UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM S-8

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

MUSTANG BIO, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

47-3828760

(I.R.S. Employer Identification No.)

2 Gansevoort Street, 9th Floor New York, New York 10014

(Address, including Zip Code, of Principal Executive Offices)

Mustang Bio, Inc. 2016 Incentive Plan (Full title of the plan)

Manuel Litchman, M.D.
President and Chief Executive Officer
Mustang Bio, Inc.
2 Gansevoort Street, 9th Floor
New York, New York 10014
(781) 652-4500

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

Copy to: Mark McElreath Alston & Bird LLP 90 Park Avenue, 12th Floor New York, NY 10016 (212) 210-9595

-	0	accelerated filer, an accelerated filer, a non-accelerate accelerated filer," "smaller reporting company," and "	, 1 5 1	,
	Large accelerated filer		Accelerated filer	
	Non-accelerated filer	図 (Do not check if a smaller reporting company)	Smaller reporting company	
			Emerging growth company	\boxtimes
If an emerging growth company accounting standards provided p	,	f the registrant has elected not to use the extended trans B) of the Securities Act. ⊠	ition period for complying with	any new or revised financial

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, \$0.0001 par value	2,000,000 (1)	\$9.66 (2)	\$20,000,000 (2)	\$2,490.00

- (1) Amount to be registered consists of an aggregate of 2,000,000 shares of Mustang Bio, Inc. Common Stock, par value \$0.0001 per share (the "Common Stock"), including any additional shares that may become issuable in accordance with the adjustment and anti-dilution provisions of the Mustang Bio, Inc. 2016 Incentive Plan.
- (2) Determined in accordance with Rule 457(h) under the Securities Act of 1933, as amended, the registration fee calculation for these shares is based on the average of the high and low prices of the Common Stock, reported on the Nasdaq Global Market on November 28, 2017.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

- (a) The documents constituting Part I of this registration statement on Form S-8 (this "Registration Statement") will be delivered to participants in the Mustang Bio, Inc. 2016 Incentive Plan (the "Plan") as specified by Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act"). These documents and the documents incorporated by reference in this 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.
- (b) Upon written or oral request, Mustang Bio, Inc. (the "Company") will provide, without charge, the documents incorporated by reference in Item 3 of Part II of this Registration Statement. The documents are incorporated by reference in the Section 10(a) prospectus. The Company will also provide, without charge, upon written or oral request, other documents required to be delivered to employees pursuant to Rule 428(b). Requests for the above mentioned information should be directed to Mustang Bio, Inc., Attn: Investor Relations, 2 Gansevoort Street, 9th Floor, New York, New York 10014, (781) 652-4500 (ir@mustangbio.com).

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, filed with the Securities and Exchange Commission (the "Commission") by the Company, are incorporated herein by reference:

- a) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016;
- b) The Company's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017, June 30, 2017 and September 30, 2017;
- c) The Company's Quarterly Report on Form 10-Q/A for the quarterly period ended June 30, 2017, as filed on November 14, 2017;
- d) The Company's Current Reports on Form 8-K filed with the SEC on January 3, 2017, January 6, 2017, February 6, 2017, February 24, 2017, March 23, 2017, April 24, 2017, June 6, 2017, June 9, 2017, June 13, 2017, October 30, 2017 and November 14, 2017 (excluding any information furnished pursuant to Item 2.02 or Item 9.01);
- e) The description of the Company's Common Stock contained in the Form 10-12G/A filed with the Commission on October 18, 2016, and any amendment or report filed for the purpose of updating such description;
- f) The description of the Common Stock as included under the caption "Description of Registrant's Securities to be Registered" in the Company's Registration Statement on Form 10-12G, as amended, originally filed with the Commission on July 28, 2016, and the Company's Registration Statement on Form 8-A12B filed with the Commission on August 21, 2017, and any amendment or report filed for the purpose of further updating such description.

All reports and other documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities that remain unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

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 statement contained herein or in any other subsequently filed document which also is incorporated or 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 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Company has adopted provisions in its certificate of incorporation that limit the liability of its directors for monetary damages for breach of their fiduciary duties, except for liability that cannot be eliminated under the Delaware General Corporation Law ("DGCL"). Delaware law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except liability for any of the following:

- any breach of their duty of loyalty to the corporation or the stockholder;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- · any transaction from which the director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under the federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Under provisions of the Company's amended and restated certificate of incorporation and bylaws, the Company will indemnify its directors and executive officers and may indemnify other officers and employees and other agents to the fullest extent permitted by law. This indemnification covers at least negligence and gross negligence on the part of indemnified parties. The bylaws also permit the Company to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity, regardless of whether the bylaws would permit indemnification. The Company has secured such insurance.

The Company has entered into separate indemnification agreements with its directors and executive officers, in addition to indemnification provided for in its charter documents. These agreements, among other things, provide for indemnification of directors and executive officers for expenses, judgments, fines and settlement amounts incurred by each of these persons in any action or proceeding arising out of his or her services as a director or executive officer or at the Company's request. The Company believes that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

See the Exhibit Index, which is incorporated herein by reference.

Item 9. Undertakings.

- (a) The Company hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (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 set forth in the registration statement.
- (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

(A) Paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the registration statement is on Form S-8, and 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 Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the registration statement;

(2)	That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new
registration statem	ent 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; and

- (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 Company hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Company's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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 of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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 Act and will be governed by the final adjudication of such issue.

(Signatures on following page)

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Company 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 New York, state of New York, on this November 30, 2017.

Mustang Bio, Inc.

By: /s/ Manuel Litchman, M.D.

Manuel Litchman, M.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW BY ALL MEN BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Michael S. Weiss as true and lawful attorney-in-fact and agent, with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any amendments (including post-effective amendments) to this registration statement and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

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

Signature	Title	Date
/s/ Michael S. Weiss Michael S. Weiss	Executive Chairman of the Board	November 30, 2017
/s/ Manuel Litchman, M.D. Manuel Litchman, M.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	November 30, 2017
/s/ Brian K. Achenbach Brian K. Achenbach	Vice President of Finance (Principal Financial Officer)	November 30, 2017
/s/ Lindsay A. Rosenwald, M.D. Lindsay A. Rosenwald, M.D.	Director	November 30, 2017
/s/ Neil Herskowitz Neil Herskowitz	Director	November 30, 2017
/s/ Adam J. Chill Adam J. Chill	Director	November 30, 2017
/s/ Michael J. Zelefsky Michael J. Zelefsky	Director	November 30, 2017

EXHIBIT INDEX TO REGISTRATION STATEMENT ON FORM S-8

Exhibit Number	<u>Description</u>
<u>5.1</u>	Opinion of Alston & Bird LLP (filed herewith).
<u>23.1</u>	Consent of Alston & Bird LLP (included in Exhibit 5.1).
<u>23.2</u>	Consent of Independent Registered Public Accounting Firm (filed herewith).
23.3	Consent of Independent Registered Public Accounting Firm (filed herewith).
<u>24.1</u>	Power of Attorney (included on signature page of this registration statement).
99.1	Mustang Bio, Inc. 2016 Incentive Plan, dated May 17, 2016 (incorporated by reference to Exhibit 10.8 to the Registrant's Form 10-12G filed on July 28, 2016).

ALSTON & BIRD

90 Park Avenue New York, NY 10016 212-210-9400 | Fax: 212-210-9444

Mark F. McElreath Direct Dial: 212-210-9595 Email: mark.mcelreath@alston.com

November 30, 2017

Mustang Bio, Inc. 2 Gansevoort Street, 9th Floor New York, NY 10014

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We are acting as counsel to Mustang Bio, Inc., a Delaware corporation (the "Company") in connection with the registration statement (the "Registration Statement") on Form S-8 filed today by the Company with the Securities and Exchange Commission (the "Commission") to register under the Securities Act of 1933, as amended (the "Securities Act"), 2,000,000 shares of the Company's common stock, \$0.0001 par value per share (the 'Shares''), which may be issued by the Company upon the grant, exercise, settlement or purchase of awards pursuant to the Mustang Bio, Inc. 2016 Incentive Plan (the "Plan"). This opinion is furnished to you at your request in accordance with the requirements of Item 8 of the Commission's Form S-8 and Item 601(b)(5) of Regulation S-K promulgated under the Securities Act.

We have examined the Amended and Restated Certificate of Incorporation of the Company, the Bylaws of the Company, records of proceedings of the Board of Directors of the Company (the "Board of Directors"), or committees thereof, and records of proceedings of the stockholders, deemed by us to be relevant to this opinion letter and the Registration Statement. We also have made such further legal and factual examinations and investigations as we deemed necessary for purposes of expressing the opinion set forth herein.

As to certain factual matters relevant to this opinion letter, we have relied conclusively upon originals or copies, certified or otherwise identified to our satisfaction, of such records, agreements, documents and instruments, including certificates or comparable documents of officers of the Company and of public officials, as we have deemed appropriate as a basis for the opinion hereinafter set forth. Except to the extent expressly set forth herein, we have made no independent investigations with regard to matters of fact, and, accordingly, we do not express any opinion as to matters that might have been disclosed by independent verification.

Our opinion set forth below is limited to the General Corporation Law of the State of Delaware, applicable provisions of the Constitution of the State of Delaware and reported judicial decisions interpreting such General Corporation Law and Constitution that, in our professional judgment, are normally applicable to transactions of the type contemplated by the Plan, and we do not express any opinion herein concerning any other laws.

Alston & Bird LLP www.alston.com

 $At lanta \mid Beijing \mid Brussels \mid Charlotte \mid Dallas \mid Los\ Angeles \mid New\ York \mid Research\ Triangle \mid San\ Francisco \mid Silicon\ Valley \mid Washington,\ D.C.$

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This opinion letter is provided for use in connection with the transactions contemplated by the Registration Statement and may not be used, circulated, quoted or otherwise relied upon for any other purpose without our express written consent. The only opinion rendered by us consists of those matters set forth in the sixth paragraph hereof, and no opinion may be implied or inferred beyond the opinion expressly stated. This opinion letter is rendered as of the date hereof and we make no undertaking and expressly disclaim any duty to supplement or update the opinions rendered herein, if, after the date hereof, facts or circumstances come to our attention or changes in the law occur which could affect such opinions. We note specifically that the Shares may be issued from time to time hereafter, and our opinion is limited to the applicable laws, including the related rules and regulations, as in effect on the date hereof.

Based on the foregoing, it is our opinion that the Shares to be issued under the Plan are duly authorized, and, when issued by the Company in accordance with the terms of the Plan, will be validly issued, fully paid and non-assessable.

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

ALSTON & BIRD LLP

By: /s/ Mark F. McElreath

Mark F. McElreath

Consent of Independent Registered Public Accounting Firm

Mustang Bio, Inc. New York, New York

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement on Form S-8 of our report dated March 30, 2017, relating to the consolidated financial statements of Mustang Bio, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

/s/ BDO USA, LLP Boston, Massachusetts

November 30, 2017

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated July 27, 2016, relating to the financial statements of Mustang Bio, Inc. (the "Company"), which report appears in the annual report on Form 10-K of the Company for the year ended December 31, 2015, and includes an explanatory paragraph as to an uncertainty with respect to the Company's ability to continue as a going concern.

/s/ Mayer Hoffman McCann P.C.

San Diego, California November 30, 2017