### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 21, 2004

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

Delaware0-1500613-3191702(State or other jurisdiction<br/>of incorporation)(Commission file number)<br/>identification no.)(IRS employer<br/>identification no.)

119 Fourth Avenue Needham, Massachusetts 02494 (Address of principal executive offices) (Zip code)

Registrant's telephone number, including area code: (781) 433-0771

ITEM 7. FINANCIAL STATEMENTS, PRO FORMA FINANCIAL INFORMATION AND EXHIBITS.

(c) Exhibits.

99.1 The Company's Press Release dated April 21, 2004.

# ITEM 9. REGULATION FD DISCLOSURE.

The following information is furnished under Item 12 of Form 8-K "Results of Operations and Financial Condition". This information is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that Section. The information in this Current Report on Form 8-K shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933 as amended.

On April 21, 2004, the Company issued a press release which is attached to this Form 8-K as Exhibit 99.1 and incorporated herein by reference.

### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AVANT IMMUNOTHERAPEUTICS, INC.

Date: April 21, 2004

By: /s/ Avery W. Catlin Avery W. Catlin Senior Vice President and Chief Financial Officer Exhibit Number

Description

99.1

The Company's Press Release dated April 21, 2004 Sequential Page Number

4

#### AVANT Immunotherapeutics Reports First Quarter Fiscal 2004 Financial Results

NEEDHAM, Mass.--(BUSINESS WIRE)--April 21, 2004--AVANT Immunotherapeutics, Inc. (Nasdaq: AVAN) today reported financial results for the first quarter ended March 31, 2004. The Company reported a net loss of \$1.9 million, or \$0.03 per share, for the first quarter of 2004 compared to a net loss of \$3.4 million, or \$0.06 per share, for the first quarter of 2003. The decreased loss for the first quarter of 2004 primarily reflects an increase in revenue, offset partly by an increase in operating expense and a decrease in interest income compared to the same period in 2003.

The increase in revenue of \$2,349,000 in 2004 results primarily from the recognition of \$1 million in revenue from DynPort Vaccine Company LLC ("DVC") for rPA clinical materials, the recognition of an upfront license fee of \$1 million from Adprotech, Ltd and an increase in government contract revenues from DVC of \$402,900. The increase in operating expense of \$828,100, or 19.9%, results primarily from an increase in research and development expense in the first quarter of 2004 due to increased clinical trials costs and contract manufacturing costs incurred on the TP10 program, offset in part by a decrease in licensing fees. The increase in operating expense further resulted from an increase of \$67,400 in general and administrative personnel-related expense. The decrease in investment income of \$68,100 reflected lower interest rates in 2004. At March 31, 2004, the Company reported cash and cash equivalents of \$41.2 million.

"Since January we achieved several notable clinical and financial milestones that bring us a step closer to becoming a commercial company and realizing the full value of our technologies and products," said Una S. Ryan, Ph.D., President and Chief Executive Officer of AVANT Immunotherapeutics, Inc.

- -- With our partner GlaxoSmithKline (GSK), our Rotarix(R) vaccine is completing Phase III clinical studies in Latin America and Southeast Asia. GSK is investing 450 million euros in a new facility in Belgium to produce Rotarix(R) and another vaccine.
- -- We released positive preliminary results of the adult portion from the Phase II clinical trial in Bangladesh of AVANT's cholera vaccine, CholeraGarde(TM).
- -- During the quarter we completed a financing of approximately \$25 million that gives us a cash balance greater than our currently anticipated requirements for the next two years.
- We began a Phase IIb trial of TP10, our novel inhibitor of complement-mediated inflammation, in approximately 300 female patients undergoing cardiac surgery utilizing cardiopulmonary bypass.
- Finally, we have completed the design phase of our pilot manufacturing facility in Fall River and expect to start construction shortly. This facility will implement our VitriLife(R) technology.

### Commitment to a Cholesterol Management Vaccine

We are evaluating a number of possibilities for the continued development of our CETP vaccine for cholesterol management, including the use of new adjuvants to elicit a more robust antibody response. We are strongly committed to this program and expect to have CETi back into the clinic in approximately 12 months.

# **Bioterrorism Vaccines**

AVANT has continued to make technical progress under its subcontracts with DVC towards development of anthrax and plague vaccines for the Department of Defense. This morning we also announced that AVANT has been awarded a new subcontract by DVC for \$3 million to support the human clinical testing of a plague vaccine candidate. AVANT continues to seek dedicated funding to provide financial support for the vaccines' preclinical and clinical development, including manufacturing process development and pilot vaccine production at AVANT's Fall River pilot manufacturing plant.

During 2003, AVANT entered into an agreement with DVC for the replacement of recombinant Protective Antigen ("rPA") clinical materials used by DVC in the Phase I clinical trial of DVC's injectable anthrax vaccine candidate. Under the agreement, AVANT recognized \$1 million in revenue from DVC in the first quarter of 2004.

## Webcast and Conference Call

Dr. Ryan and Mr. Catlin will host a conference call at 11:00 AM EDT on Wednesday, April 21, 2004 to discuss AVANT's First Quarter 2004 financial results. To access the conference call, dial 800-901-5231 (within the United States), or 617-786-2961 (if calling from outside the U.S.). The passcode for participants is 28467259. An audio replay will be available approximately two hours after the call for approximately one week and can be accessed by dialing 888-286-8010 (within the U.S.), or 617-801-6888 (if calling from outside the U.S.). The passcode I.D.# is 22970356.

A live webcast of the conference call, together with this press release, can be accessed through the company's web site www.avantimmune.com in the Investor Information section. In order to access the webcast, your PC must have a sound card, speakers and Windows Media Player software. It is recommended that you configure your PC in advance of the webcast as the software download and installation can take several minutes. In addition, the call and webcast will be archived and can be accessed through the same link. Additionally, a copy of this press release is available by contacting Investor Relations at (781) 433-0771.

AVANT Immunotherapeutics, Inc. discovers, develops and sells innovative vaccines and therapeutics that harness the human immune system to prevent and treat disease. The company has developed a broad, well-staged pipeline of vaccines and therapeutics for large, high-value, under-served markets. Six of AVANT's products are in clinical development. These include an oral human rotavirus vaccine, a treatment to reduce complement-mediated tissue damage associated with cardiac by-pass surgery, and a novel vaccine for cholesterol management. AVANT has also assembled a technology platform that enables the creation of rapid-protecting, single-dose, oral vaccines that remain stable without refrigeration. The company is developing applications of this vaccine technology in four areas: biodefense, travelers' vaccines, global health needs, and human food safety. AVANT's goal is to demonstrate proof-of-concept for its products before leveraging further development through both traditional pharmaceutical partnerships and collaborations with governmental and other organizations.

Additional information on AVANT Immunotherapeutics, Inc. can be obtained through our site on the World Wide Web: http://www.avantimmune.com.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995: This release includes forward-looking statements which reflect AVANT's current views with respect to future events and financial performance. These forward-looking statements are based on management's beliefs and assumptions and information currently available. The words "believe", "expect", "anticipate", "intend", "estimate", "project" and similar expressions which do not relate solely to historical matters identify forward-looking statements. Investors should be cautious in relying on forward-looking statements because they are subject to a variety of risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed in any such forward-looking statements. These factors include, but are not limited to: (1) the integration of multiple technologies and programs; (2) the ability to adapt AVANT's vectoring systems to develop new, safe and effective orally administered vaccines against anthrax and plague or other bioterrorism threats or emerging health care threats; (3) the ability to successfully complete development and commercialization of TP10, CETi-1, CholeraGarde(TM) (Peru-15), Ty800 and other products; (4) the cost, timing, scope and results of ongoing safety and efficacy trials of TP10, CETi-1, CholeraGarde(TM) (Peru-15), Ty800 and other preclinical and clinical testing; (5) the ability to successfully complete product research and further development, including animal, pre-clinical and clinical studies of TP10, CETi-1, CholeraGarde(TM) (Peru-15), Ty800 and other products; (6) the ability of the Company to manage multiple late stage clinical trials for a variety of product candidates; (7) the volume and profitability of product sales of Megan(R)Vac 1, Megan(R)Egg and other future products; (8) changes in existing and potential relationships with corporate collaborators; (9) the availability, cost, delivery and quality of clinical and commercial grade materials supplied by contract manufacturers; (10) the timing, cost and uncertainty of obtaining regulatory approvals to use TP10, CETi-1, CholeraGarde(TM) (Peru-15) and Ty800 among other purposes, for adults undergoing cardiac surgery, to raise serum HDL cholesterol levels and to protect travelers and people in endemic regions from diarrhea causing diseases, respectively; (11) the ability to obtain substantial additional funding; (12) the ability to develop and commercialize products before competitors; (13) the ability to retain certain members of management; and (14) other factors detailed from time to time in filings with the Securities and Exchange Commission. We expressly disclaim any responsibility to update forward-looking statements.

### AVANT IMMUNOTHERAPEUTICS, INC.

CONSOLIDATED STATEMENT OF OPERATIONS DATA Quarter Ended March 31, 2004 2003 (Unaudited)

OPERATING REVENUE
Product Development
and Licensing Agreements
Government Contract Revenue
Product Royalties

\$2,124,400	\$169,400
879,900	477,000
26,400	35,300

Total Operating Revenue	3,030,700	681,700
OPERATING EXPENSE Research and Development General and Administrative Amortization of Acquired Intangible Assets	3,453,200 1,292,100 248,800	2,692,500 1,224,700 248,800
Total Operating Expense	4,994,100	4,166,000
Operating Loss	(1,963,400)	(3,484,300)
Investment Income, Net	54,000	122,100
Net Loss	\$(1,909,400)	\$(3,362,200)
Basic and Diluted Net Loss per Common Share Weighted Average Common Shares Outstanding	\$(0.03) 69,169,600	. ,
CONDENSED CONSOLIDATED BALANCE SHEETS	March 31, 2004 (Unaudited)	December 31, 2003
ASSETS Cash and Cash Equivalents	\$41,161,500	\$20,251,000

	. , . ,	, . ,
Other Current Assets	2,282,300	2,058,000
Property and Equipment, net	1,053,100	912,700
Intangible and Other Assets, net	7,834,500	8,083,400
Total Assets	\$52,331,400	\$31,305,100
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities	\$2,941,200	\$3,385,400
Stockholders' Equity	49,390,200	27,919,700
Total Liabilities and Stockholders'		
Equity	\$52,331,400	\$31,305,100
CONTACT: AVANT Immunotherapeutics	s, Inc.	
Una S. Ryan, Ph.D., 781-	433-0771	
or		

or AVANT Immunotherapeutics, Inc. Avery W. Catlin, 781-433-0771 info@avantimmune.com or For Media: Kureczka/Martin Associates Joan Kureczka, 415-821-2413 jkureczka@aol.com