

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

**FORM S-8  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**MEI Pharma, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**51-0407811**  
(IRS Employer  
Identification No.)

**11975 El Camino Real, Suite 101  
San Diego, CA 92130**

(Address of Principal Executive Offices)(Zip Code)

**MEI Pharma, Inc. Amended and Restated 2008 Stock Omnibus Equity Compensation Plan**  
(Full title of the plan)

**Daniel P. Gold**  
**President & Chief Executive Officer**  
**MEI Pharma, Inc.**  
**11975 El Camino Real, Suite 101**  
**San Diego, CA 92130**  
**(858) 792-6300**

(Name, address and telephone number of agent for service)

*with copies to:*  
**Steven A. Navarro, Esq.**  
**Finnbarr D. Murphy, Esq.**  
**Morgan, Lewis & Bockius LLP**  
**101 Park Avenue**  
**New York, New York 10178**  
**(212) 309-6000**

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

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

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.00000002 per share	3,500,000 shares(1)	\$1.73(2)	\$6,055,000(2)	\$701.78(3)

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock issuable pursuant to the MEI Pharma, Inc. Amended and Restated 2008 Stock Omnibus Equity Compensation Plan as a result of any stock dividend, stock split, recapitalization or other similar transaction.
- (2) Calculated pursuant to paragraphs (c) and (h) of Rule 457 of the Securities Act (based upon the average of the high and low sales price for the Registrant's common stock as reported on the Nasdaq Capital Market on February 14, 2017). The foregoing calculation is solely for the purpose of determining the registration fee.
- (3) Based upon the proposed maximum offering price per share, calculated as described in footnote (2) above.

## EXPLANATORY NOTE

MEI Pharma, Inc. (formerly known as Marshall Edwards, Inc.) (“we” or “the Company”) previously filed a Registration Statement on Form S-8 (File No. 333-156985) (the “Original Registration Statement”) with respect to the Marshall Edwards, Inc. 2008 Stock Omnibus Equity Compensation Plan (the “Plan”). On December 1, 2011, our stockholders approved an amendment and restatement of the Plan to increase the aggregate number of shares of our common stock, par value \$0.00000002 per share (the “Common Stock”) that may be subject to awards under the Plan by 1,800,000 shares. On February 21, 2012, we filed an additional Registration Statement on Form S-8 (File No. 333-179591) (the “Second Registration Statement”) to cover such additional 1,800,000 shares of Common Stock. On December 3, 2014, our stockholders approved another amendment and restatement of the Plan to increase the aggregate number of shares of Common Stock that may be subject to awards under the Plan by an additional 1,750,000 shares. On January 26, 2015, we filed an additional Registration Statement on Form S-8 (File No. 333-201703) (the “Third Registration Statement”) to cover such additional 1,750,000 shares of Common Stock. On December 3, 2015, our stockholders approved another amendment and restatement of the Plan to increase the aggregate number of shares of Common Stock that may be subject to awards under the Plan by an additional 2,750,000 shares. On August 24, 2016, we filed an additional registration statement on Form S-8 (File No. 333-213278) (the “Fourth Registration Statement” and, together with the Original Registration Statement, the Second Registration Statement and the Third Registration Statement, the “Prior Registration Statements”) to cover such additional 2,750,000 shares of Common Stock. On December 1, 2016, our stockholders approved another amendment and restatement of the Plan to increase the aggregate number of shares of Common Stock that may be subject to awards under the Plan by an additional 3,500,000 shares. This Registration Statement covers such additional 3,500,000 shares of Common Stock. In accordance with General Instruction E of Form S-8, the contents of the Prior Registration Statements are incorporated herein by reference.

The Amended and Restated 2008 Stock Omnibus Equity Compensation Plan filed herewith as Exhibit 4.1 replaces the Exhibit 4.2 previously filed with the Prior Registration Statements.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

The following documents previously filed by us with the Securities and Exchange Commission (the “Commission”) are incorporated by reference into this Registration Statement:

- (a) Our Annual Report on Form 10-K for the fiscal year ended June 30, 2016 filed with the Commission on September 6, 2016;
- (b) Our Quarterly Reports on Form 10-Q for the fiscal quarter ended September 30, 2016, filed with the Commission on November 9, 2016, as amended on February 16, 2017, and for the fiscal quarter ended December 31, 2016, filed with the Commission on February 8, 2017;
- (c) Our Current Reports on Form 8-K filed with the Commission on August 9, 2016, August 17, 2016, September 6, 2016 and December 2, 2016;
- (d) Our Definitive Proxy Statement on Schedule 14A for the annual meeting of stockholders held on December 1, 2016, filed with the Commission on October 17, 2016; and
- (e) The description of the Registrant’s Common Stock contained in the Registrant’s Registration Statement on Form S-1 (File No. 333-109129) filed with the Commission on September 25, 2003 and any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), prior to the filing of a post-effective amendment which indicates that all securities offered herein have been sold or which 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 the filing of such documents.

Any statement contained herein or in a document, all or a portion of which is 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 statement contained herein or in any other

subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. 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.

**Item 8. Exhibits.**

See the attached Exhibit Index, which 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 the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

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

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply to this Registration Statement on Form S-8 if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Company pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the 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 Section 15(d) of the Exchange Act that is incorporated by reference in the 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 Commission 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, 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 San Diego, State of California, on February 16, 2017.

MEI Pharma, Inc.

By: /s/ Daniel P. Gold

Name: Daniel P. Gold

Title: President and Chief Executive Officer

## POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Daniel P. Gold and Thomas M. Zech, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution for him and in his name, place and stead, in any and all capacities, to sign any or all amendments or supplements to this Registration Statement, whether pre-effective or post-effective, and to file the same with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing necessary or appropriate to be done with respect to this Registration Statement or any amendments or supplements hereto in the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons, in the capacities indicated, on February 16, 2017:

<u>Signature</u>	<u>Title</u>
<u>/s/ Daniel P. Gold</u> Daniel P. Gold	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Thomas M. Zech</u> Thomas M. Zech	Secretary, Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Christine A. White</u> Christine A. White	Chairman of the Board
<u>/s/ William D. Rueckert</u> William D. Rueckert	Director
<u>/s/ Charles V. Baltic</u> Charles V. Baltic	Director
<u>/s/ Thomas C. Reynolds</u> Thomas C. Reynolds	Director
<u>/s/ Nicholas R. Glover</u> Nicholas R. Glover	Director
<u>/s/ Kevan E. Clemens</u> Kevan E. Clemens	Director

## Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
4.1	Amended and Restated 2008 Stock Omnibus Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Commission on December 2, 2016 (File No. 000-50484)).
5.1	Opinion of Morgan, Lewis & Bockius LLP.
23.1	Consent of BDO USA, LLP.
23.3	Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page of this Registration Statement).

## Letterhead of Morgan, Lewis &amp; Bockius LLP

February 16, 2017

MEI Pharma, Inc.  
11975 El Camino Real, Suite 101  
San Diego, California 92130

Re: MEI Pharma, Inc. 2008 Stock Omnibus Equity Compensation Plan

Ladies and Gentlemen:

We have acted as counsel to MEI Pharma, Inc., a Delaware corporation (the "Company"), in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), with the Securities and Exchange Commission (the "SEC"). This Registration Statement relates to the registration of 3,500,000 shares of common stock, par value \$0.00000002 per share (the "Common Stock") under the MEI Pharma, Inc. Amended and Restated 2008 Stock Omnibus Equity Compensation Plan (the "Plan").

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of the Restated Certificate of Incorporation and Amended and Restated By-Laws of the Company and such other documents, records and other instruments as we have deemed appropriate for purposes of the opinion set forth herein. In such examinations 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 and the authenticity of the originals of all copies.

Based on the foregoing, we are of the opinion that such shares of Common Stock being registered pursuant to the Registration Statement to be issued under the Plan have been duly authorized and, if and when issued and paid for in full in accordance with the Plan as contemplated by the Registration Statement, will be validly issued, fully paid and non-assessable.

This opinion letter is rendered as of the date first written above and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, to any other matters relating to the Company or the Common Stock.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not admit that we are acting within the category of persons whose consent is required under the provisions of the Securities Act or the rules or regulations of the SEC thereunder.

Very truly yours,

/s/ Morgan, Lewis & Bockius LLP

Consent of Independent Registered Public Accounting Firm

MEI Pharma, Inc.  
San Diego, California

We hereby consent to the incorporation by reference in this Registration Statement of our reports dated September 2, 2016, relating to the financial statements and the effectiveness of MEI Pharma Inc.'s (the "Company") internal control over financial reporting appearing in the Company's Annual Report on Form 10-K for the year ended June 30, 2016.

/s/ BDO USA, LLP  
San Diego, California

February 16, 2017