SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AVANT IMMUNOTHERAPEUTICS, INC. (Exact name of Registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization)

13-3191702 (I.R.S. Employer Identification No.)

119 FOURTH AVENUE NEEDHAM, MASSACHUSETTS 02494 (781) 433-0771

(Address, including zip code, and telephone number, including area code of Registrant's principal executive offices)
UNA S. RYAN, PH.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER AVANT IMMUNOTHERAPEUTICS, INC.

119 FOURTH AVENUE NEEDHAM, MASSACHUSETTS 02494

(781) 433-0771

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

> Copies to: STUART M. CABLE, P.C. ETTORE A. SANTUCCI, P.C. GOODWIN, PROCTER & HOAR LLP EXCHANGE PLACE BOSTON, MASSACHUSETTS 02109-2881 (617) 570-1000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box /X/

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

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Statement for the same offering. / /

If delivery of the Prospectus is expected to be made pursuant to Rule 434, please check the following box. / /

CALCULATION OF REGISTRATION FEE

Proposed Maximum Proposed Maximum Amount to be Registered Title of Shares Being Offering Price Per Aggregate Offering Registered Share Price Registration Fee Common Stock, par value \$.001(1) 2,127,113 6.16(2) \$13,103,016

- (1) This Registration Statement also relates to rights to purchase shares of Series C-1 Junior Participating Cumulative Preferred Stock of the Registrant which are attached to all shares of Common Stock issued, pursuant to the terms of the Registrant's Shareholder Rights Agreement dated November 10, 1994. Until the occurrence of certain prescribed events, the rights are not exercisable, are evidenced by the certificates for the Common Stock and will be transferred with and only with such stock. Because no separate consideration is paid for the rights, the registration fee therefor is included in the fee for the Common Stock
- This estimate is made pursuant to Rule 457(c) under the Securities Act of 1933, as amended (the "Securities Act"), solely for the purposes of determining the registration fee and is based upon the market value of outstanding shares of common stock, \$.001 par value per share, of AVANT Immunotherapeutics, Inc. on December 21, 2000, utilizing the average of the

high and low sale prices reported on the Nasdaq National Market for that

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),

The information in this prospectus is not complete and may be changed. We may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION. DATED DECEMBER 26, 2000.

PROSPECTUS

2,127,113 SHARES OF COMMON STOCK

AVANT IMMUNOTHERAPEUTICS, INC.

The selling stockholders identified in this prospectus, and any of their pledgees, donees, transferees or other successors in interest, may offer to sell up to an aggregate of 2,127,113 shares of common stock of AVANT Immunotherapeutics, Inc. We are filing the Registration Statement of which this prospectus is a part at this time to fulfill a contractual obligation to do so, which we undertook at the time of the original issuance of these shares. We will not receive any of the proceeds from the sale of the common stock by the selling stockholders but, in fulfillment of our contractual obligations, we are bearing the expenses of registration.

SEE "RISK FACTORS" BEGINNING ON PAGE 2 FOR CERTAIN FACTORS YOU SHOULD CONSIDER BEFORE YOU INVEST IN OUR COMMON STOCK.

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. IT IS ILLEGAL FOR ANY PERSON TO TELL YOU OTHERWISE.

The date of this prospectus is December , 2000.

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ABOUT AVANT

We are a biopharmaceutical Company that uses novel applications of immunology to prevent and treat diseases that arise internally, including autoimmune diseases, cardiovascular diseases, cancer and inflammation, and by external conditions, including infectious diseases and organ transplant rejection. Our products address large market opportunities for which current therapies are inadequate or non-existent.

We are developing our products using a broad set of technologies that work together to regulate the body's complement system, regulate T and B cell activity, and enable us and others to create and deliver vaccines that prevent and treat some diseases. We are using these technologies to develop both vaccines and immunotherapeutics that prevent or treat disease caused by infectious organisms and drugs and vaccines that modify undesirable activity of the body's own proteins or cells. All of our products are in various stages of research and development.

Our common stock has been quoted on the Nasdaq National Market under the symbol "AVAN" since August 24, 1998. Prior to that, our common stock traded on the Nasdaq National Market under the symbol "TCS".

Our executive offices are located at 119 Fourth Avenue, Needham, Massachusetts 02494-2725 and our telephone number is (781) 433-0771. Additional information regarding our Company, including our audited financial statements and descriptions of our business, is contained in the documents incorporated by reference in this prospectus. See "Where You Can Find More Information" on page 7 and "Incorporation of Documents by Reference" on page 7.

THE OFFERING

This prospectus relates to up to 2,127,113 shares of our common stock that may be offered for sale by the selling stockholders. We originally issued these shares as follows:

- 1,841,236 of these shares were issued to certain of the selling stockholders on December 1, 2000 in connection with our acquisition of Megan Health, Inc. In connection with this acquisition, we granted these selling stockholders registration rights under the related merger agreement.
- 285,877 of these shares were issued to Pfizer Inc, a selling stockholder, on December 1, 2000 in a private placement. In connection with this private placement, we granted Pfizer registration rights under the related stock purchase agreement.

We are registering the common stock covered by this prospectus in order to fulfill our contractual obligations under both the merger agreement and the stock purchase agreement. Registration of the common stock does not necessarily mean that all or any portion of the common stock will be offered for sale by the selling stockholders.

We have agreed to bear the expenses of the registration of the common stock under federal and state securities laws, but we will not receive any proceeds from the sale of any common stock offered under this prospectus.

RISK FACTORS

YOU SHOULD CONSIDER CAREFULLY THESE RISK FACTORS TOGETHER WITH ALL OF THE INFORMATION INCLUDED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS BEFORE YOU DECIDE TO PURCHASE SHARES OF OUR COMMON STOCK. THIS SECTION INCLUDES SOME FORWARD-LOOKING STATEMENTS.

OUR HISTORY OF LOSSES AND UNCERTAINTY OF FUTURE PROFITABILITY MAKE THE COMMON STOCK A HIGHLY SPECULATIVE INVESTMENT.

We have had no commercial revenues to date from sales of our products and cannot predict when we will. We have accumulated net operating losses since inception of approximately \$145 million, as of November 30, 2000. We expect to spend substantial funds to continue research and product testing of the following products we have in the pre-clinical and clinical testing stages of development:

PRODUCT	USE	STAGE
TP10 TP10 TP10 TP10 TP20 CETi-1 Rotavirus Vaccine Cholera Vaccine Typhoid Vaccine Shigella Vaccine Adjumer(R) Adjumer(R) Adjumer(R) Therapore(TM) Therapore(TM)	organ transplantation pediatric cardiac surgery adult cardiac surgery heart attacks stroke atherosclerosis rotavirus infection cholera infection typhoid infection dysentery respiratory synctial virus lyme disease influenza hepatitis HIV	clinical phase I/II clinical phase I/II clinical phase II clinical phase II clinical phase I clinical phase I clinical phase II clinical phase II clinical phase II clinical phase II/II pre-clinical clinical phase II pre-clinical pre-clinical pre-clinical pre-clinical pre-clinical
Therapore(TM)	cancer	pre-clinical

The product development and regulatory approval process can be generally described as follows. Pre-clinical tests are performed at an early stage of a product's development and provide information about a product's safety and effectiveness in laboratory animals. Pre-clinical tests can last years. If a product passes its pre-clinical tests satisfactorily, we file an investigational new drug application for the product with the Food and Drug Administration, and if the FDA gives its approval we begin phase I clinical tests. Phase I testing generally lasts between six and 12 months. If phase I test results are satisfactory and the FDA gives its approval, we can begin phase II clinical tests. Phase II testing generally lasts between six and 18 months. If phase II test results are satisfactory and the FDA gives its approval, we can begin phase III pivotal studies. Phase III studies generally last between 12 and 36 months. Once clinical testing is completed and a new drug application is filed with the FDA, it may take more than a year to receive FDA approval.

In anticipation of FDA approval of these products, we will need to make substantial investments to establish sales, marketing, quality control, and regulatory compliance capabilities. These investments will increase if and when any of these products receive FDA approval. We cannot predict how quickly our lead products will progress through the regulatory approval process. As a result, we may continue to lose money for several years. We will disclose the progress each product is making through clinical testing, and the preparations we are making for products that are nearing approval for sale in our periodic reports under the Securities Exchange Act of 1934, as amended.

IF WE CANNOT SELL CAPITAL STOCK TO RAISE NECESSARY FUNDS, IT MAY FORCE US TO LIMIT OUR RESEARCH, DEVELOPMENT AND TESTING PROGRAMS.

We will need to raise more capital from investors to advance our lead products through the clinical testing and to fund our operations until we receive final FDA approval and our products begin to generate revenues for us. However, based on our history of losses, we may have difficulty attracting sufficient investment interest. We may also try to obtain funding through research grants and agreements with commercial collaborators. This kind of funding is at the discretion of other organizations and companies who have limited funds and many companies compete with us for those funds. As a result, we may not receive any research grants or funds from collaborators. We will provide specific information about the sources and adequacy of funding for our active research and development programs in our periodic reports under the Securities Exchange Act of 1934, as amended.

IF SELLING STOCKHOLDERS CHOOSE TO SELL SHARES IN LARGE VOLUME, THE TRADING PRICE OF OUR COMMON STOCK COULD SUFFER.

In December 2000, we issued 1,841,236 shares of our common stock at \$9.54 per share in connection with our acquisition of Megan Health, Inc. and 285,877 shares of our common stock at \$10.50 per share in a separate private placement with Pfizer Inc. These transactions were the latest of several private placements of our common stock. Those shares, which are covered by this prospectus, plus among others, 4,650,953 shares we sold in a July 2000 private placement at \$7.85 per share, 5,459,375 shares we sold in a September 1999 private placement at \$1.92 per share, 2,043,494 shares we sold in a March 1998 private placement at \$1.90 per share, 1,433,750 shares we issued in June 1998 in settlement of a contract dispute with a landlord, and 3,124,008 shares that employees may purchase under stock options at prices ranging from \$0.30 to \$14.69 per share, can be resold in the public securities markets without restriction. These shares in total account for approximately 3.87% of our total common stock outstanding as of September 30, 2000, and approximately 3.55% of our common stock on a fully diluted basis. If large numbers of shares are sold over a short period of time, the price of our stock may decline rapidly or fluctuate widely.

IF OUR PRODUCTS DO NOT PASS REQUIRED TESTS FOR SAFETY AND EFFECTIVENESS, WE WILL NOT BE ABLE TO DERIVE COMMERCIAL REVENUE FROM THEM.

For AVANT to succeed, we will need to derive commercial revenue from the products we have under development. The FDA has not approved any of our lead products for sale to date. Our lead drug, TP10, is undergoing phase II clinical testing for use in pediatric and adult cardiac surgery. TP10 has also undergone phase I clinical testing for use in treating heart attacks and phase II clinical testing for organ transplant. Other products in our vaccine programs are in various stages of preclinical and clinical testing. Preclinical tests are performed at an early stage of a product's development and provide information about a product's safety and effectiveness on laboratory animals. Preclinical tests can last years. If a product passes its preclinical tests satisfactorily, we file an investigational new drug application for the product with the FDA, and if the FDA gives its approval we begin phase I clinical tests. Phase I testing generally lasts between 6 and 12 months. If phase I test results are satisfactory and the FDA gives its approval, we can begin phase II clinical tests. Phase II testing generally lasts between six and 18 months. If phase II test results are satisfactory and the FDA gives its approval, we can begin phase III pivotal studies. Phase III studies generally last between 12 and 36 months. Once clinical testing is completed and a new drug application is filed with the FDA, it may take more than a year to receive FDA approval. We will disclose the progress of our ongoing tests and any FDA action on our products in our periodic reports under the Securities Exchange Act of 1934, as amended.

In all cases we must show that a pharmaceutical product is both safe and effective before the FDA, or drug approval agencies of other countries where we intend to sell the product, will approve it for sale. Our research and testing programs must comply with drug approval requirements both in the United States and in other countries, since we are developing our lead products with companies, including Novartis Pharma AG, Smithkline Beecham and Aventis Pasteur, who intend to commercialize them both in the U.S. and abroad. A product may fail for safety or effectiveness at any stage of the testing process. The key risk we face is that none of our products under development will come through the testing process to final approval for sale, with

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the result that we cannot derive any commercial revenue from them after investing significant amounts of capital in multiple stages of pre-clinical and clinical testing.

PRODUCT TESTING IS CRITICAL TO THE SUCCESS OF OUR PRODUCTS BUT SUBJECT TO DELAY OR CANCELLATION IF WE HAVE DIFFICULTY ENROLLING PATIENTS.

As our portfolio of potential products moves from pre-clinical testing to clinical testing, and then through progressively larger and more complex clinical trials, we will need to enroll an increasing number of patients with the appropriate characteristics. At times we have experienced difficulty enrolling patients and we may experience more difficulty as the scale of our clinical testing program increases. The factors that affect our ability to enroll patients are largely uncontrollable and include principally the following:

- the nature of the clinical test
- the size of the patient population
- the distance between patients and clinical test sites
- the eligibility criteria for the trial

As clinical tests currently in progress continue and new tests begin, we will disclose in our periodic reports under the Securities Exchange Act of 1934, as amended, our progress in enrolling sufficient patients to keep our various programs moving forward, including any specific difficulties we face from time to time and their expected consequences on the affected program. If we cannot enroll patients as needed, our costs may increase or it could force us to delay or terminate testing for a product.

WE DEPEND GREATLY ON THE INTELLECTUAL CAPABILITIES AND EXPERIENCE OF OUR KEY EXECUTIVES AND SCIENTISTS AND THE LOSS OF ANY OF THEM COULD AFFECT OUR ABILITY TO DEVELOP OUR PRODUCTS.

The loss of Dr. Una S. Ryan, our president and chief executive officer, or other key members of our staff could harm us. We have an employment agreement with Dr. Ryan. We do not have any key-person insurance coverage. We also depend on our scientific collaborators and advisors, all of whom have outside commitments that may limit their availability to us. In addition, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled scientific, managerial and marketing personnel, particularly as we expand our activities in clinical trials, the regulatory approval process and sales and manufacturing. We face significant competition for this type of personnel from other companies, research and academic institutions, government entities and other organizations. We cannot predict our success in hiring or retaining the personnel we require for continued growth.

WE RELY ON THIRD PARTIES TO PLAN, CONDUCT, MONITOR AND SUPPLY OUR CLINICAL TESTS, AND THEIR FAILURE TO PERFORM AS REQUIRED WOULD INTERFERE WITH OUR PRODUCT DEVELOPMENT.

We rely on third parties, including Duke University Medical Center, The Cleveland Clinic, PPD International, Pharmaceuticals Research Associates, The Chicago Center for Clinical Research and SmithKline Beecham to conduct our clinical tests. If any one of those third parties fails to perform as we expect or if their work fails to meet regulatory standards, our testing could be delayed, cancelled or rendered ineffective. We also depend on third party suppliers and manufacturers, including Walter Reed Army Institute of Research, Marathon Biopharmaceuticals, Inc., Lonza Biologics plc and Multiple Peptide Systems, to provide us with suitable quantities of materials necessary for clinical tests. If these materials are not available in suitable quantities of appropriate quality, in a timely manner, and at a feasible cost, our clinical tests will face delays.

WE DEPEND GREATLY ON THIRD PARTY COLLABORATORS TO LICENSE, DEVELOP AND COMMERCIALIZE SOME OF OUR PRODUCTS, AND THEY MAY NOT MEET OUR EXPECTATIONS.

We have agreements with other companies, including Novartis Pharma AG, Aventis Pasteur and SmithKline Beecham, for the licensing, development and ultimate commercialization of some of our products. Some of those agreements give substantial responsibility over the products to the collaborator. Some collaborators may be unable or unwilling to devote sufficient resources to develop our products as their agreements require. They often face business risks similar to ours, and this could interfere with their efforts. Also, collaborators may choose to devote their resources to products that compete with ours. If a collaborator does not successfully develop any one of our products, we will need to find another collaborator to do so. Our search for a new collaborator will depend on our legal right to do so at the time and whether the product remains commercially viable.

WE MAY FACE DELAYS, DIFFICULTIES OR UNANTICIPATED COSTS IN ESTABLISHING SALES, DISTRIBUTION AND MANUFACTURING CAPABILITIES FOR OUR COMMERCIALLY READY PRODUCTS.

We have chosen to retain, rather than license, all rights to some of our lead products, such as TP10 for pediatric and adult cardiac surgery. If we proceed with this strategy, we will have full responsibility for commercialization of these products if and when they are approved for sale. We currently lack the marketing, sales and distribution capabilities that we will need to carry out this strategy. To market any of our products directly, we must develop a substantial marketing and sales force with technical expertise and a supporting distribution capability. We have little expertise in this area, and we may not succeed. We may find it necessary to enter into strategic partnerships on uncertain but potentially unfavorable terms to sell, market and distribute our products when they are approved for sale.

Some of our products are difficult to manufacture, especially in large quantities, and we have not yet developed commercial scale manufacturing processes for any of our products. We do not currently plan to develop internal manufacturing capabilities to produce any of our products if they are approved for sale. To the extent that we choose to market and distribute products ourselves, this strategy will make us dependent on other companies to produce our products in adequate quantities, in compliance with regulatory requirements, and at a competitive cost. We may not find third parties with facilities and expertise available to meet those manufacturing needs.

OUR RELIANCE ON THIRD PARTIES REQUIRES US TO SHARE OUR TRADE SECRETS, AND THIS RELIANCE INCREASES THE POSSIBILITY THAT A COMPETITOR WILL DISCOVER THEM.

Because we rely on third parties to develop our products, we must share trade secrets with them. We seek to protect our proprietary technology in part by confidentiality agreements and, if applicable, inventor's rights agreements with our collaborators, advisors, employees and consultants. Our competitors may discover our trade secrets either through breach of these agreements or through independent development. A competitor's discovery of our trade secrets would impair our competitive position. Moreover, we conduct a significant amount of research through academic advisors and collaborators who are prohibited from entering into confidentiality or inventor's rights agreements by their academic institutions.

WE LICENSE TECHNOLOGY FROM OTHER COMPANIES TO DEVELOP OUR PRODUCTS, AND THOSE COMPANIES COULD RESTRICT OUR USE OF IT.

Companies that license to us technologies we use in our research and development programs may require us to achieve milestones or devote minimum amounts of resources to develop products using those technologies. They may also require us to make significant royalty and milestone payments, including a percentage of any sublicensing income, as well as payments to reimburse them for patent costs. The number and variety of our research and development programs require us to establish priorities and to allocate available resources among competing programs. From time to time we may choose to slow down or cease our efforts on particular products. If in doing so we fail to perform our obligations under a license fully, the licensor can terminate the licenses or permit our competitors to use the technology. Moreover, we may lose our right to market and sell any products based on the licensed technology.

WE HAVE MANY COMPETITORS IN OUR FIELD AND THEY MAY DEVELOP TECHNOLOGIES THAT MAKE OURS OBSOLETE.

Biotechnology, pharmaceuticals and therapeutics are rapidly evolving fields in which scientific and technological developments are expected to continue at a rapid pace. We have many competitors in the U.S. and abroad, including Alexion Pharmaceuticals, Bayer, Merck, Pfizer, Immune Response and Wyeth-Lederle. Our success depends upon our ability to develop and maintain a competitive position in the product categories and technologies on which we focus. Many of our competitors have greater capabilities, experience and financial resources than we do. Competition is intense and is expected to increase as new products enter the market and new technologies become available. Our competitors may:

- develop technologies and products that are more effective than ours, making ours obsolete or otherwise noncompetitive
- obtain regulatory approval for products more rapidly or effectively than us
- obtain patent protection or other intellectual property rights that would block our ability to develop competitive products

WE RELY ON PATENTS, PATENT APPLICATIONS AND OTHER INTELLECTUAL PROPERTY PROTECTIONS TO PROTECT OUR TECHNOLOGY AND TRADE SECRETS; THEY ARE EXPENSIVE AND MAY NOT PROVIDE SUFFICIENT PROTECTION.

Our success depends in part on our ability to obtain and maintain patent protection for technologies that we use. Biotechnology patents involve complex legal, scientific and factual questions and are highly uncertain. To date, there is no consistent policy regarding the breadth of claims allowed in biotechnology patents, particularly in regard to patents for technologies for human uses like those we use in our business. We cannot predict whether the patents we seek will issue. If they do issue, a competitor may challenge them and limit their scope. Moreover, our patents may not afford effective protection against competitors with similar technology. A successful challenge to any one of our patents could result in a third party's ability to use the technology covered by the patent. We also face the risk that others will infringe, avoid or circumvent our patents. Technology that we license from others is subject to similar risks, and this could harm our ability to use that technology. If we, or a company that licenses technology to us, were not the first creator of an invention that we use, our use of the underlying product or technology could face restrictions, including elimination.

If we must defend against suits brought against us or prosecute suits against others involving intellectual property rights, we will incur substantial costs. In addition to any potential liability for significant monetary damages, a decision against us may require us to obtain licenses to patents or other intellectual property rights of others on potentially unfavorable terms. If those licenses from third parties are necessary but we cannot acquire them, we would attempt to design around the relevant technology. This would cause higher development costs and delays, and may ultimately prove impracticable.

OUR BUSINESS REQUIRES US TO USE HAZARDOUS MATERIALS, AND THIS INCREASES OUR EXPOSURE TO DANGEROUS AND COSTLY ACCIDENTS.

Our research and development activities involve the use of hazardous chemicals, biological materials and radioactive compounds. Although we believe that our safety procedures for handling and disposing hazardous materials comply with the standards prescribed by applicable laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of an accident, an injured party will likely sue us for any resulting damages with potentially significant liability. The ongoing cost of complying with environmental laws and regulations is significant and may increase in the future. In addition, in connection with our merger with Virus Research Institute, Inc. in 1998, we assumed the real property lease at Virus Research Institute, Inc.'s former site. We understand that this property has a low level of oil-based and other hazardous material contamination. We believe that the risks posed by this

contamination are low, but we cannot predict whether additional hazardous contamination exists at this site, or that changes in applicable law will not require us to clean up the current contamination of the property.

WHERE YOU CAN FIND MORE INFORMATION

We must comply with the informational requirements of the Securities Exchange Act of 1934, as amended, and we are required to file reports and proxy statements and other information with the Securities and Exchange Commission. You may read and copy these reports, proxy statements and information at the public reference facilities maintained by the Securities and Exchange Commission at Judiciary Plaza, 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549, and at the Securities and Exchange Commission's Regional Offices at 7 World Trade Center, 13th Floor, New York, New York 10048, and Citicorp Center, 500 W. Madison Street, Suite 1400, Chicago, Illinois 60661-2511. You may also obtain copies at the prescribed rates from the Public Reference Section of the Securities and Exchange Commission at its principal office in Washington, D.C. You may call the Securities and Exchange Commission at 1-800-SEC-0330 for further information about the public reference rooms. The Securities and Exchange Commission maintains a web site that contains reports, proxy and information statements and other information regarding registrants, including AVANT, that file electronically with the Securities and Exchange Commission. You may access the Securities and Exchange Commission's web site at http://www.sec.gov.

INCORPORATION OF DOCUMENTS BY REFERENCE

The Securities and Exchange Commission allows us to incorporate by reference in this prospectus the information that we file with them. Incorporation by reference means that we can disclose important information to you by referring you to other documents that are legally considered to be part of this prospectus, and later information that we file with the Securities and Exchange Commission will automatically update and supersede the information in this prospectus, any supplement and the documents listed below. We incorporate by reference the specific documents listed below and any future filings made with the Securities and Exchange Commission under Section 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, until all of the shares are sold:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 1999 (as amended on Form 10-K/A filed on July 25, 2000)
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2000, June 30, 2000 and September 30, 2000
- our Current Report on Form 8-K filed on July 19, 2000
- our Current Report on Form 8-K filed on December 12, 2000
- the definitive Proxy Statement for our annual meeting of stockholders filed on March 28, 2000
- the description of our common stock contained in our Registration Statement on Form 8-A, filed on September 22, 1986, including all amendments and reports updating that description
- the description of the rights to purchase shares of our Series C-1 Junior Participating Cumulative Preferred Stock contained in our Registration Statement on Form 8-A, filed on November 14, 1994, including all amendments and reports updating that description

We will furnish without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any documents incorporated by reference other than exhibits to those documents. Requests should be addressed to: 119 Fourth Avenue, Needham, Massachusetts 02494, Attention: Corporate Secretary (telephone number (781) 433-0771).

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information in this prospectus or the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

FORWARD-LOOKING STATEMENTS

Some statements incorporated by reference or made under the caption "Risk Factors" and elsewhere in this prospectus are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. When we use the words "anticipate," "assume," "believe," "estimate," "expect," "intend" and other similar expressions, they generally identify forward-looking statements. Forward-looking statements include, for example, statements relating to development activities, business strategy and prospects, future capital expenditures, sources and availability of capital, governmental regulations and their effect on us and competition.

You should exercise caution in interpreting and relying on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our control and could materially affect our actual results, performance or achievements. Some of the factors that could cause our actual results, performance or achievements to differ materially from those expressed or implied by forward-looking statements include, but are not limited to, the matters discussed under the caption "Risk Factors."

We caution you that, while forward looking statements reflect our good faith beliefs, they are not guarantees of future performance. In addition, we disclaim any obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

 $\mbox{\sc AVANT}$ will not receive any proceeds from the sale of the shares by the selling stockholders.

REGISTRATION RIGHTS OF THE SELLING STOCKHOLDERS

The following is a summary of the material terms and provisions of the merger agreement and the stock purchase agreement relating to the registration of the common stock covered by this prospectus. It may not contain all the information that is important to you. You can access complete information by referring to the merger agreement or the stock purchase agreement, as applicable.

Under the terms of the registration rights provisions of the merger agreement, we must file by December 31, 2000 a Registration Statement covering the sale by the selling stockholders of the common stock that they received on December 1, 2000 in connection with our acquisition of Megan Health, Inc. We must use all commercially reasonable efforts to cause the Registration Statement to be declared effective by the Securities and Exchange Commission at the earliest practicable date, but not later than the later of (i) March 31, 2000, or (ii) the tenth business day after the filing of our annual report on Form 10-K for the fiscal year ended December 31, 2000. We have no obligation to keep the Registration Statement effective from and after such time as all the common stock issued to the selling stockholders in connection with our acquisition of Megan Health could be sold under Rule 144 of the Securities Act of 1933, as amended.

Under the terms of the registration rights provisions of the stock purchase agreement, we must file a Registration Statement covering the sale by Pfizer Inc of the common stock that it purchased on December 1, 2000 as soon as reasonably practicable after the closing. We must use commercially reasonable efforts to cause the Registration Statement to be declared effective by the Securities and Exchange Commission and to keep the Registration Statement continuously effective until the earlier of (i) the date on which Pfizer has disposed of all of its shares of common stock and (ii) the date on which Pfizer may sell all of its shares of common stock under Rule 144 of the Securities Act of 1933, as amended.

Any common stock sold by the selling stockholders pursuant to this prospectus will no longer be entitled to the benefits of the registration rights provisions of the merger agreement or the stock purchase agreement.

The registration rights provisions of the merger agreement and the stock purchase agreement require that we bear all expenses of registering the common stock with the exception of any fees or expenses of counsel for the selling stockholders and all underwriting discounts, selling commissions and transfer taxes applicable to the sale of common stock under the Registration Statement. We also agreed to indemnify the selling stockholders and any person who controls the selling stockholders against all losses, claims, damages or liabilities arising under the securities laws in connection with an untrue statement or omission in the Registration Statement or this prospectus, subject to limitations specified in the merger agreement and the stock purchase agreement. In addition, the selling stockholders agreed to indemnify us and any person who controls our company, subject to limitations specified in the merger agreement and the stock purchase agreement, against all losses, claims, damages or liabilities arising under the securities laws if they result from an untrue statement or omission contained in any written information furnished to us by the selling stockholders expressly for use in the Registration Statement or this prospectus or any amendments to the Registration Statement or any prospectus supplements.

SELLING STOCKHOLDERS

The following table provides the name and number of shares of common stock owned by each selling stockholder as of December 1, 2000, the number of shares of common stock covered by this prospectus and the total number of shares of common stock which the selling stockholders will beneficially own upon completion of this offering. The shares offered by this prospectus may be offered from time to time by the selling stockholders named below, or by any of their pledgees, donees, transferees or other successors in interest. The selling stockholders will receive all of the proceeds from the sale of shares of common stock pursuant to this prospectus.

Because the selling stockholders may sell all, some or none of the shares, we have assumed that the selling stockholders will sell all of the shares in determining the number and percentage of shares of common stock that each selling stockholder will own upon completion of the offering to which this prospectus relates. The amounts set forth below are based upon information provided by the selling stockholders and are accurate to the best of our knowledge. It is possible, however, that the selling stockholders may acquire or dispose of additional shares of common stock from time to time after the date of this prospectus.

	SHARES OF COMMON STOCK BENEFICIALLY	SHARES OF	SHARES OF COM	THE OFFERING
SELLING STOCKHOLDER	OWNED AS OF DECEMBER 1, 2000	COMMON STOCK OFFERED HEREBY	NUMBER(1)	PERCENT
A/W Company	266,985	266,985	0	0
Aflafi Capital Company	336,315	336,315	0	0
Altec Industries, Inc	214	214	0	0
AmSouth Bancorporation	372	372	0	0
Mr. Neal Andrews	593	593	0	0
Mr. J. Claude Bennett	377	377	0	0
Mr. Keehn Berry, Jr	483	483	0	0
Bienville Ventures I	542	542	0	0
Bienville Ventures II	25,576	25,576	0	0
Harold E. Bissell	7,407	7,407	0	0
Ronald S. Brakke	208	208	0	0
Barlett G. Bretz	6,548	6,548	0	0
Brice Investment Company, Inc	513	513	0	0
Mr. Percy W. Brower, Jr.,				
Trustee under The Percy W. Brower Jr.				
Revocable Trust dated 9/20/96	186	186	0	0
Buffalo Rock Company	186	186	0	0
Mr. Thomas N. Carruthers, Jr	441	441	0	0
Gus G. Casten M.D	20,357	20,357	0	0
CID Equity Capital V, L.P	197,523	197,523	0	0
CID Equity Partners	98,762	98,762	0	0
Brian L. Clevinger, Ph.D	1,973	1,973	0	0
Richard W. Compans	3,366	3,366	0	0
Richard and Iva Conerly,				
Joint Tenants with Rights of Survivorship	12,916	12,916	0	0
Roy Curtiss III	314	314	0	0
Josephine E. Curtiss,				
Trustee of the Roy Curtiss III Irrevocable				
Trust No. 2 dated June 12, 1998	22,900	22,900	0	0
Josephine E. Curtiss	347	347	0	0
R. Hal Dean				
as Trustee of the R. Hal Dean Revocable				
Trust UAD August 26, 1987	11,606	11,606	0	0
Dunn Investment Company	24,769	24,769	0	0
Hope R. Edison	5,804	5,804	0	0
Julian I. Edison	17,410	17,410	0	0
Mr. William F. Edmonds	190	190	0	0
Mr. John D. Elmore	761	761	0	0
Mrs. Marilyn W. Elmore	761	761	0	0
Mr. Marvin R. Engel,				
As Trustee of Trust B				
U/W/O William P. Engel	325	325	0	0
Mr. William E. Engel	124	124	0	0
Mr. Wayne H. Gillis	92	92	0	0
Amos N. Goldhaber and Marilyn K. Goldhaber	9,876	9,876	0	0
Richard Grayson	1,731	1,731	0	0
Revocable Living Trust of Richard C. Grayson				
Dated November 15, 1990, Richard C. Grayson,				
Trustee	9,876	9,876	0	0
Tony Good	347	347	0	0

	SHARES OF COMMON STOCK BENEFICIALLY	SHARES OF	SHARES OF COMMON STOCK OWNED AFTER THE OFFERING	
SELLING STOCKHOLDER	OWNED AS OF DECEMBER 1, 2000	COMMON STOCK OFFERED HEREBY	NUMBER(1)	PERCENT
Mr. G.R. Harsh III	810	810	0	0
Mr. Cooper G. Hazelrig	214	214	0	0
Sanjay K. Jain	14,519	14,519	0	0
Jemison Investment Co., Inc	49,272	49,272	0	0
Mr. Crawford T. Johnson III	253	253	0	0
Johnston Properties, Inc	214	214	0	0
Joint Tenants with a Right of Survivorship	1,975	1,975	0	0
Everett R. Lerwick, M.D	12,345	12,345	0	0
Longview Farm Trust	4,534	4,534	0	0
Caldwell Marks	4, 186	4,186	0	0
Michael C. Matsos	13,695	13,695	0	0
McWane, Inc	943	943	0 0	0
Dr. Jiri Mestecky	314	314	U	0
as Trustee U/I William E. Nasser	0.076	0.076	0	0
dated March 17, 1995	9,876	9,876	0 0	0 0
John F. Norwood Dr. Daniel S. Prince	11,606 368	11,606 368	0	0
Research Corporation Technologies, Inc	1,034	1,034	0	0
Richgood Corporation	5,238	5,238	0	0
Mr. Burnell R. Roberts	651	651	0	0
Arthur F. Sackler	14,519	14,519	0	0
Dennis P. Schafer	4,936	4,936	0	0
Murray W. and Margaret S. Smith	8,722	8,722	0	0
Joseph C. South, III and Murray S. South, Joint Tenants with Right of Survivorship	8,866	8,866	0	0
Virginia B. Spencer	5,926	5,926	0	0
William M. Spencer, III	28,867	28,867	0	0
Mr. Andrew B. Stanley	126	126	0	0
Ms. Susan W. Stanley	126	126	Õ	0
Mr. Thomas B. Stanley, III	126	126	0	0
Ruth B. Stanley, Trustee Under Intervivos Trust Agreement				
with Thomas B. Stanley, Jr., 4-28-82	10,003	10,003	0	0
John Steuart	695	695	0	0
Ms. Kate Stockham	156	156	0	0
Ms. Carolyn Stockham Thomas	167	167	0	0
Lee J. Styslinger, Jr	11,542	11,542	0	0
M. Bruce Sullivan	7,948	7,948	0	0
Suttle Brothers Investments	2,193	2,193	0	0
Pharmacia & Upjohn	217,554	217,554	0	0
VACS, Ltd	17,410	17,410	0	0
Mr. R. Lee Walthall	377	377	0	0
Mr. Stewart H. Welch, Jr	747	747	0	0
John R. Welser	982	982	0	0
Alice M. Williams	2,155	2,155	0	0
Mr. Robert H. Yoe, III	106	106	0	0
Mr. Robert H. Yoe, Jr	322	322	0	0
Mr. Frank M. Young, III and AmSouth Bancorporation, as trustees under Indenture dated 12/15/76 for the				
benefit of Mary Cobb Young	122	122	0	0
Mr. Frank M. Young, III and AmSouth Bancorporation,				
as trustees under Indenture dated 12/15/76 for the				
benefit of Frank M. Young, IV	122	122	0	0
Zinsmeyer Trusts Partnership	13,046	13,046	0	0
U.S. Bank Trust	262,250	262,250	0	0
Pfizer Inc	285,877	285,877 	0	0
TOTAL	2,127,113	2,127,113	0	0

⁽¹⁾ Assumes that all shares hereby offered by the selling stockholders are sold.

PLAN OF DISTRIBUTION

We are registering 2,127,113 shares of common stock for resale by the selling stockholders, to satisfy our commitment to do so under contracts with them, but the registration of these shares does not necessarily mean that the selling stockholders will sell any or all of the shares registered. The selling stockholders, or their pledgees, donees, transferees or other successors in interest may sell the shares from time to time at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at prices otherwise negotiated. The selling stockholders may sell shares by one or more of the following methods:

- block transactions in which a broker-dealer will attempt to sell all or a portion of such shares as agent but may position and resell all or a portion of the block as principal to facilitate the transaction
- purchases by any such broker-dealer as principal and resale by such broker-dealer for its own account pursuant to any supplement to this prospectus
- sales on a stock exchange or automated interdealer quotation system on which our shares are listed on in the over-the-counter market
- ordinary brokerage transactions and transactions in which any such broker-dealer solicits purchasers
- privately negotiated transactions
- short sales
- one or more underwritten offerings on a firm commitment or best efforts basis
- through the writing of options on the shares, whether or not the options are listed on an options exchange
- through the distribution of the shares by any selling stockholder to its partners, members or stockholders

The selling stockholders may also transfer the shares by gift. We do not know of any specific arrangements by the selling stockholders for the sale of any of the shares at the present time.

The selling stockholders may engage brokers and dealers, and any brokers or dealers may arrange for other brokers or dealers to participate in effecting sales of the shares. These brokers, dealers or underwriters may act as principals, or as an agent of a selling stockholder. Broker-dealers may agree with a selling stockholder to sell a specified number of the shares at a stipulated price per security. If the broker-dealer is unable to sell shares acting as agent for a selling stockholder, it may purchase as principal any unsold shares at the stipulated price. Broker-dealers who acquire shares as principals may thereafter resell the shares from time to time in transactions in any stock exchange or automated interdealer quotation system on which the shares are then listed, at prices and on terms then prevailing at the time of sale, at prices related to the then-current market price or in negotiated transactions. Broker-dealers may also use block transactions and sales to and through broker-dealers as described above.

From time to time, the selling stockholders may pledge, hypothecate or grant a security interest in some or all of the shares owned by them. The pledgees, secured parties or persons to whom the shares have been hypothecated will, upon foreclosure in the event of default, be deemed to be selling stockholders. The number of a selling stockholder's shares offered under this prospectus will decrease as and when it takes such actions. The plan of distribution for that selling stockholder's shares will otherwise remain unchanged. In addition, a selling stockholder may, from time to time, sell the shares short, and, in those instances, this prospectus may be delivered in connection with the short sales and the shares offered under this prospectus may be used to cover short sales.

To the extent required under the Securities Act of 1933, as amended, the aggregate amount of selling stockholders' shares being offered and the terms of the offering, the names of any agents, brokers, dealers or underwriters and any applicable commission with respect to a particular offer will be disclosed in a prospectus supplement. Any underwriters, dealers, brokers or agents participating in the distribution of the shares may receive compensation in the form of underwriting discounts, concessions, commissions or fees from a selling stockholder and/or purchasers of shares for whom they may act (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The selling stockholders and any underwriters, brokers, dealers or agents that participate in the distribution of the shares may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, as amended, and any discounts, concessions, commissions or fees received by them and any profit on the resale of the shares sold by them may be deemed to be underwriting discounts and commissions.

A selling stockholder may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the shares in the course of hedging the positions they assume with that selling stockholder, which may include distributions of the shares by those broker-dealers. A selling stockholder may enter into option or other transactions with broker-dealers that involve the delivery of shares to the broker-dealers, who may then recall or otherwise transfer those shares. A selling stockholder may also loan or pledge shares to a broker-dealer and the broker-dealer may sell those shares.

The selling stockholders and other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Securities and Exchange Commission, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares by the selling stockholders and any other person. The anti-manipulation rules under the Securities Exchange Act of 1934, as amended, may apply to sales of securities in the market and to the activities of the selling stockholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the shares to engage in market-making activities with respect to the particular shares being distributed for a period of up to five business days before the distribution. These restrictions may affect the marketability of the shares and the ability of any person or entity to engage in market-making activities with respect to the shares.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act of 1933, as amended, arising from disclosures we make or fail to make. The selling stockholders have agreed to indemnify us against liabilities, under the Securities Act of 1933, as amended, arising from information supplied to us by them. We will pay all expenses relating to the offering and sale of shares by the selling stockholders, with the exception of any fees or expenses of counsel, underwriting discounts, selling commissions or transfer taxes incurred by the selling stockholders.

LEGAL MATTERS

The validity of the common stock being offered by the selling shareholders will be passed upon for us by Goodwin, Procter & Hoar LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K/A for the year ended December 31, 1999 have been so incorporated in reliance upon the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS, INCORPORATED HEREIN BY REFERENCE OR CONTAINED IN A PROSPECTUS SUPPLEMENT; NEITHER WE NOR THE SELLING STOCKHOLDERS HAVE AUTHORIZED ANYONE ELSE TO PROVIDE YOU WITH DIFFERENT OR ADDITIONAL INFORMATION. THE SELLING STOCKHOLDERS ARE NOT MAKING AN OFFER OF THESE SECURITIES IN ANY STATE WHERE THE OFFER IS NOT PERMITTED. YOU SHOULD NOT ASSUME THAT THE INFORMATION IN THE PROSPECTUS, OR INCORPORATED HEREIN BY REFERENCE, OR IN ANY PROSPECTUS SUPPLEMENT IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE ON THE FRONT OF THOSE DOCUMENTS.

2,127,113 SHARES

AVANT IMMUNOTHERAPEUTICS, INC.

COMMON STOCK

PROSPECTUS

DECEMBER , 2000

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION(1).

The following are the estimated expenses of the distribution of the shares registered hereunder on Form S-3: $\,$

Registration FeeSecurities and Exchange Commission\$ 3,276
Accountants Fees and Expenses\$ 5,000
Blue Sky Fees and Expenses\$ 1,000
Legal Fees and Expenses\$25,000
Printing Expenses
Transfer Agent Expenses\$ 3,500
Total\$38,776

The amounts set forth above, except for the SEC Registration Fee, are estimated.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Company is a Delaware corporation. In accordance with the Delaware General Corporation Law (the "DGCL"), Article Sixth of the Registrant's Third Restated Certificate of Incorporation, as amended, provides that no director of the Registrant shall be personally liable to the Registrant or its stockholders for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Company 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 DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

The DGCL permits, but does not require, a corporation to indemnify its directors, officers, employees or agents and expressly provides that the indemnification provided for under the DGCL shall not be deemed exclusive of any indemnification right under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The DGCL permits indemnification against expenses and certain other liabilities arising out of legal actions brought or threatened against such persons for their conduct on behalf of the corporation, provided that each such person acted in good faith and in a manner that he or she reasonably believed was in or not opposed to the corporation's best interests and in the case of a criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The DGCL does not allow indemnification of directors in the case of an action by or in the right of the corporation (including stockholder derivative suits) unless the directors successfully defend the action or indemnification is ordered by the court. The Amended and Restated Bylaws of the Company (the "Bylaws") provide for indemnification to the directors, officers, employees and agents of the Company consistent with that authorized by the Company. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors and officers of the Company pursuant $\dot{\mbox{\sc d}}$ to the foregoing provision or otherwise, the Company has been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Exchange Act of 1934, as amended, and is therefore, unenforceable.

The Company currently carries a directors' and officers' liability insurance policy which provides for payment of expenses of the Company's directors and officers in connection with threatened, pending or completed actions, suits or proceedings against them in their capacities as directors and officers, in accordance with the Bylaws and the DGCL.

ITEM 16. EXHIBITS.

EXHIBIT

NO.

DESCRIPTION

- 4.1 Third Restated Certificate of Incorporation of the Company (incorporated herein by reference to Exhibit 3.1 of the Company's Registration Statement on Form S-4 (Reg. No. 333-59215)).
- 4.2 Certificate of Amendment of Third Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 of the Company's Registration Statement on Form S-4 (Reg. No. 333-59215)).
- 4.3 Certificate of Designation for series C-1 Junior Participating Cumulative Preferred Stock (incorporated herein by reference to Exhibit 3.1 of the Company's Registration Statement on Form S-4 (Reg. No. 333-59215)).
- 4.4 Second Certificate of Amendment of Third Restated Certificate of Incorporation of the Company (incorporated herein by reference to Exhibit 3.2 of the Company's Registration Statement on Form S-4 (Reg. No. 333-59215)).
- 4.5 Amended and Restated By-Laws of the Company as of November 10, 1994 (incorporated herein by reference to Exhibit 3.3 of the Company's Registration Statement on Form S-4 (Reg. No. 333-59215)).
- 5.1 Opinion of Goodwin, Procter & Hoar LLP.
- 23.1 Consent of PricewaterhouseCoopers LLP.
- 23.2 Consent of Goodwin, Procter & Hoar LLP (included in Exhibit 5.1).
- 24.1 Powers of Attorney (included on the signature page hereto).
- 99.1 Agreement and Plan of Merger, dated as of November 20, 2000, between the Company, AVANT Acquisition Corp. and Megan Health, Inc. (incorporated herein by reference to Exhibit 2.1 of the Company's Current Report of Form 8-K, dated December 12, 2000 (File No. 000-15006)).
- 99.2 Stock Purchase Agreement dated as of December 1, 2000 by and between the Company and Pfizer Inc.

ITEM 17. UNDERTAKINGS.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement.
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

PROVIDED, HOWEVER, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or

furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time to be the initial BONA FIDE offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement 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.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 Securities Act of 1933 and will be governed by the final adjudication of such issue.

STGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Needham, Commonwealth of Massachusetts, on December 26, 2000.

AVANT IMMUNOTHERAPEUTICS, INC.

By: /s/ UNA S. RYAN, PH.D.

Una S. Ryan, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated, each of whom also constitutes and appoints Una S. Ryan and Avery W. Catlin, and each of them singly, his true and lawful attorney-in-fact and agent, for him, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same and all exhibits thereto and any other documents in connection therewith with the Securities and Exchange Commission, granting unto each attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each attorney-in-fact and agent or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

SIGNATURE	TITLE	DATE
/s/ UNA S. RYAN, PH.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	December 26, 2000
Una S. Ryan, Ph.D.		
/s/ J. BARRIE WARD, PH.D. J. Barrie Ward, Ph.D.	Chairman	December 26, 2000
/s/ AVERY W. CATLIN	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	December 26, 2000
/s/ HARRY H. PENNER, JR.	Director	December 26, 2000
Harry H. Penner, Jr.		
/s/ PETER A. SEARS, ESQ.	Director	December 26, 2000
Peter A. Sears, Esq.		
/s/ THOMAS R. OSTERMUELLER Thomas R. Ostermueller	Director	December 26, 2000
/s/ JOHN L. LITTLECHILD John L. Littlechild	Director	December 26, 2000
/s/ FREDERICK W. KYLE	Director	December 26, 2000
Frederick W. Kyle		

EXHIBIT INDEX

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99.2	Stock Purchase Agreement dated as of December 1, 2000 by and between the Company and Pfizer Inc.

GOODWIN, PROCTER & HOAR LLP COUNSELLORS AT LAW EXCHANGE PLACE BOSTON, MA 02109-2991

December 22, 2000

AVANT Immunotherapeutics, Inc. 119 Fourth Avenue Needham, Massachusetts 02494 Attn: Dr. Una S. Ryan

Re:

Legality of Securities to be Registered under Registration Statement on Form S-3 $\,$

Ladies and Gentlemen:

This opinion is delivered in our capacity as counsel to AVANT Immunotherapeutics, Inc., a Delaware corporation (the "Company"), in connection with the registration, pursuant to the Securities Act of 1933 (the "Securities Act"), of 2,127,113 shares (the "Shares") of common stock, par value \$.001 per share, of the Company.

In connection with rendering this opinion, we have examined the Certificate of Incorporation and the Bylaws of the Company, each as amended to date; such records of the corporate proceedings of the Company as we have deemed material; a registration statement on Form S-3 under the Securities Act relating to the Shares and the prospectus contained therein; and such other certificates, receipts, records and documents as we considered necessary for the purposes of this opinion.

We are attorneys admitted to practice in The Commonwealth of Massachusetts. We express no opinion concerning the laws of any jurisdiction other than the laws of the United States of America and The Commonwealth of Massachusetts and the Delaware General Corporation Law.

Based upon the foregoing, we are of the opinion that the Shares are duly authorized, legally issued, fully paid and nonassessable by the Company under the Delaware General Corporation Law.

The foregoing assumes that all requisite steps will be taken to comply with the requirements of the Securities Act and applicable requirements of state laws regulating the offer and sale of securities.

AVANT Immunotherapeutics, Inc. December 22, 2000 Page 2

We hereby consent to being named as counsel to the Company in the Registration Statement, to the references therein to our firm under the caption "Legal Matters" and to the inclusion of this opinion as an exhibit to the Registration Statement.

Very truly yours,
/s/ Goodwin, Procter & Hoar LLP
GOODWIN, PROCTER & HOAR LLP

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated February 14, 2000 relating to the financial statements, which appears in AVANT Immunotherapeutics, Inc.'s Annual Report on Form 10-K/A for the year ended December 31, 1999. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

PricewaterhouseCoopers LLP Boston, Massachusetts December 22 2000

STOCK PURCHASE AGREEMENT DATED DECEMBER 1, 2000

BY AND BETWEEN

AVANT IMMUNOTHERAPEUTICS, INC.

AND

PFIZER INC

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THIS STOCK PURCHASE AGREEMENT, dated December 1, 2000 (this "Agreement"), by and between AVANT IMMUNOTHERAPEUTICS, INC., a Delaware corporation, with headquarters located at 119 Fourth Avenue, Needham, MA 02494 (the "Company"), and Pfizer Inc ("Pfizer").

WITNESSETH:

WHEREAS,

- (A) Pfizer desires to purchase, and the Company desires to sell, upon the terms and conditions set forth in this Agreement, shares (the "Shares") of common stock, \$.001 par value per share, of the Company (the "Common Stock"), that will result in the receipt by the Company of aggregate gross proceeds of approximately \$3 million; and
- (B) Pfizer wishes to purchase, upon the terms and conditions stated in this Agreement, 285,877 Shares.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. DEFINITIONS

1.1 The following terms used in this Agreement shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):

"AMEX" means the American Stock Exchange.

"Closing Date" means 4:00~p.m., Boston time, three (3) days after the date hereof, or such other time and date as the parties hereto may agree on.

"Disclosure Schedule" means the Disclosure Schedule prepared by the Company and furnished to Pfizer prior to the date of execution and delivery of this Agreement by Pfizer. Items disclosed in response to a particular Section of this Agreement in the Disclosure Schedule will be deemed disclosed for purposes of other Sections as applicable without cross-references.

"Executory Agreement" means the agreement entitled same entered into by the Company and Pfizer on November 17, 2000.

"Material Adverse Effect" means any material adverse effect on the business, operations, assets, condition (financial or other) or prospects of the Company and its Subsidiaries taken as a whole.

"Megan Health Transaction" means the Company's merger with Megan Health, Inc. $\,$

"Nasdaq" means the Nasdaq Stock Market.

"NYSE" means the New York Stock Exchange.

"1933 Act" means the Securities Act of 1933, as amended.

"1934 Act" means the Securities Exchange Act of 1934, as amended.

"Person" means any natural person, corporation, partnership, limited liability company, trust or unincorporated organization, incorporated government, governmental agency or political subdivision.

"Polmerix" means Polmerix, Inc., a Delaware corporation.

"Registration Statement" means a registration statement with respect to the Shares, together with any necessary amendments or supplements thereto and any prospectus forming a part thereof.

"Rule 144" means Rule 144 under the 1933 Act.

"SEC" means the United States Securities and Exchange Commission.

"SEC Reports" means all periodic and other reports filed by the Company with the SEC pursuant to the 1933 Act and 1934 Act subsequent to January 1, 2000 and prior to the date hereof, in each case as filed with the SEC and including the information and documents (other than exhibits) incorporated therein by reference.

"Securities Laws" means the 1933 Act, the 1934 Act, or any state securities or "blue sky" law.

"Subsidiary" has the meaning set forth in Section 4.1.

2. PURCHASE AND SALE; PURCHASE PRICE

- 2.1 SALE AND PURCHASE OF THE SHARES. Subject to all of the terms and conditions hereof and in reliance on the representations and warranties set forth or referred to herein, at the Closing the Company agrees to sell to Pfizer and Pfizer hereby agrees to purchase, 285,877 Shares of Common Stock at a price per share of \$10.494, representing the average closing price as reported by Nasdaq for the sixty (60) trading days ending on the trading day two (2) days preceding the date of the execution of the Executory Agreement, plus a ten percent (10%) premium, for an aggregate consideration of 2,999,993.20 (the "Purchase Price").
- 2.2 CLOSING. The closing of the purchase and sale of the Shares (the "Closing") will take place at the offices of Goodwin, Procter & Hoar LLP, Boston, Massachusetts on the Closing Date or at such other place as the parties hereto may agree upon. The Closing shall occur when (a) the Company shall have delivered to Pfizer share certificates representing the Shares to be issued to Pfizer; and (b) Pfizer has delivered an amount equal to the Purchase Price.

3. REPRESENTATIONS, WARRANTIES, COVENANTS, ETC. OF PFIZER

Pfizer represents and warrants to, and covenants and agrees with, the Company as follows:

- 3.1 DUE AUTHORIZATION. Pfizer has all requisite power and authority, corporate or otherwise, to execute, deliver and perform its obligations under this Agreement and the other agreements executed by Pfizer in connection herewith and to consummate the transactions contemplated hereby and thereby. This Agreement has been duly and validly authorized, duly executed and delivered by Pfizer and, assuming due execution and delivery by the Company, is a valid and binding agreement of Pfizer enforceable in accordance with its terms, except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other similar laws now or hereafter in effect relating to or affecting creditors' rights generally and general principles of equity, regardless of whether enforcement is considered in a proceeding in equity or at law.
- 3.2 NON-CONTRAVENTION. The execution, delivery and performance of this Agreement by Pfizer and the consummation of any of the transactions contemplated hereby by Pfizer will not (a) conflict with or result in a breach of any of the terms and provisions of, or constitute a default (or an event which with notice or lapse of time, or both, would constitute a default) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of Pfizer pursuant to any agreement, instrument, franchise, license or permit to which Pfizer is a party or by which any of its properties or assets may be bound or (b) violate or conflict with any judgment, decree, order, statute, rule or regulation of any court or any public, governmental or regulatory agency or body applicable to Pfizer or any of its properties or assets, other than such breaches, defaults or violations that are not reasonably expected to materially impair the ability of Pfizer to consummate the transactions contemplated by this Agreement. The execution, delivery and performance of this Agreement by Pfizer and

the consummation of the transactions contemplated hereby by Pfizer does not and will not violate or conflict with any provision of the organizational documents of Pfizer, as currently in effect. No consent, approval, authorization, order, registration, filing, qualification, license or permit of or with any court or any government agency or body applicable to Pfizer is required for the execution, delivery and performance of this Agreement or the consummation of the transactions contemplated hereby other than those, if any, which have been obtained on or prior to the Closing Date.

- 3.3 OWN ACCOUNT. Pfizer is acquiring the Shares for its own account, for investment and not with a view to the distribution thereof in violation of the 1933 $\,$ Act.
- 3.4 LEGEND. Pfizer agrees that the Company may place a legend on the stock certificates delivered hereunder stating that the Shares have not been registered under the1933 Act and, therefore, cannot be offered, sold or transferred unless they are registered under the 1933 Act or an exemption from such registration is available.
- 3.5. FINANCIAL EXPERIENCE. Pfizer has such knowledge and experience in business and financial matters so as to enable it to understand and evaluate the risks of Pfizer's investment in the Shares and form an investment decision with respect thereto.
- 3.6 BROKERS AND FINDERS. No agent, broker, investment banker, financial advisor or other firm or person engaged by Pfizer is or will be entitled to any broker's or finder's fee or any other commission or similar fee in connection with any of the transactions contemplated by this Agreement.
- 4. REPRESENTATIONS, WARRANTIES, COVENANTS, ETC. OF THE COMPANY

The Company represents and warrants to Pfizer that, except as specifically set forth in the Disclosure Schedule, the following matters are true and correct on the date of execution and delivery of this Agreement and will be true and correct on the Closing Date, and the Company covenants and agrees with Pfizer as follows:

- 4.1 ORGANIZATION AND AUTHORITY. The Company and each of its Subsidiaries (as defined in Rule 405 under the 1933 Act) is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation, and has all requisite corporate power and authority to (i) own, lease and operate its properties and to carry on its business as described in the SEC Reports and as currently conducted and (ii) to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby and thereby. The Company is duly qualified to do business as a foreign corporation and is in good standing in all jurisdictions where such qualification is necessary and where failure so to qualify could have a Material Adverse Effect.
- 4.2 ENFORCEABILITY. The execution, delivery and performance by the Company of this Agreement and the issuance and sale by the Company of the Shares will result in legally binding obligations of the Company, enforceable against it in accordance with the respective

terms and provisions hereof and thereof, except as limited by bankruptcy, insolvency, and other laws affecting the enforcement of creditors' rights generally or by its equitable principles in any action (legal or equitable).

4.3 CAPITALIZATION.

- (a) The authorized capitalization of the Company is as set forth in the Disclosure Schedule.
- (b) Except as set forth in this Section 4.3, or in the Disclosure Schedule, there are: (i) no outstanding warrants, options, agreements, convertible securities or other commitments or instruments pursuant to which the Company or any Subsidiary is or may become obligated to issue, sell, repurchase or redeem any shares of capital stock or other securities of the Company or any Subsidiary; (ii) no preemptive, contractual or similar rights to purchase or otherwise acquire shares of capital stock of the Company or any Subsidiary pursuant to any provision of law, the Certificate of Incorporation or By-Laws of the Company or any Subsidiary or any agreement to which the Company or any Subsidiary is a party, or otherwise; (iii) no restrictions on the transfer of capital stock of the Company or any Subsidiary imposed by the Certificate of Incorporation or By-Laws of the Company or any Subsidiary, any agreement to which the Company or any Subsidiary is a party, any order of any court or any governmental agency to which the Company or any Subsidiary is subject, or any statute other than those imposed by relevant state and federal securities laws; (iv) no cumulative voting rights for any of the Company's capital stock; (v) no registration rights under the 1933 Act with respect to shares of the Company's capital stock; (vi) no shares of capital stock of the Company reserved for issuance for any purpose; (vii) to the best of the Company's knowledge and belief after due inquiry, no options or other rights to purchase shares of capital stock from stockholders of the Company or any Subsidiary granted by such stockholders; and (viii) no agreements, written or oral, between the Company or any Subsidiary and any holder of its securities, or, to the best of the Company's knowledge and belief, among holders of its securities, relating to the acquisition, disposition or voting of the securities of the Company or any Subsidiary.
- (c) Prior to the date of this Agreement, the Company has reserved a number of authorized but unissued shares of Common Stock sufficient for issuance pursuant to this Agreement.
- (d) All of the outstanding capital stock of the only Subsidiary, Polmerix, is owned by the Company.
- 4.4 AUTHORIZATION OF THE SHARES. The issuance, sale and delivery of the Shares to Pfizer have been duly authorized by all requisite action of the Company, and the Shares are authorized, validly issued and outstanding, fully paid and nonassessable and not subject to preemptive or any other similar rights of the stockholders of the Company or others.

- 4.5 NON-CONTRAVENTION. The execution and delivery of this Agreement by the Company and the consummation by the Company of the offer and sale of the Shares and the other transactions contemplated by this Agreement do not and will not, with or without the giving of notice or the lapse of time, or both (i) result in any violation of any provision of the Certificate of Incorporation or By-laws of the Company or any of its Subsidiaries; (ii) conflict with or result in a breach by the Company or any of its Subsidiaries of any of the terms or provisions of, or constitute a default under, or result in the modification of, or result in the creation or imposition of any lien, security interest, charge or encumbrance upon any of the properties or assets of the Company or any of its Subsidiaries pursuant to, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries or any of their respective properties or assets are bound or affected; (iii) violate or contravene any applicable law, rule or regulation or any applicable decree, judgment or order of any court, United States federal or state regulatory body, administrative agency or other governmental body having jurisdiction over the Company or any of its Subsidiaries or any of their respective properties or assets; or (iv) violate or contravene any permit, certification, registration approval, consent, license or franchise necessary for the Company or any of its Subsidiaries to own or lease and operate any of their respective properties and to conduct any of their respective business or the ability of the Company or any of its Subsidiaries to make use thereof.
- 4.6 CONSENTS AND APPROVALS. No authorization, consent, approval or other order of, or declaration to or filing with, any governmental agency or body (other than filings required to be made under applicable federal and state securities laws, which have been made) or any third party is required for (a) the valid authorization, execution, delivery and performance by the Company of this Agreement or (b) the valid authorization, reservation, issuance, sale and delivery of the Shares by the Company to Pfizer.

4.7 BUSINESS OF THE COMPANY.

- (a) Except as provided in the Disclosure Schedule: (i) there are no actions, suits, arbitrations, claims, investigations or legal or administrative proceedings pending or, to the best of the Company's knowledge and belief after due inquiry of the executive officers of the Company, threatened, against the Company or any Subsidiary, whether at law or in equity, before or by any federal, state, municipal or other governmental department, commission, agency, instrumentality, or arbitrator, domestic or foreign; and (ii) there are no judgments, decrees, injunctions, orders or awards of any court, governmental department, commission, agency, instrumentality or arbitrator entered or existing against the Company or any Subsidiary or any of its assets or properties.
- (b) The Disclosure Schedule lists each SEC Report filed by the Company with the SEC under the 1933 Act or the 1934 Act since September 30, 1998. The Company has delivered to Pfizer copies of the SEC Reports, other than exhibits and material incorporated by reference which have not been requested by Pfizer. The SEC Reports as filed comply with the applicable requirements of the 1933 Act or the 1934 Act, as the case may be, and the rules and regulations thereunder, and as of the respective dates thereof did not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or

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necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. Except as set forth in the Disclosure Schedule, the Company has filed on a timely basis all SEC Reports, required to be filed by it pursuant to the 1933 Act or the 1934 Act.

- (c) Except as set forth in the Disclosure Schedule, since September 30, 1998, there has not been any material adverse change in the business, operations, properties, assets, condition or prospects of the Company or any Subsidiary or any event, condition or contingency that could reasonably be expected to result in such a material adverse change.
- 4.8 SECURITIES LAWS. Neither the Company nor anyone acting on its behalf has offered securities of the Company for sale to, or solicited any offers to buy the same from, or sold securities of the Company to, any person or organization, in any case so as to subject the Company, its promoters, directors or officers to any liability under the Securities Laws. The offer, sale and issuance of the Shares to Pfizer hereunder is in compliance with the Securities Laws and is exempt from the registration requirements of the 1933 Act.
- 4.9 INVESTMENTS IN OTHER ENTITIES. Except as set forth in the Disclosure Schedule, (a) neither the Company nor any Subsidiary has made any loan or advance to any person or entity which is outstanding on the date hereof, nor is it committed or obligated to make any such loan or advance, and (b) neither the Company nor any Subsidiary has ever owned or controlled and does not currently own or control any capital stock or other ownership interest, directly or indirectly, in any corporation, association, partnership, trust, joint venture or other entity, other than Polmerix.
- 4.10 LICENSES AND OTHER RIGHTS; COMPLIANCE WITH LAWS. The Company or the Subsidiary, as the case may be, is in compliance under each franchise, permit, license and other rights and privileges necessary to permit them to own their respective properties and to conduct business as presently conducted, and the transactions contemplated by this Agreement will not cause a violation under any, of such franchises, permits, licenses and other rights and privileges. The Company and the Subsidiary is in compliance with all applicable laws, rules, regulations, orders, judgements, decrees and any bring-downs except when the failure to so comply would not have a Material Adverse Effect.
- 4.11 RELIANCE; "KNOWLEDGE". The Company understands that the foregoing representations and warranties shall be deemed material and to have been relied upon by Pfizer. No representation or warranty by the Company in this Agreement, and no written statement contained in any document, certificate or other writing delivered by the Company to Pfizer contains any untrue statement of material fact or omits to state any material fact necessary to make the statements herein or therein, in light of the circumstances under which they were made, not misleading.

COVENANTS OF THE COMPANY

- 5.1 NASDAQ; REPORTING STATUS. The Company shall use its best efforts to take all such actions as may be necessary and as soon as practicable and in no event later than 30 days after the Closing Date to file with Nasdaq an application or other document required by Nasdaq for the listing of the Shares with Nasdaq and shall provide evidence of such filing to Pfizer. So long as Pfizer beneficially owns any portion of the Shares, the Company will use its best efforts to maintain the inclusion of the Common Stock on Nasdaq or the listing of the Common Stock on the AMEX or the NYSE; PROVIDED, HOWEVER, that this will not restrict the Company from engaging in any transaction which results in all of the capital stock of the Company being acquired in a business combination or other acquisition transaction.
- 5.2 STATE SECURITIES LAWS. On or before the Closing Date, the Company shall take such action as shall be necessary to qualify, or to obtain, an exemption for the Shares under such of the securities laws of United States jurisdictions as shall be necessary to qualify, or to obtain an exemption from, the sale of the Shares. The Company shall furnish Pfizer with copies of all filings, applications, orders and grants or confirmations of exemptions relating to such securities laws on or before the Closing Date.
- 5.3 CONFIDENTIALITY. Except as necessary for governmental notification purposes or to comply with applicable laws and regulations, and except as otherwise agreed to by the parties in writing, the parties agree to keep the existence of this Agreement and the transactions contemplated hereby and thereby, until public disclosure is made pursuant to Section 11.13 hereof, strictly confidential; PROVIDED, HOWEVER that the existence of this Agreement and the transactions contemplated hereby or portions thereof may be disclosed to those third parties who agree to be bound by the terms of this confidentiality provision. In the event that the Company is required by law to provide a copy of this Agreement to any third party, the Company shall ensure that such document is redacted, to the extent permitted by law, to eliminate all confidential information. Pfizer shall have the right to review and approve each such document prior to its submission to any third party
- 5.4 REMOVAL OF LEGEND. The legend on the stock certificates delivered hereunder which is referenced in Section 3.4 hereof shall be removed and the Company shall issue unlegended certificates to Pfizer if Pfizer provides the Company with an opinion of counsel to Pfizer (which may be in-house counsel) which is reasonably acceptable to the Company to the effect that such legend is no longer required or if Pfizer has met or complied with the conditions for a permissible sale or transfer pursuant to Rule 144 under the 1933 Act (as such rule may be amended from time to time).

6. REGISTRATION

6.1 REGISTRATION STATEMENT COVERING RESALE OF COMMON STOCK. As soon as reasonably practicable after the closing of the Megan Health Transaction, the Company will file a registration statement (the "Shelf Registration Statement") under Rule 415 under the 1933 Act covering the resale of the Shares. Thereupon, the Company shall use commercially reasonable efforts to cause such Shelf Registration Statement to be declared effective by the SEC for all Shares covered thereby. The Company agrees to use commercially reasonable

efforts to keep the Shelf Registration Statement continuously effective, with respect to Pfizer's Shares, until the earlier of (i) the date on which Pfizer has disposed of all of its Shares, or (ii) the date on which Pfizer may sell all of the Shares under Rule 144 of the 1933 Act (the "Terminal Date").

- 6.2 REGISTRATION OBLIGATIONS. Whenever the Company includes any Shares in a registration statement or similar document pursuant to this Agreement, the Company shall, as expeditiously as reasonably possible:
- (a) Prepare and file with the SEC a Registration Statement, and use its best efforts to cause such Registration Statement to become effective;
- (b) Notify Pfizer, promptly after the Company receives notice thereof, of the effective date of the Registration Statement, or if any amendment or supplement to the Registration Statement is filed, the date of such filing;
- (c) Notify Pfizer promptly of any request by the SEC for additional information or an amendment or supplement to the Registration Statement;
- (d) Advise Pfizer of any order by the SEC suspending the effectiveness of the Registration Statement and of the initiation or threat of any proceeding for that purpose, and use its best efforts to prevent the issuance of any stop order and to promptly obtain its withdrawal if such stop order is issued;
- (e) Prepare and file with the SEC such amendments and supplements to the Registration Statement as may be necessary to keep the Registration Statement effective until the Terminal Date, and comply with the provisions of the 1933 Act during such period with respect to the disposition of all securities covered by the Registration Statement;
- (f) Provide Pfizer with copies of the Registration Statement (including preliminary prospectuses) in conformity with the requirements of the 1933 Act and such other documents as Pfizer may reasonably request in order to facilitate the disposition of the Shares;
- (g) Use its commercially reasonable efforts to register and qualify the Shares under the securities and blue sky laws of those jurisdictions selected by Pfizer or any underwriter, and take any and all other action reasonably necessary or advisable to enable Pfizer to sell the Shares in such jurisdictions; PROVIDED, HOWEVER, that the Company shall not be required to qualify to do business or consent to service of process in any jurisdiction in which it is not now so qualified or has not so consented;
- (h) Promptly notify Pfizer of the occurrence of any event, the result of which is to cause the Registration Statement to contain an untrue statement of a material fact or to omit to state any material fact required to be reported therein or necessary to make the statements therein not misleading in light of the circumstances then existing, and prepare a supplement or

amendment to the Registration Statement which shall correct such untrue statement or eliminate such omission;

- (i) Cause the registered Shares to be listed or approved for trading on each securities exchange or through any facility on which similar securities issued by the Company are then listed or traded;
- (j) Provide a transfer agent and registrar for the registered Shares not later than the effective date of the Registration Statement; $\$
- (k) In the event of an underwritten public offering, enter into such customary agreements (including an underwriting agreement in customary form) and take such other actions as Pfizer or the underwriters, may reasonably request in order to expedite or facilitate the sale of the Shares;
- (1) Make available for inspection by Pfizer, any participating underwriter, attorney, accountant or other agent retained by Pfizer or such underwriter, all financial and other records and pertinent corporate documents of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by Pfizer, the underwriter, attorney, accountant or agent in connection with the Registration Statement;
- (m) Use its commercially reasonable efforts to obtain cold comfort letters from the Company's independent public accountants, in customary form and covering such matters of the type customarily covered by cold comfort letters, as Pfizer may reasonably request; and
- (n) Use its commercially reasonable efforts to cause counsel to the Company to provide legal opinions reasonably requested by Pfizer in connection with the Registration Statement.
- 6.3 REPORTS. The Company shall at all times timely file all information and reports required to be filed by it under the 1933 Act and the 1934 Act and the rules and regulations adopted by the SEC thereunder. Upon request, the Company shall deliver to Pfizer a written statement as to whether it has complied with such requirements, and the Company shall take such further action as Pfizer may reasonably request, to enable Pfizer to be eligible to sell restricted securities pursuant to Rule 144 under the 1933 Act or any similar rule or regulation hereafter adopted by the SEC.
- 6.4 INDEMNIFICATION. The Company shall indemnify and hold harmless Pfizer, the officers and directors of Pfizer, and each underwriter of Shares sold by Pfizer pursuant to this Section 6 (and any person who controls Pfizer or the underwriter within the meaning of Section 15 of the 1933 Act) against all claims, losses, damages, liabilities and expenses (including reasonable attorneys' fees) arising out of or based on any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or in any related prospectus, notification or similar document, or from any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein, in

light of the circumstances under which they were made, not misleading (a "Misstatement or Omission") except insofar as such Misstatement or Omission is based on information furnished in writing to the Company by Pfizer relating to Pfizer and expressly for use therein, and used in accordance with such writing. Pfizer shall furnish the Company with such information concerning Pfizer and the intended method of disposition of the Shares as shall be necessary to effect the registration of the Shares pursuant to this Section 6. In the event that the Shares are registered pursuant to this Agreement, Pfizer shall indemnify and hold harmless the Company, its officers and directors and each of its underwriters (and any person who controls the Company or such underwriters within the meaning of Section 15 of the 1933 Act) against all claims, losses, damages, liabilities and expenses (including reasonable attorneys' fees) arising out of or based on any Misstatement or Omission, but only insofar as such Misstatement or Omission is based on information furnished in writing to the Company by Pfizer relating to Pfizer and expressly for use in connection with such registration, and used in accordance with such writing. In no event shall the liability of Pfizer under this Section 6.4 be greater in amount than the dollar amount of the proceeds received by Pfizer upon the sale of the Shares giving rise to such indemnification obligation.

CONDITIONS TO THE COMPANY'S OBLIGATION TO SELL

Pfizer understands that the Company's obligation to sell the Shares to Pfizer pursuant to this Agreement is conditioned upon satisfaction of the following conditions precedent on or before the Closing Date (any or all of which may be waived by the Company in its sole discretion):

- (a) the delivery by Pfizer to the Company of an amount equal to the Purchase Price;
- (b) on the Closing Date, no legal action, suit or proceeding shall be pending or threatened which seeks to restrain or prohibit the transactions contemplated by this Agreement;
- (c) the representations and warranties of Pfizer contained in this Agreement shall have been true and correct on the date of this Agreement and on the Closing Date as if made on the Closing Date and on or before the Closing Date Pfizer shall have performed all covenants and agreements of Pfizer required to be performed by Pfizer on or before the Closing Date;
- (d) the Company and/or Megan and Pfizer shall have entered into a License and Royalty Agreement and a Collaborative Research and Development Agreement; and
- (e) the closing of the Megan Health Transaction.

8. CONDITIONS TO PETZER'S OBLIGATION TO PURCHASE

The Company understands that Pfizer's obligation to purchase the Shares is conditioned upon satisfaction of the following conditions precedent on or before the Closing Date (any or all of which may be waived by Pfizer in its sole discretion):

- (a) delivery by the Company to Pfizer of the share certificates representing the Shares in accordance with this Agreement;
- (b) on the Closing Date, no legal action, suit or proceeding shall be pending or threatened which seeks to restrain or prohibit the transactions contemplated by this Agreement;
- (c) the representations and warranties of the Company contained in this Agreement shall have been true and correct on the date of this Agreement and shall be true and correct on the Closing Date as if given on and as of the Closing Date (except for representations given as of a specific date, which representations shall be true and correct as of such date), and on or before the Closing Date the Company shall have performed all covenants and agreements of the Company contained herein required to be performed by the Company on or before the Closing Date;
- (d) the Company shall have delivered to Pfizer its certificate, dated the Closing Date, duly executed by its Chief Executive Officer to the effect set forth in subparagraphs (b) and (c) of this Section 8.
- (e) the receipt by Pfizer of a certificate, dated the Closing Date, of the Secretary or Assistant Secretary of the Company certifying (i) the Certificate of Incorporation and By-laws of the Company as in effect on the Closing Date, (ii) all resolutions of the board of directors (and committees thereof) of the Company relating to this Agreement and the transactions contemplated hereby and thereby, (iii) the incumbency of officers and directors of AVANT, and (iv) such other matters as are reasonably requested by Pfizer;
- (f) on the Closing Date, Pfizer shall have received an opinion of Goodwin, Procter & Hoar LLP, counsel for the Company, dated the Closing Date, addressed to Pfizer, in form, scope and substance reasonably satisfactory to Pfizer; and
- (h) on the Closing Date, (i) trading in securities on the NYSE, Inc., the AMEX or Nasdaq shall not have been suspended or materially limited and (ii) a general moratorium on commercial banking activities in the Commonwealth of Massachusetts shall not have been declared by either federal or state authorities.

9. TNDFMNTETCATION

- (a) INDEMNIFICATION. The Company shall indemnify, defend and hold Pfizer harmless against any and all claims, losses, damages, liabilities and expenses (including reasonable attorneys' fees) arising out of or based on the untruth, inaccuracy or breach of any statements, representations, warranties or covenants of the Company contained herein.
- (b) INDEMNIFICATION PROCEDURE. Any party (the "Indemnified Party") that may be entitled to indemnification under this Agreement shall give notice to the party obligated to indemnify ("Indemnifying Party") reasonably promptly after the assertion by a third party of a claim against the Indemnified Party in respect of which the Indemnified Party intends to seek indemnification, but the delay in notifying the Indemnifying Party shall not relieve it of any obligations hereunder except to the extent that such delay adversely affects the ability of the Indemnifying Party to conduct the defense of such claim. The Indemnified Party shall be entitled to participate in such defense, but shall not be entitled to indemnification with respect to the expenses of such defense incurred after the date the Indemnifying Party shall have assumed the defense of the claim with counsel satisfactory to the Indemnified Party. The Indemnifying Party may not settle any claim without the consent of the Indemnified Party (which consent shall not be unreasonably withheld). If notice is given to an Indemnifying Party of the assertion by a third party of a claim against the Indemnified Party and the Indemnifying Party does not, within ten (10) days after the Indemnified Party's notice is given, give notice to the Indemnified Party of its election to assume the defense thereof, the Indemnified Party may, at the Indemnifying Party's expense, select counsel to defend such claim, and defend such claim in such manner as it may deem appropriate, and the Indemnifying Party shall be bound by any determination made with respect to such claim or any compromise or settlement thereof effected by the Indemnified Party. Notwithstanding the foregoing, if an Indemnified Party determines in good faith that there is a reasonable probability that a claim may adversely affect it other than as a result of monetary damages or that the Indemnified Party may have claims or interests opposed to that of the Indemnifying Party, such Indemnified Party may, by notice to the Indemnifying Party, assume the exclusive right to defend, compromise or settle such claim, but the Indemnifying Party shall not be bound by any determination of a claim so defended or any compromise or settlement thereof effected without its consent (which shall not be unreasonably withheld).

10. MISCELLANEOUS

- 10.1 GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS OF THE UNITED STATES.
- 10.2 HEADINGS. The headings and captions used in this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.
- 10.3 SEVERABILITY. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement or the validity or enforceability of this Agreement in any other jurisdiction.

10.4 NOTICES. Any notice or other communication required or permitted to be given or made hereunder shall be in writing in the English language and shall be deemed to have been duly given if sent by registered air mail (return receipt requested), facsimile letter or delivered by hand to the party to whom such notice or communication is required or permitted to be given. Any such notice or other communication, if mailed, shall be considered given or made when mailed, as evidenced by the postmark at point of mailing. If sent by facsimile letter such notice shall be deemed to have been given on the date that it is sent; provided, that a confirmatory copy of the facsimile letter is mailed on the same day as the facsimile letter is sent to the receiving party. If delivered by hand, any such notice or communication shall be considered given when delivered.

All notices to the Company shall be addressed as follows:

AVANT Immunotherapeutics, Inc. 119 Fourth Avenue Needham, MA 02194 U.S.A.

Facsimile: (781) 433-3191

Attention: Chief Executive Officer

With a copy to:

Goodwin, Procter & Hoar LLP Exchange Place Boston, MA 02109 Facsimile: (617) 523-1231 Attention: Stuart M. Cable, P.C.

All notices to Pfizer shall be addressed as follows:

Pfizer Inc Global Research & Development Eastern Point Road Groton, CT 06340 Attention: Mark Dellaporta, Esq.

10.5 COUNTERPARTS. This Agreement may be executed in counterparts and by the parties hereto on separate counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument. A telephone line facsimile transmission of this Agreement bearing a signature on behalf of a party hereto shall be legal and binding on such party.

- 10.6 ENTIRE AGREEMENT; BENEFIT. This Agreement together with the Disclosure Schedule, constitute the entire agreement among the parties hereto with respect to the subject matter hereof. There are no restrictions, promises, warranties or undertakings other than those set forth or referred to herein and therein. This Agreement, including the Annexes hereto and Disclosure Schedule, supersede all prior agreements and understandings, whether written or oral, between the parties hereto with respect to the subject matter hereof. This Agreement and the terms and provisions hereof are for the sole benefit of only the Company, Pfizer and their respective successors and permitted assigns.
- 10.7 WAIVER. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, or course of dealing between the parties shall not operate as a waiver thereof or an amendment hereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or exercise of any other right or power.
- 10.8 AMENDMENT. No amendment, modification, waiver, discharge or termination of any provision of this Agreement or consent to any departure by Pfizer or the Company therefrom shall in any event be effective unless the same shall be in writing and signed by the party to be charged with enforcement, and then shall be effective only in the specific instance and for the purpose for which given. No course of dealing between the parties hereto shall operate as an amendment of this Agreement.
- 10.9 FURTHER ASSURANCES. Each party to this Agreement will perform any and all acts and execute any and all documents as may be necessary and proper under the circumstances in order to accomplish the intents and purposes of this Agreement and to carry out its provisions.
- 10.10 ASSIGNMENT. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto; PROVIDED, HOWEVER, that the right of Pfizer to purchase Shares shall not be assignable (other than to a wholly-owned subsidiary) without the consent of the Company (such consent not to be unreasonably withheld).
- 10.11 EXPENSES. Each of the Company and Pfizer shall bear its own expenses in connection with the preparation and negotiation of this Agreement and the consummation of the transactions contemplated hereby.
- 10.12 SURVIVAL. The respective representations, warranties, covenants and agreements of the Company and Pfizer contained in this Agreement and the documents delivered in connection with this Agreement shall survive the execution and delivery of this Agreement and the closing hereunder and delivery of and payment for the Shares, and shall remain operative and in full force and effect regardless of any investigation made by or on behalf of Pfizer or any Person controlling or acting on behalf of Pfizer or by the Company or any Person controlling or acting on behalf of the Company.

10.13 PUBLIC STATEMENTS, PRESS RELEASES, ETC. The Company and Pfizer shall have the right to approve before issuance any press releases or any other public statements with respect to the transactions contemplated hereby; PROVIDED, HOWEVER, that the Company shall be entitled, without the prior approval of Pfizer, to make any press release or other public disclosure with respect to such transactions as is required by applicable law and regulations, including the 1933 Act and the rules and regulations promulgated thereunder and the rules and regulations of the Nasdaq National Market (although Pfizer and its counsel shall be consulted and provided with a draft press release by the Company in connection with any such press release or other public disclosure prior to its release and shall be provided with a final copy thereof promptly following the release thereof).

11.14 CONSTRUCTION. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed by their respective officers hereunto duly authorized as of the date first set forth above.

AVANT IMMUNOTHERAPEUTICS, INC.

By: /s/ Una S. Ryan

Name: Una S. Ryan Title: President and CEO

PFIZER INC

By: /s/ Pfizer Inc

Name: Title: