UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

MACROGENICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 06-1591613 (I.R.S. Employer Identification No.)

9640 Medical Center Drive, Rockville, MD (Address of Principal Executive Offices)

20850 (Zip Code)

2013 Equity Incentive Plan (Full title of the plan)

Scott Koenig, M.D., Ph.D.
President and Chief Executive Officer
9640 Medical Center Drive
Rockville, MD 20850
(Name and address of agent for service)

(301) 251-5172 (Telephone number, including area code, of agent for service)

Copies to:

Atul Saran Senior Vice President and General Counsel 9640 Medical Center Drive Rockville, MD 20850 (301) 251-5172 Eric Blanchard Keir D. Gumbs Covington & Burling LLP 850 Tenth Street, NW Washington, DC 20001-4956 (202) 662-6000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \square Accelerated filer \square Non-accelerated filer \square (Do not check if a smaller reporting company)Smaller Reporting Company \square

CALCULATION OF REGISTRATION FEE

Proposed **Proposed** maximum maximum Amount Title of securities to be offering price aggregate Amount of to be registered registered(1) per share offering price registration fee Common Stock, \$0.01 par value per share 1,287,966 shares \$15.75(2) \$ 20,060,070.45 (2) \$ 2,020.05

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended. The price per share and aggregate offering price are calculated on the basis of \$15.75, the average of the high and low price of the registrant's Common Stock as reported on the NASDAQ Global Market on February 26, 2016.



EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 1,287,966 shares of common stock of MacroGenics, Inc. (the "Company") issuable pursuant to the Company's 2013 Equity Incentive Plan. Accordingly, the contents of the Company's registration statement on Form S-8 filed with the SEC on November 12, 2013 (Registration No. 333-192277) are incorporated by reference into this Registration Statement pursuant to General Instruction E of Form S-8.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

Item 1. Plan Information.

A prospectus setting forth the information requested by this Item will be sent or given to participants in the plan covered by this registration statement (the "Registration Statement") pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

Item 2. Registration Information and Employee Plan Annual Information.

A prospectus setting forth the information requested by this Item is included in documents sent or given to participants in the plan covered by this Registration Statement pursuant to Rule 428(b)(1) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The Company is subject to the informational and reporting requirements of Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports and other information with the SEC. The following documents, which are on file with the SEC, are incorporated in this Registration Statement by reference:

- The Company's annual report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 29, 2016;
- The description of the Company's common stock contained in its Registration Statement on Form 8-A filed on October 7, 2013, including any amendments or reports filed for the purpose of updating such description; and
- · All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment that indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents.

Any document or any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a subsequently filed document or statement contained therein that is or is also deemed to be incorporated by reference herein modifies or supersedes such document or statement in such document. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Nothing in this Registration Statement shall be deemed to incorporate information furnished but not filed on Form 8-K.

The Company promptly will provide without charge to each person to whom a prospectus is delivered a copy of any or all information that has been incorporated herein by reference (not including exhibits to the information that is incorporated by reference unless such exhibits are specifically incorporated by reference into such information) upon the written or oral request of such person directed to the General Counsel of the Company at its principal offices, 9640 Medical Center Drive, Rockville, MD 20850, Telephone: (301) 251-5172.

Item 8. Exhibits.

The exhibits to this Registration Statement are described in the Exhibit Index below.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended (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-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockville, State of Maryland, on February 29, 2016.

DATE: February 29, 2016

By: /s/ Scott Koenig

Name: Scott Koenig, M.D., Ph.D.

Title: President and Chief Executive Officer

We, the undersigned directors and officers of MacroGenics, Inc., a Delaware corporation, do hereby constitute and appoint Scott Koenig, Chief Executive Officer, Atul Saran, General Counsel and James Karrels, Chief Financial Officer, and each and any of them, our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, to do any and all acts and things in our names and on our behalf in our capacities as directors and officers and to execute any and all instruments for us and in our name in the capacities indicated below, which said attorneys and agents may deem necessary or advisable to enable said corporation to comply with the Securities Act and any rules, regulations and requirements of the SEC, in connection with this registration statement, or any registration statement for this offering under the Securities Act, including specifically, but without limitation, any and all amendments (including post-effective amendments) hereto; and we hereby ratify and confirm all that said attorneys and agents, or either of them, shall do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons on February 29, 2016.

SIGNATURE:	
/s/ Scott Koenig	President and CEO and Director
Scott Koenig, M.D., Ph.D.	(Principal Executive Officer)
/s/ James Karrels	Senior Vice President, Chief Financial Officer and Secretary (Principal Financial Officer)
James Karrels	
/s/ Atul Saran	Senior Vice President and General Counsel
Atul Saran	
/s/ Lynn Cilinski	Vice President, Controller and Treasurer
Lynn Cilinski	(Principal Accounting Officer)
/s/ Paulo Costa	Director
Paulo Costa	
/s/ Matthew Fust	Director
Matthew Fust	
/s/ Kenneth Galbraith	Director
Kenneth Galbraith	
/s/ Edward Hurwitz	Director
Edward Hurwitz	
/s/ David Stump	Director
David Stump, M.D.	

INDEX TO EXHIBITS

4.1	Company 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 1, 2013)
5.1	Opinion of Covington & Burling LLP
23.1	Consent of Covington & Burling LLP (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP
24.1	Power of Attorney (included on signature page)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8), filed February 29, 2016, pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc. of our reports dated February 29, 2016, with respect to the consolidated financial statements of MacroGenics, Inc. and the effectiveness of internal control over financial reporting of MacroGenics, Inc. included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

McLean, Virginia February 29, 2016

February 29, 2016

MacroGenics, Inc. 9640 Medical Center Drive, Suite 300 Rockville, MD 20850

Ladies and Gentlemen:

We have acted as counsel to MacroGenics, Inc., a Delaware corporation (the "Company"), in connection with the registration by the Company under the Securities Act of 1933, as amended (the "Act"), of 1,287,966 shares of the Company's Common Stock, par value \$0.01 per share (the "Shares"), issuable under the Company's 2013 Equity Incentive Plan (the "Plan"), pursuant to the registration statement on Form S-8 filed with the Securities and Exchange Commission on the date herewith (such registration statement is referred to herein as the "Registration Statement").

We have reviewed such corporate records, certificates and other documents, and such questions of law, as we have considered necessary or appropriate for the purposes of this opinion. We have assumed that all signatures are genuine, that all documents submitted to us as originals are authentic and that all copies of documents submitted to us conform to the originals.

We have relied as to certain matters on information obtained from public officials, officers of the Company and other sources believed by us to be responsible.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued in accordance with the terms of the Plan and any individual agreements relating to such Shares, will be validly issued, fully paid and nonassessable.

We are members of the bar of the State of District of Columbia. We do not express any opinion herein on any laws other than the General Corporation Law of the State of Delaware and applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act.

Sincerely,

/s/Covington & Burling LLP