

SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(A) OF THE SECURITIES EXCHANGE ACT OF 1934

FILED BY THE REGISTRANT /X/ FILED BY A PARTY OTHER THAN THE REGISTRANT / /

Check the appropriate box:

/ / Preliminary Proxy Statement

/ / Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

/X/ Definitive Proxy Statement

/ / Definitive Additional Materials

/ / Soliciting Material Pursuant to sec.240.14a-11(c) or sec.240.14a-12

/ / Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

ImmunoGen, Inc.
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement)

PAYMENT OF FILING FEE (CHECK THE APPROPRIATE BOX):

/X/ \$125 per Exchange Act Rules 0-11(c)(1)(ii), 14a-6(i)(1), or 14a-6(i)(2) or Item 22(a)(2) of Schedule 14A.

/ / \$500 per each party to the controversy pursuant to Exchange Act Rule 14a-6(i)(3).

/ / Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

- 1) Title of each class of securities to which transaction applies:
- 2) Aggregate number of securities to which transaction applies:
- 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):
- 4) Proposed maximum aggregate value of transaction:
- 5) Total fee paid:

/ / Fee paid previously with preliminary materials.

/ / Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- 1) Amount Previously Paid:
- 2) Form, Schedule or Registration Statement No.:
- 3) Filing Party:
- 4) Date Filed:

Dear Shareholder:

You are cordially invited to attend a Special Meeting of Shareholders of ImmunoGen, Inc. to be held at 10:00 a.m. on Thursday, August 15, 1996 at the offices of the Company, 148 Sidney Street, Cambridge, Massachusetts.

At the Special Meeting the Company will seek shareholder approval of a proposal to amend and restate the Company's Restated Articles of Organization to authorize a new class of 5 million shares of Preferred Stock. The Board of Directors recommends approval of this proposal which will allow the Company to improve its balance sheet by, among other things, converting existing debentures and pursuing additional equity capital. Such other business will be transacted as may properly come before the Special Meeting.

Whether you plan to attend the Special Meeting or not, it is important that you promptly complete, sign, date and return the enclosed proxy card in accordance with the instructions pertaining to the card. This will ensure your proper representation at the Special Meeting.

Sincerely,

/S/ MITCHEL SAYARE

MITCHEL SAYARE

YOUR VOTE IS IMPORTANT. PLEASE RETURN YOUR PROXY PROMPTLY.

3

IMMUNOGEN, INC.
148 SIDNEY STREET
CAMBRIDGE, MASSACHUSETTS 02139-4239

NOTICE OF SPECIAL MEETING OF SHAREHOLDERS
TO BE HELD ON AUGUST 15, 1996

To the Shareholders of
ImmunoGen, Inc.:

Notice is hereby given that a Special Meeting of Shareholders of ImmunoGen, Inc. (the "Company") will be held at the offices of the Company, 148 Sidney Street, Cambridge, Massachusetts, on Thursday, August 15, 1996 at 10:00 a.m. Boston time for the following purposes:

1. To consider and act upon a proposal to amend and restate the Company's Restated Articles of Organization to authorize 5 million shares of a new class of \$.01 par value Preferred Stock to be issuable on terms to be determined by the Board of Directors.
2. To transact such other business as may properly come before the Meeting or any adjournment(s) thereof.

Only shareholders of record at the close of business on July 2, 1996 will receive notice of the Meeting and be entitled to vote at the Meeting or any adjournment(s) thereof. The transfer books will not be closed.

You are cordially invited to attend the Meeting in person, if possible. WHETHER YOU PLAN TO ATTEND THE MEETING OR NOT, PLEASE COMPLETE, SIGN AND DATE THE ENCLOSED PROXY AND RETURN IT IN THE ENVELOPE ENCLOSED FOR THIS PURPOSE. The Proxy is revocable by the person giving it at any time prior to the exercise thereof by written notice received by the Company, by delivery of a duly executed proxy bearing a later date, or by attending the Meeting and voting in person.

By order of the Board of Directors

LOGO
JONATHAN L. KRAVETZ, ESQ.
Clerk

July 11, 1996

4

IMMUNOGEN, INC.
148 SIDNEY STREET
CAMBRIDGE, MASSACHUSETTS 02139-4239

PROXY STATEMENT

SPECIAL MEETING OF SHAREHOLDERS

TO BE HELD ON AUGUST 15, 1996

GENERAL INFORMATION

Introduction. This Proxy Statement is furnished in connection with the solicitation by and on behalf of the Board of Directors of ImmunoGen, Inc. (the "Company") of Proxies for use at a Special Meeting of Shareholders of the Company to be held at the offices of the Company, 148 Sidney Street, Cambridge, Massachusetts on Thursday, August 15, 1996 at 10:00 a.m. and at any adjournments thereof (the "Meeting"), and, together with the enclosed Form of Proxy, is being mailed to the shareholders on or about July 11, 1996.

Revocability of Proxies. Any Proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by delivering to the Company a written notice of revocation or a duly executed Proxy bearing a later date, or by attending the Meeting and voting in person.

Cost of Solicitation. The entire cost of this solicitation will be paid by the Company. In addition, the Company may reimburse brokerage firms and other persons representing beneficial owners of shares for their reasonable expenses in forwarding solicitation material to such beneficial owners. Solicitation of proxies by mail may be supplemented by telephone, telegram, telex, telecopy and personal solicitation by directors, officers or employees of the Company. No additional compensation will be paid for such solicitation. In addition, the Company has hired Morrow & Co. to act as its proxy solicitation agent to assist in the solicitation of proxies for the Meeting. The Company estimates that the fee payable to Morrow & Co. for such services will be approximately \$7,500.

Quorum and Voting. Only shareholders of record of the Company's 16,599,855 shares of Common Stock, \$.01 par value (the "Common Stock"), outstanding as of the close of business on July 2, 1996, will be entitled to vote. Each share of Common Stock is entitled to one vote at the Meeting. The presence, in person or by Proxy, of the holders of a majority of the outstanding shares of Common Stock entitled to vote is necessary to constitute a quorum at the Meeting. No appraisal rights exist for any action to be taken at the Meeting.

1

5

PROPOSAL 1: AUTHORIZATION OF PREFERRED STOCK

The Company's Board of Directors recommends that the shareholders consider and approve a proposal to amend and restate the Corporation's Restated Articles of Organization eliminating all currently authorized shares of Convertible Preferred Stock and authorizing 5,000,000 shares of a new class of Preferred Stock, \$.01 par value (the "Preferred Stock"), with the terms to be set by the Board.

The existing four classes of Convertible Preferred Stock, Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Convertible Preferred Stock and Series D Convertible Preferred Stock, were authorized in connection with venture capital financings of the Company in the years prior to the Company's initial public offering in November 1989, and all outstanding shares of such classes of Convertible Preferred Stock were converted to Common Stock in connection with the initial public offering. The terms of the Convertible Preferred Stock provide that converted shares may not be reissued. There remain 122,555 shares of Series C Convertible Preferred Stock and 154,525 shares of Series D Convertible Preferred Stock which are authorized and unissued. The Company has no intention to issue such shares at any time in the

future, since the terms of such classes include dividend rights, liquidation preferences and other rights in favor of the holders thereof which were specific to the venture capital financings. Management, therefore, believes that elimination of these classes of Preferred Stock is appropriate in conjunction with the authorization of the new class of Preferred Stock described below.

The proposal also calls for the authorization of a new class of Preferred Stock consisting of 5,000,000 shares which may be issued in one or more series by vote of the Board of Directors. If this proposal is approved by the shareholders, the Board of Directors will be empowered, without the necessity of further action or authorization by the shareholders (unless required in a specific case by applicable laws, regulations or rules), to cause the Company to issue Preferred Stock from time to time in one or more series, and to fix by resolution the preferences, voting powers, qualifications, and special or relative rights or privileges of each such series. Each series of Preferred Stock will rank senior to the Company's Common Stock with respect to dividends and liquidation rights.

The adoption of the proposed amendment will increase the Company's financial flexibility and allow management to pursue equity financing and other transactions which management believes will enhance shareholder value. The Board believes that the complexity of modern business financing and acquisition transactions requires greater flexibility in the Company's capital structure than now exists. The Preferred Stock will be available for issuance from time to time as determined by the Board for any proper corporate purpose. Such purposes could include, without limitation, issuance in public or private sales for cash as a means of obtaining capital for use in the Company's business and operations, issuance as part or all of the consideration required to be paid by the Company for assets and services, and issuance to the Company's employees and consultants as compensation. The Company does not presently have any plans, agreements, understandings or arrangements that will or could result in the issuance of any share of the Preferred Stock, except as described below.

The authorization of the new class of Preferred Stock will allow the Company to convert an outstanding \$2.5 million debenture into such Preferred Stock at the Company's option. On March 15, 1996, the Company entered into a Securities Purchase Agreement pursuant to which the Company agreed to sell \$5 million of convertible debentures (the "Debentures") to Capital Ventures International ("CVI") in a private placement, consisting of two installments of \$2.5 million each. The first Debenture was issued on March 25, 1996, and was converted into the Company's Common Stock on June 6, 1996. The second \$2.5 million Debenture was issued on June 13, 1996. This Debenture, which is still outstanding, bears interest at the rate of 9% per year, and is convertible into Common Stock at any time at the option of CVI based on a predetermined

2

6

formula providing for a discount from the market price of the Common Stock. The Company and CVI agreed to a modification of this Debenture in June 1996 to allow the Company to exchange the Debenture for shares of the Company's preferred stock at the Company's option if the Company's shareholders approve an amendment to the Company's Restated Articles of Organization authorizing a new class of preferred stock. Management believes that conversion of the second Debenture into Preferred Stock is in the best interests of the Company and its shareholders, since the conversion would improve the Company's balance sheets by removing the Debenture as a liability.

It is not possible to state the actual effect of the authorization of the Preferred Stock upon the rights of holders of Common Stock until the Board determines the respective rights of the holders of one or more series of Preferred Stock. The effects of such issuance could include, however, (i) reduction of the amount otherwise available for payments of dividends on Common Stock if dividends are payable on the Preferred Stock, (ii) restrictions on dividends on Common Stock if dividends on the Preferred Stock are in arrears, (iii) dilution of the voting power of Common Stock if the Preferred Stock has voting rights, and (iv) restriction of the rights of holders of Common Stock to share in the Company's assets upon liquidation until satisfaction of any liquidation preference granted to the holders of Preferred Stock.

The Board of Directors could also utilize shares of Preferred Stock in order to adopt a shareholder rights plan (a so-called "poison pill"), which could have the effect of discouraging or delaying a takeover of the Company. Massachusetts law permits the issuance of classes of stock with voting rights

under which a vote of the holders of each class, voting separately, is required to approve a merger. Shares of Preferred Stock could thus be issued to make approval of a merger more difficult. The issuance of shares of Preferred Stock could also increase the absolute cost of a merger or other takeover transaction. The Company does not presently contemplate using any of the authorized shares of Preferred Stock for such purposes.

If the amendment is authorized, the current "Description of Common Stock, Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Convertible Preferred Stock and Series D Convertible Preferred Stock" contained in Article 4 of the Company's Restated Articles of Organization will be deleted and the provision included in Appendix A to this Proxy Statement will be inserted.

THE AFFIRMATIVE VOTE OF THE HOLDERS OF TWO-THIRDS OF THE OUTSTANDING SHARES OF COMMON STOCK ENTITLED TO VOTE AT THE MEETING IS REQUIRED TO AUTHORIZE THE PROPOSED ELIMINATION OF ALL CURRENTLY AUTHORIZED CONVERTIBLE PREFERRED STOCK AND THE PROPOSED AUTHORIZATION OF A NEW CLASS OF PREFERRED STOCK, WITH ABSTENTIONS AND BROKER NON-VOTES BEING TREATED AS VOTES AGAINST THE PROPOSAL.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the beneficial ownership of shares of Common Stock as of July 1, 1996 by (i) each person or entity known by the Company to be a beneficial owner of more than 5% of the outstanding shares of Common Stock, (ii) each Director of the Company, (iii) the Company's Chief Executive Officer and to each executive officer of the Company whose total annual salary and bonus exceeded \$100,000 for the fiscal year ended June 30, 1996, and (iv) all current executive officers and Directors of the Company as a group. Except as otherwise indicated, each shareholder has sole voting and investment power with respect to the shares beneficially owned.

NAME AND ADDRESS OF BENEFICIAL OWNER**	NUMBER OF SHARES BENEFICIALLY OWNED (1)	PERCENTAGE OF SHARES BENEFICIALLY OWNED (1)
Aeneas Venture Corporation(2) 600 Atlantic Avenue Boston, Massachusetts 02210	1,186,159	7.1%
Capital Ventures International(3) One Capitol Place P.O. Box 1787 GT Grand Cayman Cayman Islands, BWI	1,709,299	9.9%
Mitchel Sayare(4)	452,666	2.7%
Michael R. Eisenson(5)	--	--
Stuart F. Feiner(6)	2,100	*
Donald E. O'Neill(7)	10,000	*
Walter A. Blattler(8)	235,061	1.4%
Dixie-Lee W. Esseltine, M.D.(9)	64,866	*
Carol A. Gloff(10)	66,666	*
Frank J. Pocher(11)	191,250	1.1%
All current executive officers and Directors as a group (8 persons)(12)	1,022,609	5.9%

* Represents beneficial ownership of less than 1% of the Common Stock.

** Addresses are given for beneficial owners of more than 5% of the outstanding Common Stock only.

(1) Share ownership includes shares of Common Stock issuable upon exercise of certain outstanding options as described in the footnotes below.

- (2) Includes 10,000 shares of Common Stock which Aeneas Venture Corporation may acquire upon the exercise of Director's options within 60 days after July 1, 1996.
- (3) Includes 691,299 shares of Common Stock issuable upon exercise of warrants and/or conversion of a Debenture. This information is based solely on a Schedule 13D filed with the Securities and Exchange Commission and dated June 13, 1996.
- (4) Includes 314,666 shares of Common Stock which Mr. Sayare may acquire upon the exercise of options within 60 days after July 1, 1996.
- (5) Michael R. Eisensohn, a Director of the Company, is President and Chief Executive Officer of Harvard Private Capital Group, Inc. The outstanding capital stock of Harvard Management Company, Inc., the parent company of Harvard Private Capital Group, Inc., and Aeneas Venture Corporation is owned by The President and Fellows of Harvard College. Mr. Eisensohn owns no shares of Common Stock and disclaims beneficial ownership of the shares owned by Aeneas Venture Corporation. Pursuant to an

4

8

agreement among the Company, Aeneas Venture Corporation and Mr. Eisensohn, grants of stock options in respect of Mr. Eisensohn's service as a Director are granted directly to Aeneas Venture Corporation.

- (6) Stuart F. Feiner, a Director of the Company, is the Executive Vice President, General Counsel and Secretary of Inco Limited, which owns 11,856 shares of Common Stock. He is also President of Inco Securities Corp., a subsidiary of Inco Limited, which owns 258,947 shares of Common Stock, and Chairman of the general partner of North American Partners Limited Partnership II, which owns 19 shares of Common Stock. Mr. Feiner disclaims beneficial ownership of the shares of Common Stock held by each of such shareholders. Mr. Feiner individually owned 2,100 shares as of July 1, 1996. He is also named as direct owner of a non-qualified option to acquire 10,000 shares of Common Stock granted by the Company in July 1992, which option is exercisable with respect to 10,000 shares within 60 days after July 1, 1996; however, Mr. Feiner disclaims all beneficial interest in the derivative securities and underlying shares pursuant to an arrangement made between Mr. Feiner and Inco Limited, assigning all benefit to that entity.
- (7) Consists of 10,000 shares of Common Stock which Mr. O'Neill may acquire upon the exercise of options within 60 days after July 1, 1996.
- (8) Includes 190,061 shares of Common Stock which Dr. Blattler may acquire upon the exercise of options within 60 days after July 1, 1996.
- (9) Consists of 64,866 shares of Common Stock which Dr. Esseltine may acquire upon the exercise of options within 60 days after July 1, 1996.
- (10) Consists of 66,666 shares of Common Stock which Dr. Gloff may acquire upon the exercise of options within 60 days after July 1, 1996.
- (11) Includes 181,250 shares of Common Stock which Mr. Pocher may acquire upon the exercise of options within 60 days after July 1, 1996.
- (12) See also footnotes (4), (5), (6), (7), (8), (9), (10) and (11).

SHAREHOLDER PROPOSALS AND OTHER MATTERS

In order to be considered for inclusion in the proxy statement distributed to shareholders prior to the annual meeting in 1996, a shareholder proposal had to be received by the Company no later than June 12, 1996. Proposals should be delivered in writing to ImmunoGen, Inc., 148 Sidney Street, Cambridge, Massachusetts 02139-4239.

The Board of Directors does not know of any other matters which will be brought before the Meeting. If other business is properly presented for consideration at the Meeting, it is intended that the shares represented by the enclosed Proxy will be voted by the persons voting the Proxies in accordance with their judgment on such matters.

In order that your shares may be represented if you do not plan to attend

the meeting, and in order to assure the required quorum, please complete, sign, date and return your Proxy promptly.

By order of the Board of Directors

JONATHAN L. KRAVETZ, ESQ.
Clerk

July 11, 1996

5

9

APPENDIX A

There shall be authorized a total of 30,000,000 shares of Common Stock, \$.01 par value (the "Common Stock"), and 5,000,000 shares of Preferred Stock, \$.01 par value (the "Preferred Stock").

Each holder of Common Stock shall at every meeting of stockholders be entitled to one vote in person or by proxy for each share of Common Stock held by him. The holders of the Common Stock shall be entitled to such dividends as may from time to time be declared by the Board of Directors out of any funds legally available for the declaration of dividends, subject to any provisions of these Articles of Organization, as amended from time to time, and subject to the relative rights and preferences of any shares of Preferred Stock authorized and issued hereunder. No share of Common Stock shall entitle its holder to have any preemptive right in or preemptive right to subscribe to any additional shares of Common Stock or any shares of any other class of stock which may at any time be authorized or issued, or any bonds, debentures or other securities convertible into shares of stock of any class of the Company, or options or warrants carrying rights to purchase such shares or securities.

The Board of Directors is authorized, subject to limitations prescribed by law and the provisions of this Article 4, to provide the issuance of the shares of Preferred Stock, with or without series, and, by filing a certificate pursuant to the applicable law of the Commonwealth of Massachusetts (the "Certificate of Designation"), to establish from time to time the number of shares to be included in each such series and to fix the designation, preferences, voting powers, qualifications and special or relative rights or privileges of the shares of each such series. In the event that at any time the Board of Directors shall have established and designated one or more series of Preferred Stock consisting of a number of shares less than all of the authorized number of shares of Preferred Stock, the remaining authorized shares of Preferred Stock shall be deemed to be shares of an undesignated series of Preferred Stock until designated by the Board of Directors as being part of a series previously established or a new series then being established by the Board of Directors. Notwithstanding the fixing of the number of shares constituting a particular series, the Board of Directors may at any time thereafter authorize the issuance of additional shares of the same series except as set forth in the Certificate of Designation.

The authority of the Board of Directors with respect to each series of Preferred Stock shall include, but not be limited to, determination of the following:

(i) The number of shares constituting that series and the distinctive designation of that series, and whether additional shares of that series may be issued;

(ii) whether any dividends shall be paid on shares of that series, and, if so, the dividend rate on the shares of that series; whether dividends shall be cumulative and, if so, from which date or dates, and the relative rights of priority, if any, of payment of dividends on shares of that series;

(iii) whether shares of that series shall have voting rights in addition to the voting rights provided by law and, if so, the terms of such voting rights;

(iv) whether shares of that series shall be convertible into shares of Common Stock or another security and, if so, the terms and conditions of such conversion, including provisions for adjustment of the conversion rate in such events as the Board of Directors shall determine.

(v) whether or not the shares of that series shall be redeemable and, if so, the terms and conditions of such redemption, including the date or dates upon or after which they shall be redeemable and the amount per share payable in case of redemption, which amount may vary under different conditions and

6

10

at different redemption dates; and whether that series shall have a sinking fund for the redemption or purchase of shares of that series and, if so, the terms and amount of such sinking fund.

(vi) whether, in the event of purchase or redemption of the shares of that series, any shares of that series shall be restored to the status of authorized but unissued shares or shall have such other status as shall be set forth in the Certificate Designation;

(vii) the rights of the shares of that series in the event of the sale, conveyance, exchange or transfer of all or substantially all of the property and assets of the Company, or the merger or consolidation of the Company into or with any other company, or the merger of any other company into it, or the voluntary or involuntary liquidation, dissolution or winding up of the Company, and the relative rights or priority, if any, of shares of that series to payment in any such event.

(viii) whether the shares of that series shall carry any preemptive right in or preemptive right to subscribe for any additional shares of Preferred Stock or any shares of any other class of stock which may at any time be authorized or issued, or any bonds, debentures or other securities convertible into shares of stock of any class of the Company, or options or warrants carrying rights to purchase such shares or securities; and

(ix) any other designation, preferences, voting powers, qualifications, and special or relative rights or privileges of the shares of that series.

7

11
PROXY

IMMUNOGEN, INC.

PROXY

PROXY SOLICITED BY THE BOARD OF DIRECTORS
OF IMMUNOGEN, INC. FOR A
SPECIAL MEETING OF SHAREHOLDERS
TO BE HELD ON AUGUST 15, 1996

The undersigned hereby acknowledges receipt of the Notice of Special Meeting of Shareholders and Proxy Statement dated July 11, 1996, and does hereby appoint Mitchel Sayare and Frank J. Pocher, or either of them, the undersigned's attorneys-in-fact and proxies, with full power of substitution in each, for and in the name of the undersigned, with all the powers the undersigned would possess if personally present, hereby revoking any proxy heretofore given, to appear and represent and vote all shares of Common Stock of ImmunoGen, Inc. which the undersigned would be entitled to vote if personally present at the Special Meeting of Shareholders to be held at the offices of the Company, 148 Sidney Street, Cambridge, Massachusetts on Thursday, August 15, 1996, at 10:00 a.m. and at any adjournments thereof.

FILL IN REVERSE SIDE AND MAIL IN THE ENCLOSED ENVELOPE

The shares represented hereby will be voted as directed herein. If no direction is indicated, such shares will be voted FOR Item 1.

I plan to attend
the meeting.

Item 1. To approve the proposal to amend and restate the Corporation's Restated Articles of Organization to eliminate all currently authorized

shares of Convertible Preferred Stock and authorize 5,000,000 shares of a new class of Preferred Stock.

FOR AGAINST ABSTAIN
/ / / / / /

IN THEIR DISCRETION THE PROXIES ARE AUTHORIZED TO VOTE UPON SUCH OTHER BUSINESS AS MAY PROPERLY COME BEFORE THE MEETING OR ANY ADJOURNMENTS THEREOF.

THIS PROXY MAY BE REVOKED IN WRITING AT ANY TIME PRIOR TO THE VOTING THEREOF.

Please date and sign exactly as name appears on this card. Joint owners should each sign. Please give full title when signing as executor, administrator, trustee, attorney, guardian for a minor, etc. Signatures for corporations and partnerships should be in the corporate or firm name by a duly authorized person. Please return this proxy promptly in the enclosed envelope.

Signature: _____
Signature: _____
Date: _____
Date: _____

"PLEASE MARK INSIDE BLUE BOXES SO THAT
DATA PROCESSING EQUIPMENT WILL RECORD
YOUR VOTES"
