
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

AEVI GENOMIC MEDICINE, INC.

(Exact name of registrant as specified in its charter)

Delaware **98-0217544**
(State or Other Jurisdiction of (I.R.S. Employer
Incorporation or Organization) Identification Number)

435 Devon Park Drive, Suite 715, Wayne, PA 19087
(Address, including zip code, of principal executive offices)

AEVI GENOMIC MEDICINE, INC. STOCK INCENTIVE PLAN
(Full title of the plan)

Michael F. Cola
President and Chief Executive Officer
Aevi Genomic Medicine, Inc.
435 Devon Park Drive, Suite 715
Wayne, PA 19087
Phone: (610) 254-4201
(Name, address and telephone number, including area code, of agent for service)

With a copy to:

Brian M. Katz, Esq.
Pepper Hamilton LLP
3000 Two Logan Square
Philadelphia, PA 19103
(215) 981-4000

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.0001 per share, issuable under the Aevi Genomic Medicine, Inc. Stock Incentive Plan	4,000,000 shares	\$1.03	\$4,120,000	\$512.94

- (1) Represents shares of common stock, par value \$0.0001 per share (“*Common Stock*”) available for future issuance under the Aevi Genomic Medicine, Inc. Stock Incentive Plan, as amended (the “*Plan*”). The Plan has recently been amended to increase the number of shares of Common Stock issuable under the Plan, as well as to make certain other amendments. Pursuant to Rule 416 of the Securities Act of 1933, as amended, this registration statement shall also cover any additional shares of Common Stock which become issuable under the Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the outstanding shares of the Registrant.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) of the Securities Act based upon a \$1.03 per share average of high and low prices of the Common Stock on The NASDAQ Global Market on July 9, 2018.

EXPLANATORY NOTE

Pursuant to General Instruction E of Form S-8, this Registration Statement is being filed in order to register 4,000,000 additional shares of Common Stock issuable by Aevi Genomic Medicine, Inc. (the “**Registrant**”) under the Plan. This registration of 4,000,000 shares of Common Stock will increase the number of shares registered for issuance under the Plan to an aggregate of 13,178,571 shares of Common Stock, subject to adjustment as provided in the Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Items 1 and 2 of Part I of the Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act and the introductory note to Part I of the Form S-8. The document(s) containing the information specified in Part I of Form S-8 will be sent or given to the recipient of any awards under the Plan, as required by Rule 428 promulgated by the Securities and Exchange Commission (the “**SEC**”) under the Securities Act. Such documents need not be filed with the SEC either as part of this registration statement or as prospectuses or prospectus supplements pursuant to Rule 424. These documents and the documents incorporated by reference in the registration statement pursuant to Item 3 of Part II of this form, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant pursuant to the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”) are incorporated by reference into this Registration Statement and made a part hereof:

1. The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on March 13, 2018;
2. The Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 15, 2018;
3. The Registrant’s Current Reports on Form 8-K filed with the SEC on March 6, 2018, March 13, 2018, March 21, 2018, May 15, 2018, June 20, 2018 and June 22, 2018; and
4. The description of the Registrant’s common stock contained in its registration statement on Form 8-A filed with the SEC on October 20, 2016.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to filing a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing such documents, except for the documents, or portions thereof, that are "furnished" (e.g., the portions of those documents set forth under Item 7.01 of Form 8-K or other information "furnished" to the SEC) rather than filed with the SEC. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's amended and restated certificate of incorporation provides that to the fullest extent permitted by the Delaware General Corporation Law, the Registrant's directors shall not be liable to the Registrant or to its stockholders for monetary damages for breach of fiduciary duty as a director.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interest of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided, that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances. The Registrant's amended and restated certificate of incorporation and by-laws provide that any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or officer of our company, or by reason of the fact that he or she was serving at the request of our company as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, shall be indemnified (and we must advance expenses incurred in connection with the defense of such actions, suit or proceedings) to the full extent now or hereafter permitted by law.

The Registrant maintains an insurance policy providing indemnification for certain of its directors, officers, affiliates, partners and employees for certain liabilities.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant, Aevi Genomic Medicine, Inc., 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 Wayne, Pennsylvania, on July 11, 2018.

Aevi Genomic Medicine, Inc.

By: /s/ Brian D. Piper

Brian D. Piper

Chief Financial Officer and Corporate Secretary

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Michael F. Cola and Brian D. Piper, or either of them acting individually, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for him or her in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, granting unto such attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary in connection with such matters and hereby ratifying and confirming all that such attorney-in-fact and agent or his substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on the date indicated below:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael F. Cola</u> Michael F. Cola	President, Chief Executive Officer, Director (Principal Executive Officer)	June 25, 2018
<u>/s/ Brian D. Piper</u> Brian D. Piper	Chief Financial Officer and Corporate Secretary (Principal Financial Officer and Principal Accounting Officer)	June 28, 2018
<u>/s/ Sol J. Barer</u> Sol J. Barer	Chairman of the Board of Directors	June 15, 2018
<u>/s/ Eugene A. Bauer</u> Eugene A. Bauer	Director	June 21, 2018
<u>/s/ Matthew D. Bayley</u> Matthew D. Bayley	Director	June 21, 2018
<u>/s/ Alastair Clemow</u> Alastair Clemow	Director	June 15, 2018
<u>/s/ Barbara Duncan</u> Barbara Duncan	Director	June 25, 2018
<u>/s/ Joseph J. Grano, Jr.</u> Joseph J. Grano, Jr.	Director	June 18, 2018

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
<u>4.1</u>	<u>Amended and Restated Certificate of Incorporation of the Registrant (previously filed as Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 filed November 5, 2010 and incorporated herein by reference).</u>
<u>4.2</u>	<u>Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant (previously filed as Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 filed November 5, 2010 and incorporated herein by reference).</u>
<u>4.3</u>	<u>Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant dated as of February 14, 2011 (previously filed as Exhibit 4.3 to the Registrant's Post-Effective Amendment No. 1 to Form S-1 on Form S-3 filed July 16, 2012 and incorporated herein by reference).</u>
<u>4.4</u>	<u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed December 15, 2016 and incorporated herein by reference).</u>
<u>4.5</u>	<u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed October 18, 2017 and incorporated herein by reference).</u>
<u>4.6</u>	<u>Third Amended and Restated By-Laws of the Registrant (previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed December 15, 2016 and incorporated herein by reference).</u>
<u>5.1</u>	<u>Opinion of Pepper Hamilton LLP.</u>
<u>23.1</u>	<u>Consent of Ernst & Young LLP.</u>
<u>23.2</u>	<u>Consent of Kost Forer Gabbay & Kasierer.</u>
<u>23.3</u>	<u>Consent of Pepper Hamilton LLP (included in Exhibit 5.1).</u>
<u>24.1</u>	<u>Power of Attorney (set forth on signature page hereto).</u>



3000 Two Logan Square
Eighteenth and Arch Streets
Philadelphia, PA 19103-2799
215.981.4000
Fax 215.981.4750

July 11, 2018

Aevi Genomic Medicine, Inc.
435 Devon Park Drive, Suite 715
Wayne, Pennsylvania 19087

Re: Registration Statement on Form S-8a

Ladies and Gentlemen:

Reference is made to a registration statement on Form S-8 (the "Registration Statement") of Aevi Genomic Medicine, Inc., a Delaware corporation (the "Company"), to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the registration by the Company of an additional Four Million (4,000,000) shares of common stock, par value \$0.0001 per share (the "Shares"), of the Company issuable under the Aevi Genomic Medicine, Inc. Stock Incentive Plan (the "Plan").

In this connection, we have examined the Registration Statement, including the exhibits thereto, the originals or copies, certified or otherwise identified to our satisfaction, of the Certificate of Incorporation and the Third Amended and Restated By-Laws of the Company as amended to date, and such other documents and corporate records relating to the Company as we have deemed appropriate for the purpose of rendering the opinion expressed herein. The opinion expressed herein is based exclusively on the applicable provisions of the Delaware General Corporation Law and federal securities laws as in effect on the date hereof.

On the basis of the foregoing, we are of the opinion that the Shares, when issued and paid for in accordance with the Plan, will be legally issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not admit that we come within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the Commission thereunder.

Very truly yours,

/s/ Pepper Hamilton LLP

Pepper Hamilton LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Aevi Genomic Medicine, Inc. Stock Incentive Plan of our report dated March 13, 2018, with respect to the consolidated financial statements of Aevi Genomic Medicine, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
July 11, 2018

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Aevi Genomic Medicine, Inc. Stock Incentive Plan of our report dated February 26, 2016, with respect to the consolidated financial statements of Aevi Genomic Medicine, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

Haifa, Israel
July 11, 2018

/s/ KOST, FORER, GABBAY & KASIERER
A Member of EY Global
