UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 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) 2834 (Primary Standard Industrial Classification Code Number) 06-1591613 (I.R.S. Employer Identification No.)

9640 Medical Center Drive Rockville, MD 20850 (301) 251-5172

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

Scott Koenig, M.D., Ph.D. President and Chief Executive Officer 9640 Medical Center Drive Rockville, MD 20850 (301) 251-5172

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Richard E. Baltz Arnold & Porter LLP 555 12th Street NW Washington, DC 20004-1206 (202) 942-5000 Steven D. Singer Lisa Firenze Wilmer Cutler Pickering Hale and Dorr LLP 7 World Trade Center New York, NY 10007 (212) 230-8000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \boxtimes 333-193648

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

(Check one):

CALCULATION OF REGISTRATION FEE

Shares to be Registered(1)	Maximum Offering Price Per Share(2)	Maximum Aggregate Offering Price	Amount of Registration Fee
575,000	\$36.50	\$20,987,500	\$2,704
_	Registered(1) 575,000	Registered(1) Per Share(2)	Registered(1) Per Share(2) Offering Price 575,000 \$36.50 \$20,987,500

(1) Includes shares that the underwriters have the option to purchase to cover over-allotments, if any.

(2) Estimated in accordance with Rule 457(c) of the Securities Act of 1933.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This registration statement is being filed with respect to the registration of additional shares of common stock, par value \$0.01 per share, of MacroGenics, Inc., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the earlier registration statement on Form S-1 (File No. 333-193648), which was declared effective by the Commission on February 12, 2014, are incorporated in this registration statement by reference.

The required opinions and consents are listed on an Exhibit Index attached hereto and filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant 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 12, 2014.

MACROGENICS, INC.

By: /s/ Scott Koenig

Scott Koenig, M.D., Ph.D. President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Scott Koenig Scott Koenig, M.D., Ph.D.	President and CEO and Director (Principal Executive Officer)	February 12, 2014
/s/ James Karrels James Karrels	Vice President, Chief Financial Officer and Secretary (Principal Financial Officer)	February 12, 2014
/s/ Lynn Cilinski Lynn Cilinski	Vice President, Controller and Treasurer (Principal Accounting Officer)	February 12, 2014
* Paulo Costa	Director	February 12, 2014
* Kenneth Galbraith	Director	February 12, 2014
* Edward Hurwitz	Director	February 12, 2014
* Eran Nadav, Ph.D.	Director	February 12, 2014
* Arnold Oronsky, Ph.D.	Director	February 12, 2014
* Michael Steinmetz, Ph.D.	Director	February 12, 2014
*By: /s/ Scott Koenig		

Scott Koenig, M.D., Ph.D., Attorney-in-Fact

EXHIBIT INDEX

Exhibit No.	Description
5.1	Opinion of Arnold & Porter LLP
23.1	Consent of Ernst & Young, LLP, Independent Registered Public Accounting Firm
23.2	Consent of Arnold & Porter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney

* Filed as Exhibit 24.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-193648) filed with the Commission on January 30, 2014.

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

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-1 (File No. 333-) (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Rule 462(b) of the Securities Act, for the registration of an aggregate of 575,000 shares of Common Stock, \$0.01 par value per share (the "Shares"), of MacroGenics, Inc., a Delaware corporation (the "Company"), of which (i) up to 450,000 Shares may be issued and sold by the Company upon exercise of an over-allotment option granted by the Company and (ii) the remaining Shares will be sold by certain stockholders of the Company (the "Selling Stockholders").

The Shares are to be sold by the Company and the Selling Stockholders pursuant to an underwriting agreement (the "Underwriting Agreement") to be entered into by and among the Company, the Selling Stockholders and Merrill Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC, as representatives of the several underwriters named in the Underwriting Agreement, the form of which has been filed as Exhibit 1.1 to the Registration Statement.

We are acting as counsel for the Company in connection with the sale by the Company and the Selling Stockholders of the Shares. We have examined signed copies of the Registration Statement as filed with the Commission. We have also examined and relied upon the Underwriting Agreement, minutes of meetings and actions of the stockholders and the Board of Directors of the Company as provided to us by the Company, stock record books of the Company as provided to us by the Company, the Certificate of Incorporation and By-laws of the Company, each as restated and/or amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the State of Delaware.

Based upon and subject to the foregoing, we are of the opinion that (i) the Shares to be issued and sold by the Company have been duly authorized for issuance and, when such Shares are issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, such Shares will be validly issued, fully paid and nonassessable and (ii) the Shares to be sold by the Selling Stockholders have been duly authorized and are validly issued, fully paid and nonassessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Prospectus under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Sincerely,

/s/ Arnold & Porter LLP Arnold & Porter LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated March 8, 2013, except for the last paragraph of Note 4, as to which the date is September 26, 2013, with respect to the financial statements of MacroGenics, Inc. included in the Registration Statement (Form S-1 No. 333-193468) and related Prospectus for the registration of its shares of common stock, as incorporated by reference in this Registration Statement (Form S-1) filed with the Securities and Exchange Commission on February 12, 2014 for the registration of its shares of common stock.

/s/ Ernst & Young LLP

McLean, Virginia February 12, 2014