACT

SECTION 20. TRUSTEE OR CUSTODIAN

OPTION A: [X] Financial Organization as Trustee or Custodian

CHECK ONE: [X] Custodian, [ ] Trustee without full trust powers, or
[ ] Trustee with full trust powers

Financial Organization SMITH BARNEY

Signature

Type Name

COLLECTIVE OR COMMINGLED FUNDS

List any collective or commingled funds maintained by the financial organization Trustee in which assets of the Plan may be invested (Complete if applicable).

OPTION B: [X] Individual Trustee(s)

Signature	/s/ Elma S. Hawkins	Signature	
Type Name	/s/ Elma S. Hawkins	Type Name	
Signature		Signature	
Type Name		Type Name	

SECTION 21. RELIANCE

An Employer who has ever maintained or who later adopts any plan (including a welfare benefit fund, as defined in Section 419(e) of the Code, which provides post-retirement medical benefits allocated to separate accounts for key employees, as defined in Section A(d)(3) of the Code, or an individual medical account, as defined in Section 415(1)(2) of the Code) in addition to this Plan (other than a paired standardized money purchase pension plan using the same Basic Plan Document as this Plan) may not rely on the opinion letter issued by the National Office of the Internal Revenue Service as evidence that this Plan is qualified under Section 401 of the Internal Revenue Code. If the Employer who adopts or maintains multiple plans wishes to obtain reliance that his or her plan(s) are qualified, application for a determination letter should be made to the appropriate Key District Director of Internal Revenue.

The Employer may not rely on the opinion letter issued by the National Office of the Internal Revenue Service as evidence that this Plan is qualified under Section 401 of the code unless the terms of the Plan, as herein adopted or amended, that pertain to the requirements of Sections 401(a)(4), 401(a)(17), 401(1), 401(a)(5), 410(b) and 414(s) of the Code, as amended by the Tax Reform Act of 1986, or later laws, (a) are made effective retroactively to the first day of the first Plan Year beginning after December 31, 1988 (or such later date on which these requirements first become effective with respect to this Plan); or (b) are made effective no later than the first day on which the Employer is no longer entitled, under regulations, to rely on a reasonable, good faith interpretation of these requirements, and the prior provisions of the Plan constitute such an interpretation.

This Adoption Agreement may be used only in conjunction with Basic Plan Document No. 04.

SECTION 22. EMPLOYER SIGNATURE
IMPORTANT: PLEASE READ BEFORE SIGNING

I am an authorized representative of the Employer named above and I state the following:

1. I acknowledge that I have relied upon my own advisors regarding the completion of this Adoption Agreement and the legal tax implications of adopting this Plan.

2. I understand that my failure to properly complete this Adoption Agreement may result in disqualification of the Plan.

3. I understand that the Prototype Sponsor will inform me of any amendments made to the Plan and will notify me should it discontinue or abandon the Plan.

4. I have received a copy of this Adoption Agreement and the corresponding Basic Plan Document.

Signature for Employer /s/ Elma S. Hawkins Date Signed 8/13/97

Type Name Elma S Hawkins Title Chief Operating Officer

QUALIFIED RETIREMENT PLAN/403(b)
LOAN DISCLOSURE

As a participant in the qualified retirement plan/403(b) adopted by your employer, you may be able to borrow a portion of your vested account balance. The loan program adopted by your employer is available on a uniform basis to all parties in interest to the plan who meet loan qualification requirements. For additional information about the loan program available under your employer's plan, contact the loan program administrator listed below.

NOTE: THIS LOAN DISCLOSURE CONSTITUTES PART OF THE SUMMARY PLAN DESCRIPTION (SPD) OF YOUR QUALIFIED RETIREMENT PLAN AND SHOULD BE KEPT WITH YOUR OTHER SPD DOCUMENTS.

PLAN LOAN INFORMATION

Plan Name Antigenics 401(k)

Plan Number 001 Plan Year-End 12-31

EFFECTIVE DATE

The effective date of the plan loan program is 01-01-1997

LOAN PROGRAM ADMINISTRATOR

The person responsible for administering your loan program is ELENA HAWKINS
Your loan program administrator may be reached at the following address and/or telephone number: 212-332-4774

LOAN APPLICATION PROCEDURE

To apply for a loan under this plan, you must complete and return to the loan program administrator a Loan Application Form, furnishing all information requested and pay any required loan application processing fees. In addition, you must follow the procedures described below. (specify)

LIMITATIONS ON TYPES OF LOANS

Loans from this plan may be used for the following purposes:

[X] all

[ ] purchase of your principal residence

[ ] post-secondary tuition for you or your immediate family

[ ] medical expenses for you or your immediate family

[ ] rent or mortgage payments to prevent eviction or foreclosure from your principal residence

[ ] other (specify)

LOAN APPROVAL STANDARDS

Decisions approving or denying loans from this Plan will be based on the following criteria:

[X] the value of your vested individual account balance

[ ] other (specify)

NOTE: LOAN APPROVAL BASIS SELECTED MUST NOT CAUSE LOANS TO BE MADE AVAILABLE ON A DISCRIMINATORY BASIS.

LOAN PRINCIPAL LIMITATIONS

Loans from this plan shall be in a minimum amount of: $ 500.00 (may not exceed $1,000.)
The maximum amount of all loans outstanding cannot exceed: [X] one-half of your vested account balance or $50,000
[ ] other (specify) _____

NOTE: IF THE "OTHER" OPTION IS SELECTED, THE AMOUNT ENTERED CANNOT EXCEED THE LESSER OF ONE-HALF THE VESTED BALANCE OR $50,000.

INTEREST CALCULATION

Interest on loans from this plan will be computed on the following basis:

[ ] prime rate (as specified in the Wall Street Journal) _____

[ ] prime rate (as specified in the Wall Street Journal) _____ plus _____ percent

[X] other (specify) the prime rate as of the first day of each month plus two percent

NOTE: THE INTEREST RATE MUST BE COMPARABLE TO THAT CHARGED BY COMMERCIAL LENDERS IN A SIMILAR TRANSACTION. ANY LOAN RENEWALS ARE SUBJECT TO INTEREST RATE MODIFICATION.

COLLATERAL PLEDGE

A percentage of your vested account balance equal to the amount borrowed divided by your vested account balance is pledged as security of repayment of loans under this program.

DEFAULT PROVISIONS

The following are deemed to be acts of default under your qualified plan/403(b) loan program:

* failure to remit payment in a timely manner as required under the Loan Agreement
* breach of any of your obligations or duties under the Loan Agreement
* termination of employment
* other (specify) _____

Upon default, your loan program administrator is entitled to foreclose its security interest in your vested account balance pledged for repayment upon the occurrence of an event which triggers a distribution of your benefits.

In addition, the loan program administrator will report as taxable any amounts which are deemed distributed as a result of failing to make loan payments.

QUALIFIED RETIREMENT PLAN AND TRUST
DEFINED CONTRIBUTION BASIC PLAN DOCUMENT 04

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SECTION ONE DEFINITIONS

The following words and phrases when used in the Plan with initial capital letters shall, for the purpose of this Plan, have the meanings set forth below unless the context indicates that other meanings are intended:

1.01 ADOPTION AGREEMENT

Means the document executed by the Employer through which it adopts the Plan and Trust and thereby agrees to be bound by all terms and conditions of the Plan and Trust.

1.02 BASIC PLAN DOCUMENT

Means this prototype Plan and Trust document.

1.03 BENEFICIARY

Means the individual or individuals designated pursuant to Section 6.03(A) of the Plan.

1.04 BREAK IN ELIGIBILITY SERVICE

Means a 12 consecutive month period which coincides with an Eligibility Computation Period during which an Employee fails to complete more than 500 Hours of Service (or such lesser number of Hours of Service specified in the Adoption Agreement for this purpose).

1.05 BREAK IN VESTING SERVICE

Means a Plan Year (or other vesting computation period described in Section 1.50) during which an Employee fails to complete more than 500 Hours of Service (or such lesser number of Hours of Service specified in the Adoption Agreement for this purpose).

1.06 CODE

Means the Internal Revenue Code of 1986 as amended from time-to-time.

1.07 COMPENSATION

A. Basic Definition

For Plan Years beginning on or after January 1, 1989, the following definition of Compensation shall apply:

As elected by the Employer in the Adoption Agreement (and if no election is made, W-2 wages will be deemed to have been selected), Compensation shall mean one of the following:

1. W-2 wages. Compensation is defined as information required to be reported under Sections 6041 and 6051, and 6052 of the Code (Wages, tips and other compensation as reported on Form W-2). Compensation is defined as wages within the meaning of Section 3401(a) of the Code and all other payments of compensation to an Employee by the Employer (in the course of the Employer's trade or business) for which the Employer is required to furnish the Employee a written statement under Sections 6041(d) and 6051(a)(3), and 6052 of the Code. Compensation must be determined without regard to any rules under Section 3401(a) that limit the remuneration included in wages based on the nature or location of the employment or the services performed (such as the exception for agricultural labor in Section 3401(a)(2)).

2. Section 3401(a) wages. Compensation is defined as wages within the meaning of Section 3401(a) of the Code, for the purposes of income tax withholding at the source but determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or the services performed (such as the exception for agricultural labor in Section 3401(a)(2)).

3. 415 safe-harbor compensation. Compensation is defined as wages, salaries, and fees for professional services and other amounts received (without regard to whether or not an amount is paid in cash) for personal services actually rendered in the course of employment with the Employer maintaining the Plan to the extent that the amounts are includible in gross income (including, but not limited to, commissions paid salesmen, compensation for services on the basis of a percentage of profits, commissions on insurance premiums, tips, bonuses, fringe benefits, and reimbursements or other expense allowances under a nonaccountable plan (as described in 1.62-2(c)), and excluding the following:

   a. Employer contributions to a plan of deferred compensation which are not includible in the Employee's gross income for the taxable year in which contributed, or employer contributions under a

simplified employee pension plan to the extent such contributions are deductible by the Employee, or any distributions from a plan of deferred compensation;

b. Amounts realized from the exercise of a nonqualified stock option, or when restricted stock (or property) held by the Employee either becomes freely transferable or is no longer subject to a substantial risk of forfeiture;

c. Amounts realized from the sale, exchange or other disposition of stock acquired under a qualified stock option; and

d. Other amounts which received special tax benefits, or contributions made by the Employer (whether or not under a salary reduction agreement) towards the purchase of an annuity contract described in Section 403(b) of the Code (whether or not the contributions are actually excludable from the gross income of the Employee).

For any Self-Employed Individual covered under the Plan, Compensation will mean Earned Income.

B. Determination Period And Other Rules

Compensation shall include only that Compensation which is actually paid to the Participant during the determination period. Except as provided elsewhere in this Plan, the determination period shall be the Plan Year unless the Employer has selected another period in the Adoption Agreement. If the Employer makes no election, the determination period shall be the Plan Year.

Unless otherwise indicated in the Adoption Agreement, Compensation shall include any amount which is contributed by the Employer pursuant to a salary reduction agreement and which is not includible in the gross income of the Employee under Sections 125, 402(e)(3), 402(h)(1)(B) or 403(b) of the Code.

Where this Plan is being adopted as an amendment and restatement to bring a Prior Plan into compliance with the Tax Reform Act of 1986, such Prior Plan's definition of Compensation shall apply for Plan Years beginning before January 1, 1989.

C. Limits On Compensation

For years beginning after December 31, 1988 and before January 1, 1994, the annual Compensation of each Participant taken into account for determining all benefits provided under the Plan for any determination period shall not exceed $200,000. This limitation shall be adjusted by the Secretary at the same time and in the same manner as under Section 4

15(d) of the Code, except that the dollar increase in effect on January 1 of any calendar year is effective for Plan Years beginning in such calendar year and the first adjustment to the $200,000 limitation is effective on January 1, 1990.

For Plan Years beginning on or after January 1, 1994, the annual Compensation of each Participant taken into account for determining all benefits provided under the Plan for any Plan Year shall not exceed $150,000, as adjusted for increases in the cost-of-living in accordance with Section 401(a)(17)(B) of the Internal Revenue Code. The cost-of-living adjustment in effect for a calendar year applies to any determination period beginning in such calendar year.

If the period for determining Compensation used in calculating an Employee's allocation for a determination period is a short Plan Year (i.e., shorter than 12 months), the annual Compensation limit is an amount equal to the otherwise applicable annual Compensation limit multiplied by a fraction, the numerator of which is the number of months in the short Plan Year, and the denominator of which is 12.

In determining the Compensation of a Participant for purposes of this limitation, the rules of Section 414(q)(6) of the Code shall apply, except in applying such rules, the term "family" shall include only the spouse of the Participant and any lineal descendants of the Participant who have not attained age 19 before the close of the year. If, as a result of the application of such rules the adjusted $200,000 limitation is exceeded, then (except for purposes of determining the portion of Compensation up to the integration level, if this Plan provides for permitted disparity), the limitation shall be prorated among the affected individuals in proportion to each such individual's Compensation as determined under this Section prior to the application of this limitation.

If Compensation for any prior determination period is taken into account in determining an Employee's allocations or benefits for the current determination period, the Compensation for such prior determination period is subject to the applicable annual Compensation limit in effect for that prior period. For this purpose, in determining allocations in Plan Years beginning on or after January 1, 1989, the annual Compensation limit in effect for determination periods beginning before that date is $200,000. In addition, in determining allocations in Plan Years beginning on or after January 1, 1994, the annual Compensation limit in effect for determination periods beginning before that date is $150,000.

1.08 CUSTODIAN

Means an entity specified in the Adoption Agreement as Custodian or any duly appointed successor as provided in Section 5.09.

1.09 DISABILITY

Unless the Employer has elected a different definition in the Adoption Agreement, Disability means the inability to engage in any substantial, gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. The permanence and degree of such impairment shall be supported by medical evidence.

1.10 EARLY RETIREMENT AGE

Means the age specified in the Adoption Agreement. The Plan will not have an Early Retirement Age if none is specified in the Adoption Agreement.

1.11 EARNED INCOME

Means the net earnings from self-employment in the trade or business with respect to which the Plan is established, for which personal services of the individual are a material income-producing factor. Net earnings will be determined without regard to items not included in gross income and the deductions allocable to such items. Net earnings are reduced by contributions by the Employer to a qualified plan to the extent deductible under Section 404 of the Code.

Net earnings shall be determined with regard to the deduction allowed to the Employer by Section 164(t) of the Code for taxable years beginning after December 31, 1989.

1.12 EFFECTIVE DATE

Means the date the Plan becomes effective as indicated in the Adoption Agreement. However, as indicated in the Adoption Agreement, certain provisions may have specific effective dates. Further, where a separate date is stated in the Plan as of which a particular Plan provision becomes effective, such date will control with respect to that provision.

1.13 ELIGIBILITY COMPUTATION PERIOD

An Employee's initial Eligibility Computation Period shall be the 12 consecutive month period commencing on the Employee's Employment Commencement Date. The Employee's subsequent Eligibility Computation Periods shall be the 12 consecutive month periods commencing on the anniversaries of his or her Employment Commencement Date; provided, however, if pursuant to the Adoption Agreement, an Employee is required to complete one or less Years of Eligibility Service to become a Participant, then his or her subsequent Eligibility Computation Periods shall be the Plan Years commencing with the Plan Year beginning during his or her initial Eligibility Computation Period. An Employee does not complete a Year of Eligibility Service before the end of the 12 consecutive month period regardless of when during such period the Employee completes the required number of Hours of Service.

1.14 EMPLOYEE

Means any person employed by an Employer maintaining the Plan or of any other employer required to be aggregated with such Employer under Sections 4 14(b), (c), (m) or (0) of the Code.

The term Employee shall also include any Leased Employee deemed to be an Employee of any Employer described in the previous paragraph as provided in Section 414(n) or (0) of the Code.

1.15 EMPLOYER

Means any corporation, partnership, sole-proprietorship or other entity named in the Adoption Agreement and any successor who by merger, consolidation, purchase or otherwise assumes the obligations of the Plan. A partnership is considered to be the Employer of each of the partners and a sole-proprietorship is considered to be the Employer of a sole proprietor. Where this Plan is being maintained by a union or other entity that represents its member Employees in the negotiation of collective bargaining agreements, the term Employer shall mean such union or other entity.

1.16 EMPLOYER CONTRIBUTION

Means the amount contributed by the Employer each year as determined under this Plan.

1.17 EMPLOYMENT COMMENCEMENT DATE

An Employee's Employment Commencement date means the date the Employee first performs an Hour of Service for the Employer.

1.18 EMPLOYER PROFIT SHARING CONTRIBUTION

Means an Employer Contribution made pursuant to the Section of the Adoption Agreement titled "Employer Profit Sharing Contributions." The Employer may make Employer Profit Sharing Contributions without regard to current or accumulated earnings or profits.

1.19 ENTRY DATES

Means the first day of the Plan Year and the first day of the seventh month of the Plan Year, unless the Employer has specified different dates in the Adoption Agreement.

1.20 ERISA

Means the Employee Retirement Income Security Act of 1974 as amended from time-to-time.

1.21 FORFEITURE

Means that portion of a Participant's Individual Account derived from Employer Contributions which he or she is not entitled to receive (i.e., the nonvested portion).

1.22 FUND

Means the Plan assets held by the Trustee for the Participants' exclusive benefit.

1.23 HIGHLY COMPENSATED EMPLOYEE

The term Highly Compensated Employee includes highly compensated active employees and highly compensated former employees.

A highly compensated active employee includes any Employee who performs service for the Employer during the determination year and who, during the look-back year: (a) received Compensation from the Employer in excess of $75,000 (as adjusted pursuant to Section 415(d) of the Code); (b)received Compensation from the Employer in excess of $50,000 (as adjusted pursuant to Section 415(d) of the Code) and was a member of the top-paid group for such year; or (c) was an officer of the Employer and received Compensation during such year that is greater than 50% of the dollar limitation in effect under Section 415(b)(1)(A) of the Code. The term Highly Compensated Employee also includes: (a) Employees who are both described in the preceding sentence if the term "determination year" is substituted for the term "look-back year" and the Employee is one of the 100 Employees who received the most Compensation from the Employer during the determination year; and (b) Employees who are 5% owners at any time during the look-back year or determination year.

If no officer has satisfied the Compensation requirement of (c) above during either a determination year or look-back year, the highest paid officer for such year shall be treated as a Highly Compensated Employee.

For this purpose, the determination year shall be the Plan Year. The look-back year shall be the 12 month period immediately preceding the determination year.

A highly compensated former employee includes any Employee who separated from service (or was deemed to have separated) prior to the determination year, performs no service for the Employer during the determination year, and was a highly compensated active employee for either the separation year or any determination year ending on or after the Employee's 55th birthday.

If an Employee is, during a determination year or look-back year, a family member of either a 5% owner who is an active or former Employee or a Highly Compensated Employee who is one of the 10 most Highly Compensated Employees ranked on the basis of Compensation paid by the Employer during such year, then the family member and the 5% owner or top 10 Highly Compensated Employee shall be aggregated. In such case, the family member and 5% owner or top 10 Highly Compensated Employee shall be treated as a single Employee receiving Compensation and Plan contributions or benefits equal to the sum of such Compensation and contributions or benefits

equal to the sum of such Compensation and contributions or benefits of the family member and 5% owner or top 10 Highly Compensated Employee. For purposes of this Section, family member includes the spouse, lineal ascendants and descendants of the Employee or former Employee and the spouses of such lineal ascendants and descendants.

The determination of who is a Highly Compensated Employee, including the determinations of the number and identity of Employees in the top-paid group, the top 100 Employees, the number of Employees treated as officers and the Compensation that is considered, will be made in accordance with Section 414(q) of the Code and the regulations thereunder.

1.24 HOURS OF SERVICE - Means

A. Each hour for which an Employee is paid, or entitled to payment, for the performance of duties for the Employer. These hours will be credited to the Employee for the computation period in which the duties are performed; and

B. Each hour for which an Employee is paid, or entitled to payment, by the Employer on account of a period of time during which no duties are performed (irrespective of whether the employment relationship has terminated) due to vacation, holiday, illness, incapacity (including disability), layoff, jury duty, military duty or leave of absence. No more than 501 Hours of Service will be credited under this paragraph for any single continuous period (whether or not such period occurs in a single computation period). Hours under this paragraph shall be calculated and credited pursuant to Section 2530.200b-2 of the Department of Labor Regulations which is incorporated herein by this reference; and

C. Each hour for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Employer. The same Hours of Service will not be credited both under paragraph (A) or paragraph (B), as the case may be, and under this paragraph (C). These hours will be credited to the Employee for the computation period or periods to which the award or agreement pertains rather than the computation period in which the award, agreement, or payment is made.

D. Solely for purposes of determining whether a Break in Eligibility Service or a Break in Vesting Service has occurred in a computation period (the computation period for purposes of determining whether a Break in Vesting Service has occurred is the Plan Year or other vesting computation period described in Section 1.50) an individual who is absent from work for maternity or paternity reasons shall receive credit for the Hours of Service which would otherwise have been credited to such individual but for such absence, or in any case in which such hours cannot be determined, 8 Hours of Service per day of such absence. For purposes of this paragraph, an absence from work for maternity or paternity reasons means an absence (1) by reason of the pregnancy of the individual, (2) by reason of a birth of a child of the individual, (3) by reason of the placement of a child with the individual in connection with

the adoption of such child by such individual, or (4) for purposes of caring for such child for a period beginning immediately following such birth or placement. The Hours of Service credited under this paragraph shall be credited (1) in the Eligibility Computation Period or Plan Year or other vesting computation period described in Section 1.50 in which the absence begins if the crediting is necessary to prevent a Break in Eligibility Service or a Break in Vesting Service in the applicable period, or (2) in all other cases, in the following Eligibility Computation Period or Plan Year or other vesting computation period described in Section 1.50.

E. Hours of Service will be credited for employment with other members of an affiliated service group (under Section 4 14(m) of the Code), a controlled group of corporations (under Section 414(b) of the Code), or a group of trades or businesses under common control (under Section 4 14(c) of the Code) of which the adopting. Employer is a member, and any other entity required to be aggregated with the Employer pursuant to Section 4 14(o) of the Code and the regulations thereunder.

Hours of Service will also be credited for any individual considered an Employee for purposes of this Plan under Code Sections 4 14(n) or 4 14(o) and the regulations thereunder.

F. Where the Employer maintains the plan of a predecessor employer, service for such predecessor employer shall be treated as service for the Employer.

G. The above method for determining Hours of Service may be altered as specified in the Adoption Agreement.

1.25 INDIVIDUAL ACCOUNT

Means the account established and maintained under this Plan for each Participant in accordance with Section 4.01.

1.26 INVESTMENT FUND

Means a subdivision of the Fund established pursuant to Section 5.05.

1.27 KEY EMPLOYEE

Means any person who is determined to be a Key Employee under Section 10.08.

1.28 LEASED EMPLOYEE

Means any person (other than an Employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with Section 414(n)(6) of the Code) on a substantially full time basis for a period of at least one year, and such services are of a type historically performed by Employees in the business field of the recipient

Employer. Contributions or benefits provided a Leased Employee by the leasing organization which are attributable to services performed for the recipient Employer shall be treated as provided by the recipient Employer.

A Leased Employee shall not be considered an Employee of the recipient if: (1) such employee is covered by a money purchase pension plan providing: (a) a nonintegrated employer contribution rate of at least 10% of compensation, as defined in Section 415(c)(3) of the Code, but including amounts contributed pursuant to a salary reduction agreement which are excludable from the employee's gross income under Section 125, Section 402(e)(3), Section 402(h)(l)(B) or Section 403(b) of the Code, (b)immediate participation, and (c) full and immediate vesting; and (2) Leased Employees do not constitute more than 20% of the recipient's nonhighly compensated work force.

1.29 NONDEDUCTIBLE EMPLOYEE CONTRIBUTIONS

Means any contribution made to the Plan by or on behalf of a Participant that is included in the Participant's gross income in the year in which made and that is maintained under a separate account to which earnings and losses are allocated.

1.30 NORMAL RETIREMENT AGE

Means the age specified in the Adoption Agreement. However, if the Employer enforces a mandatory retirement age which is less than the Normal Retirement Age, such mandatory age is deemed to be the Normal Retirement Age. If no age is specified in the Adoption Agreement, the Normal Retirement Age shall be age 65.

1.31 OWNER - EMPLOYEE

Means an individual who is a sole proprietor, or who is a partner owning more than 10% of either the capital or profits interest of the partnership.

1.32 PARTICIPANT

Means any Employee or former Employee of the Employer who has met the Plan's eligibility requirements, has entered the Plan and who is or may become eligible to receive a benefit of any type from this Plan or whose Beneficiary may be eligible to receive any such benefit.

1.33 PLAN

Means the prototype defined contribution plan adopted by the Employer. The Plan consists of this Basic Plan Document plus the corresponding Adoption Agreement as completed and signed by the Employer.

1.34 PLAN ADMINISTRATOR

Means the person or persons determined to be the Plan Administrator in accordance with Section 8.01.

1.35 PLAN YEAR

Means the 12 consecutive month period which coincides with the Employer's fiscal year or such other 12 consecutive month period as is designated in the Adoption Agreement.

1.36 PRIOR PLAN

Means a plan which was amended or replaced by adoption of this Plan document as indicated in the Adoption Agreement.

1.37 PROTOTYPE SPONSOR

Means the entity specified in the Adoption Agreement that makes this prototype plan available to employers for adoption.

1.38 QUALIFYING PARTICIPANT

Means a Participant who has satisfied the requirements described in Section 3.01(B)(2) to be entitled to share in any Employer Contribution (and Forfeitures, if applicable) for a Plan Year.

1.39 RELATED EMPLOYER

Means an employer that may be required to be aggregated with the Employer adopting this Plan for certain qualification requirements under Sections 414(b), (c), (m) or (o) of the Code (or any other employer that has ownership in common with the Employer). A Related Employer may participate in this Plan if so indicated in the Section of the Adoption Agreement titled "Employer Information" or if such Related Employer executes a Related Employer Participation Agreement.

1.40 RELATED EMPLOYER PARTICIPATION AGREEMENT

Means the agreement under this prototype Plan that a Related Employer may execute to participate in this Plan.

1.41 SELF-EMPLOYED INDIVIDUAL

Means an individual who has Earned Income for the taxable year from the trade or business for which the Plan is established; also, an individual who would have had Earned Income but for the fact that the trade or business had no net profits for the taxable year.

1.42 SEPARATE FUND

Means a subdivision of the Fund held in the name of a particular Participant representing certain assets held for that Participant. The assets which comprise a Participant's Separate Fund are those assets earmarked for him or her and those assets subject to the Participant's individual direction pursuant to Section 5.14.

1.43 TAXABLE WAGE BASE

Means, with respect to any taxable year, the contribution and benefit base in effect under Section 230 of the Social Security Act at the beginning of the Plan Year.

1.44 TERMINATION OF EMPLOYMENT

A Termination of Employment of an Employee of an Employer shall occur whenever his or her status as an Employee of such Employer ceases for any reason other than death. An Employee who does not return to work for the Employer on or before the expiration of an authorized leave of absence from such Employer shall be deemed to have incurred a Termination of Employment when such leave ends.

1.45 TOP-HEAVY PLAN

This Plan is a Top-Heavy Plan for any Plan Year if it is determined to be such pursuant to Section 10.08.

1.46 TRUSTEE

Means an individual, individuals or corporation specified in the Adoption Agreement as Trustee or any duly appointed successor as provided in Section 5.09. Trustee shall mean Custodian in the event the financial organization named as Trustee does not have full trust powers.

1.47 VALUATION DATE

Means the date or dates as specified in the Adoption Agreement. If no date is specified in the Adoption Agreement, the Valuation Date shall be the last day of the Plan Year and each other date designated by the Plan Administrator which is selected in a uniform and nondiscriminatory manner when the assets of the Fund are valued at their then fair market value.

1.48 VESTED

Means nonforfeitable, that is, a claim which is unconditional and legally enforceable against the Plan obtained by a Participant or the Participant's Beneficiary to that part of an immediate or deferred benefit under the Plan which arises from a Participant's Years of Vesting Service.

1.49 YEAR OF ELIGIBILITY SERVICE

Means a 12 consecutive month period which coincides with an Eligibility Computation Period during which an Employee completes at least 1,000 Hours of Service (or such lesser number of Hours of Service specified in the Adoption Agreement for this purpose). An Employee does not complete a Year of Eligibility Service before the end of the 12 consecutive month period regardless of when during such period the Employee completes the required number of Hours of Service.

1.50 YEAR OF VESTING SERVICE

Means a Plan Year during which an Employee completes at least 1,000 Hours of Service (or such lesser number of Hours of Service specified in the Adoption Agreement for this purpose). Notwithstanding the preceding sentence, where the Employer so indicates in the Adoption Agreement, vesting shall be computed by reference to the 12 consecutive month period beginning with the Employee's Employment Commencement Date and each successive 12 month period commencing on the anniversaries thereof.

In the case of a Participant who has 5 or more consecutive Breaks in Vesting Service, all Years of Vesting Service after such Breaks in Vesting Service will be disregarded for the purpose of determining the Vested portion of his or her Individual Account derived from Employer Contributions that accrued before such breaks. Such Participant's prebreak service will count in vesting the postbreak Individual Account derived from Employer Contributions only if either:

(A) such Participant had any Vested right to any portion of his or her Individual Account derived from Employer Contributions at the time of his or her Termination of Employment; or

(B) upon returning to service, the number of consecutive Breaks in Vesting Service is less than his or her number of Years of Vesting Service before such breaks.

Separate subaccounts will be maintained for the Participant's prebreak and postbreak portions of his or her Individual Account derived from Employer Contributions. Both subaccounts will share in the gains and losses of the Fund.

Years of Vesting Service shall not include any period of time excluded from Years of Vesting Service in the Adoption Agreement.

In the event the Plan Year is changed to a new 12-month period, Employees shall receive credit for Years of Vesting Service, in accordance with the preceding provisions of this definition, for each of the Plan Years (the old and new Plan Years) which overlap as a result of such change.

SECTION TWO ELIGIBILITY AND PARTICIPATION

2.01 ELIGIBILITY TO PARTICIPATE

Each Employee of the Employer, except those Employees who belong to a class of Employees which is excluded from participation as indicated in the Adoption Agreement, shall be eligible to participate in this Plan upon the satisfaction of the age and Years of Eligibility Service requirements specified in the Adoption Agreement.

2.02 PLAN ENTRY

A. If this Plan is a replacement of a Prior Plan by amendment or restatement, each Employee of the Employer who was a Participant in said Prior Plan before the Effective Date shall continue to be a Participant in this Plan.

B. An Employee will become a Participant in the Plan as of the Effective Date if the Employee has met the eligibility requirements of Section 2.01 as of such date. After the Effective Date, each Employee shall become a Participant on the first Entry Date following the date the Employee satisfies the eligibility requirements of Section 2.01 unless otherwise indicated in the Adoption Agreement.

C. The Plan Administrator shall notify each Employee who becomes eligible to be a Participant under this Plan and shall furnish the Employee with the application form, enrollment forms or other documents which are required of Participants. The eligible Employee shall execute such forms or documents and make available such information as may be required in the administration of the Plan.

2.03 TRANSFER TO OR FROM INELIGIBLE CLASS

If an Employee who had been a Participant becomes ineligible to participate because he or she is no longer a member of an eligible class of Employees, but has not incurred a Break in Eligibility Service, such Employee shall participate immediately upon his or her return to an eligible class of Employees. If such Employee incurs a Break in Eligibility Service, his or her eligibility to participate shall be determined by Section 2.04.

An Employee who is not a member of the eligible class of Employees will become a Participant immediately upon becoming a member of the eligible class provided such Employee has satisfied the age and Years of Eligibility Service requirements. If such Employee has not satisfied the age and Years of Eligibility Service requirements as of the date he or she becomes a member of the eligible class, such Employee shall become a Participant on the first Entry Date following the date he or she satisfies those requirements unless otherwise indicated in the Adoption Agreement.

2.04 RETURN AS A PARTICIPANT AFTER BREAK IN ELIGIBILiTY SERVICE

A. Employee Not Participant Before Break - If an Employee incurs a Break in Eligibility Service before satisfying the Plan's eligibility requirements, such Employee's Years of Eligibility Service before such Break in Eligibility Service will not be taken into account.

B. Nonvested Participants - In the case of a Participant who does not have a Vested interest in his or her Individual Account derived from Employer Contributions, Years of Eligibility Service before a period of consecutive Breaks in Eligibility Service will not be taken into account for eligibility purposes if the number of consecutive Breaks in Eligibility Service in

such period equals or exceeds the greater of 5 or the aggregate number of Years of Eligibility Service before such break. Such aggregate number of Years of Eligibility Service will not include any Years of Eligibility Service disregarded under the preceding sentence by reason of prior breaks.

If a Participant's Years of Eligibility Service are disregarded pursuant to the preceding paragraph, such Participant will be treated as a new Employee for eligibility purposes. If a Participant's Years of Eligibility Service may not be disregarded pursuant to the preceding paragraph, such Participant shall continue to participate in the Plan, or, if terminated, shall participate immediately upon reemployment.

C. Vested Participants - A Participant who has sustained a Break in Eligibility Service and who had a Vested interest in all or a portion of his or her Individual Account derived from Employer Contributions shall continue to participate in the Plan, or, if terminated, shall participate immediately upon reemployment.

2.05 DETERMINATIONS UNDER THIS SECTION

The Plan Administrator shall determine the eligibility of each Employee to be a Participant. This determination shall be conclusive and binding upon all persons except as otherwise provided herein or by law.

2.06 TERMS OF EMPLOYMENT

Neither the fact of the establishment of the Plan nor the fact that a common law Employee has become a Participant shall give to that common law Employee any right to continued employment; nor shall either fact limit the right of the Employer to discharge or to deal otherwise with a common law Employee without regard to the effect such treatment may have upon the Employee's rights under the Plan.

2.07 SPECIAL RULES WHERE ELAPSED TIME METHOD IS BEING USED

This Section 2.07 shall apply where the Employer has indicated in the Adoption Agreement that the elapsed time method will be used. When this Section applies, the definitions of year of service, break in service and hour of service in this Section will replace the definitions of Year of Eligibility Service, Year of Vesting Service, Break in Eligibility Service, Break in Vesting Service and Hours of Service found in the Definitions Section of the Plan (Section One).

For purposes of determining an Employee's initial or continued eligibility to participate in the Plan or the Vested interest in the Participant's Individual Account balance derived from Employer Contributions, (except for periods of service which may be disregarded on account of the "rule of parity" described in Sections 1.50 and 2.04) an Employee will receive credit for the aggregate of all time period(s) commencing with the Employee's first day of employment or reemployment and ending on the date a break in service begins. The first day of employment or reemployment is the first day the Employee performs an hour of

service. An Employee will also receive credit for any period of severance of less than 12 consecutive months. Fractional periods of a year will be expressed in terms of days.

For purposes of this Section, hour of service will mean each hour for which an Employee is paid or entitled to payment for the performance of duties for the Employer. Break in service is a period of severance of at least 12 consecutive months. Period of severance is a continuous period of time during which the Employee is not employed by the Employer. Such period begins on the date the Employee retires, quits or is discharged, or if earlier, the 12 month anniversary of the date on which the Employee was otherwise first absent from service.

In the case of an individual who is absent from work for maternity or paternity reasons, the 12 consecutive month period beginning on the first anniversary of the first date of such absence shall not constitute a break in service. For purposes of this paragraph, an absence from work for maternity or paternity reasons means an absence (1) by reason of the pregnancy of the individual, (2) by reason of the birth of a child of the individual, (3) by reason of the placement of a child with the individual in connection with the adoption of such child by such individual, or (4) for purposes of caring for such child for a period beginning immediately following such birth or placement.

Each Employee will share in Employer Contributions for the period beginning on the date the Employee commences participation under the Plan and ending on the date on which such Employee severs employment with the Employer or is no longer a member of an eligible class of Employees.

If the Employer is a member of an affiliated service group (under Section 414(m) of the Code), a controlled group of corporations (under Section 414(b) of the Code), a group of trades or businesses under common control (under Section 4 14(c) of the Code), or any other entity required to be aggregated with the Employer pursuant to Section 414(o) of the Code, service will be credited for any employment for any period of time for any other member of such group. Service will also be credited for any individual required under Section 4 14(n) or Section 4 14(o) to be considered an Employee of any Employer aggregated under Section 414(b), (c), or (m) of the Code.

2.08 ELECTION NOT TO PARTICIPATE

This Section 2.08 will apply if this Plan is a nonstandardized plan and the Adoption Agreement so provides. If this Section applies, then an Employee or a Participant may elect not to participate in the Plan for one or more Plan Years. The Employer may not contribute for an Employee or Participant for any Plan Year during which such Employee's or Participant's election not to participate is in effect. Any election not to participate must be in writing and filed with the Plan Administrator.

The Plan Administrator shall establish such uniform and nondiscriminatory rules as it deems necessary or advisable to carry out the terms of this Section, including, but not limited to, rules prescribing the timing of the filing of elections not to participate and the procedures for electing to re-participate in the Plan.

An Employee or Participant continues to earn credit for vesting and eligibility purposes for each Year of Vesting Service or Year of Eligibility Service he or she completes and his or her Individual Account (if any) will share in the gains or losses of the Fund during the periods he or she elects not to participate.

SECTION THREE CONTRIBUTIONS

3.01 EMPLOYER CONTRIBUTIONS

A. Obligation to Contribute - The Employer shall make contributions to the Plan in accordance with the contribution formula specified in the Adoption Agreement. If this Plan is a profit sharing plan, the Employer shall, in its sole discretion, make contributions without regard to current or accumulated earnings or profits.

B. Allocation Formula and the Right to Share in the Employer Contribution -

1. General - The Employer Contribution for any Plan Year will be allocated or contributed to the Individual Accounts of Qualifying Participants in accordance with the allocation or contribution formula specified in the Adoption Agreement. The Employer Contribution for any Plan Year will be allocated to each Participant's Individual Account as of the last day of that Plan Year.

   Any Employer Contribution for a Plan Year must satisfy Section 401(a)(4) and the regulations thereunder for such Plan Year.

2. Qualifying Participants - A Participant is a Qualifying Participant and is entitled to share in the Employer Contribution for any Plan Year if the Participant was a Participant on at least one day during the Plan Year and satisfies any additional conditions specified in the Adoption Agreement. If this Plan is a standardized plan, unless the Employer specifies more favorable conditions in the Adoption Agreement, a Participant will not be a qualifying Participant for a Plan Year if he or she incurs a Termination of Employment during such Plan Year with not more than 500 Hours of Service if he or she is not an Employee on the last day of the Plan Year. The determination of whether a Participant is entitled to share in the Employer Contribution shall be made as of the last day of each Plan Year.

3. Special Rules for Integrated Plans - This Plan may not allocate contributions based on an integrated formula if the Employer maintains any other plan that provides for allocation of contributions based on an integrated formula that benefits any of the same Participants. If the Employer has selected the integrated contribution or allocation formula in the Adoption Agreement, then the maximum disparity rate shall be determined in accordance with the following table.

MAXIMUM DISPARITY RATE

Integration Level	Money Purchase	Top-Heavy Profit Sharing	Nonstandardized and Non-Top-Heavy Profit Sharing
Taxable Wage Base (TWB)	5.7%	2.7%	5.7%
More than $0 but not more than 20% of TWB	5.7%	2.7%	5.7%
More than 20% of TWB but not more than 80% of TWB	4.3%	1.3%	4.3%
More than 80% of TWB but not more than TWB	5.4%	2.4%	5.4%

C. Allocation of Forfeitures - Forfeitures for a Plan Year which arise as a result of the application of Section 6.01(D) shall be allocated as follows:

1. Profit Sharing Plan - If this is a profit sharing plan, unless the Adoption Agreement indicates otherwise, Forfeitures shall be allocated in the manner provided in Section 3.01(B) (for Employer Contributions) to the Individual Accounts of Qualifying Participants who are entitled to share in the Employer Contribution for such Plan Year. Forfeitures shall be allocated as of the last day of the Plan Year during which the Forfeiture arose (or any subsequent Plan Year if indicated in the Adoption Agreement).

2. Money Purchase Pension and Target Benefit Plan - If this Plan is a money purchase plan or a target benefit plan, unless the Adoption Agreement indicates otherwise, Forfeitures shall be applied towards the reduction of Employer Contributions to the Plan. Forfeitures shall be allocated as of the last day of the Plan Year during which the Forfeiture arose (or any subsequent Plan Year if indicated in the Adoption Agreement).

D. Timing of Employer Contribution - The Employer Contribution for each Plan Year shall be delivered to the Trustee (or Custodian, if applicable) not later than the due date for filing the Employer's income tax return for its fiscal year in which the Plan Year ends, including extensions thereof.

E. Minimum Allocation for Top-Heavy Plans - The contribution and allocation provisions of this Section 3.01(E) shall apply for any Plan Year with respect to which this Plan is a Top-Heavy Plan.

1. Except as otherwise provided in (3) and (4) below, the Employer Contributions and Forfeitures allocated on behalf of any Participant who is not a Key Employee shall not be less than the lesser of 3% of such Participant's Compensation or (in the case where the Employer has no defined benefit plan which

designates this Plan to satisfy Section 401 of the Code) the largest percentage of Employer Contributions and Forfeitures, as a percentage of the first $200,000 ($150,000 for Plan Years beginning after December 31, 1993), (increased by any cost of living adjustment made by the Secretary of Treasury or the Secretary's delegate) of the Key Employee's Compensation, allocated on behalf of any Key Employee for that year. The minimum allocation is determined without regard to any Social Security contribution. The Employer may, in the Adoption Agreement, limit the Participants who are entitled to receive the minimum allocation. This minimum allocation shall be made even though under other Plan provisions, the Participant would not otherwise be entitled to receive an allocation, or would have received a lesser allocation for the year because of (a) the Participant's failure to complete 1,000 Hours of Service (or any equivalent provided in the Plan), or (b) the Participant's failure to make mandatory Nondeductible Employee Contributions to the Plan, or (c) Compensation less than a stated amount.

2. For purposes of computing the minimum allocation, Compensation shall mean Compensation as defined in Section 1.07 of the Plan and shall include any amounts contributed by the Employer pursuant to a salary reduction agreement and which is not includible in the gross income of the Employee under Sections 125, 402(e)(3), 402(h)(1)(B) or 403(b) of the Code even if the Employer has elected to exclude such contributions in the definition of Compensation used for other purposes under the Plan.

3. The provision in (1) above shall not apply to any Participant who was not employed by the Employer on the last day of the Plan Year.

4. The provision in (1) above shall not apply to any Participant to the extent the Participant is covered under any other plan or plans of the Employer and the Employer has provided in the adoption agreement that the minimum allocation or benefit requirement applicable to Top-Heavy Plans will be met in the other plan or plans.

5. The minimum allocation required under this Section 3.01(E) and Section 3.0l(F)(1) (to the extent required to be nonforfeitable under Code Section 4 16(b)) may not be forfeited under Code Section 41 1(a)(3)(B) or 41 1(a)(3)(D).

F. Special Requirements for Paired Plans - The Employer maintains paired plans if the Employer has adopted both a standardized profit sharing plan and a standardized money purchase pension plan using this Basic Plan Document.

1. Minimum Allocation - When the paired plans are top-heavy, the top-heavy requirements set forth in Section 3.01(E)(1) of the Plan shall apply.

   a. Same eligibility requirements. In satisfying the top-heavy minimum allocation requirements set forth in Section 3.01(E) of the Plan, if the Employees benefiting under each of the paired plans are identical, the top-heavy minimum allocation shall be made to the money purchase pension plan.

   b. Different eligibility requirements. In satisfying the top-heavy minimum allocation requirements set forth in Section 3.01(E) of the Plan, if the Employees benefiting under each of the paired plans are not identical, the top-heavy minimum allocation will be made to both of the paired plans.

      A Participant is treated as benefiting under the Plan for any Plan Year during which the Participant received or is deemed to receive an allocation in accordance with Section 1 .410(b)-3(a).

2. Only One Plan Can Be Integrated - If the Employer maintains paired plans, only one of the Plans may provide for the disparity in contributions which is permitted under Section 40 1(l) of the Code. In the event that both Adoption Agreements provide for such integration, only the money purchase pension plan shall be deemed to be integrated.

G. Return of the Employer Contribution to the Employer Under Special Circumstances - Any contribution made by the Employer because of a mistake of fact must be returned to the Employer within one year of the contribution.

In the event that the Commissioner of Internal Revenue determines that the Plan is not initially qualified under the Code, any contributions made incident to that initial qualification by the Employer must be returned to the Employer within one year after the date the initial qualification is denied, but only if the application for qualification is made by the time prescribed by law for filing the Employer's return for the taxable year in which the Plan is adopted, or such later date as the Secretary of the Treasury may prescribe.

In the event that a contribution made by the Employer under this Plan is conditioned on deductibility and is not deductible under Code Section 404, the contribution, to the extent of the amount disallowed, must be returned to the Employer within one year after the deduction is disallowed.

H. Omission of Participant

1. If the Plan is a money purchase plan or a target benefit plan and, if in any Plan Year, any Employee who should be included as a Participant is erroneously omitted and discovery of such omission is not made until after a contribution by the Employer for the year has been made and allocated, the Employer shall make a subsequent contribution to include earnings thereon, with respect to the omitted Employee in the amount which the Employer would have contributed with respect to that Employee had he or she not been omitted.

2. If the Plan is a profit sharing plan, and if in any Plan Year, any Employee who should be included as a Participant is erroneously omitted and discovery of such omission is not made until after the Employer Contribution has been made and allocated, then the Plan Administrator must re-do the allocation (if a correction can be made) and inform the Employee. Alternatively, the Employer may choose to contribute for the omitted Employee the amount to include earnings thereon, which the Employer would have contributed for the Employee.

3.02 NONDEDUCTIBLE EMPLOYEE CONTRIBUTIONS

This Plan will not accept Nondeductible Employee Contributions and matching contributions for Plan Years beginning after the Plan Year in which this Plan is adopted by the Employer. Nondeductible Employee Contributions for Plan Years beginning after December 31, 1986, together with any matching contributions as defined in Section 401(m) of the Code, will be limited so as to meet the nondiscrimination test of Section 40 1(m) of the Code.

A separate account will be maintained by the Plan Administrator for the Nondeductible Employee Contributions of each Participant.

A Participant may, upon a written request submitted to the Plan Administrator withdraw the lesser of the portion of his or her Individual Account attributable to his or her Nondeductible Employee Contributions or the amount he or she contributed as Nondeductible Employee Contributions.

Nondeductible Employee Contributions and earnings thereon will be nonforfeitable at all times. No Forfeiture will occur solely as a result of an Employee's withdrawal of Nondeductible Employee Contributions.

The Plan Administrator will not accept deductible employee contributions which are made for a taxable year beginning after December 31, 1986. Contributions made prior to that date will be maintained in a separate account which will be nonforfeitable at all times. The account will share in the gains and losses of the Fund in the same manner as described in Section 4.03 of the Plan. No part of the deductible employee contribution account will be used to purchase life insurance. Subject to Section 6.05, joint and survivor annuity requirements (if applicable),

the Participant may withdraw any part of the deductible employee contribution account by making a written application to the Plan Administrator.

3.03 ROLLOVER CONTRIBUTIONS

If so indicated in the Adoption Agreement, an Employee may contribute a rollover contribution to the Plan. The Plan Administrator may require the Employee to submit a written certification that the contribution qualifies as a rollover contribution under the applicable provisions of the Code. If it is later determined that all or part of a rollover contribution was ineligible to be rolled into the Plan, the Plan Administrator shall direct that any ineligible amounts, plus earnings attributable thereto, be distributed from the Plan to the Employee as soon as administratively feasible.

A separate account shall be maintained by the Plan Administrator for each Employee's rollover contributions which will be nonforfeitable at all times. Such account will share in the income and gains and losses of the Fund in the manner described in Section 4.03 and shall be subject to the Plan's provisions governing distributions.

The Employer may, in a uniform and nondiscriminatory manner, only allow Employees who have become Participants in the Plan to make rollover contributions.

3.04 TRANSFER CONTRIBUTIONS

If so indicated in the Adoption Agreement, the Trustee (or Custodian, if applicable) may receive any amounts transferred to it from the trustee or custodian of another plan qualified under Code Section 40 1(a). If it is later determined that all or part of a transfer contribution was ineligible to be transferred into the Plan, the Plan Administrator shall direct that any ineligible amounts, plus earnings attributable thereto, be distributed from the Plan to the Employee as soon as administratively feasible.

A separate account shall be maintained by the Plan Administrator for each Employee's transfer contributions which will be nonforfeitable at all times. Such account will share in the income and gains and losses of the Fund in the manner described in Section 4.03 and shall be subject to the Plan's provisions governing distributions.

The Employer may, in a uniform and nondiscriminatory manner, only allow Employees who have become Participants in the Plan to make transfer contributions.

3.05 LIMITATION ON ALLOCATIONS

A. If the Participant does not participate in, and has never participated in another qualified plan maintained by the Employer or a welfare benefit fund, as defined in Section 4 19(e) of the Code maintained by the Employer, or an individual medical account, as defined

in Section 415(l)(2) of the Code, or a simplified employee pension plan, as defined in Section 408(k) of the Code, maintained by the Employer, which provides an annual addition as defined in Section 3.08(E)(l), the following rules shall apply:

1. The amount of annual additions which may be credited to the Participant's Individual Account for any limitation year will not exceed the lesser of the maximum permissible amount or any other limitation contained in this Plan. If the Employer Contribution that would otherwise be contributed or allocated to the Participant's Individual Account would cause the annual additions for the limitation year to exceed the maximum permissible amount, the amount contributed or allocated will be reduced so that the annual additions for the limitation year will equal the maximum permissible amount.

2. Prior to determining the Participant's actual Compensation for the limitation year, the Employer may determine the maximum permissible amount for a Participant on the basis of a reasonable estimation of the Participant's Compensation for the limitation year, uniformly determined for all Participants similarly situated.

3. As soon as is administratively feasible after the end of the limitation year, the maximum permissible amount for the limitation year will be determined on the basis of the Participant's actual Compensation for the limitation year.

4. If pursuant to Section 3.05(A)(3) or as a result of the allocation of Forfeitures there is an excess amount, the excess will be disposed of as follows:

   a. Any Nondeductible Employee Contributions, to the extent they would reduce the excess amount, will be returned to the Participant;

   b. If after the application of paragraph (a) an excess amount still exists, and the Participant is covered by the Plan at the end of the limitation year, the excess amount in the Participant's Individual Account will be used to reduce Employer Contributions (including any allocation of Forfeitures) for such Participant in the next limitation year, and each succeeding limitation year if necessary;

   c. If after the application of paragraph (b) an excess amount still exists, and the Participant is not covered by the Plan at the end of a limitation year, the excess amount will be held unallocated in a suspense account. The suspense account will be applied to reduce future Employer Contributions (including allocation of any Forfeitures) for all remaining Participants in the next limitation year, and each succeeding limitation year if necessary;

d. If a suspense account is in existence at any time during a limitation year pursuant to this Section, it will not participate in the allocation of the Fund's investment gains and losses. If a suspense account is in existence at any time during a particular limitation year, all amounts in the suspense account must be allocated and reallocated to Participants' Individual Accounts before any Employer Contributions or any Nondeductible Employee Contributions may be made to the Plan for that limitation year. Excess amounts may not be distributed to Participants or former Participants.

B. If, in addition to this Plan, the Participant is covered under another qualified master or prototype defined contribution plan maintained by the Employer, a welfare benefit fund maintained by the Employer, an individual medical account maintained by the Employer, or a simplified employee pension maintained by the Employer that provides an annual addition as defined in Section 3.05(E)(1), during any limitation year the following rules apply:

1. The annual additions which may be credited to a Participant's Individual Account under this Plan for any such limitation year will not exceed the maximum permissible amount reduced by the annual additions credited to a Participant's Individual Account under the other qualified master or prototype plans, welfare benefit funds, individual medical accounts and simplified employee pensions for the same limitation year. If the annual additions with respect to the Participant under other qualified master or prototype defined contribution plans, welfare benefit funds, individual medical accounts and simplified employee pensions maintained by the Employer are less than the maximum permissible amount and the Employer Contribution that would otherwise be contributed or allocated to the Participant's Individual Account under this Plan would cause the annual additions for the limitation year to exceed this limitation, the amount contributed or allocated will be reduced so that the annual additions under all such plans and funds for the limitation year will equal the maximum permissible amount. If the annual additions with respect to the Participant under such other qualified master or prototype defined contribution plans, welfare benefit funds, individual medical accounts and simplified employee pensions in the aggregate are equal to or greater than the maximum permissible amount, no amount will be contributed or allocated to the Participant's Individual Account under this Plan for the limitation year.

2. Prior to determining the Participant's actual Compensation for the limitation year, the Employer may determine the maximum permissible amount for a Participant in the manner described in Section 3.05(A)(2).

3. As soon as is administratively feasible after the end of the limitation year, the maximum permissible amount for the limitation year will be determined on the basis of the Participant's actual Compensation for the limitation year.

4. If, pursuant to Section 3.05(B)(3) or as a result of the allocation of Forfeitures a Participant's annual additions under this Plan and such other plans would result in an excess amount for a limitation year, the excess amount will be deemed to consist of' the annual additions last allocated, except that annual additions attributable to a simplified employee pension will be deemed to have been allocated first, followed by annual additions to a welfare benefit fund or individual medical account, regardless of the actual allocation date.

5. If an excess amount was allocated to a Participant on an allocation date of this Plan which coincides with an allocation date of another plan, the excess amount attributed to this Plan will be the product of,

   a. the total excess amount allocated as of such date, times

   b. the ratio of (i) the annual additions allocated to the Participant for the limitation year as of such date under this Plan to (ii) the total annual additions allocated to the Participant for the limitation year as of such date under this and all the other qualified prototype defined contribution plans.

6. Any excess amount attributed to this Plan will be disposed in the manner described in Section 3.05(A)(4).

C. If the Participant is covered under another qualified defined contribution plan maintained by the Employer which is not a master or prototype plan, annual additions which may be credited to the Participant's Individual Account under this Plan for any limitation year will be limited in accordance with Sections 3.05(B)(l) through 3.05(B)(6) as though the other plan were a master or prototype plan unless the Employer provides other limitations in the Section of the Adoption Agreement titled "Limitation on Allocation - More Than One Plan."

D. If the Employer maintains, or at any time maintained, a qualified defined benefit plan covering any Participant in this Plan, the sum of the Participant's defined benefit plan fraction and defined contribution plan fraction will not exceed 1.0 in any limitation year. The ANNUAL additions which may be credited to the Participant's Individual Account under this Plan for any limitation year will be limited in accordance with the Section of the Adoption Agreement titled "Limitation on Allocation - More Than One Plan."

E. The following terms shall have the following meanings when used in this Section 3.05:

1. Annual additions: The sum of the following amounts credited to a Participant's Individual Account for the limitation year:

   a. Employer Contributions,

   b. Nondeductible Employee Contributions,

   c. Forfeitures,

   d. amounts allocated, after March 31, 1984, to an individual medical account, as defined in Section 415(l)(2) of the Code, which is part of a pension or annuity plan maintained by the Employer are treated as annual additions to a defined contribution plan. Also amounts derived from contributions paid or accrued after December 31, 1985, in taxable years ending after such date, which are attributable to post-retirement medical benefits, allocated to the separate account of a key employee, as defined in Section 419A(d)(3) of the Code, under a welfare benefit fund, as defined in Section 4 19(e) of the Code, maintained by the Employer are treated as annual additions to a defined contribution plan, and

   e. allocations under a simplified employee pension.

   For this purpose, any excess amount applied under Section 3.05(A)(4) or 3.05(B)(6) in the limitation year to reduce Employer Contributions will be considered annual additions for such limitation year.

2. Compensation: Means Compensation as defined in Section 1.07 of the Plan except that Compensation for purposes of this Section 3.05 shall not include any amounts contributed by the Employer pursuant to a salary reduction agreement and which is not includible in the gross income of the Employee under Sections 125, 402(e)(3), 402(h)(1)(B) or 403(b) of the Code even if the Employer has elected to include such contributions in the definition of Compensation used for other purposes under the Plan. Further, any other exclusion the Employer has elected (such as the exclusion of certain types of pay or pay earned before the Employee enters the Plan) will not apply for purposes of this Section.

   Notwithstanding the preceding sentence, Compensation for a Participant in a defined contribution plan who is permanently and totally disabled (as defined in Section 22(e)(3) of the Code) is the Compensation such Participant would have received for

the limitation year if the Participant had been paid at the rate of Compensation paid immediately before becoming permanently and totally disabled; such imputed Compensation for the disabled Participant may be taken into account only if the Participant is not a Highly Compensated Employee (as defined in Section 414(q) of the Code) and contributions made on behalf of such Participant are nonforfeitable when made.

3. Defined benefit fraction: A fraction, the numerator of which is the sum of the Participant's projected annual benefits under all the defined benefit plans (whether or not terminated) maintained by the Employer, and the denominator of which is the lesser of 125% of the dollar limitation determined for the limitation year under Section 4 15(b) and (d) of the Code or 140% of the highest average compensation, including any adjustments under Section 415(b) of the Code.

   Notwithstanding the above, if the Participant was a Participant as of the first day of the first limitation year beginning after December 31, 1986, in one or more defined benefit plans maintained by the Employer which were in existence on May 6, 1986, the denominator of this fraction will not be less than 125% of the sum of the annual benefits under such plans which the Participant had accrued as of the close of the last limitation year beginning before January 1, 1987, disregarding any changes in the terms and conditions of the plan after May 5, 1986. The preceding sentence applies only if the defined benefit plans individually and in the aggregate satisfied the requirements of Section 415 of the Code for all limitation years beginning before January 1, 1987.

4. Defined contribution dollar limitation: $30,000 or if greater, one-fourth of the defined benefit dollar limitation set forth in Section 415(b)(l) of the Code as in effect for the limitation year.

5. Defined contribution fraction: A fraction, the numerator of which is the sum of the annual additions to the Participant's account under all the defined contribution plans (whether or not terminated) maintained by the Employer for the current and all prior limitation years (including the ANNUAL additions attributable to the Participant's nondeductible employee contributions to all defined benefit plans, whether or not terminated, maintained by the Employer, and the animal additions attributable to all welfare benefit funds, as defined in Section 419(e) of the Code, individual medical accounts, and simplified employee pensions, maintained by the Employer), and the denominator of which is the sum of the maximum aggregate amounts for the current and all prior limitation years of service with the Employer (regardless of whether a defined contribution plan was maintained by the Employer). The maximum aggregate amount in any limitation year is the lesser of 125% of the dollar

limitation determined under Section 4 15(b) and (d) of the Code in effect under Section 415(c)(l)(A) of the Code or 35% of the Participant's Compensation for such year.

If the Employee was a Participant as of the end of the first day of the first limitation year beginning after December 31, 1986, in one or more defined contribution plans maintained by the Employer which were in existence on May 6, 1986, the numerator of this fraction will be adjusted if the sum of this fraction and the defined benefit fraction would otherwise exceed 1.0 under the terms of this Plan. Under the adjustment, an amount equal to the product of (1) the excess of the sum of the fractions over 1.0 times (2) the denominator of this fraction, will be permanently subtracted from the numerator of this fraction. The adjustment is calculated using the fractions as they would be computed as of the end of the last limitation year beginning before January 1, 1987, and disregarding any changes in the terms and conditions of the Plan made after May 5, 1986, but using the Section 415 limitation applicable to the first limitation year beginning on or after January 1, 1987.

The annual addition for any limitation year beginning before January 1, 1987, shall not be recomputed to treat all Nondeductible Employee Contributions as annual additions.

6. Employer: For purposes of this Section 3.05, Employer shall mean the Employer that adopts this Plan, and all members of a controlled group of corporations (as defined in Section 4 14(b) of the Code as modified by Section 415(h)), all commonly controlled trades or businesses (as defined in Section 414(c) as modified by Section 4 15(b)) or affiliated service groups (as defined in Section 414(m)) of which the adopting Employer is a part, and any other entity required to be aggregated with the Employer pursuant to regulations under Section 414(o) of the Code.

7. Excess amount: The excess of the Participant's annual additions for the limitation year over the maximum permissible amount.

8. Highest average compensation: The average compensation for the three consecutive years of service with the Employer that produces the highest average.

9. Limitation year: A calendar year, or the 12-consecutive month period elected by the Employer in the Adoption Agreement. All qualified plans maintained by the Employer must use the same limitation year. If the limitation year is amended to a different 12-consecutive month period, the new limitation year must begin on a date within the limitation year in which the amendment is made.

10. Master or prototype plan: A plan the form of which is the subject of a favorable opinion letter from the Internal Revenue Service.

11. Maximum permissible amount: The maximum annual addition that may be contributed or allocated to a Participant's Individual Account under the Plan for any limitation year shall not exceed the lesser of:

a. the defined contribution dollar limitation, or

b. 25% of the Participant's Compensation for the limitation year.

The compensation limitation referred to in (b) shall not apply to any contribution for medical benefits (within the meaning of Section 401(h) or Section 419A(f)(2) of the Code) which is otherwise treated as an annual addition under Section 415(l)(1) or 419A(d)(2) of the Code.

If a short limitation year is created because of an amendment changing the limitation year to a different 12-consecutive month period, the maximum permissible amount will not exceed the defined contribution dollar limitation multiplied by the following fraction:

$$\frac{\text{Number of months in the short limitation year}}{12}$$

12. Projected annual benefit: The annual retirement benefit (adjusted to an actuarially equivalent straight life annuity if such benefit is expressed in a form other than a straight life annuity or qualified joint and survivor annuity) to which the Participant would be entitled under the terms of the Plan assuming:

a. the Participant will continue employment until Normal Retirement Age under the Plan (or current age, if later), and

b. the Participant's Compensation for the current limitation year and all other relevant factors used to determine benefits under the Plan will remain constant for all future limitation years.

Straight life annuity means an annuity payable in equal installments for the life of the Participant that terminates upon the Participants' death.

SECTION FOUR INDIVIDUAL ACCOUNTS OF PARTICIPANTS AND VALUATION

4.01 INDIVIDUAL ACCOUNTS

A. The Plan Administrator shall establish and maintain an Individual Account in the name of each Participant to reflect the total value of his or her interest in the Fund. Each Individual Account established hereunder shall consist of such subaccounts as may be needed for each Participant including:

1. a subaccount to reflect Employer Contributions and Forfeitures allocated on behalf of a Participant;

2. a subaccount to reflect a Participant's rollover contributions;

3. a subaccount to reflect a Participant's transfer contributions;

4. a subaccount to reflect a Participant's Nondeductible Employee Contributions; and

5. a subaccount to reflect a Participant's deductible employee contributions.

B. The Plan Administrator may establish additional accounts as it may deem necessary for the proper administration of the Plan, including, but not limited to, a suspense account for Forfeitures as required pursuant to Section 6.01(D).

4.02 VALUATION OF FUND

The Fund will be valued each Valuation Date at fair market value.

4.03 VALUATION OF INDIVIDUAL ACCOUNTS

A. Where all or a portion of the assets of a Participant's Individual Account are invested in a Separate Fund for the Participant, then the value of that portion of such Participant's Individual Account at any relevant time equals the sum of the fair market values of the assets in such Separate Fund, less any applicable charges or penalties.

B. The fair market value of the remainder of each Individual Account is determined in the following manner:

1. First, the portion of the Individual Account invested in each Investment Fund as of the previous Valuation Date is determined. Each such portion is reduced by any withdrawal made from the applicable Investment Fund to or for the benefit of a Participant or the Participant's Beneficiary, further reduced by any amounts forfeited by the Participant pursuant to Section 6.01(D) and further reduced by any transfer to another

Investment Fund since the previous Valuation Date and is increased by any amount transferred from another Investment Fund since the previous Valuation Date. The resulting amounts are the net Individual Account portions invested in the Investment Funds.

2. Secondly, the net Individual Account portions invested in each Investment Fund are adjusted upwards or downwards, pro rata (i.e., ratio of each net Individual Account portion to the sum of all net Individual Account portions) so that the sum of all the net Individual Account portions invested in an Investment Fund will equal the then fair market value of the Investment Fund. Notwithstanding the previous sentence, for the first Plan Year only, the net Individual Account portions shall be the sum of all contributions made to each Participant's Individual Account during the first Plan Year.

3. Thirdly, any contributions to the Plan and Forfeitures are allocated in accordance with the appropriate allocation provisions of Section 3. For purposes of Section 4, contributions made by the Employer for any Plan Year but after that Plan Year will be considered to have been made on the last day of that Plan Year regardless of when paid to the Trustee (or Custodian, if applicable):

   Amounts contributed between Valuation Dates will not be credited with investment gains or losses until the next following Valuation Date.

4. Finally, the portions of the Individual Account invested in each Investment Fund (determined in accordance with (1), (2) and (3) above) are added together.

4.04 MODIFICATION OF METHOD FOR VALUING INDIVIDUAL ACCOUNTS

If necessary or appropriate, the Plan Administrator may establish different or additional procedures (which shall be uniform and nondiscriminatory) for determining the fair market value of the Individual Accounts.

4.05 SEGREGATION OF ASSETS

If a Participant elects a mode of distribution other than a lump sum, the Plan Administrator may place that Participant's account balance into a segregated Investment Fund for the purpose of maintaining the necessary liquidity to provide benefit installments on a periodic basis.

4.06 STATEMENT OF INDIVIDUAL ACCOUNTS

No later than 270 days after the close of each Plan Year, the Plan Administrator shall furnish a statement to each Participant indicating the Individual Account balances of such Participant as of the last Valuation Date in such Plan Year.

SECTION FIVE TRUSTEE OR CUSTODIAN

5.01 CREATION OF FUND

By adopting this Plan, the Employer establishes the Fund which shall consist of the assets of the Plan held by the Trustee (or Custodian, if applicable) pursuant to this Section 5. Assets within the Fund may be pooled on behalf of all Participants, earmarked on behalf of each Participant or be a combination of pooled and earmarked. To the extent that assets are earmarked for a particular Participant, they will be held in a Separate Fund for that Participant.

No part of the corpus or income of the Fund may be used for, or diverted to, purposes other than for the exclusive benefit of Participants or their Beneficiaries.

5.02 INVESTMENT AUTHORITY

Except as provided in Section 5.14 (relating to individual direction of investments by Participants), the Employer, not the Trustee (or Custodian, if applicable), shall have exclusive management and control over the investment of the Fund into any permitted investment. Notwithstanding the preceding sentence, a Trustee may make an agreement with the Employer whereby the Trustee will manage the investment of all or a portion of the Fund. Any such agreement shall be in writing and set forth such matters as the Trustee deems necessary or desirable.

5.03 FINANCIAL ORGANIZATION CUSTODIAN OR TRUSTEE WITHOUT FULL TRUST POWERS

This Section 5.03 applies where a financial organization has indicated in the Adoption Agreement that it will serve, with respect to this Plan, as Custodian or as Trustee without full trust powers (under applicable law). Hereinafter, a financial organization Trustee without full trust powers (under applicable law) shall be referred to as a Custodian. The Custodian shall have no discretionary authority with respect to the management of the Plan or the Fund but will act only as directed by the entity who has such authority.

A. Permissible Investments - The assets of the Plan shall be invested only in those investments which are available through the Custodian in the ordinary course of business which the Custodian may legally hold in a qualified plan and which the Custodian chooses to make available to Employers for qualified plan investments. Notwithstanding the preceding sentence, the Prototype Sponsor may, as a condition of making the Plan available to the Employer, limit the types of property in which the assets of the Plan may be invested.

B. Responsibilities of the Custodian - The responsibilities of the Custodian shall be limited to the following:

1. To receive Plan contributions and to hold, invest and reinvest the Fund without distinction between principal and interest;

provided, however, that nothing in this Plan shall require the Custodian to maintain physical custody of stock certificates (or other indicia of ownership of any type of asset) representing assets within the Fund;

2. To maintain accurate records of contributions, earnings, withdrawals and other information the Custodian deems relevant with respect to the Plan;

3. To make disbursements from the Fund to Participants or Beneficiaries upon the proper authorization of the Plan Administrator; and

4. To furnish to the Plan Administrator a statement which reflects the value of the investments in the hands of the Custodian as of the end of each Plan Year and as of any other times as the Custodian and Plan Administrator may agree.

C. Powers of the Custodian - Except as otherwise provided in this Plan, the Custodian shall have the power to take any action with respect to the Fund which it deems necessary or advisable to discharge its responsibilities under this Plan including, but not limited to, the following powers:

1. To invest all or a portion of the Fund (including idle cash balances) in time deposits, savings accounts, money market accounts or similar investments bearing a reasonable rate of interest in the Custodian's own savings department or the savings department of another financial organization;

2. To vote upon any stocks, bonds, or other securities; to give general or special proxies or powers of attorney with or without power of substitution; to exercise any conversion privileges or subscription rights and to make any payments incidental thereto; to oppose, or to consent to, or otherwise participate in, corporate reorganizations or other changes affecting corporate securities, and to pay any assessment or charges in connection therewith; and generally to exercise any of the powers of an owner with respect to stocks, bonds, securities or other property;

3. To hold securities or other property of the Fund in its own name, in the name of its nominee or in bearer form; and

4. To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted.

5.04 FINANCIAL ORGANIZATION TRUSTEE WITH FULL TRUST POWERS AND INDIVIDUAL TRUSTEE

This Section 5.04 applies where a financial organization has indicated in the Adoption Agreement that it will serve as Trustee with full trust powers. This Section also applies where one or more individuals are named in the Adoption Agreement to serve as Trustee(s).

A. Permissible Investments - The Trustee may invest the assets of the Plan in property of any character, real or personal, including, but not limited to the following: stocks, including shares of open-end investment companies (mutual funds); bonds; notes; debentures; options; limited partnership interests; mortgages; real estate or any interests therein; unit investment trusts; Treasury Bills, and other U.S. Government obligations; common trust funds, combined investment trusts, collective trust funds or commingled funds maintained by a bank or similar financial organization (whether or not the Trustee hereunder); savings accounts, time deposits or money market accounts of a bank or similar financial organization (whether or not the Trustee hereunder); annuity contracts; life insurance policies; or in such other investments as is deemed proper without regard to investments authorized by statute or rule of law governing the investment of trust funds but with regard to ERISA and this Plan.

Notwithstanding the preceding sentence, the Prototype Sponsor may, as a condition of making the Plan available to the Employer, limit the types of property in which the assets of the Plan may be invested.

B. Responsibilities of the Trustee - The responsibilities of the Trustee shall be limited to the following:

1. To receive Plan contributions and to hold, invest and reinvest the Fund without distinction between principal and interest; provided, however, that nothing in this Plan shall require the Trustee to maintain physical custody of stock certificates (or other indicia of ownership) representing assets within the Fund;

2. To maintain accurate records of contributions, earnings, withdrawals and other information the Trustee deems relevant with respect to the Plan;

3. To make disbursements from the Fund to Participants or Beneficiaries upon the proper authorization of the Plan Administrator; and

4. To furnish to the Plan Administrator a statement which reflects the value of the investments in the hands of the Trustee as of the end of each Plan Year and as of any other times as the Trustee and Plan Administrator may agree.

C. Powers of the Trustee - Except as otherwise provided in this Plan, the Trustee shall have the power to take any action with respect to the Fund which it deems necessary or advisable to discharge its responsibilities under this Plan including, but not limited to, the following powers:

1. To hold any securities or other property of the Fund in its own name, in the name of its nominee or in bearer form;

2. To purchase or subscribe for securities issued, or real property owned, by the Employer or any trade or business under common control with the Employer but only if the prudent investment and diversification requirements of ERISA are satisfied;

3. To sell, exchange, convey, transfer or otherwise dispose of any securities or other property held by the Trustee, by private contract or at public auction. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity, expediency, or propriety of any such sale or other disposition, with or without advertisement;

4. To vote upon any stocks, bonds, or other securities; to give general or special proxies or powers of attorney with or without power of substitution; to exercise any conversion privileges or subscription rights and to make any payments incidental thereto; to oppose, or to consent to, or otherwise participate in, corporate reorganizations or other changes affecting corporate securities, and to delegate discretionary powers, and to pay any assessments or charges in connection therewith; and generally to exercise any of the powers of an owner with respect to stocks, bonds, securities or other property;

5. To invest any part or all of the Fund (including idle cash balances) in certificates of deposit, demand or time deposits, savings accounts, money market accounts or similar investments of the Trustee (if the Trustee is a bank or similar financial organization), the Prototype Sponsor or any affiliate of such Trustee or Prototype Sponsor, which bear a reasonable rate of interest;

6. To provide sweep services without the receipt by the Trustee of additional compensation or other consideration (other than reimbursement of direct expenses properly and actually incurred in the performance of such services);

7. To hold in the form of cash for distribution or investment such portion of the Fund as, at any time and from time-to-time, the Trustee shall deem prudent and deposit such cash in interest bearing or noninterest bearing accounts;

8. To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

9. To settle, compromise, or submit to arbitration any claims, debts, or damages due or owing to or from the Plan, to commence or defend suits or legal or administrative proceedings, and to represent the Plan in all suits and legal and administrative proceedings;

10. To employ suitable agents and counsel, to contract with agents to perform administrative and recordkeeping duties and to pay their reasonable expenses, fees and compensation, and such agent or counsel may or may not be agent or counsel for the Employer;

11. To cause any part or all of the Fund, without limitation as to amount, to be commingled with the funds of other trusts (including trusts for qualified employee benefit plans) by causing such money to be invested as a part of any pooled, common, collective or commingled trust fund (including any such fund described in the Adoption Agreement) heretofore or hereafter created by any Trustee (if the Trustee is a bank), by the Prototype Sponsor, by any affiliate bank of such a Trustee or by such a Trustee or the Prototype Sponsor, or by such an affiliate in participation with others; the instrument or instruments establishing such trust fund or funds, as amended, being made part of this Plan and trust so long as any portion of the Fund shall be invested through the medium thereof; and

12. Generally to do all such acts, execute all such instruments, initiate such proceedings, and exercise all such rights and privileges with relation to property constituting the Fund as if the Trustee were the absolute owner thereof.

5.05 DIVISION OF FUND INTO INVESTMENT FUNDS

The Employer may direct the Trustee (or Custodian) from time-to-time to divide and redivide the Fund into one or more Investment Funds. Such Investment Funds may include, but not be limited to, Investment Funds representing the assets under the control of an investment manager pursuant to Section 5.12 and Investment Funds representing investment options available for individual direction by Participants pursuant to Section 5.14. Upon each division or redivision, the Employer may specify the part of the Fund to be allocated to each such Investment Fund and the terms and conditions, if any, under which the assets in such Investment Fund shall be invested.

5.06 COMPENSATION AND EXPENSES

The Trustee (or Custodian, if applicable) shall receive such reasonable compensation as may be agreed upon by the Trustee (or Custodian) and the

Employer. The Trustee (or Custodian) shall be entitled to reimbursement by the Employer for all proper expenses incurred in carrying out his or her duties under this Plan, including reasonable legal, accounting and actuarial expenses. If not paid by the Employer, such compensation and expenses may be charged against the Fund.

All taxes of any kind that may be levied or assessed under existing or future laws upon, or in respect of, the Fund or the income thereof shall be paid from the Fund.

5.07 NOT OBLIGATED TO QUESTION DATA

The Employer shall furnish the Trustee (or Custodian, if applicable) and Plan Administrator the information which each party deems necessary for the administration of the Plan including, but not limited to, changes in a Participant's status, eligibility, mailing addresses and other such data as may be required. The Trustee (or Custodian) and Plan Administrator shall be entitled to act on such information as is supplied them and shall have no duty or responsibility to further verify or question such information.

5.08 LIABILITY FOR WITHHOLDING ON DISTRIBUTIONS

The Plan Administrator shall be responsible for withholding federal income taxes from distributions from the Plan, unless the Participant (or Beneficiary, where applicable) elects not to have such taxes withheld. The Trustee (or Custodian) or other payor may act as agent for the Plan Administrator to withhold such taxes and to make the appropriate distribution reports, if the Plan Administrator furnishes all the information to the Trustee (or Custodian) or other payor it may need to do withholding and reporting.

5.09 RESIGNATION OR REMOVAL OF TRUSTEE (OR CUSTODIAN)

The Trustee (or Custodian, if applicable) may resign at any time by giving 30 days advance written notice to the Employer. The resignation shall become effective 30 days after receipt of such notice unless a shorter period is agreed upon.

The Employer may remove any Trustee (or Custodian) at any time by giving written notice to such Trustee (or Custodian) and such removal shall be effective 30 days after receipt of such notice unless a shorter period is agreed upon. The Employer shall have the power to appoint a successor Trustee (or Custodian).

Upon such resignation or removal, if the resigning or removed Trustee (or Custodian) is the sole Trustee (or Custodian), he or she shall transfer all of the assets of the Fund then held by such Trustee (or Custodian) as expeditiously as possible to the successor Trustee (or Custodian) after paying or reserving such reasonable amount as he or she shall deem necessary to provide for the expense in the settlement of the accounts and the amount of any compensation due him or her and any sums chargeable against the Fund for which he or she may be liable. If the Funds as reserved are not sufficient for such purpose, then he or she shall be entitled to reimbursement from the successor Trustee (or Custodian) out of the

assets in the successor Trustee's (or Custodian's) hands under this Plan. If the amount reserved shall be in excess of the amount actually needed, the former Trustee (or Custodian) shall return such excess to the successor Trustee (or Custodian).

Upon receipt of the transferred assets, the successor Trustee (or Custodian) shall thereupon succeed to all of the powers and responsibilities given to the Trustee (or Custodian) by this Plan.

The resigning or removed Trustee (or Custodian) shall render an accounting to the Employer and unless objected to by the Employer within 30 days of its receipt, the accounting shall be deemed to have been approved and the resigning or removed Trustee (or Custodian) shall be released and discharged as to all matters set forth in the accounting. Where a financial organization is serving as Trustee (or Custodian) and it is merged with or bought by another organization (or comes under the control of any federal or state agency), that organization shall serve as the successor Trustee (or Custodian) of this Plan, but only if it is the type of organization that can so serve under applicable law.

Where the Trustee or Custodian is serving as a nonbank trustee or custodian pursuant to Section 1.401-12(n) of the Income Tax Regulations, the Employer will appoint a successor Trustee (or Custodian) upon notification by the Commissioner of Internal Revenue that such substitution is required because the Trustee (or Custodian) has failed to comply with the requirements of Section 1.401-12(n) or is not keeping such records or making such returns or rendering such statements as are required by forms or regulations.

5.10 DEGREE OF CARE - LIMITATIONS OF LIABILITY

The Trustee (or Custodian) shall not be liable for any losses incurred by the Fund by any direction to invest communicated by the Employer, Plan Administrator, investment manager appointed pursuant to Section 5.12 or any Participant or Beneficiary. The Trustee (or Custodian) shall be under no liability for distributions made or other action taken or not taken at the written direction of the Plan Administrator. It is specifically understood that the Trustee (or Custodian) shall have no duty or responsibility with respect to the determination of matters pertaining to the eligibility of any Employee to become a Participant or remain a Participant hereunder, the amount of benefit to which a Participant or Beneficiary shall be entitled to receive hereunder, whether a distribution to Participant or Beneficiary is appropriate under the terms of the Plan or the size and type of any policy to be purchased from any insurer for any Participant hereunder or similar matters; it being understood that all such responsibilities under the Plan are vested in the Plan Administrator.

5.11 INDEMNIFICATION OF PROTOTYPE SPONSOR AND TRUSTEE (OR CUSTODIAN)

Notwithstanding any other provision herein, and except as may be otherwise provided by ERISA, the Employer shall indemnify and hold harmless the Trustee (or Custodian, if applicable) and the Prototype Sponsor, their officers, directors, employees, agents, their heirs, executors, successors and assigns, from and

against any and all liabilities, damages, judgments, settlements, losses, costs, charges, or expenses (including legal expenses) at any time arising out of or incurred in connection with any action taken by such parties in the performance of their duties with respect to this Plan, unless there has been a final adjudication of gross negligence or willful misconduct in the performance of such duties.

Further, except as may be otherwise provided by ERISA, the Employer will indemnify the Trustee (or Custodian) and Prototype Sponsor from any liability, claim or expense (including legal expense) which the Trustee (or Custodian) and Prototype Sponsor shall incur by reason of or which results, in whole or in part, from the Trustee's (or Custodian's) or Prototype Sponsor's reliance on the facts and other directions and elections the Employer communicates or fails to communicate.

5.12 INVESTMENT MANAGERS

A. Definition of Investment Manager - The Employer may appoint one or more investment managers to make investment decisions with respect to all or a portion of the Fund. The investment manager shall be any firm or individual registered as an investment adviser under the Investment Advisers Act of 1940, a bank as defined in said Act or an insurance company qualified under the laws of more than one state to perform services consisting of the management, acquisition or disposition of any assets of the Plan.

B. Investment Manager's Authority - A separate Investment Fund shall be established representing the assets of the Fund invested at the direction of the investment manager. The investment manager so appointed shall direct the Trustee (or Custodian, if applicable) with respect to the investment of such Investment Fund. The investments which may be acquired at the direction of the investment manager are those described in Section 5.03(A) (for Custodians) or Section 5.04(A) (for Trustees).

C. Written Agreement - The appointment of any investment manager shall be by written agreement between the Employer and the investment manager and a copy of such agreement (and any modification or termination thereof) must be given to the Trustee (or Custodian).

The agreement shall set forth, among other matters, the effective date of the investment manager's appointment and an acknowledgement by the investment manager that it is a fiduciary of the Plan under ERISA.

D. Concerning the Trustee (or Custodian) - Written notice of each appointment of an investment manager shall be given to the Trustee (or Custodian) in advance of the effective date of such appointment. Such notice shall specify which portion of the Fund will constitute the Investment Fund subject to the investment manager's direction. The Trustee (or Custodian) shall comply with the investment direction given to it by the investment manager and will not be liable for any loss which may result by reason of any action (or inaction) it takes at the direction of the investment manager.

5.13 MATTERS RELATING TO INSURANCE

A. If a life insurance policy is to be purchased for a Participant, the aggregate premium for certain life insurance for each Participant must be less than a certain percentage of the aggregate Employer Contributions and Forfeitures allocated to a Participant's Individual Account at any particular time as follows:

1. Ordinary Life Insurance - For purposes of these incidental insurance provisions, ordinary life insurance contracts are contracts with both nondecreasing death benefits and nonincreasing premiums. If such contracts are purchased, less than 50% of the aggregate Employer Contributions and Forfeitures allocated to any Participant's Individual Account will be used to pay the premiums attributable to them,

2. Term and Universal Life Insurance - No more than 25% of the aggregate Employer Contributions and Forfeitures allocated to any Participant's Individual Account will be used to pay the premiums on term life insurance contracts, universal life insurance contracts, and all other life insurance contracts which are not ordinary life.

3. Combination - The sum of 50% of the ordinary life insurance premiums and all other life insurance premiums will not exceed 25% of the aggregate Employer Contributions and Forfeitures allocated to any Participant's Individual Account.

If this Plan is a profit sharing plan, the above incidental benefits limits do not apply to life insurance contracts purchased with Employer Contributions and Forfeitures that have been in the Participant's Individual Account for at least 2 full Plan Years, measured from the date such contributions were allocated.

B. Any dividends or credits earned on insurance contracts for a Participant shall be allocated to such Participant's Individual Account.

C. Subject to Section 6.05, the contracts on a Participant's life will be converted to cash or an annuity or distributed to the Participant upon commencement of benefits.

D. The Trustee (or Custodian, if applicable) shall apply for and will be the owner of any insurance contract(s) purchased under the terms of this Plan. The insurance contract(s) must provide that proceeds will be payable to the Trustee (or Custodian), however, the Trustee (or Custodian) shall be required to pay over all proceeds of the contract(s) to the Participant's designated Beneficiary in accordance with the distribution provisions of this Plan. A Participant's spouse will be the designated Beneficiary of the proceeds in all circumstances unless a qualified election has been made in accordance with Section 6.05. Under no circumstances shall the Fund retain any part of the proceeds. In the

event of any conflict between the terms of this Plan and the terms of any insurance contract purchased hereunder, the Plan provisions shall control.

E. The Plan Administrator may direct the Trustee (or Custodian) to sell and distribute insurance or annuity contracts to a Participant (or other party as may be permitted) in accordance with applicable law or regulations.

5.14 DIRECTION OF INVESTMENTS BY PARTICIPANT

If so indicated in the Adoption Agreement, each Participant may individually direct the Trustee (or Custodian, if applicable) regarding the investment of part or all of his or her Individual Account. To the extent so directed, the Employer, Plan Administrator, Trustee (or Custodian) and all other fiduciaries are relieved of their fiduciary responsibility under Section 404 of ERISA.

The Plan Administrator shall direct that a Separate Fund be established in the name of each Participant who directs the investment of part or all of his or her Individual Account. Each Separate Fund shall be charged or credited (as appropriate) with the earnings, gains, losses or expenses attributable to such Separate Fund. No fiduciary shall be liable for any loss which results from a Participant's individual direction. The assets subject to individual direction shall not be invested in collectibles as that term is defined in Section 408(m) of the Code.

The Plan Administrator shall establish such uniform and nondiscriminatory rules relating to individual direction as it deems necessary or advisable including, but not limited to, rules describing (1) which portions of Participant's Individual Account can be individually directed; (2) the frequency of investment changes; (3) the forms and procedures for making investment changes; and (4) the effect of a Participant's failure to make a valid direction.

The Plan Administrator may, in a uniform and nondiscriminatory manner, limit the available investments for Participants' individual direction to certain specified investment options (including, but not limited to, certain mutual funds, investment contracts, deposit accounts and group trusts). The Plan Administrator may permit, in a uniform and nondiscriminatory manner, a Beneficiary of a deceased Participant or the alternate payee under a qualified domestic relations order (as defined in Section 414(p) of the Code) to individually direct in accordance with this Section.

SECTION SIX VESTING AND DISTRIBUTION

6.01 DISTRIBUTION TO PARTICIPANT

A. Distributable Events

1. Entitlement to Distribution - The Vested portion of a Participant's Individual Account shall be distributable to the Participant upon (1) the occurrence of any of the distributable events specified in the Adoption Agreement; (2) the Participant's

Termination of Employment after attaining Normal Retirement Age; (3) the termination of the Plan; and (4) the Participant's Termination of Employment after satisfying any Early Retirement Age conditions.

If a Participant separates from service before satisfying the Early Retirement Age requirement, but has satisfied the service requirement, the Participant will be entitled to elect an early retirement benefit upon satisfaction of such age requirement.

2. Written Request: When Distributed - A Participant entitled to distribution who wishes to receive a distribution must submit a written request to the Plan Administrator. Such request shall be made upon a form provided by the Plan Administrator. Upon a valid request, the Plan Administrator shall direct the Trustee (or Custodian, if applicable) to commence distribution no later than the time specified in the Adoption Agreement for this purpose and, if not specified in the Adoption Agreement, then no later than 90 days following the later of:

   a. the close of the Plan Year within which the event occurs which entitles the Participant to distribution; or

   b. the close of the Plan Year in which the request is received.

3. Special Rules for Withdrawals During Service - If this is a profit sharing plan and the Adoption Agreement so provides, a Participant may elect to receive a distribution of all or part of the Vested portion of his or her Individual Account, subject to the requirements of Section 6.05 and further subject to the following limits:

   a. Participant for 5 or more years. An Employee who has been a Participant in the Plan for 5 or more years may withdraw up to the entire Vested portion of his or her Individual Account.

   b. Participant for less than 5 years. An Employee who has been a Participant in the Plan for less than 5 years may withdraw only the amount which has been in his or her Individual Account attributable to Employer Contributions for at least 2 full Plan Years. measured from the date such contributions were allocated. However, if the distribution is on account of hardship, the Participant may withdraw up to his or her entire Vested portion of the Participant's Individual Account. For this purpose, hardship shall have the meaning set forth in Section 6.01(A)(4) of the Code.

4. Special Rules for Hardship Withdrawals - If this is a profit sharing plan and the Adoption Agreement so provides, a Participant may elect to receive a hardship distribution of all or part of the Vested portion of his or her Individual Account, subject to the requirements of Section 6.05 and further subject to the following limits:

a. Participant for 5 or more years. An Employee who has been a Participant in the Plan for 5 or more years may withdraw up to the entire Vested portion of his or her Individual Account.

b. Participant for less than 5 years. An Employee who has been a Participant in the Plan for less than 5 years may withdraw only the amount which has been in his or her Individual Account attributable to Employer Contributions for at least 2 full Plan Years, measured from the date such contributions were allocated.

For purposes of this Section 6.01(A)(4) and Section 6.0l(A)(3) hardship is defined as an immediate and heavy financial need of the Participant where such Participant lacks other available resources. The following are the only financial needs considered immediate and heavy: expenses incurred or necessary for medical care, described in Section 2 13(d) of the Code, of the Employee, the Employee's spouse or dependents; the purchase (excluding mortgage payments) of a principal residence for the Employee; payment of tuition and related educational fees for the next 12 months of post-secondary education for the Employee, the Employee's spouse, children or dependents; or the need to prevent the eviction of the Employee from, or a foreclosure on the mortgage of, the Employee's principal residence.

A distribution will be considered as necessary to satisfy an immediate and heavy financial need of the Employee only if:

1) The employee has obtained all distributions, other than hardship distributions, and all nontaxable loans under all plans maintained by the Employer;

2) The distribution is not in excess of the amount of an immediate and heavy financial need (including amounts necessary to pay any federal, state or local income taxes or penalties reasonably anticipated to result from the distribution).

5. One-Time In-Service Withdrawal Option - If this is a profit sharing plan and the Employer has elected the one-time in-service withdrawal option in the Adoption Agreement, then Participants will be permitted only one in-service withdrawal during the course of such Participants employment with the Employer. The amount which the Participant can withdraw will be limited to the lesser of the amount determined under the limits set forth in Section 6.01(A)(3) or the percentage of the Participant's Individual Account specified by the Employer in the Adoption Agreement. Distributions under this Section will be subject to the requirements of Section 6.05.

6. Commencement of Benefits - Notwithstanding any other provision, unless the Participant elects otherwise, distribution of benefits will begin no later than the 60th day after the latest of the close of the Plan Year in which:

   a. the Participant attains Normal Retirement Age;

   b. occurs the 10th anniversary of the year in which the Participant commenced participation in the Plan; or

   c. the Participant incurs a Termination of Employment.

Notwithstanding the foregoing, the failure of a Participant and spouse to consent to a distribution while a benefit is immediately distributable, within the meaning of Section 6.02(B) of the Plan, shall be deemed to be an election to defer commencement of payment of any benefit sufficient to satisfy this Section.

B. Determining the Vested Portion - In determining the Vested portion of a Participant's Individual Account, the following rules apply:

1. Employer Contributions and Forfeitures - The Vested portion of a Participant's Individual Account derived from Employer Contributions and Forfeitures is determined by applying the vesting schedule selected in the Adoption Agreement (or the vesting schedule described in Section 6.01(C) if the Plan is a Top-Heavy Plan).

2. Rollover and Transfer Contributions - A Participant is fully Vested in his or her rollover contributions and transfer contributions.

3. Fully Vested Under Certain Circumstances - A Participant is fully Vested in his or her Individual Account if any of the following occurs:

   a. the Participant reaches Normal Retirement Age;

b. the Plan is terminated or partially terminated; or

c. there exists a complete discontinuance of contributions under the Plan.

Further, unless otherwise indicated in the Adoption Agreement, a Participant is fully Vested if the Participant dies, incurs a Disability, or satisfies the conditions for Early Retirement Age (if applicable).

4. Participants in a Prior Plan - If a Participant was a participant in a Prior Plan on the Effective Date, his or her Vested percentage shall not be less than it would have been under such Prior Plan as computed on the Effective Date.

C. Minimum Vesting Schedule for Top-Heavy Plans - The following vesting provisions apply for any Plan Year in which this Plan is a Top-Heavy Plan.

Notwithstanding the other provisions of this Section 6.01 or the vesting schedule selected in the Adoption Agreement (unless those provisions or that schedule provide for more rapid vesting), a Participant's Vested portion of his or her Individual Account attributable to Employer Contributions and Forfeitures shall be determined in accordance with the vesting schedule elected by the Employer in the Adoption Agreement (and if no election is made the 6 year graded schedule will be deemed to have been elected) as described below:

6 YEAR GRADED		3 YEAR CLIFF	
Years of Vesting Service	Vested Percentage	Years of Vesting Service	Vested Percentage
1	0	1	0
2	20	2	0
3	40	3	100
4	60		
5	80		
6	100		

This minimum vesting schedule applies to all benefits within the meaning of Section 411 (a)(7) of the Code, except those attributable to Nondeductible Employee Contributions including benefits accrued before the effective date of Section 416 of the Code and benefits accrued before the Plan became a Top-Heavy Plan. Further, no decrease in a Participant's Vested percentage may occur in the event the Plan's status as a Top-Heavy Plan changes for any Plan Year. However, this Section 6.0 1(C) does not apply to the Individual Account of any Employee who does not have an Hour of Service after the Plan has initially become a Top-Heavy Plan and such Employee's Individual Account attributable to

Employer Contributions and Forfeitures will be determined without regard to this Section.

If this Plan ceases to be a Top-Heavy Plan, then in accordance with the above restrictions, the vesting schedule as selected in the Adoption Agreement will govern. If the vesting schedule under the Plan shifts in or out of top-heavy status, such shift is an amendment to the vesting schedule and the election in Section 9.04 applies.

D. Break in Vesting Service and Forfeitures - If a Participant incurs a Termination of Employment, any portion of his or her Individual Account which is not Vested shall be held in a suspense account. Such suspense account shall share in any increase or decrease in the fair market value of the assets of the Fund in accordance with Section 4 of the Plan. The disposition of such suspense account shall be as follows:

1. Breaks in Vesting Service - If a Participant neither receives nor is deemed to receive a distribution pursuant to Section 6.01(D)(3) or (4) and the Participant returns to the service of the Employer before incurring 5 consecutive Breaks in Vesting Service, there shall be no Forfeiture and the amount in such suspense account shall be recredited to such Participant's Individual Account.

2. Five Consecutive Breaks in Vesting Service - If a Participant neither receives nor is deemed to receive a distribution pursuant to Section 6.01(D)(3) or (4) and the Participant does not return to the service of the Employer before incurring 5 consecutive Breaks in Vesting Service, the portion of the Participant's Individual Account which is not Vested shall be treated as a Forfeiture and allocated in accordance with Section 3.01(C).

3. Cash-out of Certain Participants - If the value of the Vested portion of such Participant's Individual Account derived from Nondeductible Employee Contributions and Employer Contributions does not exceed $3,500, the Participant shall receive a distribution of the entire Vested portion of such Individual Account and the portion which is not Vested shall be created as a Forfeiture and allocated in accordance with Section 3.01(C). For purposes of this Section, if the value of the Vested portion of a Participant's Individual Account is zero, the Participant shall be deemed to have received a distribution of such Vested Individual Account. A Participant's Vested Individual Account balance shall not include accumulated deductible employee contributions within the meaning of Section 72(o)(5)(B) of the Code for Plan Years beginning prior to January 1, 1989.

4. Participants Who Elect to Receive Distributions - If such Participant elects to receive a distribution, in accordance with Section 6.02(B), of the value of the Vested portion of his or her

Individual Account derived from Nondeductible Employee Contributions and Employer Contributions, the portion which is not Vested shall be treated as a Forfeiture and allocated in accordance with Section 3.01(C).

5. Re-employed Participants - If a Participant receives or is deemed to receive a distribution pursuant to Section 6.0l(D)(3) or (4) above and the Participant resumes employment covered under this Plan, the Participant's Employer-derived Individual Account balance will be restored to the amount on the date of distribution if the Participant repays to the Plan the full amount of the distribution attributable to Employer Contributions before the earlier of 5 years after the first date on which the Participant is subsequently re-employed by the Employer, or the date the Participant incurs 5 consecutive Breaks in Vesting Service following the date of the distribution.

Any restoration of a Participant's Individual Account pursuant to Section 6.01(D)(5) shall be made from other Forfeitures, income or gain to the Fund or contributions made by the Employer.

E. Distribution Prior to Full Vesting - If a distribution is made to a Participant who was not then fully Vested in his or her Individual Account derived from Employer Contributions and the Participant may increase his or her Vested percentage in his or her Individual Account, then the following rules shall apply:

1. a separate account will be established for the Participant's interest in the Plan as of the time of the distribution, and

2. at any relevant time the Participant's Vested portion of the separate account will be equal to an amount ("X") determined by the formula: X=P (AB + (R x D)) - (R x D) where "P" is the Vested percentage at the relevant time, "AB" is the separate account balance at the relevant time; "D" is the amount of the distribution; and "R" is the ratio of the separate account balance at the relevant time to the separate account balance after distribution.

6.02 FORM OF DISTRIBUTION TO A PARTICIPANT

A. Value of Individual Account Does Not Exceed $3,500 - If the value of the Vested portion of a Participant's Individual Account derived from Nondeductible Employee Contributions and Employer Contributions does not exceed $3,500, distribution from the Plan shall be made to the Participant in a single lump sum in lieu of all other forms of distribution from the Plan as soon as administratively feasible.

B. Value of Individual Account Exceeds $3,500

1. If the value of the Vested portion of a Participant's Individual Account derived from Nondeductible Employee Contributions and Employer Contributions exceeds (or at the time of any prior distribution exceeded) $3,500, and the Individual Account is immediately distributable, the Participant and the Participant's spouse (or where either the Participant or the spouse died, the survivor) must consent to any distribution of such Individual Account. The consent of the Participant and the Participant's spouse shall be obtained in writing within the 90-day period ending on the annuity starting date. The annuity starting date is the first day of the first period for which an amount is paid as an annuity or any other form. The Plan Administrator shall notify the Participant and the Participant's spouse of the right to defer any distribution until the Participant's Individual Account is no longer immediately distributable. Such notification shall include a general description of the material features, and an explanation of the relative values of, the optional forms of benefit available under the Plan in a manner that would satisfy the notice requirements of Section 417(a)(3) of the Code, and shall be provided no less than 30 days and no more than 90 days prior to the annuity starting date.

   If a distribution is one to which Sections 401(a)(11) and 417 of the Internal Revenue Code do not apply, such distribution may commence less than 30 days after the notice required under Section 1.411(a)-11(c) of the Income Tax Regulations is given, provided that:

   a. the Plan Administrator clearly informs the Participant that the Participant has a right to a period of at least 30 days after receiving the notice to consider the decision of whether or not to elect a distribution (and, if applicable, a particular distribution option), and

   b. the Participant, after receiving the notice, affirmatively elects a distribution.

   Notwithstanding the foregoing, only the Participant need consent to the commencement of a distribution in the form of a qualified joint and survivor annuity while the Individual Account is immediately distributable.

   Neither the consent of the Participant nor the Participant's spouse shall be required to the extent that a distribution is required to satisfy Section 40l(a)(9) or Section 415 of the Code. In addition, upon termination of this Plan if the Plan does not offer an annuity option (purchased from a commercial provider), the Participant's Individual Account may, without the Participant's consent, be distributed to the Participant or transferred to another defined contribution plan (other than an

employee stock ownership plan as defined in Section 4975(e)(7) of the Code) within the same controlled group.

An Individual Account is immediately distributable if any part of the Individual Account could be distributed to the Participant (or surviving spouse) before the Participant attains or would have attained (if not deceased) the later of Normal Retirement Age or age 62.

2. For purposes of determining the applicability of the foregoing consent requirements to distributions made before the first day of the first Plan Year beginning after December 31, 1988, the Vested portion of a Participant's Individual Account shall not include amounts attributable to accumulated deductible employee contributions within the meaning of Section 72(o)(5)(B) of the Code.

C. Other Forms of Distribution to Participant - If the value of the Vested portion of a Participant's Individual Account exceeds $3,500 and the Participant has properly waived the joint and survivor annuity, as described in Section 6.05, the Participant may request in writing that the Vested portion of his or her Individual Account be paid to him or her in one or more of the following forms of payment: (1) in a lump sum; (2) in installment payments over a period not to exceed the life expectancy of the Participant or the joint and last survivor life expectancy of the Participant and his or her designated Beneficiary; or (3) applied to the purchase of an annuity contract.

Notwithstanding anything in this Section 6.02 to the contrary, a Participant cannot elect payments in the form of an annuity if the Retirement Equity Act safe harbor rules of Section 6.05(F) apply.

6.03 DISTRIBUTIONS UPON THE DEATH OF A PARTICIPANT

A. Designation of Beneficiary - Spousal Consent - Each Participant may designate, upon a form provided by and delivered to the Plan Administrator, one or more primary and contingent Beneficiaries to receive all or a specified portion of the Participant's Individual Account in the event of his or her death. A Participant may change or revoke such Beneficiary designation from time to time by completing and delivering the proper form to the Plan Administrator.

In the event that a Participant wishes to designate a primary Beneficiary who is not his or her spouse, his or her spouse must consent in writing to such designation, and the spouse's consent must acknowledge the effect of such designation and be witnessed by a notary public or plan representative. Notwithstanding this consent requirement, if the Participant establishes to the satisfaction of the Plan Administrator that such written consent may not be obtained because there is no spouse or the spouse cannot be located, no consent shall be required. Any change of Beneficiary will require a new spousal consent.

B. Payment to Beneficiary - If a Participant dies before the Participant's entire Individual Account has been paid to him or her, such deceased Participant's Individual Account shall be payable to any surviving Beneficiary designated by the Participant, or, if no Beneficiary survives the Participant, to the Participant's estate. C. Written Request: When Distributed - A Beneficiary of a deceased Participant entitled to a distribution who wishes to receive a distribution must submit a written request to the Plan Administrator. Such request shall be made upon a form provided by the Plan Administrator, Upon a valid request, the Plan Administrator shall direct the Trustee (or Custodian) to commence distribution no later than the time specified in the Adoption Agreement for this purpose and if not specified in the Adoption Agreement, then no later than 90 days following the later of:

1. the close of the Plan Year within which the Participant dies; or

2. the close of the Plan Year in which the request is received.

6.04 FORM OF DISTRIBUTION TO BENEFICIARY

A. Value of Individual Account Does Not Exceed $3,500 - If the value of the Participant's Individual Account derived from Nondeductible Employee Contributions and Employer Contributions does not exceed $3,500, the Plan Administrator shall direct the Trustee (or Custodian, if applicable) to make a distribution to the Beneficiary in a single lump sum in lieu of all other forms of distribution from the Plan.

B. Value of Individual Account Exceeds $3,500 - If the value of a Participant's Individual Account derived from Nondeductible Employee Contributions and Employer Contributions exceeds $3,500 the preretirement survivor annuity requirements of Section 6.05 shall apply unless waived in accordance with that Section or unless the Retirement Equity Act safe harbor rules of Section 6.05(F) apply. However, a surviving spouse Beneficiary may elect any form of payment allowable under the Plan in lieu of the preretirement survivor annuity. Any such payment to the surviving spouse must meet the requirements of Section 6.06.

C. Other Forms of Distribution to Beneficiary - If the value of a Participant's Individual Account exceeds $3,500 and the Participant has properly waived the preretirement survivor annuity, as described in Section 6.05 (if applicable) or if the Beneficiary is the Participant's surviving spouse, the Beneficiary may, subject to the requirements of Section 6.06, request in writing that the Participant's Individual Account be paid as follows: (1) in a lump sum; or (2) in installment payments over a period not to exceed the life expectancy of such Beneficiary.

6.05 JOINT AND SURVIVOR ANNUITY REQUIREMENTS

A. The provisions of this Section shall apply to any Participant who is credited with at least one Hour of Eligibility Service with the Employer on or after August 23, 1984, and such other Participants as provided in Section 6.05(G).

B. Qualified Joint and Survivor Annuity - Unless an optional form of benefit is selected pursuant to a qualified election within the 90-day period ending on the annuity starting date, a married Participant's Vested account balance will be paid in the form of a qualified joint and survivor annuity and an unmarried Participant's Vested account balance will be paid in the form of a life annuity. The Participant may elect to have such annuity distributed upon attainment of the earliest retirement age under the Plan.

C. Qualified Preretirement Survivor Annuity - Unless an optional form of benefit has been selected within the election period pursuant to a qualified election, if a Participant dies before the annuity starting date then the Participant's Vested account balance shall be applied toward the purchase of an annuity for the life of the surviving spouse. The surviving spouse may elect to have such annuity distributed within a reasonable period after the Participant's death.

D. Definitions

1. Election Period - The period which begins on the first day of the Plan Year in which the Participant attains age 35 and ends on the date of the Participant's death. If a Participant separates from service prior to the first day of the Plan Year in which age 35 is attained, with respect to the account balance as of the date of separation, the election period shall begin on the date of separation.

   Pre-age 35 waiver - A Participant who will not yet attain age 35 as of the end of any current Plan Year may make special qualified election to waive the qualified preretirement survivor annuity for the period beginning on the date of such election and ending on the first day of the Plan Year in which the Participant will attain age 35. Such election shall not be valid unless the Participant receives a written explanation of the qualified preretirement survivor annuity in such terms as are comparable to the explanation required under Section 6.05(E)(1). Qualified preretirement survivor annuity coverage will be automatically reinstated as of the first day of the Plan Year in which the Participant attains age 35. Any new waiver on or after such date shall be subject to the full requirements of this Section 6.05.

2. Earliest Retirement Age - The earliest date on which, under the Plan, the Participant could elect to receive retirement benefits.

3. Qualified Election - A waiver of a qualified joint and survivor annuity or a qualified preretirement survivor annuity. Any waiver of a qualified joint and survivor annuity or a qualified preretirement survivor annuity shall not be effective unless: (a) the Participant's spouse consents in writing to the election, (b) the election designates a specific Beneficiary, including any class of beneficiaries or any contingent beneficiaries, which may not be changed without spousal consent (or the spouse expressly permits designations by the Participant without any further spousal consent); (c) the spouse's consent acknowledges the effect of the election; and (d) the spouse's consent is witnessed by a plan representative or notary public. Additionally, a Participant's waiver of the qualified joint and survivor annuity shall not be effective unless the election designates a form of benefit payment which may not be changed without spousal consent (or the spouse expressly permits designations by the Participant without any further spousal consent). If it is established to the satisfaction of a plan representative that there is no spouse or that the spouse cannot be located, a waiver will be deemed a qualified election.

   Any consent by a spouse obtained under this provision (or establishment that the consent of a spouse may not be obtained) shall be effective only with respect to such spouse. A consent that permits designations by the Participant without any requirement of further consent by such spouse must acknowledge that the spouse has the right to limit consent to a specific Beneficiary, and a specific form of benefit where applicable, and that the spouse voluntarily elects to relinquish either or both of such rights. A revocation of a prior waiver may be made by a Participant without the consent of the spouse at any time before the commencement of benefits.

The number of revocations shall not be limited. No consent obtained under this provision shall be valid unless the Participant has received notice as provided in Section 61)5(E) below.

4. Qualified Joint and Survivor Annuity - An immediate annuity for the life of the Participant with a survivor annuity for the life of the spouse which is not less than 50% and not more than 100% of the amount of the annuity which is payable during the joint lives of the Participant and the spouse and which is the amount of benefit which can be purchased with the Participant's vested account balance. The percentage of the survivor annuity under the Plan shall be 50% (unless a different percentage is elected by the Employer in the Adoption Agreement).

5. Spouse (surviving spouse) - The spouse or surviving spouse of the Participant, provided that a former spouse will be treated as the spouse or surviving spouse and a current spouse will not be treated as the spouse or surviving spouse to the extent provided

under a qualified domestic relations order as described in Section 414(p) of the Code.

6. Annuity Starting Date - The first day of the first period for which an amount is paid as an annuity or any other form.

7. Vested Account Balance - The aggregate value of the Participant's Vested account balances derived from Employer and Nondeductible Employee Contributions (including rollovers), whether Vested before or upon death, including the proceeds of insurance contracts, if any, on the Participant's life. The provisions of this Section 6.05 shall apply to a Participant who is Vested in amounts attributable to Employer Contributions, Nondeductible Employee Contributions (or both) at the time of death or distribution.

E. Notice Requirements

1. In the case of a qualified joint and survivor annuity, the Plan Administrator shall no less than 30 days and not more than 90 days prior to the annuity starting date provide each Participant a written explanation of: (a) the terms and conditions of a qualified joint and survivor annuity; (b) the Participant's right to make and the effect of an election to waive the qualified joint and survivor annuity form of benefit; (c) the rights of a Participant's spouse; and (d) the right to make, and the effect of, a revocation of a previous election to waive the qualified joint and survivor annuity.

2. In the case of a qualified preretirement annuity as described in Section 6.05(C), the Plan Administrator shall provide each Participant within the applicable period for such Participant a written explanation of the qualified preretirement survivor annuity in such terms and in such manner as would be comparable to the explanation provided for meeting the requirements of Section 6.05(E)(1) applicable to a qualified joint and survivor annuity.

The applicable period for a Participant is whichever of the following periods ends last: (a) the period beginning with the first day of the Plan Year in which the Participant attains age 32 and ending with the close of the Plan Year preceding the Plan Year in which the Participant attains age 35; (b) a reasonable period ending after the individual becomes a Participant; (c) a reasonable period ending after Section 6.05(E)(3) ceases to apply to the Participant; and (d) a reasonable period ending after this Section 6.05 first applies to the Participant. Notwithstanding the foregoing, notice must be provided within a reasonable period ending after separation from service in the case of a Participant who separates from service before attaining age 35.

For purposes of applying the preceding paragraph, a reasonable period ending after the enumerated events described in (b), (c) and (d) is the end of the two-year period beginning one year prior to the date the applicable event occurs, and ending one year after that date. In the case of a Participant who separates from service before the Plan Year in which age 35 is attained, notice shall be provided within the two-year period beginning one year prior to separation and ending one year after separation. If such a Participant thereafter returns to employment with the Employer, the applicable period for such Participant shall be redetermined.

3. Notwithstanding the other requirements of this Section 6.05(E), the respective notices prescribed by this Section 6.05(E), need not be given to a Participant if (a) the Plan "fully subsidizes" the costs of a qualified joint and survivor annuity or qualified preretirement survivor annuity, and (b) the Plan does not allow the Participant to waive the qualified joint and survivor annuity or qualified preretirement survivor annuity and does not allow a married Participant to designate a nonspouse beneficiary. For purposes of this Section 6.05(E)(3), a plan fully subsidizes the costs of a benefit if no increase in cost, or decrease in benefits to the Participant may result from the Participant's failure to elect another benefit.

F. Retirement Equity Act Safe Harbor Rules

1. If the Employer so indicates in the Adoption Agreement, this Section 6.05(F) shall apply to a Participant in a profit sharing plan, and shall always apply to any distribution, made on or after the first day of the first Plan Year beginning after December 31, 1988: from or under a separate account attributable solely to accumulated deductible employee contributions, as defined in Section 72(o)(5)(B) of the Code, and maintained on behalf of a Participant in a money purchase pension plan, (including a target benefit plan) if the following conditions are satisfied:

   a. the Participant does not or cannot elect payments in the form of a life annuity; and

   b. on the death of a Participant, the Participant's Vested account balance will be paid to the Participant's surviving spouse, but if there is no surviving spouse, or if the surviving spouse has consented in a manner conforming to a qualified election, then to the Participant's designated Beneficiary. The surviving spouse may elect to have distribution of the Vested account balance commence within the 90-day period following the date of the Participant's death. The account balance shall be adjusted for gains or losses occurring after the Participant's death in accordance with

the provisions of the Plan governing the adjustment of account balances for other types of distributions. This Section 6.05(F) shall not be operative with respect to a Participant in a profit sharing plan if the plan is a direct or indirect transferee of a defined benefit plan, money purchase plan, a target benefit plan, stock bonus, or profit sharing plan which is subject to the survivor annuity requirements of Section 401(a)(11) and Section 417 of the code. If this Section 6.05(F) is operative, then the provisions of this Section 6.05 other than Section 6.05(G) shall be inoperative.

2. The Participant may waive the spousal death benefit described in this Section 6.05(F) at any time provided that no such waiver shall be effective unless it satisfies the conditions of Section 6.05(D)(3) (other than the notification requirement referred to therein) that would apply to the Participant's waiver of the qualified preretirement survivor annuity.

3. For purposes of this Section 6.05(F), Vested account balance shall mean, in the case of a money purchase pension plan or a target benefit plan, the Participant's separate account balance attributable solely to accumulated deductible employee contributions within the meaning of Section 72(o)(5)(B) of the Code. In the case of a profit sharing plan, Vested account balance shall have the same meaning as provided in Section 6.05(D)(7).

G. Transitional Rules

1. Any living Participant not receiving benefits on August 23, 1984, who would otherwise not receive the benefits prescribed by the previous subsections of this Section 6.05 must be given the opportunity to elect to have the prior subsections of this Section apply if such Participant is credited with at least one Hour of Service under this Plan or a predecessor plan in a Plan Year beginning on or after January 1, 1976, and such Participant had at least 10 Years of Vesting Service when he or she separated from service.

2. Any living Participant not receiving benefits on August 23, 1984, who was credited with at least one Hour of Service under this Plan or a predecessor plan on or after September 2, 1974, and who is not otherwise credited with any service in a Plan Year beginning on or after January 1, 1976, must be given the opportunity to have his or her benefits paid in accordance with Section 6.05(G)(4).

3. The respective opportunities to elect (as described in Section 6.05(G)(1) and (2) above) must be afforded to the appropriate Participants during the period commencing on August 23, 1984,

and ending on the date benefits would otherwise commence to said Participants.

4. Any Participant who has elected pursuant to Section 6.05(G)(2) and any Participant who does not elect under Section 6.05(G)(I) or who meets the requirements of Section 6.05(G)(1) except that such Participant does not have at least 10 Years of Vesting Service when he or she separates from service, shall have his or her benefits distributed in accordance with all of the following requirements if benefits would have been payable in the form of a life annuity:

   a. Automatic Joint and Survivor Annuity - If benefits in the form of a life annuity become payable to a married Participant who:

      (1) begins to receive payments under the Plan on or after Normal Retirement Age; or

      (2) dies on or after Normal Retirement Age while still working for the Employer; or

      (3) begins to receive payments on or after the qualified early retirement age; or

      (4) separates from service on or after attaining Normal Retirement Age (or the qualified early retirement age) and after satisfying the eligibility requirements for the payment of benefits under the Plan and thereafter dies before beginning to receive such benefits; then such benefits will be received under this Plan in the form of a qualified joint and survivor annuity, unless the Participant has elected otherwise during the election period. The election period must begin at least 6 months before the Participant attains qualified early retirement age and ends not more than 90 days before the commencement of benefits. Any election hereunder will be in writing and may be changed by the Participant at any time.

   b. Election of Early Survivor Annuity - A Participant who is employed after attaining the qualified early retirement age will be given the opportunity to elect, during the election period, to have a survivor annuity payable on death. If the Participant elects the survivor annuity, payments under such annuity must not be less than the payments which would have been made to the spouse under the qualified joint and survivor annuity if the Participant had retired on the day before his or her death.

Any election under this provision will be in writing and may be changed by the Participant at any time. The election period begins on the later of (1) the 90th day before the Participant attains the qualified early retirement age, or (2) the date on which participation begins, and ends on the date the Participant terminates employment.

c. For purposes of Section 6.05(G)(4):

1. Qualified early retirement age is the latest of:

a. the earliest date, under the Plan, on which the Participant may elect to receive retirement benefits,

b. the first day of the 120th month beginning before the Participant reaches Normal Retirement Age, or

c. the date the Participant begins participation.

2. Qualified joint and survivor annuity is an annuity for the life of the Participant with a survivor annuity for the life of the spouse as described in Section 6.05(D)(4) of this Plan.

6.06 DISTRIBUTION REQUIREMENTS

A. General Rules

1. Subject to Section 6.05 Joint and Survivor Annuity Requirements, the requirements of this Section shall apply to any distribution of a Participant's interest and will take precedence over any inconsistent provisions of this Plan. Unless otherwise specified, the provisions of this Section 6.06 apply to calendar years beginning after December 31, 1984.

2. All distributions required under this Section 6.06 shall be determined and made in accordance with the Income Tax Regulations under Section 401(a)(9), including the minimum distribution incidental benefit requirement of Section 1 .401(a)(9)-2 of the proposed regulations.

B. Required Beginning Date - The entire interest of a Participant must be distributed or begin to be distributed no later than the Participant's required beginning date.

C. Limits on Distribution Periods - As of the first distribution calendar year, distributions, if not made in a single sum, may only be made over one of the following periods (or a combination thereof):

1. the life of the Participant,

2. the life of the Participant and a designated Beneficiary,

3. a period certain not extending beyond the life expectancy of the Participant, or

4. a period certain not extending beyond the joint and last survivor expectancy of the Participant and a designated Beneficiary.

D. Determination of Amount to be Distributed Each Year - If the Participant's interest is to be distributed in other than a single sum, the following minimum distribution rules shall apply on or after the required beginning date:

1. Individual Account

a. If a Participant's benefit is to be distributed over (1) a period not extending beyond the life expectancy of the Participant or the joint life and last survivor expectancy of the Participant and the Participant's designated Beneficiary or (2) a period not extending beyond the life expectancy of the designated Beneficiary, the amount required to be distributed for each calendar year, beginning with distributions for the first distribution calendar year, must at least equal the quotient obtained by dividing the Participant's benefit by the applicable life expectancy.

b. For calendar years beginning before January 1, 1989, if the Participant's spouse is not the designated Beneficiary, the method of distribution selected must assure that at least 50% of the present value of the amount available for distribution is paid within the life expectancy of the Participant.

c. For calendar years beginning after December 31, 1988, the amount to be distributed each year, beginning with distributions for the first distribution calendar year shall not be less than the quotient obtained by dividing the Participant's benefit by the lesser of (1) the applicable life expectancy or (2) if the Participant's spouse is not the designated Beneficiary, the applicable divisor determined from the table set forth in Q&A-4 of Section 1 .401(a)(9)-2 of the Proposed Income Tax Regulations. Distributions after the death of the Participant shall be

distributed using the applicable life expectancy in Section 6.05(D)(1)(a) above as the relevant divisor without regard to proposed regulations 1 .401(a)(9)-2.

d. The minimum distribution required for the Participant's first distribution calendar year must be made on or before the Participant's required beginning date. The minimum distribution for other calendar years, including the minimum distribution for the distribution calendar year in which the Employee's required beginning date occurs, must be made on or before December 31 of that distribution calendar year.

2. Other Forms - If the Participant's benefit is distributed in the form of an annuity purchased from an insurance company, distributions thereunder shall be made in accordance with the requirements of Section 401(a)(9) of the Code and the regulations thereunder.

E. Death Distribution Provisions

1. Distribution Beginning Before Death - If the Participant dies after distribution of his or her interest has begun, the remaining portion of such interest will continue to be distributed at least as rapidly as under the method of distribution being used prior to the Participant's death.

2. Distribution Beginning After Death - If the Participant dies before distribution of his or her interest begins, distribution of the Participant's entire interest shall be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death except to the extent that an election is made to receive distributions in accordance with (a) or (b) below:

a. if any portion of the Participant's interest is payable to a designated Beneficiary, distributions may be made over the life or over a period certain not greater than the life expectancy of the designated Beneficiary commencing on or before December 31 of the calendar year immediately following the calendar year in which the Participant died;

b. if the designated Beneficiary is the Participant's surviving spouse, the date distributions are required to begin in accordance with (a) above shall not be earlier than the later of (1) December 31 of the calendar year immediately following the calendar year in which the Participant dies or (2) December 31 of the calendar year in which the Participant would have attained age 70 1/2.

If the Participant has not made an election pursuant to this Section 6.05(E)(2) by the time of his or her death, the Participant's designated Beneficiary must elect the method of distribution no later than the earlier of (1) December 31 of the calendar year in which distributions would be required to begin under this Section 6.05(E)(2), or (2) December 31 of the calendar year which contains the fifth anniversary of the date of death of the Participant. If the Participant has no designated Beneficiary, or if the designated Beneficiary does not elect a method of distribution, distribution of the Participant's entire interest must be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

3. For purposes of Section 6.06(E)(2) above, if the surviving spouse dies after the Participant, but before payments to such spouse begin, the provisions of Section 6.06(E)(2), with the exception of paragraph (b) therein, shall be applied as if the surviving spouse were the Participant.

4. For purposes of this Section 6.06(E), any amount paid to a child of the Participant will be treated as if it had been paid to the surviving spouse if the amount becomes payable to the surviving spouse when the child reaches the age of majority.

5. For purposes of this Section 6.06(E), distribution of a Participant's interest is considered to begin on the Participant's required beginning date (or, if Section 6.06(E)(3) above is applicable, the date distribution is required to begin to the surviving spouse pursuant to Section 6,06(E)(2) above). If distribution in the form of an annuity irrevocably commences to the Participant before the required beginning date, the date distribution is considered to begin is the date distribution actually commences.

F. Definitions

1. Applicable Life Expectancy - The life expectancy (or joint and last survivor expectancy) calculated using the attained age of the Participant (or designated Beneficiary) as of the Participant's (or designated Beneficiary's) birthday in the applicable calendar year reduced by one for each calendar year which has elapsed since the date life expectancy was first calculated. If life expectancy is being recalculated, the applicable life expectancy shall be the life expectancy as so recalculated. The applicable calendar year shall be the first distribution calendar year, and if life expectancy is being recalculated such succeeding calendar year.

2. Designated Beneficiary - The individual who is designated as the Beneficiary under the Plan in accordance with Section 401(a)(9) of the Code and the regulations thereunder.

3. Distribution Calendar Year - A calendar year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year which contains the Participant's required beginning date. For distributions beginning after the Participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin pursuant to Section 6.05(E) above.

4. Life Expectancy - Life expectancy and joint and last survivor expectancy are computed by use of the expected return multiples in Tables V and VI of Section 1.72-9 of the Income Tax Regulations.

   Unless otherwise elected by the Participant (or spouse, in the case of distributions described in Section 6.05(E)(2)(b) above) by the time distributions are required to begin, life expectancies shall be recalculated annually. Such election shall be irrevocable as to the Participant (or spouse) and shall apply to all subsequent years. The life expectancy of a nonspouse Beneficiary may not be recalculated.

5. Participant's Benefit

   a. The account balance as of the last valuation date in the valuation calendar year (the calendar year immediately preceding the distribution calendar year) increased by the amount of any Contributions or Forfeitures allocated to the account balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date.

   b. Exception for second distribution calendar year. For purposes of paragraph (a) above, if any portion of the minimum distribution for the first distribution calendar year is made in the second distribution calendar year on or before the required beginning date, the amount of the minimum distribution made in the second distribution calendar year shall be treated as if it had been made in the immediately preceding distribution calendar year.

6. Required Beginning Date

   a. General Rule - The required beginning date of a Participant is the first day of April of the calendar year

following the calendar year in which the Participant attains age 70 1/2.

b. Transitional Rules - The required beginning date of a Participant who attains age 70 1/2 before January 1, 1988, shall be determined in accordance with (1) or (2) below:

(1) Non 5% Owners - The required beginning date of a Participant who is not a 5% owner is the first day of April of the calendar year following the calendar year in which the later of retirement or attainment of age 70 1/2 occurs.

(2) 5% Owners - The required beginning date of a Participant who is a 5% owner during any year beginning after December 31, 1979, is the first day of April following the later of:

(a) the calendar year in which the Participant attains age 70 1/2, or

(b) the earlier of the calendar year with or within which ends the Plan Year in which the Participant becomes a 5% owner, or the calendar year in which the Participant retires.

The required beginning date of a Participant who is not a 5% owner who attains age 70 1/2 during 1988 and who has not retired as of January 1, 1989, is April 1, 1990.

c. 5% Owner - A Participant is treated as a 5% owner for purposes of this Section 6.06(F)(6) if such Participant is a 5% owner as defined in Section 4 16(i) of the Code (determined in accordance with Section 416 but without regard to whether the Plan is top-heavy) at any time during the Plan Year ending with or within the calendar year in which such owner attains age 66 1/2 or any subsequent Plan Year.

d. Once distributions have begun to a 5% owner under this Section 6.06(F)(6) they must continue to be distributed, even if the Participant ceases to be a 5% owner in-a subsequent year.

G. Transitional Rule

1. Notwithstanding the other requirements of this Section 6.06 and subject to the requirements of Section 6.05, Joint and Survivor

Annuity Requirements, distribution on behalf of any Employee, including a 5% owner, may be made in accordance with all of the following requirements (regardless of when such distribution commences):

a. The distribution by the Fund is one which would not have qualified such Fund under Section 401(a)(9) of the Code as in effect prior to amendment by the Deficit Reduction Act of 1984.

b. The distribution is in accordance with a method of distribution designated by the Employee whose interest in the Fund is being distributed or, if the Employee is deceased, by a Beneficiary of such Employee.

c. Such designation was in writing, was signed by the Employee or the Beneficiary, and was made before January 1, 1984.

d. The Employee had accrued a benefit under the Plan as of December 31, 1983.

e. The method of distribution designated by the Employee or the Beneficiary specifies the time at which distribution will commence, the period over which distributions will be made, and in the case of any distribution upon the Employee's death, the Beneficiaries of the Employee listed in order of priority.

2. A distribution upon death will not be covered by this transitional rule unless the information in the designation contains the required information described above with respect to the distributions to be made upon the death of the Employee.

3. For any distribution which commences before January 1, 1984, but continues after December 31, 1983, the Employee, or the Beneficiary, to whom such distribution is being made, will be presumed to have designated the method of distribution under which the distribution is being made if the method of distribution was specified in writing and the distribution satisfies the requirements in Sections 6.06(G)(1)(a) and (e).

4. If a designation is revoked, any subsequent distribution must satisfy the requirements of Section 401(a)(9) of the Code and the regulations thereunder. If a designation is revoked subsequent to the date distributions are required to begin, the Plan must distribute by the end of the calendar year following the calendar year in which the revocation occurs the total amount not yet distributed which would have been required to have been distributed to satisfy Section 401(a)(9) of the Code and the regulations thereunder, but for the Section 242(b)(2) election,

For calendar years beginning after December 31, 1988, such distributions must meet the minimum distribution incidental benefit requirements in Section 1 .401(a)(9)-2 of the Proposed Income Tax Regulations. Any changes in the designation will be considered to be a revocation of the designation. However, the mere substitution or addition of another Beneficiary (one not named in the designation) under the designation will not be considered to be a revocation of the designation, so long as such substitution or addition does not alter the period over which distributions are to be made under the designation, directly or indirectly (for example, by altering the relevant measuring life). In the case in which an amount is transferred or rolled over from one plan to another plan, the rules in Q&A J-2 and Q&A J-3 shall apply.

6.07 ANNUITY CONTRACTS

Any annuity contract distributed under the Plan (if permitted or required by this Section 6) must be nontransferable. The terms of any annuity contract purchased and distributed by the Plan to a Participant or spouse shall comply with the requirements of the Plan.

6.08 LOANS TO PARTICIPANTS

If the Adoption Agreement so indicates, a Participant may receive a loan from the Fund, subject to the following rules:

A. Loans shall be made available to all Participants on a reasonably equivalent basis.

B. Loans shall not be made available to Highly Compensated Employees (as defined in Section 414(q) of the Code) in an amount greater than the amount made available to other Employees.

C. Loans must be adequately secured and bear a reasonable interest rate.

D. No Participant loan shall exceed the present value of the Vested portion of a Participant's Individual Account.

E. A Participant must obtain the consent of his or her spouse, if any, to the use of the Individual Account as security for the loan. Spousal consent shall be obtained no earlier than the beginning of the 90 day period that ends on the date on which the loan is to be so secured. The consent must be in writing, must acknowledge the effect of the loan, and must be witnessed by a plan representative or notary public. Such consent shall thereafter be binding with respect to the consenting spouse or any subsequent spouse with respect to that loan. A new consent shall be required if the account balance is used for renegotiations, extension, renewal, or other revision of the loan. Notwithstanding the foregoing, no spousal consent is necessary if, at the time the loan is secured, no consent would be required for a distribution under Section 417(a)(2)(B). In

addition, spousal consent is not required if the Plan or the Participant is not subject to Section 40l(a)(11) at the time the Individual Account is used as security, or if the total Individual Account subject to the security is less than or equal to $3,500.

F. In the event of default, foreclosure on the note and attachment of security will not occur until a distributable event occurs in the Plan. Notwithstanding the preceding sentence, a Participant's default on a loan will be treated as a distributable event and as soon as administratively feasible after the default, the Participant's Vested Individual Account will be reduced by the lesser of the amount in default (plus accrued interest) or the amount secured. If this Plan is a 401(k) plan, then to the extent the loan is attributable to a Participant's Elective Deferrals, Qualified Nonelective Contributions or Qualified Matching Contributions, the Participant's Individual Account will not be reduced unless the Participant has attained age 59 1/2 or has another distributable event. A Participant will be deemed to have consented to the provision at the time the loan is made to the Participant.

G. No loans will be made to any shareholder-employee or Owner-Employee. For purposes of this requirement, a shareholder-employee means an employee or officer of an electing small business (Subchapter S) corporation who owns (or is considered as owning within the meaning of Section 3l8(a)(1) of the Code), on any day during the taxable year of such corporation, more than 5% of the outstanding stock of the corporation.

If a valid spousal consent has been obtained in accordance with 6.08(E), then, notwithstanding any other provisions of this Plan, the portion of the Participant's Vested Individual Account used as a security interest held by the Plan by reason of a loan outstanding to the Participant shall be taken into account for purposes of determining the amount of the account balance payable at the time of death or distribution, but only if the reduction is used as repayment of the loan. If less than 100% of the Participant's Vested Individual Account (determined without regard to the preceding sentence) is payable to the surviving spouse, then the account balance shall be adjusted by first reducing the Vested Individual Account by the amount of the security used as repayment of the loan, and then determining the benefit payable to the surviving spouse.

To avoid taxation to the Participant, no loan to any Participant can be made to the extent that such loan when added to the outstanding balance of all other loans to the Participant would exceed the lesser of (a) $50,000 reduced by the excess (if any) of the highest outstanding balance of loans during the one year period ending on the day before the loan is made, over the outstanding balance of loans from the Plan on the date the loan is made, or (b) 50% of the present value of the nonforfeitable Individual Account of the Participant or, if greater, the total Individual Account up to $10,000. For the purpose of the above limitation, all loans from all plans of the Employer and other members of a group of employers described in Sections 414(b), 414(c), and 414(m) of the Code are aggregated. Furthermore, any loan shall by its terms require that repayment (principal and interest) be amortized in level payments, not less frequently than quarterly, over a

period not extending beyond 5 years from the date of the loan, unless such loan is used to acquire a dwelling unit which within a reasonable time (determined at the time the loan is made) will be used as the principal residence of the Participant. An assignment or pledge of any portion of the Participant's interest in the Plan and a loan, pledge, or assignment with respect to any insurance contract purchased under the Plan, will be treated as a loan under this paragraph.

The Plan Administrator shall administer the loan program in accordance with a written document. Such written document shall include, at a minimum, the following: (i) the identity of the person or positions authorized to administer the Participant loan program; (ii) the procedure for applying for loans; (iii) the basis on which loans will be approved or denied; (iv) limitations (if any) on the types and amounts of loans offered; (v) the procedure under the program for determining a reasonable rate of interest; (vi) the types of collateral which may secure a Participant loan; and (vii) the events constituting default and the steps that will be taken to preserve Plan assets in the event of such default.

6.09 DISTRIBUTION IN KIND

The Plan Administrator may cause any distribution under this Plan to be made either in a form actually held in the Fund, or in cash by converting assets other than cash into cash, or in any combination of the two foregoing ways.

6.10 DIRECT ROLLOVERS OF ELIGIBLE ROLLOVER DISTRIBUTIONS

A. Direct Rollover Option

This Section applies to distributions made on or after January 1, 1993. Notwithstanding any provision of the Plan to the contrary that would otherwise limit a distributee's election under this Section, a distributee may elect, at the time and in the manner prescribed by the Plan Administrator, to have any portion of an eligible rollover distribution that is equal to at least $500 paid directly to an eligible retirement plan specified by the distributee in a direct rollover.

B. Definitions

1. Eligible rollover distribution - An eligible rollover distribution is any distribution of all or any portion of the balance to the credit of the distributee, except that an eligible rollover distribution does not include:

a. any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated Beneficiary, or for a specified period of ten years or more;

b. any distribution to the extent such distribution is required under Section 401(a)(9) of the Code;

c. the portion of any other distribution that is not includible in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to employer securities); and

d. any other distribution(s) that is reasonably expected to total less than $200 during a year.

2. Eligible retirement plan - An eligible retirement plan is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, or a qualified trust described in Section 401(a) of the Code, that accepts the distributee's eligible rollover distribution. However, in the case of an eligible rollover distribution to the surviving spouse, an eligible retirement plan is an individual retirement account or individual retirement annuity.

3. Distributee - A distributee includes an Employee or former Employee. In addition, the Employee's or former Employee's surviving spouse and the Employee's or former Employee's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 4l4(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

4. Direct rollover - A direct rollover is a payment by the Plan to the eligible retirement plan specified by the distributee.

6.11 PROCEDURE FOR MISSING PARTICIPANTS OR BENEFICIARIES

The Plan Administrator must use all reasonable measures to locate Participants or Beneficiaries who are entitled to distributions from the Plan. In the event that the Plan Administrator cannot locate a Participant or Beneficiary who is entitled to a distribution from the Plan after using all reasonable measures to locate him or her, the Plan Administrator may, consistent with applicable laws, regulations and other pronouncements under ERISA, use any reasonable procedure to dispose of distributable plan assets, including any of the following: (1) establish a bank account for and in the name of the Participant or Beneficiary and transfer the assets to such bank account, (2) purchase an annuity contract with the assets in the name of the Participant or Beneficiary, or (3) after the expiration of 5 years after the benefit becomes payable, treat the amount distributable as a Forfeiture and allocate it in accordance with the terms of the Plan and if the Participant or Beneficiary is later located, restore such benefit to the Plan.

SECTION SEVEN CLAIMS PROCEDURE

7.01 FILING A CLAIM FOR PLAN DISTRIBUTIONS

A Participant or Beneficiary who desires to make a claim for the Vested portion of the Participant's Individual Account shall file a written request with the Plan Administrator on a form to be furnished to him or her by the Plan Administrator for such purpose. The request shall set forth the basis of the claim, The Plan Administrator is authorized to conduct such examinations as may be necessary to facilitate the payment of any benefits to which the Participant or Beneficiary may be entitled under the terms of the Plan.

7.02 DENIAL OF CLAIM

Whenever a claim for a Plan distribution by any Participant or Beneficiary has been wholly or partially denied, the Plan Administrator must furnish such Participant or Beneficiary written notice of the denial within 60 days of the date the original claim was filed. This notice shall set forth the specific reasons for the denial, specific reference to pertinent Plan provisions on which the denial is based, a description of any additional information or material needed to perfect the claim, an explanation of why such additional information or material is necessary and an explanation of the procedures for appeal.

7.03 REMEDIES AVAILABLE

The Participant or Beneficiary shall have 60 days from receipt of the denial notice in which to make written application for review by the Plan Administrator. The Participant or Beneficiary may request that the review be in the nature of a hearing. The Participant or Beneficiary shall have the right to representation, to review pertinent documents and to submit comments in writing. The Plan Administrator shall issue a decision on such review within 60 days after receipt of an application for review as provided for in Section 7.02. Upon a decision unfavorable to the Participant or Beneficiary, such Participant or Beneficiary shall be entitled to bring such actions in law or equity as may be necessary or appropriate to protect or clarify his or her right to benefits under this Plan.

SECTION EIGHT PLAN ADMINISTRATOR

8.01 EMPLOYER IS PLAN ADMINISTRATOR

A. The Employer shall be the Plan Administrator unless the managing body of the Employer designates a person or persons other than the Employer as the Plan Administrator and so notifies the Trustee (or Custodian, if applicable). The Employer shall also be the Plan Administrator if the person or persons so designated cease to be the Plan Administrator. The Employer may establish an administrative committee that will carry out the Plan Administrator's duties. Members of the administrative committee may allocate the Plan Administrator's duties among themselves.

B. If the managing body of the Employer designates a person or persons other than the Employer as Plan Administrator, such person or persons shall serve at the pleasure of the Employer and shall serve pursuant to such procedures as such managing body may provide. Each such person shall be bonded as may be required by law.

8.02 POWERS AND DUTIES OF THE PLAN ADMINISTRATOR

A. The Plan Administrator may, by appointment, allocate the duties of the Plan Administrator among several individuals or entities. Such appointments shall not be effective until the party designated accepts such appointment in writing.

B. The Plan Administrator shall have the authority to control and manage the operation and administration of the Plan. The Plan Administrator shall administer the Plan for the exclusive benefit of the Participants and their Beneficiaries in accordance with the specific terms of the Plan.

C. The Plan Administrator shall be charged with the duties of the general administration of the Plan, including, but not limited to, the following:

1. To determine all questions of interpretation or policy in a manner consistent with the Plan's documents and the Plan Administrator's construction or determination in good faith shall be conclusive and binding on all persons except as otherwise provided herein or by law. Any interpretation or construction shall be done in a nondiscriminatory manner and shall be consistent with the intent that the Plan shall continue to be deemed a qualified plan under the terms of Section 40 1(a) of the Code, as amended from time-to-time, and shall comply with the terms of ERISA, as amended from time-to-time;

2. To determine all questions relating to the eligibility of Employees to become or remain Participants hereunder;

3. To compute the amounts necessary or desirable to be contributed to the Plan;

4. To compute the amount and kind of benefits to which a Participant or Beneficiary shall be entitled under the Plan and to direct the Trustee (or Custodian, if applicable) with respect to all disbursements under the Plan, and, when requested by the Trustee (or Custodian), to furnish the Trustee (or Custodian) with instructions, in writing, on matters pertaining to the Plan and the Trustee (or Custodian) may rely and act thereon;

5. To maintain all records necessary for the administration of the Plan;

6. To be responsible for preparing and filing such disclosure and tax forms as may be required from time-to-time by the Secretary of Labor or the Secretary of the Treasury; and

7. To furnish each Employee, Participant or Beneficiary such notices, information and reports under such circumstances as may be required by law.

D. The Plan Administrator shall have all of the powers necessary or appropriate to accomplish his or her duties under the Plan, including, but not limited to, the following:

1. To appoint and retain such persons as may be necessary to carry out the functions of the Plan Administrator;

2. To appoint and retain counsel, specialists or other persons as the Plan Administrator deems necessary or advisable in the administration of the Plan;

3. To resolve all questions of administration of the Plan;

4. To establish such uniform and nondiscriminatory rules which it deems necessary to carry out the terms of the Plan;

5. To make any adjustments in a uniform and nondiscriminatory manner which it deems necessary to correct any arithmetical or accounting errors which may have been made for any Plan Year; and

6. To correct any defect, supply any omission or reconcile any inconsistency in such manner and to such extent as shall be deemed necessary or advisable to carry out the purpose of the Plan.

8.03 EXPENSES AND COMPENSATION

All reasonable expenses of administration including, but not limited to, those involved in retaining necessary professional assistance may be paid from the assets of the Fund. Alternatively, the Employer may, in its discretion, pay any or all such expenses. Pursuant to uniform and nondiscriminatory rules that the Plan Administrator may establish from time-to-time, administrative expenses and expenses unique to a particular Participant may be charged to a Participant's Individual Account or the Plan Administrator may allow Participants to pay such fees outside of the Plan. The Employer shall furnish the Plan Administrator with such clerical and other assistance as the Plan Administrator may need in the performance of his or her duties.

8.04 INFORMATION FROM EMPLOYER

To enable the Plan Administrator to perform his or her duties, the Employer shall supply full and timely information to the Plan Administrator (or his or her

designated agents) on all matters relating to the Compensation of all Participants, their regular employment, retirement, death, Disability or Termination of Employment, and such other pertinent facts as the Plan Administrator (or his or her agents) may require. The Plan Administrator shall advise the Trustee (or Custodian, if applicable) of such of the foregoing facts as may be pertinent to the Trustee's (or Custodian's) duties under the Plan. The Plan Administrator (or his or her agents) is entitled to rely on such information as is supplied by the Employer and shall have no duty or responsibility to verify such information.

SECTION NINE AMENDMENT AND TERMINATION

9.01 RIGHT OF PROTOTYPE SPONSOR TO AMEND THE PLAN

A. The Employer, by adopting the Plan, expressly delegates to the Prototype Sponsor the power, but not the duty, to amend the Plan without any further action or consent of the Employer as the Prototype Sponsor deems necessary for the purpose of adjusting the Plan to comply with all laws and regulations governing pension or profit sharing plans. Specifically, it is understood that the amendments may be made unilaterally by the Prototype Sponsor. However, it shall be understood that the Prototype Sponsor shall be under no obligation to amend the Plan documents and the Employer expressly waives any rights or claims against the Prototype Sponsor for not exercising this power to amend. For purposes of Prototype Sponsor amendments, the mass submitter shall be recognized as the agent of the Prototype Sponsor. If the Prototype Sponsor does not adopt the amendments made by the mass submitter, it will no longer be identical to or a minor modifier of the mass submitter plan.

B. An amendment by the Prototype Sponsor shall be accomplished by giving written notice to the Employer of the amendment to be made. The notice shall set forth the text of such amendment and the date such amendment is to be effective. Such amendment shall take effect unless within the 30 day period after such notice is provided, or within such shorter period as the notice may specify, the Employer gives the Prototype Sponsor written notice of refusal to consent to the amendment. Such written notice of refusal shall have the effect of withdrawing the Plan as a prototype plan and shall cause the Plan to be considered an individually designed plan. The right of the Prototype Sponsor to cause the Plan to be amended shall terminate should the Plan cease to conform as a prototype plan as provided in this or any other section.

9.02 RIGHT OF EMPLOYER TO AMEND THE PLAN

The Employer may (1) change the choice of options in the Adoption Agreement; (2) add overriding language in the Adoption Agreement when such language is necessary to satisfy Section 415 or Section 416 of the Code because of the required aggregation of multiple plans; and (3) add certain model amendments published by the Internal Revenue Service which specifically provide that their adoption will not cause the Plan to be treated as individually designed. An Employer that amends the Plan for any other reason, including a waiver of the

minimum funding requirement under Section 4 12(d) of the Code, will no longer participate in this prototype plan and will be considered to have an individually designed plan.

An Employer who wishes to amend the Plan to change the options it has chosen in the Adoption Agreement must complete and deliver a new Adoption Agreement to the Prototype Sponsor and Trustee (or Custodian, if applicable). Such amendment shall become effective upon execution by the Employer and Trustee (or Custodian).

The Employer further reserves the right to replace the Plan in its entirety by adopting another retirement plan which the Employer designates as a replacement plan.

9.03 LIMITATION ON POWER TO AMEND

No amendment to the Plan shall be effective to the extent that it has the effect of decreasing a Participant's accrued benefit. Notwithstanding the preceding sentence, a Participant's Individual Account may be reduced to the extent permitted under Section 412(c)(8) of the Code. For purposes of this paragraph, a plan amendment which has the effect of decreasing a Participant's Individual Account or eliminating an optional form of benefit with respect to benefits attributable to service before the amendment shall be treated as reducing an accrued benefit. Furthermore, if the vesting schedule of a Plan is amended, in the case of an Employee who is a Participant as of the later of the date such amendment is adopted or the date it becomes effective, the Vested percentage (determined as of such date) of such Employee's Individual Account derived from Employer Contributions will not be less than the percentage computed under the Plan without regard to such amendment.

9.04 AMENDMENT OF VESTING SCHEDULE

If the Plan's vesting schedule is amended, or the Plan is amended in any way that directly or indirectly affects the computation of the Participant's Vested percentage, or if the Plan is deemed amended by an automatic change to or from a top-heavy vesting schedule, each Participant with at least 3 Years of Vesting Service with the Employer may elect, within the time set forth below, to have the Vested percentage computed under the Plan without regard to such amendment.

For Participants who do not have at least 1 Hour of Service in any Plan Year beginning after December 31, 1988, the preceding sentence shall be applied by substituting "5 Years of Vesting Service" for "3 Years of Vesting Service" where such language appears.

The Period during which the election may be made shall commence with the date the amendment is adopted or deemed to be made and shall end the later of:

A. 60 days after the amendment is adopted;

B. 60 days after the amendment becomes effective; or

C. 60 days after the Participant is issued written notice of the amendment by the Employer or Plan Administrator.

9.05 PERMANENCY

The Employer expects to continue this Plan and make the necessary contributions thereto indefinitely, but such continuance and payment is not assumed as a contractual obligation. Neither the Adoption Agreement nor the Plan nor any amendment or modification thereof nor the making of contributions hereunder shall be construed as giving any Participant or any person whomsoever any legal or equitable right against the Employer, the Trustee (or Custodian, if applicable) the Plan Administrator or the Prototype Sponsor except as specifically provided herein, or as provided by law,

9.06 METHOD AND PROCEDURE FOR TERMINATION

The Plan may be terminated by the Employer at any time by appropriate action of its managing body. Such termination shall be effective on the date specified by the Employer. The Plan shall terminate if the Employer shall be dissolved, terminated, or declared bankrupt. Written notice of the termination and effective date thereof shall be given to the Trustee (or Custodian), Plan Administrator, Prototype Sponsor, Participants and Beneficiaries of deceased Participants, and the required filings (such as the Form 5500 series and others) must be made with the Internal Revenue Service and any other regulatory body as required by current laws and regulations. Until all of the assets have been distributed from the Fund, the Employer must keep the Plan in compliance with current laws and regulations by (a) making appropriate amendments to the Plan and (b) taking such other measures as may be required.

9.07 CONTINUANCE OF PLAN BY SUCCESSOR EMPLOYER

Notwithstanding the preceding Section 9.06, a successor of the Employer may continue the Plan and be substituted in the place of the present Employer. The successor and the present Employer (or, if deceased, the executor of the estate of a deceased Self-Employed Individual who was the Employer) must execute a written instrument authorizing such substitution and the successor must complete and sign a new plan document.

9.08 FAILURE OF PLAN QUALIFICATION

If the Plan fails to retain its qualified status, the Plan will no longer be considered to be part of a prototype plan, and such Employer can no longer participate under this prototype. In such event, the Plan will be considered an individually designed plan.

SECTION TEN MISCELLANEOUS

10.01 STATE COMMUNITY PROPERTY LAWS

The terms and conditions of this Plan shall be applicable without regard to the community property laws of any state.

10.02 READINGS

The headings of the Plan have been inserted for convenience of reference only and are to be ignored in any construction of the provisions hereof.

10.03 GENDER AND NUMBER

Whenever any words are used herein in the masculine gender they shall be construed as though they were also used in the feminine gender in all cases where they would so apply, and whenever any words are used herein in the singular form they shall be construed as though they were also used in the plural form in all cases where they would so apply.

10.04 PLAN MERGER OR CONSOLIDATION

In the case of any merger or consolidation of the Plan with, or transfer of assets or liabilities of such Plan to any other plan, each Participant shall be entitled to receive benefits immediately after the merger, consolidation, or transfer (if the Plan had then terminated) which are equal to or greater than the benefits he or she would have been entitled to receive immediately before the merger, consolidation, or transfer (if the Plan had then terminated). The Trustee (or Custodian) has the authority to enter into merger agreements or agreements to directly transfer the assets of this Plan but only if such agreements are made with trustees or custodians of other retirement plans described in Section 401(a) of the Code.

10.05 STANDARD OF FIDUCIARY CONDUCT

The Employer, Plan Administrator, Trustee and any other fiduciary under this Plan shall discharge their duties with respect to this Plan solely in the interests of Participants and their Beneficiaries and with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. No fiduciary shall cause the Plan to engage in any transaction known as a "prohibited transaction" under ERISA.

10.06 GENERAL UNDERTAKING OF ALL PARTIES

All parties to this Plan and all persons claiming any interest whatsoever hereunder agree to perform any and all acts and execute any and all documents and papers which may be necessary or desirable for the carrying out of this Plan and any of its provisions.

10.07 AGREEMENT BINDS HEIRS, ETC.

This Plan shall be binding upon the heirs, executors, administrators, successors and assigns, as those terms shall apply to any and all parties hereto, present and future.

10.08 DETERMINATION OF TOP-HEAVY STATUS

A. For any Plan Year beginning after December 31, 1983, this Plan is a Top-Heavy Plan if any of the following conditions exist:

1. If the top-heavy ratio for this Plan exceeds 60% and this Plan is not part of any required aggregation group or permissive aggregation group of plans.

2. If this Plan is part of a required aggregation group of plans but not part of a permissive aggregation group and the top-heavy ratio for the group of plans exceeds 60%.

3. If this Plan is a part of a required aggregation group and part of a permissive aggregation group of plans and the top-heavy ratio for the permissive aggregation group exceeds 60%.

For purposes of this Section 10.08, the following terms shall have the meanings indicated below:

B. Key Employee - Any Employee or former Employee (and the Beneficiaries of such Employee) who at any time during the determination period was an officer of the Employer if such individual's annual compensation exceeds 50% of the dollar limitation under Section 415(b)(1)(A) of the Code, an owner (or considered an owner under Section 318 of the Code) of one of the 10 largest interests in the Employer if such individual's compensation exceeds 100% of the dollar limitation under Section 415(c)(1)(A) of the Code, a 5% owner of the Employer, or a 1% owner of the Employer who has an annual compensation of more than $150,000. Annual compensation means compensation as defined in Section 415(c)(3) of the Code, but including amounts contributed by the Employer pursuant to a salary reduction agreement which are excludable from the Employee's gross income under Section 125, Section 402(e)(3), Section 402(h)(l)(B) or Section 403(b) of the Code. The determination period is the Plan Year containing the determination date and the 4 preceding Plan Years.

The determination of who is a Key Employee will be made in accordance with Section 416(i)(1) of the Code and the regulations thereunder.

C. Top-heavy ratio

1. If the Employer maintains one or more defined contribution plans (including any simplified employee pension plan) and the Employer has not maintained any defined benefit plan which during the 5-year period ending on the determination date(s) has or has had accrued benefits, the top-heavy ratio for this Plan alone or for the required or permissive aggregation group as appropriate is a fraction, the numerator of which is the sum of the account balances of all Key Employees as of the determination date(s) (including any part of any account balance

distributed in the 5-year period ending on the determination date(s)), and the denominator of which is the sum of all account balances (including any part of any account balance distributed in the 5-year period ending on the determination date(s)), both computed in accordance with Section 416 of the Code and the regulations thereunder. Both the numerator and the denominator of the top-heavy ratio are increased to reflect any contribution not actually made as of the determination date, but which is required to be taken into account on that date under Section 416 of the Code and the regulations thereunder.

2. If the Employer maintains one or more defined contribution plans (including any simplified employee pension plan) and the Employer maintains or has maintained one or more defined benefit plans which during the 5-year period ending on the determination date(s) has or has had any accrued benefits, the top-heavy ratio for any required or permissive aggregation group as appropriate is a fraction, the numerator of which is the sum of account balances under the aggregated defined contribution plan or plans for all Key Employees, determined in accordance with (1) above, and the present value of accrued benefits under the aggregated defined benefit plan or plans for all Key Employees as of the determination date(s), and the denominator of which is the sum of the account balances under the aggregated defined contribution plan or plans for all Participants, determined in accordance with (1) above, and the present value of accrued benefits under the defined benefit plan or plans for all Participants as of the determination date(s), all determined in accordance with Section 416 of the Code and the regulations thereunder. The accrued benefits under a defined benefit plan in both the numerator and denominator of the top-heavy ratio are increased for any distribution of an accrued benefit made in the S-year period ending on the determination date.

3. For purposes of(l) and (2) above, the value of account balances and the present value of accrued benefits will be determined as of the most recent valuation date that falls within or ends with the 12-month period ending on the determination date, except as provided in Section 416 of the Code and the regulations thereunder for the first and second plan years of a defined benefit plan. The account balances and accrued benefits of a Participant (a) who is not a Key Employee but who was a Key Employee in a Prior Year, or (b) who has not been credited with at least one Hour of Service with any employer maintaining the plan at any time during the S-year period ending on the determination date will be disregarded. The calculation of the top-heavy ratio, and the extent to which distributions, rollovers, and transfers are taken into account will be made in accordance with Section 416 of the Code and the regulations thereunder. Deductible employee contributions will not be taken into account for purposes of computing the top-heavy ratio. When aggregating

plans the value of account balances and accrued benefits will be calculated with reference to the determination dates that fall within the same calendar year.

The accrued benefit of a Participant other than a Key Employee shall be determined under (a) the method, if any, that uniformly applies for accrual purposes under all defined benefit plans maintained by the Employer, or (b)if there is no such method, as if such benefit accrued not more rapidly than the slowest accrual rate permitted under the fractional rule of Section 41 1(b)(l)(C) of the Code.

4. Permissive aggregation group: The required aggregation group of plans plus any other plan or plans of the Employer which, when considered as a group with the required aggregation group, would continue to satisfy the requirements of Sections 401(a)(4) and 410 of the Code.

5. Required aggregation group: (a) Each qualified plan of the Employer in which at least one Key Employee participates or participated at any time during the determination period (regardless of whether the Plan has terminated), and (b) any other qualified plan of the Employer which enables a plan described in (a) to meet the requirements of Sections 401(a)(4) or 410 of the Code.

6. Determination date: For any Plan Year subsequent to the first Plan Year, the last day of the preceding Plan Year. For the first Plan Year of the Plan, the last day of that year.

7. Valuation date: For purposes of calculating the top-heavy ratio, the valuation date shall be the last day of each Plan Year.

8. Present value: For purposes of establishing the "present value" of benefits under a defined benefit plan to compute the top-heavy ratio, any benefit shall be discounted only for mortality and interest based on the interest rate and mortality table specified for this purpose in the defined benefit plan, unless otherwise indicated in the Adoption Agreement.

10.09 SPECIAL LIMITATIONS FOR OWNER-EMPLOYEES

If this Plan provides contributions or benefits for one or more Owner-Employees who control both the business for which this Plan is established and one or more other trades or businesses, this Plan and the plan established for other trades or businesses must, when looked at as a single plan, satisfy Sections 40 1(a) and (d) of the Code for the employees of those trades or businesses.

If the Plan provides contributions or benefits for one or more Owner-Employees who control one or more other trades or businesses, the employees of the other trades or businesses must be included in a plan which satisfies Sections 40 1(a)

and (d) of the Code and which provides contributions and benefits not less favorable than provided for Owner-Employees under this Plan.

If an individual is covered as an Owner-Employee under the plans of two or more trades or businesses which are not controlled and the individual controls a trade or business, then the contributions or benefits of the employees under the plan of the trade or business which is controlled must be as favorable as those provided for him or her under the most favorable plan of the trade or business which is not controlled.

For purposes of the preceding paragraphs, an Owner-Employee, or two or more Owner-Employees, will be considered to control a trade or business if the Owner-Employee, or two or more Owner-Employees, together:

A. own the entire interest in a unincorporated trade or business, or

B. in the case of a partnership, own more than 50% of either the capital interest or the profit interest in the partnership.

For purposes of the preceding sentence, an Owner-Employee, or two or more Owner-Employees, shall be treated as owning any interest in a partnership which is owned, directly or indirectly, by a partnership which such Owner-Employee, or such two or more Owner-Employees, are considered to control within the meaning of the preceding sentence.

10.10 INALIENABILITY OF BENEFITS

No benefit or interest available hereunder will be subject to assignment or alienation, either voluntarily or involuntarily. The preceding sentence shall also apply to the creation, assignment, or recognition of a right to any benefit payable with respect to a Participant pursuant to a domestic relations order, unless such order is determined to be a qualified domestic relations order, as defined in Section 414(p) of the Code.

Generally, a domestic relations order cannot be a qualified domestic relations order until January 1, 1985. However, in the case of a domestic relations order entered before such date, the Plan Administrator:

(1) shall treat such order as a qualified domestic relations order if such Plan Administrator is paying benefits pursuant to such order on such date, and

(2) may treat any other such order entered before such date as a qualified domestic relations order even if such order does not meet the requirements of Section 414(p) of the Code.

Notwithstanding any provision of the Plan to the contrary, a distribution to an alternate payee under a qualified domestic relations order shall be permitted even if the Participant affected by such order is not otherwise entitled to a distribution and even if such Participant has not attained earliest retirement age as defined in Section 414(p) of the Code.

10.11 CANNOT ELIMINATE PROTECTED BENEFITS

Pursuant to Section 41 1(d)(6) of the Code, and the regulations thereunder, the Employer cannot reduce, eliminate or make subject to Employer discretion any Section 411(d)(6) protected benefit. Where this Plan document is being adopted to amend another plan that contains a protected benefit not provided for in this document, the Employer may attach a supplement to the Adoption Agreement that describes such protected benefit which shall become part of the Plan.

SECTION ELEVEN 401(K) PROVISIONS

In addition to Sections 1 through 10, the provisions of this Section 11 shall apply if the Employer has established a 401(k) cash or deferred arrangement (CODA) by completing and signing the appropriate Adoption Agreement.

11.100 DEFINITIONS

The following words and phrases when used in the Plan with initial capital letters shall, for the purposes of this Plan, have the meanings set forth below unless the context indicates that other meanings are intended.

11.101 ACTUAL DEFERRAL PERCENTAGE (ADP)

Means, for a specified group of Participants for a Plan Year, the average of the ratios (calculated separately for each Participant in such group) of (1) the amount of Employer Contributions actually paid over to the Fund on behalf of such Participant for the Plan Year to (2) the Participant's Compensation for such Plan Year (taking into account only that Compensation paid to the Employee during the portion of the Plan Year he or she was an eligible Participant, unless otherwise indicated in the Adoption Agreement). For purposes of calculating the ADP. Employer Contributions on behalf of any Participant shall include: (1) any Elective Deferrals made pursuant to the Participant's deferral election, (including Excess Elective Deferrals of Highly Compensated Employees), but excluding (a) Excess Elective Deferrals of Non-highly Compensated Employees that arise solely from Elective Deferrals made under the Plan or plans of this Employer and (b) Elective Deferrals that are taken into account in the Contribution Percentage test (provided the ADP test is satisfied both with and without exclusion of these Elective Deferrals); and (2) at the election of the Employer, Qualified Nonelective Contributions and Qualified Matching Contributions. For purposes of computing Actual Deferral Percentages, an Employee who would be a Participant but for the failure to make Elective Deferrals shall be treated as a Participant on whose behalf no Elective Deferrals are made.

11.102 AGGREGATE LIMIT

Means the sum of (1) 125% of the greater of the ADP of the Participants who are not Highly Compensated Employees for the Plan Year or the ACP of the Participants who are not Highly Compensated Employees under the Plan subject to Code Section 401(m) for the Plan Year beginning with or within the Plan Year of the CODA; and (2) the lesser of 200% or two plus the lesser of such ADP or ACP. "Lesser" is substituted for "greater" in "(1)" above, and "greater" is

substituted for "lesser" after "two plus the" in "(2)" if it would result in a larger Aggregate Limit.

11.103 AVERAGE CONTRIBUTION PERCENTAGE (ACP)

Means the average of the Contribution Percentages of the Eligible Participants in a group.

11.104 CONTRIBUTING PARTICIPANT

Means a Participant who has enrolled as a Contributing Participant pursuant to Section 11.201 and on whose behalf the Employer is contributing Elective Deferrals to the Plan (or is making Nondeductible Employee Contributions).

11.105 CONTRIBUTION PERCENTAGE

Means the ratio (expressed as a percentage) of the Participant's Contribution Percentage Amounts to the Participant's Compensation for the Plan Year (taking into account only the Compensation paid to the Employee during the portion of the Plan Year he or she was an eligible Participant, unless otherwise indicated in the Adoption Agreement).

11.106 CONTRIBUTION PERCENTAGE AMOUNTS

Means the sum of the Nondeductible Employee Contributions, Matching Contributions, and Qualified Matching Contributions made under the Plan on behalf of the Participant for the Plan Year. Such Contribution Percentage Amounts shall not include Matching Contributions that are forfeited either to correct Excess Aggregate Contributions or because the contributions to which they relate are Excess Deferrals, Excess Contributions, Excess Aggregate Contributions or excess annual additions which are distributed pursuant to Section 11.508. If so elected in the Adoption Agreement, the Employer may include Qualified Nonelective Contributions in the Contribution Percentage Amount. The Employer also may elect to use Elective Deferrals in the Contribution Percentage Amounts so long as the ADP test is met before the Elective Deferrals are used in the ACP test and continues to be met following the exclusion of those Elective Deferrals that are used to meet the ACP test.

11.107 ELECTIVE DEFERRALS

Means any Employer Contributions made to the Plan at the election of the Participant, in lieu of cash compensation, and shall include contributions made pursuant to a salary reduction agreement or other deferral mechanism. With respect to any taxable year, a Participant's Elective Deferral is the sum of all Employer contributions made on behalf of such Participant pursuant to an election to defer under any qualified CODA as described in Section 401(k) of the Code, any simplified employee pension cash or deferred arrangement as described in Section 402(h)(1)(B), any eligible deferred compensation plan under Section 457, any plan as described under Section 501(c)(18), and any Employer contributions made on the behalf of a Participant for the purchase of an annuity contract under Section 403(b) pursuant to a salary reduction agreement. Elective

Deferrals shall not include any deferrals properly distributed as excess annual additions.

No Participant shall be permitted to have Elective Deferrals made under this Plan, or any other qualified plan maintained by the Employer, during any taxable year, in excess of the dollar limitation contained in Section 402(g) of the Code in effect at the beginning of such taxable year.

Elective Deferrals may not be taken into account for purposes of satisfying the minimum allocation requirement applicable to Top-Heavy Plans described in Section 3.01(E).

11.108 ELIGIBLE PARTICIPANT

Means any Employee who is eligible to make a Nondeductible Employee Contribution or an Elective Deferral (if the Employer takes such contributions into account in the calculation of the Contribution Percentage), or to receive a Matching Contribution (including Forfeitures thereof) or a Qualified Matching Contribution.

If a Nondeductible Employee Contribution is required as a condition of participation in the Plan, any Employee who would be a Participant in the Plan if such Employee made such a contribution shall be treated as an Eligible Participant on behalf of whom no Nondeductible Employee Contributions are made.

11.109 EXCESS AGGREGATE CONTRIBUTIONS

Means, with respect to any Plan Year, the excess of:

A. The aggregate Contribution Percentage Amounts taken into account in computing the numerator of the Contribution Percentage actually made on behalf of Highly Compensated Employees for such Plan Year, over

B. The maximum Contribution Percentage Amounts permitted by the ACP test (determined by reducing contributions made on behalf of Highly Compensated Employees in order of their Contribution Percentages beginning with the highest of such percentages).

Such determination shall be made after first determining Excess Elective Deferrals pursuant to Section 11.111 and then determining Excess Contributions pursuant to Section 11.110.

11.110 EXCESS CONTRIBUTIONS

Means, with respect to any Plan Year, the excess of:

A. The aggregate amount of Employer Contributions actually taken into account in computing the ADP of Highly Compensated Employees for such Plan Year, over

B. The maximum amount of such contributions permitted by the ADP test (determined by reducing contributions made on behalf of Highly Compensated Employees in order of the ADPs, beginning with the highest of such percentages).

11.111 EXCESS ELECTIVE DEFERRALS

Means those Elective Deferrals that are includible in a Participant's gross income under Section 402(g) of the Code to the extent such Participant's Elective Deferrals for a taxable year exceed the dollar limitation under such Code section. Excess Elective Deferrals shall be treated as annual additions under the Plan, unless such amounts are distributed no later than the first April 15 following the close of the Participant's taxable year.

11.112 MATCHING CONTRIBUTION

Means an Employer Contribution made to this or any other defined contribution plan on behalf of a Participant on account of an Elective Deferral or a Nondeductible Employee Contribution made by such Participant under a plan maintained by the Employer.

Matching Contributions may not be taken into account for purposes of satisfying the minimum allocation requirement applicable to Top-Heavy Plans described in Section 3.01(E).

11.113 QUALIFIED NONELECTIVE CONTRIBUTIONS

Means contributions (other than Matching Contributions or Qualified Matching Contributions) made by the Employer and allocated to Participants' Individual Accounts that the Participants may not elect to receive in cash until distributed from the Plan; that are nonforfeitable when made; and that are distributable only in accordance with the distribution provisions that are applicable to Elective Deferrals and Qualified Matching Contributions.

Qualified Nonelective Contribution may be taken into account for purposes of satisfying the minimum allocation requirement applicable to Top-Heavy Plans described in Section 3.01(E).

11.114 QUALIFIED MATCHING CONTRIBUTIONS

Means Matching Contributions which are subject to the distribution and nonforfeitability requirements under Section 401(k) of the Code when made.

11.115 QUALIFYING CONTRIBUTING PARTICIPANT

Means a Contributing Participant who satisfies the requirements described in Section 11.302 to be entitled to receive a Matching Contribution (and Forfeitures, if applicable) for a Plan Year.

11.200 CONTRIBUTING PARTICIPANT

11.201 REQUIREMENTS TO ENROLL AS A CONTRIBUTING PARTICIPANT

A. Each Employee who satisfies the eligibility requirements specified in the Adoption Agreement may enroll as a Contributing Participant as of any subsequent Entry Date (or earlier if required by Section 2.03) specified in the Adoption Agreement for this purpose. A Participant who wishes to enroll as a Contributing Participant must complete, sign and file a salary reduction agreement (or agreement to make Nondeductible Employee Contributions) with the Plan Administrator.

B. Notwithstanding the times set forth in Section 11.201(A) as of which a Participant may enroll as a Contributing Participant, the Plan Administrator shall have the authority to designate, in a nondiscriminatory manner, additional enrollment times during the 12 month period beginning on the Effective Date (or the date that Elective Deferrals may commence, if later) in order that an orderly first enrollment might be completed. In addition, if the Employer has indicated in the Adoption Agreement that Elective Deferrals may be based on bonuses, then Participants shall be afforded a reasonable period of time prior to the issuance of such bonuses to elect to defer them into the Plan.

11.202 CHANGING ELECTIVE DEFERRAL AMOUNTS

A Contributing Participant may modify his or her salary reduction agreement (or agreement to make Nondeductible Employee Contributions) to increase or decrease (within the limits placed on Elective Deferrals (or Nondeductible Employee Contributions) in the Adoption Agreement) the amount of his or her Compensation deferred into the Plan. Such modification may only be made as of the dates specified in the Adoption Agreement for this purpose, or as of any other more frequent date(s) if the Plan Administrator permits in a uniform and nondiscriminatory manner. A Contributing Participant who desires to make such a modification shall complete, sign and file a new salary reduction agreement (or agreement to make Nondeductible Employee Contribution) with the Plan Administrator. The Plan Administrator may prescribe such uniform and nondiscriminatory rules it deems appropriate to carry out the terms of this Section.

11.203 CEASING ELECTIVE DEFERRALS

A Participant may cease Elective Deferrals (or Nondeductible Employee Contributions) and thus withdraw as a Contributing Participant as of the dates specified in the Adoption Agreement for this purpose (or as of any other date if the Plan Administrator so permits in a uniform and nondiscriminatory manner) by revoking the authorization to the Employer to make Elective Deferrals (or Nondeductible Employee Contributions) on his or her behalf. A Participant who desires to withdraw as a Contributing Participant shall give written notice of withdrawal to the Plan Administrator at least thirty days (or such lesser period of days as the Plan Administrator shall permit in a uniform and nondiscriminatory manner) before the effective date of withdrawal. A Participant shall cease to be a

Contributing Participant upon his or her Termination of Employment, or an account of termination of the Plan.

11.204 RETURN AS A CONTRIBUTING PARTICIPANT AFTER CEASING ELECTIVE DEFERRALS

A Participant who has withdrawn as a Contributing Participant under Section 11.203 (or because the Participant has taken a hardship withdrawal pursuant to Section 11.503) may not again become a Contributing Participant until the dates set forth in the Adoption Agreement for this purpose, unless the Plan Administrator, in a uniform and nondiscriminatory manner, permits withdrawing Participants to resume their status as Contributing Participants sooner.

11.205 CERTAIN ONE-TIME IRREVOCABLE ELECTIONS

This Section 11.205 applies where the Employer has indicated in the Adoption Agreement that an Employee may make a one-time irrevocable election to have the Employer make contributions to the Plan on such Employee's behalf. In such event, an Employee may elect, upon the Employee's first becoming eligible to participate in the Plan, to have contributions equal to a specified amount or percentage of the Employee's Compensation (including no amount of Compensation) made by the Employer on the Employee's behalf to the Plan (and to any other plan of the Employer) for the duration of the Employee's employment with the Employer. Any contributions made pursuant to a one-time irrevocable election described in this Section are not treated as made pursuant to a cash or deferred election, are not Elective Deferrals and are not includible in an Employee's gross income.

The Plan Administrator shall establish such uniform and nondiscriminatory procedures as it deems necessary or advisable to administer this provision.

11.300 CONTRIBUTIONS

11.301 CONTRIBUTIONS BY EMPLOYER

The Employer shall make contributions to the Plan in accordance with the contribution formulas specified in the Adoption Agreement.

11.302 MATCHING CONTRIBUTIONS

The Employer may elect to make Matching Contributions under the Plan on behalf of Qualifying Contributing Participants as provided in the Adoption Agreement. To be a Qualifying Contributing Participant for a Plan Year, the Participant must make Elective Deferrals (or Nondeductible Employee Contributions, if the Employer has agreed to match such contributions) for the Plan Year, satisfy any age and Years of Eligibility Service requirements that are specified for Matching Contributions in the Adoption Agreement and also satisfy any additional conditions set forth in the Adoption Agreement for this purpose. In a uniform and nondiscriminatory manner, the Employer may make Matching Contributions at the same time as it contributes Elective Deferrals or at any other time as permitted by laws and regulations.

11.303 QUALIFIED NONELECTIVE CONTRIBUTIONS

The Employer may elect to make Qualified Nonelective Contributions under the Plan on behalf of Participants as provided in the Adoption Agreement.

In addition, in lieu of distributing Excess Contributions as provided in Section 11.505 of the Plan, or Excess Aggregate Contributions as provided in Section 11.506 of the Plan, and to the extent elected by the Employer in the Adoption Agreement, the Employer may make Qualified Nonelective Contributions on behalf of Participants who are not Highly Compensated Employees that are sufficient to satisfy either the Actual Deferral Percentage test or the Average Contribution Percentage test, or both, pursuant to regulations under the Code.

11.304 QUALIFIED MATCHING CONTRIBUTIONS

The Employer may elect to make Qualified Matching Contributions under the Plan on behalf of Participants as provided in the Adoption Agreement.

11.305 NONDEDUCTIBLE EMPLOYEE CONTRIBUTIONS

Notwithstanding Section 3.02, if the Employer so allows in the Adoption Agreement, a Participant may contribute Nondeductible Employee Contributions to the Plan.

If the Employer has indicated in the Adoption Agreement that Nondeductible Employee Contributions will be mandatory, then the Employer shall establish uniform and nondiscriminatory rules and procedures for Nondeductible Employee Contributions as it deems necessary and advisable including, but not limited to, rules describing in amounts or percentages of Compensation Participants may or must contribute to the Plan.

A separate account will be maintained by the Plan Administrator for the Nondeductible Employee Contributions for each Participant.

A Participant may, upon a written request submitted to the Plan Administrator, withdraw the lesser of the portion of his or her Individual Account attributable to his or her Nondeductible Employee Contributions or the amount he or she contributed as Nondeductible Employee Contributions.

Nondeductible Employee Contributions and earnings thereon will be nonforfeitable at all times. No Forfeiture will occur solely as a result of an Employee's withdrawal of Nondeductible Employee Contributions.

11.400 NONDISCRIMINATION TESTING

11.401 ACTUAL DEFERRAL PERCENTAGE TEST (ADP)

A. Limits on Highly Compensated Employees - The Actual Deferral Percentage (hereinafter "ADP") for Participants who are Highly Compensated Employees for each Plan Year and the ADP for

Participants who are not Highly Compensated Employees for the same Plan Year must satisfy one of the following tests:

1. The ADP for Participants who are Highly Compensated Employees for the Plan Year shall not exceed the ADP for Participants who are not Highly Compensated Employees for the same Plan Year multiplied by 1.25; or

2. The ADP for Participants who are Highly Compensated Employees for the Plan Year shall not exceed the ADP for Participants who are not Highly Compensated Employees for the same Plan Year multiplied by 2.0 provided that the ADP for Participants who are Highly Compensated Employees does not exceed the ADP for Participants who are not Highly Compensated Employees by more than 2 percentage points.

B. Special Rules

1. The ADP for any Participant who is a Highly Compensated Employee for the Plan Year and who is eligible to have Elective Deferrals (and Qualified Nonelective Contributions or Qualified Matching Contributions, or both, if treated as Elective Deferrals for purposes of the ADP test) allocated to his or her Individual Accounts under two or more arrangements described in Section 401(k) of the Code, that are maintained by the Employer, shall be determined as if such Elective Deferrals (and, if applicable, such Qualified Nonelective Contributions or Qualified Matching Contributions, or both) were made under a single arrangement. If a Highly Compensated Employee participates in two or more cash or deferred arrangements that have different Plan Years, all cash or deferred arrangements ending with or within the same calendar year shall be treated as a single arrangement. Notwithstanding the foregoing, certain plans shall be treated as separate if mandatorily disaggregated under regulations under Section 401(k) of the Code.

2. In the event that this Plan satisfies the requirements of Sections 401(k), 401(a)(4), or 410(b) of the Code only if aggregated with one or more other plans, or if one or more other plans satisfy the requirements of such sections of the Code only if aggregated with this Plan, then this Section 11.401 shall be applied by determining the ADP of Employees as if all such plans were a single plan. For Plan Years beginning after December 31, 1989 plans may be aggregated in order to satisfy Section 401(k) of the Code only if they have the same Plan Year.

3. For purposes of determining the ADP of a Participant who is a 5% owner or one of the 10 most highly paid Highly Compensated Employees, the Elective Deferrals (and Qualified Nonelective Contributions or Qualified Matching Contributions, or both, if treated as Elective Deferrals for purposes of the ADP

test) and Compensation of such Participant shall include the Elective Deferrals (and, if applicable, Qualified Nonelective Contributions and Qualified Matching Contributions, or both) and Compensation for the Plan Year of family members (as defined in Section 414(c)(6) of the Code). Family members, with respect to such Highly Compensated Employees, shall be disregarded as separate Employees in determining the ADP both for Participants who are not Highly Compensated Employees and for Participants who are Highly Compensated Employees.

4. For purposes of determining the ADP test, Elective Deferrals, Qualified Nonelective Contributions and Qualified Matching Contributions must be made before the last day of the 12 month period immediately following the Plan Year to which contributions relate.

5. The Employer shall maintain records sufficient to demonstrate satisfaction of the ADP test and the amount of Qualified Nonelective Contributions or Qualified Matching Contributions, or both, used in such test.

6. The determination and treatment of the ADP amounts of any Participant shall satisfy such other requirements as may be prescribed by the Secretary of the Treasury.

7. If the Employer elects to take Qualified Matching Contributions into account as Elective Deferrals for purposes of the ADP test, then (subject to such other requirements as may be prescribed by the Secretary of the Treasury) unless otherwise indicated in the Adoption Agreement, only the amount of such Qualified Matching Contributions that are needed to meet the ADP test shall be taken into account.

8. In the event that the Plan Administrator determines that it is not likely that the ADP test will be satisfied for a particular Plan Year unless certain steps are taken prior to the end of such Plan Year, the Plan Administrator may require Contributing Participants who are Highly Compensated Employees to reduce their Elective Deferrals for such Plan Year in order to satisfy that requirement. Said reduction shall also be required by the Plan Administrator in the event that the Plan Administrator anticipates that the Employer will not be able to deduct all Employer Contributions from its income for Federal income tax purposes.

11.402 LIMITS ON NONDEDUCTIBLE EMPLOYEE CONTRIBUTIONS AND MATCHING CONTRIBUTIONS

A. Limits on Highly Compensated Employees - The Average Contribution Percentage (hereinafter "ACP") for Participants who are Highly Compensated Employees for each Plan Year and the ACP for

Participants who are not Highly Compensated Employees for the same Plan Year must satisfy one of the following tests:

1. The ACP for Participants who are Highly Compensated Employees for the Plan Year shall not exceed the ACP for Participants who are not Highly Compensated Employees for the same Plan Year multiplied by 1.25; or

2. The ACP for Participants who are Highly Compensated Employees for the Plan Year shall not exceed the ACP for Participants who are not Highly Compensated Employees for the same Plan Year multiplied by 2, provided that the ACP for the Participants who are Highly Compensated Employees does not exceed the ACP for Participants who are not Highly Compensated Employees by more than 2 percentage points.

B. Special Rules

1. Multiple Use - If one or more Highly Compensated Employees participate in both a CODA and a plan subject to the ACP test maintained by the Employer and the sum of the ADP and ACP of those Highly Compensated Employees subject to either or both tests exceeds the Aggregate Limit, then, as elected in the Adoption Agreement, the AC? or the ADP of those Highly Compensated Employees who also participate in a CODA will be reduced (beginning with such Highly Compensated Employee whose ACP (or ADP, if elected) is the highest) so that the limit is not exceeded. The amount by which each Highly Compensated Employee's Contribution Percentage Amounts (or ADP, if elected) is reduced shall be treated as an Excess Aggregate Contribution (or Excess Contribution, if elected). The ADP and ACP of the Highly Compensated Employees are determined after any corrections required to meet the ADP and ACP tests. Multiple use does not occur if the ADP and ACP of the Highly Compensated Employees does not exceed 1.25 multiplied by the AD? and AC? of the Participants who are not Highly Compensated Employees.

2. For purposes of this Section 11.402, the Contribution Percentage for any Participant who is a Highly Compensated Employee and who is eligible to have Contribution Percentage Amounts allocated to his or her Individual Account under two or more plans described in Section 40 1(a) of the Code, or arrangements described in Section 401(k) of the Code that are maintained by the Employer, shall be determined as if the total of such Contribution Percentage Amounts was made under each plan. If a Highly Compensated Employee participates in two or more cash or deferred arrangements that have different plan years, all cash or deferred arrangements ending with or within the same calendar year shall be treated as a single arrangement. Notwithstanding the foregoing, certain plans shall be treated as

separate if mandatorily disaggregated under regulations under Section 40 1(m) of the Code.

3. In the event that this Plan satisfies the requirements of Sections 40 1(m), 401(a)(4) or 4 10(b) of the Code only if aggregated with one or more other plans, or if one or more other plans satisfy the requirements of such Sections of the Code only if aggregated with this Plan, then this Section shall be applied by determining the Contribution Percentage of Employees as if all such plans were a single plan. For Plan Years beginning after December 31, 1989, plans may be aggregated in order to satisfy Section 401(m) of the Code only if they have the same Plan Year.

4. For purposes of determining the Contribution Percentage of a Participant who is a 5% owner or one of the 10 most highly paid Highly Compensated Employees, the Contribution Percentage Amounts and Compensation of such Participant shall include the Contribution Percentage Amounts and Compensation for the Plan Year of family members, (as defined in Section 414(q)(6) of the Code). Family members, with respect to Highly Compensated Employees, shall be disregarded as separate Employees in determining the Contribution Percentage both for Participants who are not Highly Compensated Employees and for Participants who are Highly Compensated Employees.

5. For purposes of determining the Contribution Percentage test, Nondeductible Employee Contributions are considered to have been made in the Plan Year in which contributed to the Fund. Matching Contributions and Qualified Nonelective Contributions will be considered made for a Plan Year if made no later than the end of the 12 month period beginning on the day after the close of the Plan Year.

6. The Employer shall maintain records sufficient to demonstrate satisfaction of the ACP test and the amount of Qualified Nonelective Contributions or Qualified Matching Contributions, or both, used in such test.

7. The determination and treatment of the Contribution Percentage of any Participant shall satisfy such other requirements as may be prescribed by the Secretary of the Treasury.

8. If the Employer elects to take Qualified Nonelective Contributions into account as Contribution Percentage Amounts for purposes of the ACP test, then (subject to such other requirements as may be prescribed by the Secretary of the Treasury) unless otherwise indicated in the Adoption Agreement, only the amount of such Qualified Nonelective Contributions that are needed to meet the ACP test shall be taken into account.

9. If the Employer elects to take Elective Deferrals into account as Contribution Percentage Amounts for purposes of the AC? test, then (subject to such other requirements as may be prescribed by the Secretary of the Treasury) unless otherwise indicated in the Adoption Agreement, only the amount of such Elective Deferrals that are needed to meet the ACP test shall be taken into account.

11.500 DISTRIBUTION PROVISIONS

11.501 GENERAL RULE

Distributions from the Plan are subject to the provisions of Section 6 and the provisions of this Section 11. In the event of a conflict between the provisions of Section 6 and Section 11, the provisions of Section 11 shall control.

11.502 DISTRIBUTION REQUIREMENTS

Elective Deferrals, Qualified Nonelective Contributions, and Qualified Matching Contributions, and income allocable to each are not distributable to a Participant or his or her Beneficiary or Beneficiaries, in accordance with such Participant's or Beneficiary or Beneficiaries' election, earlier than upon separation from service, death or disability.

Such amounts may also be distributed upon:

A. Termination of the Plan without the establishment of another defined contribution plan, other than an employee stock ownership plan (as defined in Section 4975(e) or Section 409 of the Code) or a simplified employee pension plan as defined in Section 408(k).

B. The disposition by a corporation to an unrelated corporation of substantially all of the assets (within the meaning of Section 409(d)(2) of the Code used in a trade or business of such corporation if such corporation continues to maintain this Plan after the disposition, but only with respect to Employees who continue employment with the corporation acquiring such assets.

C. The disposition by a corporation to an unrelated entity of such corporation's interest in a subsidiary (within the meaning of Section 409(d)(3) of the Code) if such corporation continues to maintain this Plan, but only with respect to Employees who continue employment with such subsidiary.

D. The attainment of age 59 1/2 in the case of a profit sharing plan.

E. If the Employer has so elected in the Adoption Agreement, the hardship of the Participant as described in Section 11.503.

All distributions that may be made pursuant to one or more of the foregoing distributable events are subject to the spousal and Participant consent requirements (if applicable) contained in Section 401(a)(1) and

417 of the Code. In addition, distributions after March 31, 1988, that are triggered by any of the first three events enumerated above must be made in a lump sum.

11.503 HARDSHIP DISTRIBUTION

A. General - If the Employer has so elected in the Adoption Agreement, distribution of Elective Deferrals (and any earnings credited to a Participant's account as of the end of the last Plan Year, ending before July 1, 1989) may be made to a Participant in the event of hardship. For the purposes of this Section, hardship is defined as an immediate and heavy financial need of the Employee where such Employee lacks other available resources. Hardship distributions are subject to the spousal consent requirements contained in Sections 401(a)(l 1) and 417 of the Code.

B. Special Rules

1. The following are the only financial needs considered immediate and heavy: expenses incurred or necessary for medical care, described in Section 2 13(d) of the Code, of the Employee, the Employee's spouse or dependents; the purchase (excluding mortgage payments) of a principal residence for the Employee; payment of tuition and related educational fees for the next 12 months of post-secondary education for the Employee, the Employee's spouse, children or dependents; or the need to prevent the eviction of the Employee from, or a foreclosure on the mortgage of, the Employee's principal residence.

2. A distribution will be considered as necessary to satisfy an immediate and heavy financial need of the Employee only if:

a. The Employee has obtained all distributions, other than hardship distributions, and all nontaxable loans under all plans maintained by the Employer;

b. All plans maintained by the Employer provide that the Employee's Elective Deferrals (and Nondeductible Employee Contributions) will be suspended for 12 months after the receipt of the hardship distribution;

c. The distribution is not in excess of the amount of an immediate and heavy financial need (including amounts necessary to pay any Federal, state or local income taxes or penalties reasonably anticipated to result from the distribution); and

d. All plans maintained by the Employer provide that the Employee may not make Elective Deferrals for the Employee's taxable year immediately following the taxable year of the hardship distribution in excess of the

applicable limit under Section 402(j) of the Code for such taxable year less the amount of such Employee's Elective Deferrals for the taxable year of the hardship distribution.

11.504 DISTRIBUTION OF EXCESS ELECTIVE DEFERRALS

A. General Rule - A Participant may assign to this Plan any Excess Elective Deferrals made during a taxable year of the Participant by notifying the Plan Administrator on or before the date specified in the Adoption Agreement of the amount of the Excess Elective Deferrals to be assigned to the Plan. A Participant is deemed to notify the Plan Administrator of any Excess Elective Deferrals that arise by taking into account only those Elective Deferrals made to this Plan and any other plans of the Employer.

Notwithstanding any other provision of the Plan. Excess Elective Deferrals, plus any income and minus any loss allocable thereto, shall be distributed no later than April 15 to any Participant to whose Individual Account Excess Elective Deferrals were assigned for the preceding year and who claims Excess Elective Deferrals for such taxable year.

B. Determination of Income or Loss - Excess Elective Deferrals shall be adjusted for any income or loss up to the date of distribution. The income of loss allocable to Excess Elective Deferrals is the sum of: (1) income or loss allocable to the Participant's Elective Deferral account for the taxable year multiplied by a fraction, the numerator of which is such Participant's Elective Deferrals for the year and the denominator is the Participant's Individual Account balance attributable to Elective Deferrals without regard to any income or loss occurring during such taxable year; and (2) 10% of the amount determined under (1) multiplied by the number of whole calendar months between the end of the Participant's taxable year and the date of distribution, counting the month of distribution if distribution occurs after the 15th of such month. Notwithstanding the preceding sentence, the Plan Administrator may compute the income or loss allocable to Excess Elective Deferrals in the manner described in Section 4 (i.e., the usual manner used by the Plan for allocating income or loss to Participants' Individual Accounts), provided such method is used consistently for all Participants and for all corrective distributions under the Plan for the Plan Year.

11.504 DISTRIBUTION OF EXCESS CONTRIBUTIONS

A. General Rule - Notwithstanding any other provision of this Plan, Excess Contributions, plus any income and minus any loss allocable thereto, shall be distributed no later than the last day of each Plan Year to Participants to whose Individual Accounts such Excess Contributions were allocated for the preceding Plan Year. If such excess amounts are distributed more than 2 1/2 months after the last day of the Plan Year in which such excess amounts arose, a 10% excise tax will be imposed on the Employer maintaining the Plan with respect to such amounts. Such distributions

shall be made to Highly Compensated Employees on the basis of the respective portions of the Excess Contributions attributable to each of such Employees. Excess Contributions of Participants who are subject to the family member aggregation rules shall be allocated among the family members in proportion to the Elective Deferrals (and amounts treated as Elective Deferrals) of each family member that is combined to determine the combined ADP.

Excess Contributions (including the amounts recharacterized) shall be treated as annual additions under the Plan.

B. Determination of Income or Loss - Excess Contributions shall be adjusted for any income or loss up to the date of distribution. The income or loss allocable to Excess Contributions is the sum of: (1) income or loss allocable to Participant's Elective Deferral account (and, if applicable, the Qualified Nonelective Contribution account or the Qualified Matching Contributions account or both) for the Plan Year multiplied by a fraction, the numerator of which is such Participant's Excess Contributions for the year and the denominator is the Participant's Individual Account balance attributable to Elective Deferrals (and Qualified Nonelective Contributions or Qualified Matching Contributions, or both, if any of such contributions are included in the ADP test) without regard to any income or loss occurring during such Plan Year; and (2) 10% of the amount determined under (1) multiplied by the number of whole calendar months between the end of the Plan Year and the date of distribution, counting the month of distribution if distribution occurs after the 15th of such month. Notwithstanding the preceding sentence, the Plan Administrator may compute the income or loss allocable to Excess Contributions in the manner described in Section 4 (i.e., the usual manner used by the Plan for allocating income or loss to Participants' Individual Accounts), provided such method is used consistently for all Participants and for all corrective distributions under the Plan for the Plan Year.

C. Accounting for Excess Contributions - Excess Contributions shall be distributed from the Participant's Elective Deferral account and Qualified Matching Contribution account (if applicable) in proportion to the Participant's Elective Deferrals and Qualified Matching Contributions (to the extent used in the ADP test) for the Plan Year. Excess Contributions shall be distributed from the Participant's Qualified Nonelective Contribution account only to the extent that such Excess Contributions exceed the balance in the Participant's Elective Deferral account and Qualified Matching Contribution account.

11.506 DISTRIBUTION OF EXCESS AGGREGATE CONTRIBUTIONS

A. General Rule - Notwithstanding any other provision of this Plan, Excess Aggregate Contributions, plus any income and minus any loss allocable thereto, shall be forfeited, if forfeitable, or if not forfeitable, distributed no later than the last day of each Plan Year to Participants to whose accounts such Excess Aggregate Contributions were allocated for the

preceding Plan Year. Excess Aggregate Contributions of Participants who are subject to the family member aggregation rules shall be allocated among the family members in proportion to the Employee and Matching Contributions (or amounts treated as Matching Contributions) of each family member that is combined to determine the combined ACP. If such Excess Aggregate Contributions are distributed more than 2 1/2 months after the last day of the Plan Year in which such excess amounts arose, a 10% excise tax will be imposed on the Employer maintaining the Plan with respect to those amounts.

Excess Aggregate Contributions shall be treated as annual additions under the Plan.

B. Determination of Income or Loss - Excess Aggregate Contributions shall be adjusted for any income or loss up to the date of distribution. The income or loss allocable to Excess Aggregate Contributions is the sum of: (1) income or loss allocable to the Participant's Nondeductible Employee Contribution account, Matching Contribution account (if any, and if all amounts therein are not used in the ADP test) and, if applicable, Qualified Nonelective Contribution account and Elective Deferral account for the Plan Year multiplied by a fraction, the numerator of which is such Participant's Excess Aggregate Contributions for the year and the denominator is the Participant's Individual Account balance(s) attributable to Contribution Percentage Amounts without regard to any income or loss occurring during such Plan Year; and (2) 10% of the amount determined under (1) multiplied by the number of whole calendar months between the end of the Plan Year and the date of distribution, counting the month of distribution if distribution occurs after the 15th of such month. Notwithstanding the preceding sentence, the Plan Administrator may compute the income or loss allocable to Excess Aggregate Contributions in the manner described in Section 4 (i.e., the usual manner used by the Plan for allocating income or loss to Participants' Individual Accounts), provided such method is used consistently for all Participants and for all corrective distributions under the Plan for the Plan Year.

B. Forfeitures of Excess Aggregate Contributions - Forfeitures of Excess Aggregate Contributions may either be reallocated to the accounts of Contributing Participants who are not Highly Compensated Employees or applied to reduce Employer Contributions, as elected by the Employer in the Adoption Agreement.

C. Accounting for Excess Aggregate Contributions - Excess Aggregate Contributions shall be forfeited, if forfeitable or distributed on a pro rata basis from the Participant's Nondeductible Employee Contribution account, Matching Contribution account, and Qualified Matching Contribution account (and, if applicable, the Participant's Qualified Nonelective Contribution account or Elective Deferral account, or both).

11.506 RECHARACTERIZATION

A Participant may treat his or her Excess Contributions as an amount distributed to the Participant and then contributed by the Participant to the Plan. Recharacterized amounts will remain nonforfeitable and subject to the same distribution requirements as Elective Deferrals. Amounts may not be recharacterized by a Highly Compensated Employee to the extent that such amount in combination with other Nondeductible Employee Contributions made by that Employee would exceed any stated limit under the Plan on Nondeductible Employee Contributions.

Recharacterization must occur no later than two and one-half months after the last day of the Plan Year in which such Excess Contributions arose and is deemed to occur no earlier than the date the last Highly Compensated Employee is informed in writing of the amount recharacterized and the consequences thereof. Recharacterized amounts will be taxable to the Participant for the Participant's tax year in which the Participant would have received them in cash.

11.508 DISTRIBUTION OF ELECTIVE DEFERRALS IF EXCESS ANNUAL ADDITIONS

Notwithstanding any other provision of the Plan, a Participant's Elective Deferrals shall be distributed to him or her to the extent that the distribution will reduce an excess annual addition (as that term is described in Section 3.05 of the Plan).

11.600 VESTING

11.601 100% VESTING ON CERTAIN CONTRIBUTIONS

The Participant's accrued benefit derived from Elective Deferrals, Qualified Nonelective Contributions, Nondeductible Employee Contributions, and Qualified Matching Contributions is nonforfeitable. Separate accounts for Elective Deferrals, Qualified Nonelective Contributions, Nondeductible Employee Contributions, Matching Contributions, and Qualified Matching Contributions will be maintained for each Participant. Each account will be credited with the applicable contributions and earnings thereon.

11.602 FORFEITURES AND VESTING OF MATCHING CONTRIBUTIONS

Matching Contributions shall be Vested in accordance with the vesting schedule for Matching Contributions in the Adoption Agreement. In any event, Matching Contributions shall be fully Vested at Normal Retirement Age, upon the complete or partial termination of the profit sharing plan, or upon the complete discontinuance of Employer Contributions. Notwithstanding any other provisions of the Plan, Matching Contributions or Qualified Matching Contributions must be forfeited if the contributions to which they relate are Excess Elective Deferrals, Excess Contributions, Excess Aggregate Contributions or excess annual additions which are distributed pursuant to Section 11.508. Such Forfeitures shall be allocated in accordance with Section 3.01(C).

When a Participant incurs a Termination of Employment, whether a Forfeiture arises with respect to Matching Contributions shall be determined in accordance with Section 6.01(D).

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EXHIBIT 23.1

The Members and Board of Managers
Antigenics L.L.C.:

We consent to the use of our report included herein and to the references to our firm under the headings "Selected Consolidated Financial Data" and "Experts" in the prospectus and registration statement.

/s/ KPMG LLP

Short Hills, New Jersey
January 7, 2000

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