UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 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): AUGUST 7, 2003

ImmunoGen, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts
(State or other jurisdiction of incorporation)

0-17999 (Commission File Number)

04-2726691 (I.R.S. Employer Identification No.)

128 Sidney Street, Cambridge, MA 02139

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (617) 995-2500

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

(c) Exhibits

Exhibit No.	Exhibit
99.1	Press Release of ImmunoGen, Inc. dated August 7, 2003

This press release is being furnished pursuant to Item 12 of this Current Report on Form 8-K and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

ITEM 12. DISCLOSURE OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On August 7, 2003, ImmunoGen, Inc. issued a press release to report the company's financial results for the quarter and year ended August 7, 2003. A copy of the press release is attached to this current report on Form 8-K as Exhibit 99.1.

The information shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

2

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.

IMMUNOGEN, INC. (Registrant)

Date: AUGUST 7, 2003 By: /s/ GREGG D. BELOFF

EXHIBIT INDEX

Exhibit No.	Exhibit
99.1	Press Release of ImmunoGen, Inc. dated August 7, 2003

QuickLinks

SIGNATURES EXHIBIT INDEX

EXHIBIT 99.1

[IMMUNOGEN, INC. LOGO]

128 Sidney Street, Cambridge, MA 02139-4239 TEL: (617) 995-2500 FAX: (617) 995-2510

Contacts:

Carol Hausner (Investors)
Senior Director, Investor Relations and
Corporate Communications
Tel: (617) 995-2500
info@immunogen.com

Pete Holmberg (Media) Rx Communications Group, LLC Tel: (917) 322-2164 pholmberg@rxir.com

- A live conference call and webcast are scheduled for August 7, 2003 at 4:30 p.m. ET.
- To access the live conference call by phone, dial 913-981-4900. No passcode is required. A playback of the call will be available from approximately 7:30 p.m. ET on August 7 through 11:59 p.m. ET on August 13, 2003. To listen to the playback, call 719-457-0820 and provide passcode #734159.
- The call also may be heard through the "Investor Relations" section on ImmunoGen's website, http://www.immunogen.com. Following the live webcast, a replay of the call will be available at the same location until August 13, 2003.

For Immediate Release

ImmunoGen, Inc. Reports Fourth Quarter and Fiscal Year 2003 Financial Results

- Company Provides Business Update -

CAMBRIDGE, MA, August 7, 2003—ImmunoGen, Inc. (Nasdaq: IMGN) today announced financial results for the three- and twelve-month periods ended June 30, 2003. For the three-month period, the Company reported a net loss of \$6.9 million, or \$0.17 per basic and diluted share, compared to a net loss of \$4.4 million, or \$0.11 per basic and diluted share, in the same quarter last year. For the twelve-month period ended June 30, 2003, the Company reported a net loss of \$20.0 million, or \$0.48 per basic and diluted share, compared to a net loss of \$14.6 million, or \$0.37 per basic and diluted share, for the year ended June 30, 2002.

Revenue for the twelve months ended June 30, 2003 was \$7.6 million compared to \$5.9 million for fiscal year 2002. Revenue for the fiscal year ended June 30, 2003 includes two milestone payments—\$1.0 million from Millennium Pharmaceuticals, Inc. and \$1.0 million from Boehringer Ingelheim International GmbH—related to the initiation of clinical testing of product candidates developed by these partners using ImmunoGen's Tumor-Activated Prodrug (TAP) technology.

Total operating expenses for the fiscal year ended June 30, 2003 were \$32.2 million as compared to \$26.4 million for the 2002 fiscal year. Included in total operating expenses for the twelve-month period ended June 30, 2003 was research and development expense of \$23.4 million compared to research and development expense of \$17.7 million in the twelve-month period ended June 30, 2002. Included in research and development expense for the twelve months ended June 30, 2003 and 2002 were approximately \$7.9 million and \$3.6 million, respectively, of process development collaboration costs and manufacturing expenses for antibody and other raw materials (ansamitocin P3 and DM1). Also included in research and development expense in the fiscal year ended June 30, 2002 was \$2.3 million of expense recorded to state inventory at its net realizable value.

Other income decreased to \$4.6 million in the twelve months ended June 30, 2003 compared to \$6.1 million for 2002. Included in other income for the fiscal years ended June 30, 2003 and 2002 was interest income of \$2.7 million and \$5.1 million, respectively. The decrease in interest income is

attributable to a lower average cash balance and return on investments in the twelve months ended June 30, 2003 compared to 2002. Also included in other income for the twelve months ended June 30, 2003 is \$1.4 million, representing the net gain on the final financial settlement of the Company's collaboration with GlaxoSmithKline plc.

As of June 30, 2003, ImmunoGen had approximately \$101.3 million in cash and marketable securities. The Company anticipates that its current capital resources and future collaborator payments, including committed funding to be received from Aventis pursuant to the collaboration agreement announced July 31, 2003, will enable the Company to meet its operational and capital resource requirements for at least the next five to seven years. On August 27, 2002, the Company announced that its Board of Directors had authorized the repurchase of up to 4.1 million shares of the Company's common stock. The repurchases are to be made at the discretion of management and as market conditions warrant. No time limit was set for the completion of the repurchase program. As of June 30, 2003, the Company had repurchased 3,675,062 shares of its common stock at a total cost of \$11.1 million.

Mitchel Sayare, Ph.D., ImmunoGen Chairman and CEO, commented, "We are committed to the development of innovative therapeutics, particularly for the treatment of cancer. We have established and will continue to establish partnerships to provide ImmunoGen with cash and spread risk. In the past twelve months, one ImmunoGen-developed TAP product, huN901-DM1, advanced into the Phase II leg of a Phase I/II study, and two partner-developed TAP products advanced into Phase I testing. In the past few days, we entered into an important collaboration with Aventis that enables us to significantly expand our product development activities. We intend to use the increased financial resources that have become available with the Aventis collaboration to further build our business."

Collaboration with Aventis

On July 31, 2003, ImmunoGen and Aventis announced they have established a collaboration to discover, develop, and commercialize novel antibody-based anticancer products. The agreement combines ImmunoGen's antibody expertise with Aventis' strength in the development and commercialization of novel anticancer products.

Under the terms of the agreement, ImmunoGen receives an upfront payment of \$12 million and more than \$50 million in committed research funding over a three-year period. Aventis has an option to extend the research collaboration for one to two years. An extension of the collaboration could bring the total committed funding to ImmunoGen up to \$99 million. Additionally, for each product candidate, ImmunoGen can receive milestone payments of between \$20 million and \$30 million based on development and regulatory achievements and also royalties on commercial sales.

Both companies will contribute targets to the collaboration. Aventis is responsible for product development, manufacturing, and commercialization, including all associated costs. Aventis will have the worldwide commercialization rights to the new product candidates created by the collaboration as well as to three early-stage product candidates in ImmunoGen's research pipeline: a product candidate for acute myeloid leukemia; a product candidate for a number of solid tumors, including breast, lung, and prostate cancers; and a product candidate for certain B-cell malignancies including non-Hodgkin's lymphoma. ImmunoGen has an option to certain co-promotion rights in the United States on a product-by-product basis.

Product Candidate Updates

- Patient enrollment in the huN901-DM1 (BB-10901) Phase II leg of the U.S. Phase I/II study is now underway at three centers: Baystate Medical Center in Springfield, MA, has joined MD Anderson in Houston, TX, and the Cancer Therapy and Research Center in San Antonio, TX, as a study center. Additional centers have expressed interest in participating in the study and may be added.
- In a conference call with the investment community, Millennium noted that the company was encouraged by the preliminary findings with MLN2704 in the Phase I single dose escalation

study underway, and that it hopes to initiate a Phase I multiple dose escalation study with MLN2704 later in 2003. MLN2704 is composed of Millennium's MLN591 antibody and ImmunoGen's DM1 effector molecule. In 2002, Millennium licensed the right to use ImmunoGen's maytansinoid TAP technology with antibodies that target the prostate specific membrane antigen (PSMA), such as MLN591.

ImmunoGen develops targeted anticancer therapies using the Company's strong antibody expertise and capabilities, including its TAP technology. Two ImmunoGen-developed TAP product candidates have advanced to clinical testing: cantuzumab mertansine and huN901-DM1. huN901-DM1 is in development for the treatment of small cell lung cancer and other CD56-expressing cancers. Two huN901-DM1 clinical trials are underway: a Phase I/II study in the U.S. with a weekly dosing regimen and a Phase I study in the United Kingdom with a more accelerated dosing regimen. British Biotech is responsible for the huN901-DM1 clinical program and has marketing rights in Europe and Japan. ImmunoGen retains marketing rights in the U.S. and the rest of the world.

ImmunoGen developed cantuzumab mertansine (huC242-DM1) for the treatment of colorectal, pancreatic, gastric, non-small-cell lung cancer and other cancers that express the CanAg receptor targeted by the product. In Phase I testing, cantuzumab mertansine was found to be well tolerated and had evidence of biological activity. ImmunoGen intends to partner this compound for further development and commercialization.

About ImmunoGen, Inc.

ImmunoGen, Inc. has extensive expertise and capabilities in the creation of antibody-based anticancer agents. The Company's proprietary technology includes its TAP technology, which uses tumor-targeting antibodies to deliver a potent cell-killing agent specifically to cancer cells. Two ImmunoGen-developed TAP products have begun clinical evaluation: cantuzumab mertansine and huN901-DM1 (BB-10901). On July 31, 2003, ImmunoGen and Aventis announced a collaboration to discover, develop, and commercialize antibody-based anticancer therapeutics. The agreement provides ImmunoGen with committed funding and also includes milestone payments, royalties, and co-promotion rights. ImmunoGen out-licenses its TAP technology in exchange for upfront, milestone, and manufacturing payments plus royalties. Companies developing TAP products include Boehringer Ingelheim (bivatuzumab mertansine), Millennium (MLN2704), and Genentech (Trastuzumab-DM1); ImmunoGen also has multitarget agreements with Genentech, Abgenix, and Millennium.

This press release includes forward-looking statements based on management's current expectations. For these statements, ImmunoGen claims the protection of the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Various factors could cause the Company's actual results to differ materially from those discussed or implied in the forward-looking statements and you are cautioned not to place undue reliance on these forward-looking statements, which are current only as of the date of this release. Factors that could cause future results to differ materially from such expectations include, but are not limited to: the success of the Company's research and clinical development processes; the difficulties inherent in the development of pharmaceuticals, including uncertainties as to the timing, expense and results of preclinical studies and clinical trials; the Company's dependence upon existing and potential collaborative partners; uncertainty as to whether the Company's potential products or those of the Company's collaborators will succeed in entering human clinical trials and uncertainty as to the results of such trials; the risk that the Company and/or its collaborators may not be able to obtain regulatory approvals necessary to commercialize their product candidates; the potential development by competitors of competing products and technologies; uncertainty whether the Company's TAP technology will produce safe, effective and commercially viable products; and other factors more fully described in ImmunoGen's Annual Report on Form 10-K for the fiscal year ended June 30, 2002 and other current reports filed with the Securities and Exchange Commission.

-financials follow-

[IMMUNOGEN, INC. LOGO]

SELECTED FINANCIAL INFORMATION (in thousands, except per share amounts)

CONDENSED CONSOLIDATED BALANCE SHEETS As of June 30, 2003 and 2002

ASSETS	_
Cash and marketable securities \$ 101,273 \$ 137,84	0
Other assets 16,759 14,31	6
	_
Total assets \$ 118,032 \$ 152,15	6
	-
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current liabilities \$ 5,811 \$ 6,50	4
Long term portion of deferred revenue and other long term	
liabilities 9,542 11,43	7
Stockholders' equity 102,679 134,21	5
	-
Total liabilities and stockholders' equity \$ 118,032 \$ 152,15	6

hang=0>CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

For the three months and year ended June 30, 2003 and 2002

Three Months Ended June 30,			Year Ended June 30,				
2003		2002		2003		2002	
(Unaudited)		(Unaudited)				
\$	438	\$	471	\$	4,183	\$	1,717
	903		1,135		3,170		3,512
_	8		96	_	275	_	654
	1,349		1,702		7,628		5,883
	799		1,009		2,834		3,341
	6,457		5,002		23,429		17,694
	1,416		1,386		5,957		5,403
	8,672		7,397		32,220		26,438
	(7,323)		(5,695)		(24,592)		(20,555)
	464		1,263		4,645		6,053
	(6,859)		(4,432)		(19,947)		(14,502)
					(35)		(128)
\$	(6,859)	\$	(4,432)	\$	(19,982)	\$	(14,630)
\$	(0.17)	\$	(0.11)	\$	(0.48)	\$	(0.37)
	40,584		40,136		41,912		39,624
	\$	2003 (Unaudited) \$ 438 903 8 1,349 799 6,457 1,416 8,672 (7,323) 464 (6,859) \$ (6,859) \$ (0.17)	799 6,457 1,416 8,672 (7,323) 464 (6,859) \$ (0.17) \$	2003 2002 (Unaudited) (Unaudited) (Unaudited) (Unaudited)	2003 2002	Tune 30, June 30, June 30, 2002 2003	June 30, June 30, 2003 2002 2003 (Unaudited) (Unaudited) \$ 438

QuickLinks

ImmunoGen, Inc. Reports Fourth Quarter and Fiscal Year 2003 Financial Results Company Provides Business Update