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

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

PHASEBIO PHARMACEUTICALS, 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)

03-0375697
(I.R.S. Employer
Identification Number)

**1 Great Valley Parkway, Suite 30
Malvern, Pennsylvania 19355
(610) 981-6500**

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

**Jonathan P. Mow
Chief Executive Officer
PhaseBio Pharmaceuticals, Inc.
11260 El Camino Real,
Suite 100
San Diego, CA 92130
(610) 981-6500**

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

Copies to:

**Christian E. Plaza
Darren K. DeStefano
Madison A. Jones
Cooley LLP
11951 Freedom Drive
Reston, Virginia 20190
(703) 456-8000**

**Edwin M. O'Connor
Seo Salimi
Goodwin Procter LLP
620 Eighth Avenue
New York, New York 10018
(212) 813-8800**

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, as amended, 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, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. (333-230783)

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 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, 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

Accelerated Filer

Non-accelerated Filer

Smaller Reporting Company

Emerging Growth Company

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 Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Aggregate Offering Price Per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(3)
Common stock, \$0.001 par value per share	674,475	\$12.00	\$8,093,700	\$980.96

- (1) Represents only the number of shares being registered pursuant to this Registration Statement and includes an additional 87,975 shares that the underwriters have the option to purchase. The amount to be registered does not include the 3,450,000 shares that were previously registered pursuant to the registrant’s Registration Statement on Form S-1 (File No. 333-230783) (the “Earlier Registration Statement”), which included 450,000 shares that the underwriters have the option to purchase.
- (2) The registrant previously registered securities on the Earlier Registration Statement, which was declared effective by the Securities and Exchange Commission on April 11, 2019. In accordance with Rule 462(b) under the Securities Act of 1933, as amended (the “Securities Act”), an additional amount of securities having a proposed maximum aggregate offering price of \$8,093,700 are hereby registered, which includes shares issuable upon the exercise of the underwriters’ option to purchase additional shares.
- (3) Calculated pursuant to Rule 457(c) under the Securities Act.

The Registration Statement shall become effective upon filing in accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended.

**EXPLANATORY NOTE AND
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE**

This Registration Statement (the "Registration Statement") is being filed with the Securities and Exchange Commission (the "Commission") with respect to the registration of additional shares of common stock, \$0.001 par value per share, of PhaseBio Pharmaceuticals, Inc. (the "Registrant"), pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"). This Registration Statement incorporates by reference the contents of, including all amendments and exhibits thereto, the Registration Statement on Form S-1, as amended (File No. 333-230783) (the "Earlier Registration Statement"), which the Commission declared effective on April 11, 2019, and is being filed solely for the purpose of increasing the number of shares to be offered in the public offering by 674,475, including 87,975 shares that may be sold pursuant to the underwriters' option to purchase additional shares. The additional shares that are being registered for sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Earlier Registration Statement. The required opinion and consents are listed on the Exhibit Index attached hereto and filed herewith.

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
5.1	<u>Opinion of Cooley LLP.</u>
23.1	<u>Consent of KPMG LLP, independent registered public accounting firm.</u>
23.2	<u>Consent of Cooley LLP (included in Exhibit 5.1).</u>
24.1	<u>Power of Attorney (included on the signature page of the Registration Statement on Form S-1 (File No. 333-230783), filed with the Commission on April 9, 2019 and incorporated herein by reference).</u>

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Malvern, Pennsylvania, on the 11th day of April, 2019.

PHASEBIO PHARMACEUTICALS INC.

By: /s/ Jonathan P. Mow
Jonathan P. Mow
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jonathan P. Mow</u> Jonathan P. Mow	Chief Executive Officer and Director (Principal Executive Officer)	April 11, 2019
<u>/s/ John Sharp</u> John Sharp	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 11, 2019
<u>*</u> Clay B. Thorp	Chairman of the Board of Directors	April 11, 2019
<u>*</u> Edmund P. Harrigan, M.D.	Director	April 11, 2019
<u>*</u> Nancy J. Hutson, Ph.D.	Director	April 11, 2019
<u>*</u> Peter Justin Klein, M.D., J.D.	Director	April 11, 2019
<u>*</u> Caroline Loewy	Director	April 11, 2019
<u>*</u> Bibhash Mukhopadhyay, Ph.D.	Director	April 11, 2019
<u>*</u> Linda Tufts	Director	April 11, 2019
<u>*</u> Richard A. van den Broek	Director	April 11, 2019

*By: /s/ Jonathan P. Mow
Jonathan P. Mow, *Attorney-in-fact*



Darren K. DeStefano
T: 703 456 8034
ddestefano@cooley.com

April 11, 2019

PhaseBio Pharmaceuticals, Inc.
1 Great Valley Parkway
Suite 30
Malvern, Pennsylvania 19355

Ladies and Gentlemen:

We have acted as counsel to PhaseBio Pharmaceuticals, Inc., a Delaware corporation (the "*Company*"), in connection with the filing by the Company of a Registration Statement on Form S-1 (the "*Registration Statement*") with the Securities and Exchange Commission, pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended, covering an underwritten public offering of up to 674,475 shares of the Company's common stock (the "*Shares*"), par value \$0.001 per share, including up to 87,975 Shares that may be sold pursuant to the exercise of an over-allotment option to be granted to the underwriters. The Registration Statement incorporates by reference the registration statement on Form S-1 (No. 333-230783), which was declared effective on April 11, 2019 (the "*Prior Registration Statement*"), including the prospectus which forms a part of the Prior Registration Statement (the "*Prospectus*").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement, the Prior Registration Statement and the Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as amended and in effect as of the date hereof and (c) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below.

We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies and the due execution and delivery, other than by the Company, of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefor as described in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Darren K. DeStefano
Darren K. DeStefano

Consent of Independent Registered Public Accounting Firm

The Board of Directors
PhaseBio Pharmaceuticals, Inc.:

We consent to the use of our report incorporated by reference herein and the reference to our Firm under the heading “Experts” in the prospectus.

/s/ KPMG LLP

Philadelphia, Pennsylvania
April 11, 2019