UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

SUTRO BIOPHARMA, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

Emerging growth company

47-0926186 (I.R.S. Employer **Identification Number)**

310 Utah Avenue, Suite 150 South San Francisco, California (650) 392-8412 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

> 2018 Equity Incentive Plan 2018 Employee Stock Purchase Plan 2004 Stock Plan

(Full title of the plans)

William J. Newell President and Chief Executive Officer Sutro Biopharma, Inc. 310 Utah Avenue, Suite 150 South San Francisco, California (650) 392-8412

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

Please send copies of all communications to:

Effie Toshav, Esq. Robert A. Freedman, Esq. Amanda L. Rose, Esq. Fenwick & West LLP 555 California Street, 12th Floor San Francisco, California 94104 (415) 875-2300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-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 (Check one).

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	
Emerging growth company	\boxtimes		

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. \Box

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share				
— To be issued under the 2018 Equity Incentive Plan	2,614,290(2)	\$15.00(3)	\$39,214,350	\$4,883
— Outstanding under the 2018 Equity Incentive Plan (Options)	2,256,523(4)	\$15.00(5)	\$33,847,845	\$4,215
— Outstanding under the 2018 Equity Incentive Plan (RSUs)	265,540(6)	\$15.00(3)	\$3,983,100	\$496
— To be issued under the 2018 Employee Stock Purchase Plan	230,000(7)	\$12.75(8)	\$2,932,500	\$366

Outstanding under the 2004 Stock Plan	814,836(9)	\$10.40(10)	\$8,474,295	\$1,056
Total	6,181,189		\$88,452,090	\$11,016

- (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 that become issuable in respect of the securities identified in the above table by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected without the Registrant's receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.
- (2) Shares of common stock reserved for issuance under the 2018 Equity Incentive Plan ('2018 Plan") consists of (a) 2,300,000 shares of common stock reserved for issuance under the 2018 Plan and (b) 2,836,353 shares of common stock previously reserved but unissued under the 2004 Stock Plan ("2004 Plan") that are now available for issuance under the 2018 Plan. To the extent outstanding awards under the 2004 Plan are forfeited, lapse unexercised, or would otherwise have been returned to the share reserve under the 2004 Plan, the shares of common stock subject to such awards instead will be available for future grant and issuance under the 2018 Plan. See footnote 9 below.
- (3) Calculated solely for the purpose of this offering under Rules 457(h) and 457(c) of the Securities Act on the basis of the initial public offering price of \$15.00
- (4) Represents shares of common stock reserved for issuance pursuant to outstanding stock option awards under the 2018 Equity Incentive Plan.
- (5) Calculated solely for the purpose of this offering under Rule 457(h) of the Securities Act and based upon the exercise price of \$15.00 per share.
- (6) Represents shares of common stock reserved for issuance pursuant to restricted stock units outstanding under the 2018 Equity Incentive Plan.
- (7) Represents shares of common stock reserved for issuance under the 2018 Employee Stock Purchase Plan ("Purchase Plan").
- (8) Calculated solely for the purpose of this offering under Rule 457(h) of the Securities Act and on the basis of the initial public offering price per share of the Registrant's common stock, multiplied by 85%, which is the percentage of the trading price per share applicable to purchasers under the Purchase Plan
- (9) Represents shares subject to issuance upon the exercise of stock options outstanding under the 2004 Plan as of the date of this Registration Statement. Any such shares of common stock that are subject to awards under the 2004 Plan, which are forfeited, lapse unexercised, or would otherwise have been returned to the share reserve under the 2004 Plan will be available for issuance under the 2018 Plan. See footnote 2 above.
- (10) Calculated solely for the purposes of this offering under Rule 457(h) of the Securities Act on the basis of the weighted average exercise price for stock options outstanding under the 2004 Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information called for by Part I of FormS-8 is omitted from this Registration Statement on Form S-8 (the "Registration Statement") and has been or will be sent or given to participating service providers in accordance with Rule 428 of the Securities Act of 1933, as amended (the "Securities Act"), and the instructions to Form S-8. In accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission") and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by Sutro Biopharma, Inc. (the "Registrant") with the Commission pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are incorporated herein by reference:

- (a) the Registrant's preliminary prospectus filed on September 17, 2018 and included in the Registration Statement on Form S-1, as amended (File No. 333-227103), which contains audited financial statements for the Registrant's latest fiscal year for which such statements have been filed; and
- (b) the description of the Registrant's common stock contained in the Registrant's registration statement on Form8-A (File No. 001-38662) filed with the Commission on September 18, 2018 under Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment, which indicates that all securities offered hereby 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 filing such documents, except as to specific sections of such documents as set forth therein. 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 in any subsequently filed document, which also 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.

The Registrant is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law (the '**DGCL**') authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the DGCL are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

As permitted by the DGCL, the Registrant's restated certificate of incorporation to be effective in connection with the completion of the Registrant's initial public offering contains provisions that eliminate the personal liability of its directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following:

- any breach of the director's duty of loyalty to the Registrant or its stockholders;
- · acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- · under Section 174 of the DGCL (regarding unlawful dividends, stock purchases or redemptions); or
- · any transaction from which the director derived an improper personal benefit.

As permitted by the DGCL, the Registrant's restated bylaws to be effective in connection with the completion of the Registrant's initial public offering, provide that:

- the Registrant is required to indemnify its directors and officers to the fullest extent permitted by the DGCL, subject to certain very limited
 exceptions:
- the Registrant may indemnify its other employees and agents as set forth in the DGCL;
- the Registrant is required to advance expenses, as incurred, to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the DGCL, subject to certain very limited exceptions; and
- the rights conferred in the restated bylaws are not exclusive.

In addition, the Registrant intends to enter into indemnity agreements with each of its current directors and executive officers. These agreements will provide for the indemnification of directors and executive officers for all reasonable expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were agents of the Registrant.

The Registrant currently carries liability insurance for its directors and executive officers for securities matters.

The indemnification provisions in the Registrant's restated certificate of incorporation, restated bylaws and the indemnification agreements entered into or to be entered into between the Registrant and each of its directors and executive officers is sufficiently broad to permit indemnification of the Registrant's directors and executive officers for liabilities arising under the Securities Act.

See also the undertakings set out in response to Item 9 hereof.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed herewith:

Exhibit		Incorporated by Reference			Filed	
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.1	Form of Restated Certificate of Incorporation of the Registrant	S-1/A	333-227103	3.2	9/17/2018	
4.2	Form of Restated Bylaws of the Registrant	S-1/A	333-227103	3.4	9/17/2018	
4.3	Form of Registrant's Common Stock certificate	S-1	333-227103	4.1	8/29/2018	
5.1	Opinion of Fenwick & West LLP					X
23.1	Consent of Fenwick & West LLP (contained in Exhibit 5.1)					X
23.2	Consent of Independent Registered Public Accounting Firm					X
24.1	<u>Power of Attorney (included on the signature page to this Registration Statement)</u>					X
99.1	2004 Stock Plan, as amended, and forms of award agreements thereunder	S-1	333-227103	10.2	8/29/2018	
99.2	2018 Equity Incentive Plan and forms of award agreements thereunder	S-1/A	333-227103	10.4	9/17/2018	
99.3	2018 Employee Stock Purchase Plan and forms of award agreements thereunder	S-1/A	333-227103	10.5	9/17/2018	

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 set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in the 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 percent 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;

<u>provided, however</u>, that clauses (A)(1)(i) and (A)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those clauses is contained in periodic reports filed with or furnished to the Commission by the Registrant 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; 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 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 (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 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 hereby, 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 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 Francisco, State of California, on this 26th day of September, 2018.

SUTRO BIOPHARMA, INC.

By: /s/ William J. Newell
William J. Newell
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints William J. Newell and Edward Albini, and each of them, as his or her true and lawful attorney-in-fact and agent with the full power of substitution, for him or her in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute, may lawfully do or cause to be done by virtue hereof.

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
/s/ William J. Newell William J. Newell	Chief Executive Officer and Director (Principal Executive Officer)	September 26, 2018
/s/ Edward Albini Edward Albini	Chief Financial Officer (Principal Financial and Accounting Officer)	September 26, 2018
/s/ Michael Dybbs Michael Dybbs	Director	September 26, 2018
/s/ John G. Freund, M.D. John G. Freund, M.D.	Director	September 26, 2018
/s/ Daniel Janney Daniel Janney	Director	September 26, 2018
/s/ V. Bryan Lawlis, Ph.D. V. Bryan Lawlis, Ph.D.	Director	September 26, 2018
/s/ Joseph M. Lobacki Joseph M. Lobacki	Director	September 26, 2018
/s/ Daniel H. Petree Daniel H. Petree	Director	September 26, 2018
/s/ Michael Ross, Ph.D. Michael Ross, Ph.D.	Director	September 26, 2018



555 CALIFORNIA STREET, 12TH FLOOR SAN FRANCISCO, CA 94104
TEL 415.875.2300 FAX 415.281.1350 WWW.FENWICK.COM

September 26, 2018

Sutro Biopharma, Inc. 310 Utah Ave, Suite 150 South San Francisco, CA 94080

Ladies and Gentlemen:

At your request, as your counsel, we have examined the Registration Statement on Form S-8 (the "Registration Statement") to be filed by Sutro Biopharma, Inc., a Delaware corporation (the "Company") with the Securities and Exchange Commission (the "Commission") on or about September 26, 2018 in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of an aggregate of 6,181,189 shares (the "Shares") of the Company's Common Stock, \$0.001 par value per share (the "Common Stock"), subject to issuance by the Company (a) upon the exercise or settlement of awards granted or to be granted under the 2018 Equity Incentive Plan (the "2018 Plan"), (b) upon the exercise of outstanding stock options granted under the 2004 Equity Incentive Plan, as amended to date (the "2004 Plan") and (c) pursuant to purchase rights to acquire shares of Common Stock to be granted under the Company's 2018 Employee Stock Purchase Plan (the "Purchase Plan"). The plans referred to in clauses (a) through (c) above are collectively referred to in this letter as the ("Plans").

At your request we are providing this letter to express our opinion on the matters set forth below in this letter ('bur opinion").

In connection with our opinion, we have examined such matters of fact as we have deemed necessary, which included examination of originals or copies of: (a) the Company's current Certificate of Incorporation and Bylaws, as amended (collectively, the "Charter Documents"), the Plans, the Registration Statement and the exhibits thereto, (b) certain corporate proceedings of the Company's Board of Directors (the "Board") and the Company's stockholders relating to adoption or approval of the Company Charter Documents, the Plans, the reservation of the Shares for sale and issuance, the filing of the Registration Statement and the registration of the Shares under the Securities Act and documents regarding the Company's outstanding and reserved capital stock and other securities and (c) such other documents as we have deemed advisable, and we have examined such questions of law as we have considered necessary.

In our examination of documents for purposes of this opinion, we have assumed, and express no opinion as to, the authenticity and completeness of all documents submitted to us as originals, the genuineness of signatures on documents reviewed by us, the conformity to originals and the completeness of all documents submitted to us as copies, the legal capacity of all parties executing any documents (other than the Company), the lack of any undisclosed termination or modification or waiver of any document, the absence of any extrinsic agreements or documents that might change or affect the interpretation or terms of documents, and the due authorization, execution and delivery of all documents by each party thereto other than the Company. We have also assumed that any certificates or instruments representing the Shares, when issued, will be executed by the Company and by officers of the Company duly authorized to do so. In rendering our opinion, we have also relied upon a Certificate of Good Standing dated September 26, 2018 issued by the Delaware Secretary of State with respect to the Company and representations and certifications made to us by the Company, including without limitation representations in a Management Certificate addressed to us of even date herewith that the Company has available a sufficient number of authorized shares of Common Stock that are not currently outstanding or reserved for issuance under other outstanding securities or plans of the Company, to enable the Company to issue and deliver all of the Shares as of the date of this letter.

We render this opinion only with respect to, and we express no opinion herein concerning the application or effect of the laws of any jurisdiction other than, the existing Delaware General Corporation Law now in effect. We express no opinion with respect to the securities or "blue sky" laws of any state.

Based upon, and subject to, the foregoing, it is our opinion that when the 6,181,189 Shares of Common Stock that may be issued and sold by the Company (a) upon the exercise or settlement of awards granted or to be granted under the 2018 Plan, (b) upon the exercise of outstanding stock options granted under the 2004 Plan and (c) pursuant to purchase rights to acquire shares of Common Stock to be granted under the Purchase Plan, have been issued and sold by the Company against the Company's receipt of payment therefor (in an amount and type of consideration not less than the par value per Share) in accordance with the terms (including, without limitation, payment and authorization provisions) of the applicable Plan, and have been duly registered on the books of the transfer agent and registrar for the Shares in the name or on behalf of the holders thereof, such Shares will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us, if any, in the Registration Statement, the prospectuses constituting a part thereof and any amendments thereto. 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. This opinion is intended solely for use in connection with issuance and sale of the Shares subject to the Registration Statement and is not to be relied upon for any other purpose. In providing this letter, we are opining only as to the specific legal issues expressly set forth above, and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks only as of, the date of this letter first written above, and does not address any potential change in facts or law that may occur after the date of this opinion letter. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very truly yours,

/s/ Fenwick & West LLP

FENWICK & WEST LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (FormS-8) pertaining to the 2018 Equity Incentive Plan, the 2018 Employee Stock Purchase Plan and the 2004 Stock Plan of Sutro Biopharma, Inc. of our report dated June 1, 2018 (except for the third paragraph of Note 1 and for Note 14, as to which the date is September 17, 2018), with respect to the financial statements of Sutro Biopharma, Inc. for the years ended December 31, 2016 and 2017, included in the Registration Statement (Form S-1 No. 333-227103) filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California September 26, 2018