December 2, 2020

Michael Landsittel Chief Financial Officer Blueprint Medicines Corp 45 Sidney Street Cambridge, Massachusetts 02139

Re: Form 10-K for the

Fiscal Year Ended December 31, 2019

Filed February 13,

2020

Form 10-Q for the

Fiscal Quarter Ended September 30, 2020

Filed October 29,

2020

File No. 001-37359

Dear Mr. Landsittel:

We have limited our review of your filing to the financial statements and related

disclosures and have the following comments. In some of our comments, we may ask you to

provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested

information or advise us as soon as possible when you will respond. If you do not believe our

comments apply to your facts and circumstances, please tell us why in vour response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2019

Notes to the Consolidated Financial Statements

2. Summary of Significant Accounting Policies and Recent Accounting Pronouncments

Revenue Recognition - Research and Development Services, page F-12

You state that payments or reimbursements from and payments to the partner that are the result of a collaborative relationship with the partner, instead of a customer relationship,

activities, are recorded as a reduction to research and

such as co-development

page 98 of the 10-K and page 36 of the September 30, 2020 10-

development. We note on

Q that you state that

research and development activities are central to your business

model. Please address

the following:

Tell us why you

believe recording the reimbursements as a reduction of research and

development for

collaborative arrangements is appropriate. In this respect, clarify

why you believe

that research and development activities are, or are not, part of your Michael Landsittel

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ongoing major or central operations/ordinary activities. Address the example in ASC 808-10-55-7 through 55-10 and

differentiate how your

fact pattern for each collaboration agreement, including the

Roche July 2020 agreement, differs from the example. Cite any other applicable guidance you considered in determining your accounting treatment and provide proposed disclosure to clarify your accounting policy, if necessary Form 10-Q for the Nine Months Ended September 30, 2020 Notes to the Consolidated Financial Statements 10. Collaboration and License Agreements, page 15 You state on page 15 that on July 13, 2020 you entered into a collaboration agreement with Roche pursuant to which you granted Roche an exclusive right to develop and commercialize pralsetinib worldwide, excluding the CStone territory, and a co-exclusive license in the U.S. to develop and commercialize pralsetinib. You state on page 16 that the agreement contains four material components. Please address the following: Tell us how you applied ASU 2018-18 to determine that part of the agreement should not be accounted for under ASC 606. In this respect, tell us why the collaborative partner is not considered a customer within the unit of account under ASU 2018-18 that would be required to be accounted for under ASC 606. For the portion of the agreement you believe is outside ASC 606, clarify what authoritative literature you are using or what methodology you are using to account for the non-ASC 606 portion. Refer to ASC 808-10-45-3. Explain why the entire \$695.7 million was allocated to the components accounted for under ASC 606 and why some of the amount was not required to be allocated to the other material components of the agreement. Please clarify the nature of the transition date discussed on page 17, why that date determines if you are the principal for the product sales, and if at that point, reimbursements will also be recorded as revenue. Clarify how the fact pattern compares to Example 3 in ASC 808-10-55-11 through 55-14 and provide any authoritative support. Management's Discussion and Analysis Financial Operations Overview Cost of Sales, page 34 You state on page 10 that until the date at which regulatory approval has been received or is otherwise considered probable, you record all costs as research and development expenses. You disclose on page 34 that cost of sales for newly launched products will not be significant until the initial pre-launch inventory is depleted, and additional inventory is manufactured. You also state that the gross margin was enhanced by amounts previously Michael Landsittel Blueprint Medicines Corp December 2, 2020 Page 3 expensed as research and development expense in prior year. Please provide proposed disclosure to include in future filings to address the following: the amount of estimated revenues represented by inventory on hand at September 30, 2020 for which manufacturing costs were expensed in prior periods as research and development expenses (i.e. "zero cost inventories"), when you expect to finish selling the zero cost inventories, the extent to which inventory capitalized may be required to be classified as noncurrent, and what you estimate your gross margin percentage will be after the

zero cost

inventories are sold.

In closing, we remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Ibolya Ignat at (202) 551-3636 or Mary Mast at (202) 551-3613 with any questions.

FirstName LastNameMichael Landsittel Comapany NameBlueprint Medicines Corp

Corporation Finance December 2, 2020 Page 3 Sciences FirstName LastName Sincerely,

Division of

Office of Life