

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

April 11, 2022

Jeffrey S. Points Chief Financial Officer Cardiovascular Systems, Inc. 1225 Old Highway 8 Northwest St. Paul, Minnesota 55112-6416

Re: Cardiovascular Systems, Inc.

Form 10-K for the fiscal year ended June 30, 2021

Filed August 19, 2021

Response Dated February 17, 2022

File No.: 000-52082

Dear Mr. Points:

We have reviewed your February 17, 2022 response to our comment letter and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment 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 comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our February 3, 2022 letter.

Form 10-K for the fiscal year ended June 30, 2021

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u> Non-GAAP Financial Information, page 39

1. We appreciate the information provided to us in response to prior comment 1. We believe that your adjustment to exclude the IPR&D charge from Adjusted EBITDA is inconsistent with the guidance in Question 100.01 of the Non-GAAP Financial Measures Compliance and Disclosure Interpretations. Please confirm to us that you will no longer include this adjustment in any non-GAAP financial measure presented in accordance with Item 10(e) of Regulation S-K or Regulation G.

You may contact Michael Fay at 202-551-3812 or Brian Cascio, Accounting Branch

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Chief, at 202-551-3676 if you have any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences