UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-3 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) 46-0926186 (I.R.S. Employer Identification No.)

310 Utah Avenue, Suite 150 South San Francisco, California 94080 (650) 392-8412

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

William J. Newell Chief Executive Officer Sutro Biopharma, Inc. 310 Utah Avenue, Suite 150 South San Francisco, California 94080 (650) 392-8412

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

Copies to:

Robert A. Freedman Amanda Rose, Esq. Effie Toshav, Esq. Ryan Mitteness, Esq. Fenwick & West LLP 555 California Street San Francisco, CA 94104 (415) 875-2300 Edward C. Albini Chief Financial Officer Sutro Biopharma, Inc. 310 Utah Avenue, Suite 150 South San Francisco, California 94080 (650) 392-8412

 $\textbf{Approximate date of commencement of proposed sale to the public}. From time to time, after the effective date of this Registration Statement.}\\$

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: \Box

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

333-234101

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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I. D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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. (Check one):

Larg	e accelerated filer		Accelerated:	filer	\times				
Non-	accelerated filer		Smaller repo	Smaller reporting company					
			Emerging gr	Emerging growth company					
new		wth company, indicate by check mark if the registrant has elected not to use the eccounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Accounting Standards provided pursuant to Section 7(a)(2)(B) of the Securities Standards provided pursuant to Section 7(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)(r complying with	n any				
		CALCULATION OF REGISTRATION FEE	Proposed Maximum Aggregate						
		Title of Each Class of	Offering Price	Amount of					
Securities to be Registered Common Stock, \$0.001 par value			\$17,517,505	Registration Fee \$1,912(2)					
(1)	Form S-3 (File No. 333-234101), which was filed by the registrant on October 4, 2019 and declared effective on October 11, 2019 (the "Prior Registration Statement"). In accordance with Rule 462(b) under the Securities Act of 1933, as amended, an additional amount of securities having a proposed maximum aggregate offering price of \$17,517,505 is hereby registered, which includes shares issuable upon the exercise of the underwriters' option to purchase additional shares, representing no more than 20% of the maximum aggregate offering price of unsold securities under the Prior Registration Statement. In no event will the maximum aggregate offering price of all securities issued pursuant to this Registration Statement and the Prior Registration Statement exceed that registered under such Registration Statements.								
	Registration States nulgated under the	nent shall become effective upon filing with the Securities and Exchange Co Securities Act.	mmission in accordance w	ith Rule 462(b)					

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This Registration Statement (this "Registration Statement") is being filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended. This Registration Statement relates to the public offering of common stock, par value \$0.001 per share, of the Registrant contemplated by the Registration Statement on Form S-3 (File No. 333-234101), initially filed with the Commission by the Registrant on October 4, 2019 (the "Prior Registration Statement"), and is being filed for the sole purpose of registering an increase in the maximum aggregate offering price of \$17,517,505 of securities of the same class as were included in the Prior Registration Statement. The contents of the Prior Registration Statement, which was declared effective by the Commission on October 11, 2019, and all exhibits thereto are hereby incorporated by reference into this Registration Statement.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith.

EXHIBIT INDEX

Exhibit			Incorporated by Reference			Filed	
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith	
5.1	Opinion of Fenwick & West LLP					X	
23.1	Consent of Independent Registered Public Accounting Firm					X	
23.2	Consent of Fenwick & West LLP (contained in Exhibit 5.1)					X	
24.1	Power of Attorney	S-3	333-234101	24.1	11/04/2019		

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant 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 December 8, 2020.

SUTRO BIOPHARMA, INC.

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

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

Signature	Title	Date
/s/ William J. Newell William J. Newell	Chief Executive Officer and Director (Principal Executive Officer)	December 8, 2020
* Edward C. Albini	Chief Financial Officer (Principal Accounting Officer and Principal Financial Officer)	December 8, 2020
* Connie Matsui	Chair of the Board of Directors	December 8, 2020
* Michael Dybbs, Ph.D	Director	December 8, 2020
* John G. Freund, M.D.	Director	December 8, 2020
* Joseph M. Lobacki	Director	December 8, 2020
/s/ James Panek James Panek	Director	December 8, 2020
* Daniel H. Petree	Director	December 8, 2020
* Shalini Sharp	Director	December 8, 2020
/s/ Jon Wigginton, M.D. Jon Wigginton, M.D.	Director	December 8, 2020

*By: /s/ William J. Newell

William J. Newell Attorney-in-Fact



555 California Street 12th Floor San Francisco, CA 94104 415.875,2300 Fenwick.com

December 8, 2020

Sutro Biopharma, Inc. 310 Utah Avenue, Suite 150 South San Francisco. California 94080

Gentlemen/Ladies:

At your request, we have examined the registration statement on Form S-3 filed by Sutro Biopharma, Inc., a Delaware corporation (the "Company") with the Securities and Exchange Commission (the "Commission") on December 8, 2020 pursuant to Rule 462(b) (the "462(b) Registration Statement") in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of the offering and sale from time to time of shares of the Company's common stock, \$0.001 par value per share (the "Common Stock"), having an aggregate public offering price of up to \$17,517,505. The 462(b) Registration Statement is filed in connection with, and incorporates by reference the information contained in, the registration statement on Form S-3 (No. 333-234101), initially filed with the Commission on October 4, 2019 and declared effective on October 11, 2019 (the "Shelf Registration Statement") and together with the 462(b) Registration Statement, the "Registration Statements"). The Common Stock may be sold from time to time by the Company as set forth in the Registration Statements, the prospectus contained within the Shelf Registration Statement (the "Prospectus") and supplements to the Prospectus.

In connection with our opinion expressed below we have examined originals or copies of the Company's Restated Certificate of Incorporation (the "Restated Certificate") and Restated Bylaws (the "Restated Bylaws" and, together with the Restated Certificate, as each may be amended, modified or restated, the "Charter Documents"), certain corporate proceedings of the Company's board of directors (the "Board") and stockholders relating to the Registration Statements, the Company's Restated Certificate and Restated Bylaws, and such other agreements, documents, certificates and statements of the Company, its transfer agent and public or government officials, as we have deemed advisable, and have examined such questions of law as we have considered necessary. We have assumed, and express no opinion as to, the genuineness of all signatures on documents submitted to us, the authenticity and completeness of all documents submitted to us as originals, the conformity to originals and completeness of all documents submitted to us as copies, the legal capacity of all persons or entities (except for the Company) executing the same, the absence of any undisclosed termination, modification, waiver or amendment to any document reviewed by us, the absence of any other extrinsic agreements or documents that might change or affect the interpretation or terms of documents we have reviewed, and the due authorization, execution and delivery of all such documents where due authorization, execution and delivery are prerequisites to the effectiveness thereof. In giving our opinion, we have also relied upon a good standing certificate regarding the Company issued by the Delaware Secretary of State dated December 7, 2020 and a management certificate addressed to us and dated of even date herewith executed by the Company containing certain factual representations (the "Management Certificate").

We also have assumed that any certificates or instruments representing the Common Stock will be, when issued, properly signed by authorized officers of the Company and delivered to the intended recipients with the intent that the Company be bound thereby. Furthermore, with respect to the Company's uncertificated capital stock, we assume that issued Common Stock will not be reissued by the Company in uncertificated form until any previously issued stock certificate representing such issued Common Stock has been surrendered to the Company in accordance with Section 158 of the Delaware General Corporation Law, and that the Company will properly register the transfer of the Common Stock to the purchasers of such Common Stock on the Company's record of uncertificated securities.

As to matters of fact relevant to this opinion, we have relied solely upon our examination of the documents referred to above and the Management Certificate and have assumed the current accuracy and completeness of the information obtained from the documents referred to above and the representations and warranties made by representatives of the Company to us, including but not limited to those set forth in the Management Certificate. We have made no independent investigation or other attempt to verify the accuracy of any of such information or to determine the existence or non-existence of any other factual matters.

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of the laws of any jurisdiction other than the Delaware General Corporation Law. Without limitation, we express no opinion with respect to the federal laws of the United States of America or the securities or "blue sky" laws of any state or any local or regional laws.

In connection with our opinion expressed below, we have assumed that, (i) at or prior to the time of the delivery of any of the Common Stock, there will not have occurred any change in the law or the facts affecting the validity of the Common Stock, (ii) the Registration Statements and any amendments (including any necessary post-effective amendments) will have been declared effective under the Securities Act, (iii) at the time of the offer, issuance and sale of any Common Stock, no stop order suspending the Registration Statements' effectiveness will have been issued and remain in effect, (iv) no future amendments will be made to the Charter Documents that would be in conflict with or inconsistent with the Company's right and ability to issue the Common Stock, (v) at the time of each offer, issuance and sale of any Common Stock, the Company will have a sufficient number of authorized and unissued and unreserved shares of the applicable class or series of its capital stock included in (or purchasable upon exercise or conversion of) the Common Stock, so issued and sold (after taking into account all other outstanding securities of the Company which may require the Company to issue shares of such applicable class or series) to be able to issue all such shares, and (vi) all purchasers of Common Stock will timely pay in full to the Company all amounts they have agreed to pay to purchase such Common Stock as approved by the Board or a duly authorized committee thereof, and that the purchase price of any Common Stock will not be less than the par value thereof. We also have assumed that the issuance and delivery of Common Stock subsequent to the date hereof and the compliance by the Company with the terms of such Common Stock will not violate any applicable law (including, without limitation, any law relating to usury or similar laws) or result in a violation of any provision of any of the Charter Documents or of any instrument or agreement then binding upon the Company or any restriction imposed by any court or gove

Based upon the foregoing, we are of the following opinion:

With respect to the shares of Common Stock registered pursuant to the 462(b) Registration Statement when (i) the issuance of and the terms of the offering of such shares of Common Stock and related matters have been duly authorized by all required corporate action of the Board or a duly authorized committee thereof, and, if required, of the stockholders of the Company in accordance with the Charter Documents and Applicable Laws and (ii) if required, certificates representing the shares of Common Stock have been duly executed, countersigned, registered and delivered in accordance with the applicable definitive purchase, underwriting or similar agreement approved by the Board, upon payment of the consideration therefor (in an amount not less than the par value of the Common Stock) provided for therein and approved by the Board or a duly authorized committee thereof, then such shares of Common Stock will be validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the 462(b) Registration Statement and further consent to all references to us, if any, in the Registration Statements, the Prospectus constituting parts thereof and any amendments thereto. In giving this consent we do not thereby admit that we come within the category of persons whose consent is required by the Securities Act or by the rules and regulations promulgated thereunder.

[Concluding Paragraph Follows on Next Page]

This opinion is intended solely for use in connection with the issuance and sale of the Common Stock subject to the 462(b) 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, is based solely on our understanding of facts in existence as of such date after the aforementioned examination and does not address any potential changes in facts, circumstance 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 on FormS-3 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption "Experts" and to the incorporation by reference of our report dated March 16, 2020, with respect to the financial statements of Sutro Biopharma, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California December 8, 2020