



345 Park Avenue  
New York, NY 10154-1895

**Direct** 212.407.4000  
**Main** 212.407.4000  
**Fax** 212.407.4990

November 21, 2022

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549  
Attn: Doris Stacey Gama

**Re: Health Sciences Acquisitions Corporation 2  
Amendment No. 2 to Registration Statement on Form S-4  
Filed October 24, 2022  
File No. 333-266660**

Dear Ms. Stacey Gama:

On behalf of our client, Health Sciences Acquisitions Corporation 2 (the “*Company*”), we submit to the staff (the “*Staff*”) of the Division of Corporation Finance of the Securities and Exchange Commission (the “*Commission*”) this letter setting forth the Company’s response to the comments contained in the Staff’s letter dated November 9, 2022 (the “*Comment Letter*”) regarding Amendment No. 2 to the Company’s Registration Statement on Form S-4 (“*Amendment No. 2*”).

The Company has filed via EDGAR Amendment No. 3 to the Company’s Registration Statement on Form S-4 (“*Amendment No. 3*”), which reflects the Company’s responses to the comments received from the Staff and certain other updated information. Please note that our responses below, insofar as relevant information relates to Orchestra BioMed, Inc. (“*Orchestra*”) or matters arising from Orchestra’s participation in the preparation of the Amendment No. 3, are based on our discussions with and information received from Orchestra or its counsel, Paul Hastings LLP, who have similarly participated in the preparation and review of this response letter.

For ease of reference, each comment contained in the Comment Letter is printed below and is followed by the Company’s response. All page references in the responses set forth below refer to the page numbers in Amendment No. 3. Capitalized terms used herein but not defined herein shall have the meanings assigned to them in Amendment No. 3.

Amendment No. 2 to Registration Statement on Form S-4

Summary of the Proxy Statement/Prospectus

Summary Risk Factors

Risks Related to Orchestras Business and Products, page 40

1. We acknowledge your response to prior comment 11, and note that you indicate on page 229 that five events in three patients were adjudicated as possibly related to the BackBeat CNT device. Accordingly, please revise the 11th bullet on page 41 to explain that there have been serious adverse events in Orchestra’s prior clinical trials, including five events in three patients that were adjudicated as possibly related to the BackBeat CNT device. Please also further revise your risk factor on page 57 to state this information, and on page 229, clarify what types of events were adjudicated as possibly device related (e.g., cardiac events).

Response: Orchestra has revised the disclosure on pages 41, 57, 231 and 232 in response to the Staff’s comment.

---

### Risk Factors

#### The Domestication may be a taxable event for U.S. Holders of HSAC2 Ordinary Shares, page 101

2. We refer to our prior comment 2 and acknowledge your response. Please expand this risk factor to explain that counsel is only providing a “should” opinion and explain the uncertainties that prevent it from being able to provide a “will” opinion. In addition, in the “Material U.S. Federal Income Tax Consequences” section, please also provide similar disclosure to clearly explain that counsel is only providing a “should” opinion and not a “will” opinion.

Response: The Company has revised the disclosure on pages 101, 144 and 145 in response to the Staff’s comment.

#### Business of Orchestra, page 219

3. We acknowledge your revised disclosures in response to prior comment 3, but note that some of your statements remain conclusory in nature. Please further revise accordingly. You may reference objective trial data or state that primary efficacy endpoints were met. In addition, balance your references to your trial results with cautionary language regarding the preliminary nature of the results.

Response: Orchestra has revised the disclosure on pages 127, 237, 247 and 248 in response to the Staff’s comment.

### Business of Orchestra

#### Product Pipeline, page 220

4. We acknowledge your revised disclosures in response to prior comment 5, and acknowledge your statement regarding the inability to predict regulatory approval timelines. However, as previously stated, please revise your “Next Milestones & Expected Timing” column to provide additional context regarding the timing to investors. With respect to each trial, please ensure that you specifically state if the referenced dates refer to the expected initiation of the trial and whether an IDE (or its foreign equivalent) has been submitted already or to be submitted in the future. In addition, please clearly disclose in the table your timing expectations with respect to minimum requirements for each of your planned trials. For example, if you are expecting that it will take a minimum of five to six years to enroll patients and complete the trial (before taking into account regulatory approval timing or delays), please revise to provide this information.

Response: Orchestra has revised the table and footnotes on pages 223 and 224 in response to the Staff’s comment.

### Results of Operations

#### Comparison of the Six Months Ended June 30, 2021 and 2022, page 312

5. We acknowledge your response to bullet 1 of comment 13. Please revise your existing disclosure about the changes in research and development expenses to quantify the amounts related to Virtue SAB product candidate, as the Virtue SAB product candidate is the majority of the research and development expenses and appears to be the driver of the changes in this line item. Similarly revise your Comparison of the Years Ended December 31, 2020 and 2021.

Response: Orchestra has revised the disclosure on pages 316 and 318 in response to the Staff’s comment.

General

6. We note your statement in footnote 2 to your filing fee table that you are registering on this S-4 up to 5 million Ordinary Shares to be issued pursuant to the Backstop Agreement. Please explain why you believe it is appropriate to register these shares on this registration statement. In this regard, it appears from your disclosures that the shares under the Backstop Agreement will be issued immediately prior to the Transactions, and therefore it appears that the RTW Funds have been essentially offered shares in the continuing entity Orchestra BioMed Holdings, Inc. on a private basis. In addition, it appears that shares to be issued under the forward purchase agreement with Medtronic are also being registered hereunder. Please also similarly explain why it would be appropriate to register such shares hereunder.

Response: In response to the Staff's comment, the Company has removed the registration of the shares to be issued under the Backstop Agreement from the registration filing fee table, and advises the Staff that the shares to be issued under the forward purchase agreement with Medtronic are not being registered and are not reflected in the filing fee table. The Company has revised the prospectus cover page, as well as Exhibit 107 to reflect this change.

Supplementally, the Company advises the Staff that the original amount included in footnote 2 to Exhibit 107 was calculated as:

HSAC2 common outstanding:	11,212,117
Backstop Shares:	4,970,000
Maximum redemptions:	<u>(4,732,117)</u>
	11,450,000

In addition to removing the shares to be issued under the Backstop Agreement from the registration filing fee table, the Company has removed the assumption of maximum redemptions and instead assumes zero redemptions in order to ensure that the maximum possible number of shares will be registered, leaving a total of 11,212,117 shares, constituting all currently outstanding shares.

Please do not hesitate to contact Giovanni Caruso at (212) 407-4866 or Janeane Ferrari at (212) 407-4209 at Loeb & Loeb LLP with any questions or comments regarding this letter.

Sincerely,

/s/ Loeb & Loeb LLP

Loeb & Loeb LLP

Copy: Roderick Wong  
Alice Lee  
Health Sciences Acquisitions Corporation 2

Samuel Waxman, Esq.  
Yariv Katz, Esq.  
Keith Pisani, Esq.  
Paul Hastings LLP