SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

AVANT IMMUNOTHERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

13-3191702

(State of Incorporation)

(I.R.S. Employer Identification No.)

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

(Address, Including Zip Code, of Principal Executive Offices)

AVANT IMMUNOTHERAPEUTICS, INC. 2004 EMPLOYEE STOCK PURCHASE PLAN

(Full Title of the Plan)

Una S. Ryan, Ph.D.
President and Chief Executive Officer
AVANT Immunotherapeutics, Inc.
119 Fourth Avenue
Needham, Massachusetts 02494
(781) 433-0771

(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

With copies to:

Stuart M. Cable, P.C.
Ettore A. Santucci, P.C.
Goodwin Procter LLP
Exchange Place
Boston, Massachusetts 02109-2881
(617) 570-1000

CALCULATION OF REGISTRATION FEE

		Proposed Maximum	Proposed Maximum	
Title of Securities to be	Amount to be	Offering Price Per	Aggregate Offering	Amount of
Registered	Registered (2)	Share (3)	Price (3)	Registration Fee
Common Stock, \$.001 par value (1)	150,000	\$ 2.38	\$ 357,000	\$ 45.23

- (1) This Registration Statement also relates to rights to purchase shares of Series C-1 Junior Participating Cumulative Preferred Stock of the Company which are attached to all shares of Common Stock issued, pursuant to the terms of the Company'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.
- (2) Shares available for issuance under the AVANT Immunotherapeutics, Inc. 2004 Employee Stock Purchase Plan (the "Plan"); plus such indeterminate number of additional shares of common stock as may be required pursuant to the Plan in the event of a stock dividend, stock split, reverse stock split, recapitalization, forfeiture of stock under the Plan or other similar event.
- (3) Estimated solely for purposes of determining the registration fee pursuant to Rule 457(c) and (h) under the Securities Act of 1933, as amended, based on the average of the high and low sales prices on the Nasdaq National Market on July 19, 2004.

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

AVANT Immunotherapeutics, Inc. (the "Registrant") hereby incorporates by reference the documents listed below, which have previously been filed with the Commission.

- (a) The Registrant's Current Report on Form 8-K, filed on April 21, 2004.
- (b) The Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2004.
- (c) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2003.
- (d) The description of the Registrant's Common Stock contained in its Registration Statement on Form 8-A, filed with the Commission on September 22, 1986 under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any amendments or reports filed for the purpose of updating such description.
- (e) The description of the rights to purchase shares of the Registrant's Series C-1 Junior Participating Cumulative Preferred Stock contained in the Registrant's Registration Statement on Form 8-A, filed on November 14, 1994, and all amendments and reports updating such description.

In addition, all documents subsequently filed with the Commission by the Registrant pursuant to Sections 13(a) and 13(c), Section 14 and Section 15(d) of the Exchange Act prior to the filing of a post-effective amendment hereto that indicates that all securities offered hereunder have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

AVANT is a Delaware corporation. In accordance with the Delaware General Corporation Law (the "DGCL"), Article Six 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 AVANT 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

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indemnification is ordered by the court. The Amended and Restated Bylaws of AVANT (the "Bylaws") provide for indemnification to the directors, officers, employees and agents of AVANT consistent with that authorized by the DGCL. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors and officers of AVANT pursuant to the foregoing provision or otherwise, AVANT 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.

AVANT currently carries a directors' and officers' liability insurance policy which provides for payment of expenses of AVANT'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 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits

The following is a complete list of exhibits filed or incorporated by reference as part of this Registration Statement.

Exhibit No. Description

4.1 Third Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form S-4, filed July 16, 1998)

- 4.2 Certificate of Amendment of Third Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form S-4, filed July 16, 1998)
- 4.3 Certificate of Designation for Series C-1 Junior Participating Cumulative Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form S-4, filed July 16, 1998)
- 4.4 Second Certificate of Amendment of Third Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.2 of the Registrant's Registration Statement on Form S-4, filed July 16, 1998)
- 4.5 Amended and Restated By-Laws of the Company as of November 10, 1994 (incorporated by reference to Exhibit 3.3 of the Registrant's Registration Statement on Form S-4, filed July 16, 1998)
- 4.6 Third Certificate of Amendment of Third Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 of the Company's Report on Form 10-Q, filed May 10, 2002)
- 4.7 Shareholder Rights Agreement dated November 10, 1994 between the Registrant and State Street Bank and Trust Company as Rights Agent (incorporated by reference to Exhibit 4.1 of the Registrant's Annual Report on From 10-K filed March 28, 2000)
- 4.8 Amendment to Shareholder Rights Agreement between State Street Bank and Trust Company and AVANT Immunotherapeutics, Inc., dated as of December 17, 2001 (incorporated by reference to Exhibit 4.2 of the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2001)

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- *5.1 Opinion of Goodwin Procter LLP as to the legality of the securities being registered
- *23.1 Consent of PricewaterhouseCoopers LLP, Independent Accountants
- 23.2 Consent of Goodwin Procter LLP (included in Exhibit 5.1 hereto)
- 24.1 Powers of Attorney (included on signature pages to this Registration Statement)
- *99.1 AVANT Immunotherapeutics, Inc. 2004 Employee Purchase Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement, filed with the Commission on April 19, 2004 pursuant to Section 14(a) of the Exchange Act)
- * Filed herewith

Item 9. 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 of 1933;
- (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 of 1933, each filing of the Registrant's annual report pursuant to Section 13 (a) or 15 (d) of the Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15 (d) of the Exchange Act of 1934) 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 and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for

indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 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 this 23rd day of July, 2004.

AVANT Immunotherapeutics, Inc.

By:/s/ Una S. Ryan, Ph.D.
Una S. Ryan, Ph.D.,
President and Chief Executive
Officer

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Una S. Ryan, Ph.D. and Avery W. Catlin, and each of them singly, as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said 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 in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

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

Signatures	Title	Date
/s/ J. Barrie Ward, Ph.D. J. Barrie Ward, Ph.D.	Chairman	July 23, 2004
/s/ Una S. Ryan, Ph.D. Una S. Ryan, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	July 23, 2004
/s/ Avery W. Catlin Avery W. Catlin	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	July 23, 2004
/s/ Larry Ellberger Larry Ellberger	Director	July 23, 2004
Harry H. Penner, Jr.	Director	July 23, 2004
/s/ Peter A. Sears Peter A. Sears	Director	July 23, 2004
/s/ Karen Shoos Lipton Karen Shoos Lipton	Director	July 23, 2004
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Filed herewith

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*99.1

AVANT Immunotherapeutics, Inc. 2004 Employee Purchase Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement, filed with the Commission on April 19, 2004 pursuant to Section 14(a) of the Exchange Act)

Powers of Attorney (included on signature pages to this Registration Statement)

GOODWIN PROCTER LLP EXCHANGE PLACE BOSTON, MA 02109

July 23, 2004

AVANT Immunotherapeutics, Inc. 119 Fourth Avenue Needham, Massachusetts 02494

Re: Registration Statement on Form S-8 for Shares available for issuance under the AVANT Immunotherapeutics, Inc. 2004 Employee Stock Purchase Plan

Ladies and Gentlemen:

This opinion is delivered in our capacity as counsel to AVANT Immunotherapeutics, Inc. (the "Company") in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act") of a Registration Statement on Form S-8 (the "Registration Statement") relating to 150,000 shares of the Company's common stock, par value \$.001 per share (the "Registered Shares"), which may be issued pursuant to the AVANT Immunotherapeutics, Inc. 2004 Employee Stock Purchase Plan (the "Plan").

As counsel for the Company, we have examined copies of the Plan, the Registration Statement, and the Company's Restated Articles of Organization and Amended and Restated By-laws, each as presently in effect, such records of the corporate proceedings of the Company as deemed to be material and such other certificates, receipts, records, and other documents as we have deemed necessary or appropriate 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 jurisdictions other than the federal laws of the United States of America, the laws of the Commonwealth of Massachusetts and the Delaware General Corporation Law, and also express no opinion with respect to the blue sky or securities laws of any state, including Massachusetts and Delaware.

Based on the foregoing, we are of the opinion that, when the Registered Shares are sold and paid for pursuant to the terms of the Plan, the Registered Shares will be duly authorized, validly issued, fully paid and non-assessable 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.

We hereby consent to being named as counsel to the Company in the Registration Statement and to the inclusion of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT AUDITORS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of AVANT Immunotherapeutics, Inc. for its 2004 Employee Stock Purchase Plan of our report dated February 18, 2004 relating to the financial statements, which appears in AVANT Immunotherapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003.

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
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Boston, Massachusetts
July 22, 2004