HEARTBEAM, INC. 2118 Walsh Avenue, Suite 210 Santa Clara, CA 95050

October 12, 2021

Mary Mast U.S. Securities & Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Re: HeartBeam, Inc.

Amendment No. 1 to Registration Statement on Form S-1 Filed October 4, 2021 File No. 333-259358

Dear Ms. Mast:

By letter dated October 7, 2021, the staff (the "<u>Staff</u>," "<u>you</u>" or "<u>your</u>") of the U.S. Securities & Exchange Commission (the "<u>Commans</u>," "<u>we</u>," "<u>us</u>" or "<u>our</u>") with its comments to the Company's Amendment No. 1 to Registration Statement on Form S-1 filed on October 4, 2021. We are in receipt of your letter and set forth below are the Company's responses to the Staff's comments. For your convenience, the comments are listed below, followed by the Company's responses.

Amendment No. 1 to Registration Statement on Form S-1 filed October 4, 2021

Business

Preparations for FDA Clearance Submissions and Design for Manufacturing, page 59

1. We note your disclosure that you have a contract with Ximedica to prepare your ER product for FDA 510(k) clearance submission. Please discuss the principal terms of this agreement and file the agreement as an exhibit. See Items 101(h)(4) and 601(b)(10) of Regulation S-K.

Response:

We have added the principal terms of the Ximedica agreement for our ER product and attached the agreement as Exhibit 10.4.

Executive Compensation

Summary Compensation Table, page 66

2. In the summary compensation table, please include all compensation and related information. See Item 402(n) of Regulation S-K. For example, please include the unvested service warrants as disclosed in the beneficial ownership table on page 74 or advise.

Response:

We have included the unvested service warrants for Dr. Vajdic in footnote 2 of the Summary Compensation Table Stock Awards.

Director Compensation, page 67

3. Please revise the table to include the information required by Item 402(r) of Regulation S-K. For example please reconcile the compensation in the table with the amounts disclosed in the beneficial ownership table on page 74, including compensation to Willem Pieter Elfrink and other stock options granted to directors or advise.

Response:

We have added notes to the Director Compensation table reconciling the 27,272 options granted to Mr. Ferrari and Ms. Ortigas-Wedekind in 2020 to the total options in the beneficial ownership table which also include 2021 grants.

We advise that Mr. Elfrink had no 2020 grants or fees earned or paid and was therefore not included in the Director Compensation table. The amounts included in the beneficial ownership table include a 2021 grant of 43,636 options, with the balance of his grants and the unvested service warrants granted pre-2020.

Outstanding Equity Awards at Fiscal Year-End 2020, page 67

4. Please reconcile the information in the table, including the option exercise price, with your disclosure regarding stock options on pages 74 and F-14 or advise. See Item 402(p) of Regulation S-K.

Response:

We have updated our Outstanding Equity Awards to include unexercised and unvested option awards and their related option exercise price that agrees with the disclosures on page 74 and F-14.

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Certain Relationships and Related Transactions, page 75

5. Please describe each transaction and disclose the name of the related party, the basis on which the person is a related party and the approximate dollar value. See Item 404 of Regulation S-K. For example, please provide this disclosure for purchases by related parties in the 2015 Notes and other investments. In addition, please include the milestone warrants as described in Part II of the registration statement or advise.

Response:

Our related parties are our Directors and Officers. We have added a table showing their name and title and the dollar value of their investment that corresponds to the periods as of June 30, 2021, December 31, 2020, and 2019, respectively.

We advise that the service warrants have been included in the compensation disclosures on pages 66 and 67 and are not part of Related Transactions in this section.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information of the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures that they have made.

The company acknowledges that

- The company is responsible for the adequacy and accuracy of the disclosure in the filing;
- · Staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- The company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Thank you for your assistance in reviewing this filing.

Very Truly Yours,

/s/ Branislav Vajdic

Branislav Vajdic Chief Executive Officer HeartBeam, Inc. 2118 Walsh Avenue, Suite 210 Santa Clara, CA 95050