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VIA EDGAR AND OVERNIGHT DELIVERY

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549

Attention: John Reynolds, Assistant Director
Irene Barberena-Meissner, Staff Attorney
Kevin Dougherty, Staff Attorney
Ethan Horowitz, Accounting Branch Chief
Wei Lu, Staff Accountant

Re: Sutro Biopharma, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted July 10, 2018
CIK No. 0001382101

Ladies and Gentlemen:

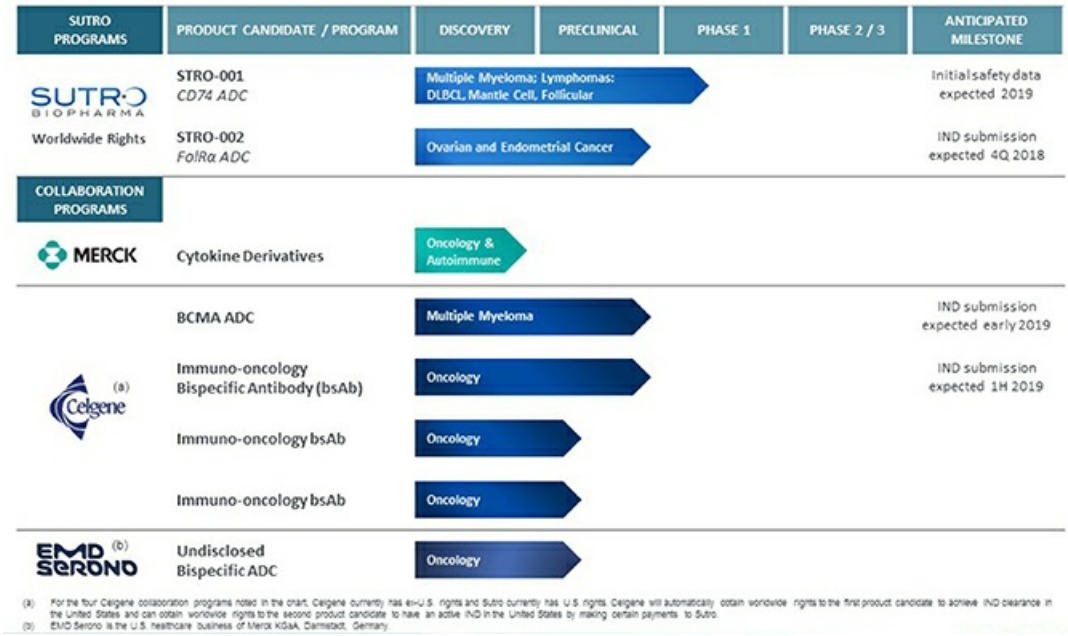
On behalf of Sutro Biopharma, Inc. (the "***Company***"), we are responding to the comments of the staff (the "***Staff***") of the Securities and Exchange Commission (the "***Commission***") contained in the Staff's letter dated July 27, 2018 (the "***Letter***"). The numbered paragraphs below correspond to the numbered comments in the Letter and the Staff's comments are presented in bold italics.

Our Pipeline, page 2

1. We note your response to our prior comment 3, and we reissue in part:

- ***We do not object to a discussion of each program below the table or in the business section, but research and discovery activities that precede the identification of a product candidate are too remote to be highlighted in the pipeline table. Please limit your table to products that are at least in the preclinical stage of development.***
- ***For products in such preclinical stage of development that you retain, please clarify the indication intended to be pursued for each program more specifically than "oncology," or disclose why such indication is not material.***

The Company advises the Staff that it has revised the pipeline chart to remove reference to the two internal discovery phase programs and to clarify which programs are being developed internally and which are being developed with a collaborator, as reflected in the revised pipeline chart below.



The Company respectfully advises the Staff that it believes disclosure of the collaboration programs, including the programs in discovery phase and with "oncology" indications, are material to a full understanding of the Company's development programs and potential near-term value. Each of the programs that are in discovery phase or have a broad indication relate to product candidates that are being developed by a third-party collaborator. Each of these collaborators is a large pharmaceutical company with extensive experience in evaluating discovery phase product candidates with the best potential for future success. While the development potential of discovery programs may be remote, given the diligence and evaluation that was conducted in connection with the partnering of these programs by large pharmaceutical companies, the development of these product candidates is less remote than is typical with internally developed discovery stage product candidates.

Additionally, unlike internally developed product candidates where the company may not see any revenue until commercialization, for each of the Company's product candidates that are being developed in collaboration with a large pharmaceutical company, the Company is eligible to receive revenue in the form of milestone payments during the development process, including during early stage development. The potential value to the Company from the early stage development of these collaboration product candidates makes disclosure of these programs material to an understanding of the Company's near-term value and financial condition. For these reasons, these collaboration programs are an important part of the Company's development pipeline. If removed from the pipeline table, the Company believes investors could overlook these development programs and may mistakenly believe that the Company is only advancing its two internally developed product candidates and two collaboration product candidates, which may obscure a material part of the Company's overall story.

Furthermore, the broad diversity of the programs in the Company's pipeline, which comprises antibody-drug conjugates, bispecific antibodies and cytokine derivatives, is appropriately illustrated in the

pipeline table. The Company believes that a pipeline table that shows only those programs that have an identified product candidate would be misleading and incorrectly emphasize three antibody-drug conjugates and a single bispecific antibody out of a substantially diverse portfolio of ongoing programs in the Company's pipeline. The Company is concerned that investors could misconstrue the breadth of the Company's platform and could believe that it is much more limited in scope (by virtue of seeing only a handful of programs listed on the pipeline slide) than it is in reality.

With respect to the "oncology" indication for the partnered programs, the terms of the Company's agreements with its collaborators prohibit the Company from disclosing the specific indications without prior consent from the collaborators, which the collaborators have indicated they are not willing to give. The Company believes that the specific indications are not material, as the important information for investors is that these product candidates are partnered with the specified collaborators.

Merck KGaA, Darmstadt, Germany Collaboration, page 115

2. ***We note your response to prior comment 10. Please revise to disclose the information included in your response addressing the expiration terms of the MDA agreement, including that the term of the MDA Agreement is based on the later of the expiration of the patents covering products licensed under the MDA Agreement or ten years after the first commercial sale of a product covered under the MDA Agreement.***

In response to the Staff's comment, the Company will revise its disclosure in the next amendment to the Registration Statement to clarify that the term of the MDA Agreement is based on the later of the expiration of the patents covering products licensed under the MDA Agreement or ten years after the first commercial sale of a product covered under the MDA Agreement.

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Should the Staff have additional questions or comments regarding the foregoing, please do not hesitate to contact the undersigned at (650) 335-7292, or, in his absence, Amanda Rose at (206) 389-4553.

Sincerely,

FENWICK & WEST LLP

/s/ Robert A. Freedman

Robert A. Freedman
Partner

cc: William J. Newell, Chief Executive Officer
Edward Albini, Chief Financial Officer
Sutro Biopharma, Inc.

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