Filed by Health Sciences Acquisitions Corporation 2
pursuant to Rule 425 under the Securities Act of 1933
and deemed filed pursuant to Rule 14a-12
under the Securities Exchange Act of 1934

Subject Company: Health Sciences Acquisitions Corporation 2
Commission File No. 333-266660
Date: December 1, 2022

Important Notice and Disclaimer

This investor presentation (this "Presentation") is for informational purposes only to assist interested parties in making their own evaluation with respect to the proposed business combination (the "Business Combination") between Health Sciences Acquisitions Corporation 2 ("HSAC2") and Orchestra BioMed, Inc. ("OBIO," "Orchestra," or the "Company") and for no other purpose. The information contained herein does not purport to be all-inclusive and none of HSAC2, the Company or their respective affiliates makes any representation or warranty, express or implied, as to the accuracy, completeness or reliability of the information contained in this Presentation. Neither the Company nor HSAC2 has verified, or will verify, any part of this Presentation. The recipient should make its own independent investigations and analyses of the Company and its own assessment of all information and material provided, or made available, by the Company, HSAC2 or any of their respective directors, officers, employees, affiliates, agents, advisors or representatives.

This Presentation does not constitute (i) a solicitation of a proxy, consent or authorization with respect to any securities or in respect of the proposed Business Combination or (ii) an offer to sell, a solicitation of an offer to buy, or a recommendation to purchase any security of HSAC2, the Company, or any of their respective affiliates, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made expect by means of a prospectus meeting the requirements of the U.S. Securities Act of 1933, as amended (the "Securities Act"). You should not construe the contents of this Presentation as legal, tax, accounting or investment advice or a recommendation. You should consult your own counsel and tax and financial advisors as to legal and related matters concerning the matters described herein, and, by accepting this Presentation, you confirm that you are not relying upon the information contained herein to make any decision.

The distribution of this Presentation may also be restricted by law and persons into whose possession this Presentation comes should inform themselves about and observe any such restrictions. The recipient acknowledges that it is (a) aware that the U.S securities laws prohibit any person who has material, non-public information concerning a company from purchasing or selling securities of such company or from communicating such information to any other person under circumstances in which it is reasonably foreseeable that such person is likely to purchase or sell such securities, and (b) familiar with the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "Exchange Act"), and that the recipient will neither use, nor cause any third party to use, this Presentation or any information contained herein in contravention of the Exchange Act, including, without limitation, Rule 10b-5 thereunder.

This Presentation and information contained herein constitutes confidential information and is provided to you on the condition that you agree that you will hold it in strict confidence and not reproduce, disclose, forward or distribute it in whole or in part without the prior written consent of HSAC2 and the Company and is intended for the recipient hereof only.

Forward-Looking Statements

This Presentation may contain forward-looking statements. Forward-looking statements include, without limitation, statements regarding the estimated future financial performance and financial position of the Company. Future results are not possible to predict. Opinions and estimates offered in this Presentation constitute the Company's judgment and are subject to change without notice, as are statements about market trends, which are based on current market conditions. This Presentation contains forward-looking statements, including without limitation, forward-looking statements that represent opinions, expectations, beliefs, intentions, estimates or strategies regarding the future of the Company and its affiliates, which may not be realized. Forward-looking statements can be identified by the words, including, without limitation, "believe," "anticipate," "continue," "estimate," "may," "project," "expect," "plan," "potential," "target," "intend," "seek," "will," "would," "could," "should," "forecast," or the negative or plural of these words, or other similar expressions that are predictions or indicate future events, trends or prospects but the absence of these words does not necessarily mean that a statement is not forward-looking. Any statements that refer to expectations, projections, indications of, and guidance or outlook on, future earnings, dividends or financial position or performance or other characterizations of future events or circumstances are also forward-looking statements.

All forward-looking statements are based on estimates and assumptions that are inherently uncertain and that could cause actual results to differ materially from expected results. Many of these factors are beyond the Company's ability to control or predict. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: (1) the occurrence of any event, change or other circumstances that could give rise to the termination of any definitive agreements with respect to the Business Combination; (2) the outcome of any legal proceedings that may be instituted against HSAC2, the combined company or others following the announcement of the Business Combination and any definitive agreements with respect thereto; (3) the inability to complete the Business Combination due to the failure to obtain approval of the shareholders of HSAC2, or to satisfy other conditions to closing; (4) changes to the proposed structure of the Business Combination that may be required or appropriate as a result of applicable laws or regulations or as a condition to obtaining regulatory approval of the Business Combination; (5) the ability to meet stock exchange listing standards following the consummation of the Business Combination; (6) the risk that the Business Combination disrupts current plans and operations of the Company as a result of the announcement and consummation of the Business Combination; (7) the ability to recognize the anticipated benefits of the Business Combination, which may be affected by, among other things, competition, the ability of the combined company to commercialize its product candidates, maintain relationships with physicians and suppliers and retain its management and key employees; (8) costs related to the Business Combination; (9) changes in applicable laws or regulations; (10) the possibility that the Company or the combined company may be adversely affected by other economic, business, and/or competitive factors; (11) the Company's estimates of expenses and profitability; (12) the risks and uncertainties set forth on the slides titled "Summary of Risk Factors" located in the appendix to this Presentation; and (13) other risks and uncertainties set forth in the sections entitled "Risk Factors" and "Forward Looking Statements" in HSAC2's Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 31, 2022. There may be additional risks that neither HSAC2 nor the Company presently know or that HSAC2 and the Company currently believe are immaterial that could also cause actual results to differ from those contained in the forward-looking statements.

Orchestra BioMed™

Important Notice and Disclaimer (Cont'd)

You are cautioned not to place undue reliance upon any forward-looking statements. Any forward-looking statement speaks only as of the date on which it was made, based on information available as of the date of this Presentation, and such information may be inaccurate or incomplete. The Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law. Information regarding performance by, or businesses associated with, our management team or businesses associated with them is presented for informational purposes only. Past performance by the Company's management team and its affiliates is not a guarantee of future performance. Therefore, you should not rely on the historical record of the performance of the Company's management team or businesses associated with them as indicative of the Company's future performance of an investment or the returns the Company will, or is likely to, generate going forward.

Industry and Market Data

In this Presentation, the Company may rely on and refer to certain information and statistics obtained from third-party sources which they believe to be reliable. The Company has not independently verified the accuracy or completeness of any such third-party information. No representation is made as to the reasonableness of the assumptions made within or the accuracy or completeness of any such third-party information.

Trademarks

HSAC2 and the Company own or have rights to various trademarks, service marks and trade names that they use in connection with the operation of their respective businesses. This Presentation may also contain trademarks, service marks, trade names and copyrights of third parties, which are the property of their respective owners. The use or display of third parties' trademarks, service marks, trade names or products in this Presentation is not intended to, and does not imply, a relationship with HSAC2 or the Company, or an endorsement or sponsorship by or of HSAC2 or the Company. Solely for convenience, the trademarks, service marks, trade names and copyrights referred to in this Presentation may appear without the TM, SM, * or © symbols, but such references are not intended to indicate, in any way, that HSAC2 or the Company will not assert, to the fullest extent under applicable law, their rights or the right of the applicable licensor to these trademarks, service marks, trade names and copyrights.

Additional Information

In connection with the proposed Business Combination, has filed a registration statement on Form S-4 with the SEC on August 8, 2022 (as may be amended, the "Registration Statement"), which includes a preliminary document that when finalized in definitive format will serve as a prospectus and a proxy statement of HSAC2, referred to as a "proxy statement/prospectus," and will file and other relevant documents with the SEC relating to the proposed Business Combination . This Presentation does not contain all the information that should be considered concerning the proposed Business Combination and is not intended to form the basis of any investment decision or any other decision in respect of the Business Combination. **HSAC2's and the Company's shareholders and other interested persons are advised to read the Registration Statement and the amendments thereto, when available, and the definitive proxy statement/prospectus and other documents filed in connection with the proposed Business Combination, as these materials will contain important information about HSAC2, the Company and the Business Combination.** When available, the definitive proxy statement/prospectus and other relevant materials for the proposed Business Combination will be mailed to shareholders of HSAC2 as of a record date to be established for voting on the proposed Business Combination. Shareholders will also be able to obtain copies of the preliminary proxy statement/prospectus, the definitive proxy statement/prospectus and other documents filed with the SEC, without charge, once available, at the SEC's website at www.sec.gov, or by directing a request to: Health Sciences Acquisitions Corporation 2; 40 10th Avenue, Floor 7, New York, NY 10014.

Participants in the Solicitation

HSAC2 and its directors and executive officers may be deemed participants in the solicitation of proxies from HSAC2's shareholders with respect to the proposed Business Combination. A list of the names of those directors and executive officers and a description of their interests in HSAC2 is contained in HSAC2's Annual Report on Form 10-K, which was filed with the SEC on March 31, 2022 and is available free of charge at the SEC's web site at www.sec.gov, or by directing a request to Health Sciences Acquisitions Corporation 2; 40 10th Avenue, Floor 7, New York, NY 10014. Additional information regarding the interests of such participants will be contained in the proxy statement/prospectus for the proposed Business Combination when available.

The Company and its directors and executive officers may also be deemed to be participants in the solicitation of proxies from the shareholders of HSAC2 in connection with the proposed Business Combination. A list of the names of such directors and executive officers and information regarding their interests in the proposed Business Combination will be included in the proxy statement/prospectus for the proposed Business Combination when available.

INVESTMENT IN ANY SECURITIES DESCRIBED HEREIN HAS NOT BEEN APPROVED OR DISAPPROVED BY THE SEC OR ANY OTHER REGULATORY AUTHORITY NOR HAS ANY AUTHORITY PASSED UPON OR ENDORSED THE MERITS OF THE OFFERING OR THE ACCURACY OR ADEQUACY OF THE INFORMATION CONTAINED HEREIN ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Orchestra BioMed™

Orchestra BioMed Executive Summary

Partnership-enabled business model designed to **accelerate innovation** to patients, drive strong partner and shareholder value, & yield **exceptional future profitability**

BackBeat CNT™ targets >$10B annual hypertension markets

Firmware upgrade to existing pacemaker

Statistically significant double-blind, randomized preliminary trial efficacy data

Plan to initiate pivotal trial H2 2023

Strategic collaboration

Medtronic

Double-digit revenue share

Virtue® SAB targets >$3B annual artery disease markets

Protected sirolimus delivery, non-coated balloon

Strong 3-year multi-center preliminary trial safety and efficacy data

Plan to initiate pivotal trial H1 2023

Strategic collaboration

TERUMO

Double-digit revenue share

Strong balance sheet with financial runway into 2026 and outstanding investors

Medtronic rtw PERCEPTIVE ADVISORS TERUMO

Orchestra BioMed

Transaction Overview

Transaction Summary	• **Orchestra BioMed and Health Sciences Acquisitions Corporation 2 ("HSAC2", Nasdaq: HSAQ) have entered into a definitive business combination agreement** - HSAC2 is a special purpose acquisition company **sponsored by an affiliate of RTW Investments, LP** - Upon closing, HSAC2 will change its name to "Orchestra BioMed Holdings, Inc." and is expected to trade under ticker "OBIO" - Transaction expected to close Q1 2023 - Post transaction implied pro forma fully diluted equity value of $317 million and **pro forma fully diluted enterprise value of $173 million**[1]
Cash in Trust / Backstop	• **Deal provides $70 million in additional gross cash to the combined company**[2] - RTW is providing up to a $50 million commitment to backstop the trust - $20 million in total forward purchase agreements from Medtronic and funds managed by RTW ("RTW Funds")
Orchestra Shareholders' Earnout	• 8M shares subject to milestones being achieved - 50% at 20-day VWAP of $15.00/share and 50% at 20-day VWAP of $20.00/share - Earnout requires an opt-in with an extended lock-up of 12 months
Sponsor Shares and Private Placement Warrants	• Sponsor and affiliates agreed to defer 1 million (25% of 4 million total) of its sponsor shares, subject to vesting at same milestones as Orchestras' shareholder earnout • Sponsor agreed to extinguish 750,000 (50% of 1.5 million total) of its pre-paid private placement warrants issued at IPO that have an exercise price of $11.50/share
Use of Proceeds	• **Orchestra BioMed expected to have a minimum total pro forma cash of $154 million**, after expenses, at announcement[1] • The combined company is expected to **have sufficient capital into 2026** based on current plans and estimates

[1]Assumes HSAC2 and Orchestra cash balances as of September 30, 2022. On July 22, 2022, in connection with the vote to approve the extension of HSAC2, the holders of 9,237,883 shares exercised their right to redeem their shares for cash. As a result, at closing approximately 222,350 shares are expected to be issued through a PIPE for the RTW Funds to fulfill their obligations under the backstop agreement of $70 million. In addition, the RTW Funds purchased 1,000,000 shares from an accredited investor in a privately negotiated transaction in order to fulfill their obligations under the Forward Purchase Agreement.

Terms of Transaction

Combination is structured to provide $70 million in additional gross cash to the combined company

Sources & Uses

Sources	Amount
Cash Held in Trust [1]	$67,800,000
Backstop Agreement [1]	2,200,000
Orchestra Fully Diluted Equity [2 3]	212,900,000
HSAC2 Sponsor Shares	34,500,000
Total Sources	**$317,400,000**

Uses	Amount
Orchestra Fully Diluted Equity	$212,900,000
HSAC2 Sponsor Shares	34,500,000
Cash to Balance Sheet [1]	56,400,000
Estimated Transaction Expenses	13,600,000
Total Uses	**$317,400,000**

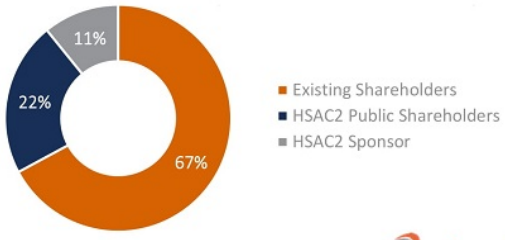
Note: Assumes HSAC2 and Orchestra cash balances as of September 30, 2022. On July 22, 2022, in connection with the vote to approve the extension of HSAC2, the holders of 9,237,883 shares exercised their right to redeem their shares for cash. As a result, at closing approximately 222,350 shares are expected to be issued through a PIPE for the RTW Funds to fulfill their obligations under the backstop agreement of $70 million. In addition, the RTW Funds purchased 1,000,000 shares from an accredited investor in a privately negotiated transaction in order to fulfill their obligations under the Forward Purchase Agreement.

1. Assumes gross cash of $70 million consisting of $50 million commitment from RTW and $20 million from forward purchase agreements from RTW and Medtronic;
2. Does not include potential future effect of up to 8 million earnout shares to legacy Orchestra BioMed shareholders that are subject to vesting milestones being achieved (50% at 20-day VWAP of $15.00 and 50% at 20-day VWAP of $20.00, any time in 5 years following SPAC merger closing);
3. Does not include potential future effect of up to 1M deferred sponsor shares vesting that are subject to earnout milestones being achieved as described in footnote 2.

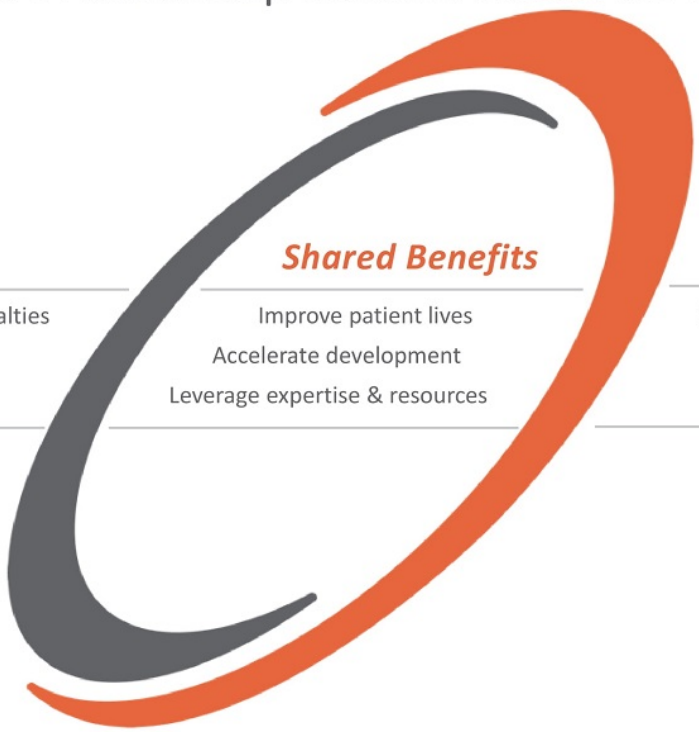
Pro Forma Valuation

Particulars	Amount
Share Price	$10.00
Pro Forma Fully Diluted Shares Outstanding [2 3]	31,740,000
Pro Forma Fully Diluted Equity Value	**$317,400,000**
(-) Net Trust Cash [1]	(56,400,000)
(-) Existing Balance Sheet Cash	(97,700,000)
(+) Debt	10,000,000
Pro Forma Fully Diluted Enterprise Value	**$173,300,000**

Pro Forma Basic Ownership



Orchestra BioMed's Partnership-enabled Model Benefits All



Orchestra BioMed

Development

- Secure substantial long-term royalties
- Outsource commercialization
- Multiple pipeline opportunities

Shared Benefits

- Improve patient lives
- Accelerate development
- Leverage expertise & resources

Strategic Partners

Commercialization

- Enable new growth opportunities
- Outsource development
- Minimize P&L dilution

Orchestra BioMed

Highly Accomplished Executive Team & Board

David Hochman
Chairman, CEO, Co-Founder

Darren R. Sherman
President, COO, Director, Co-Founder

Michael Kaswan
Chief Financial Officer

Dennis Donohoe, M.D.
Chief Medical Officer

Yuval Mika, Ph.D.
GM & CTO, Bioelectronic Therapies

Hans-Peter Stoll, M.D., Ph.D.
Chief Clinical Officer

George Papandreou
SVP, Quality

Inessa R. Wheeler
VP, Marketing

Bob Laughner
VP, Regulatory Affairs

Stephen A. Zielinski
VP, Product Dev., Bioelectronic Therapies

Ziv Belsky
VP, Research, Bioelectronic Therapies

Juan Lorenzo
VP, Product Dev., Focal Therapies

Bill Baumbach, Ph.D.
VP, Scientific Affairs, Focal Therapies

Eileen Bailey
VP, Quality, Focal Therapies

Executive Team: >250 Years of Experience, ~25 Avg Industry Years, >100 Product Approvals & >600 Authored Patents

Jason Aryeh
Board Member

Pamela Connealy
Board Member

Eric S. Fain, M.D.
Board Member

Eric A. Rose, M.D.
Board Member

Geoffrey W. Smith
Board Member

Advancing a High-Impact Pipeline

Product Platforms	Target Indications	Preclinical	Clinical Feasibility	Clinical Pivotal	Partner	Study Sponsor	Next Milestones & Expected Timing[6]
BackBeat Cardiac Neuromodulation Therapy (CNT™)	***Hypertension (HTN)*** *(pacing patients; HTN+P)*				**Medtronic**	Orchestra BioMed	**Global Pivotal Study Start H2 2023**
	High-Risk HTN *(non-pacing patients)*				**Medtronic** ROFN		**Will Seek to Leverage Data from HTN+P[2]**
CNT - HF	*Heart Failure*						Acute Clinical Data 2023 Potential Chronic Study Start 2024
Virtue® Sirolimus AngioInfusion™ Balloon (SAB)	***Coronary In-Stent Restenosis (ISR)***	FDA Breakthrough[3]			TERUMO	Orchestra BioMed	**US Pivotal Study Start H1 2023** **Japan Pivotal Study Start H1 2024**
	Coronary Small Vessel (SV)[1]	FDA Breakthrough[4]			TERUMO	TERUMO	**Japan Pivotal Study Start H1 2024** **US Pivotal Study Start 2024**
	Below-the-Knee (BTK)[1]	FDA Breakthrough[5]			TERUMO	TERUMO	**Global BTK Study Start 2024/2025**
SirolimusEFR™ / Microporous Balloon	*Urethral Strictures & BPH* *Osteoarthritis*						Preclinical Development Milestones 2023/2024

[1]Plan to leverage existing coronary ISR data to support potential Pivotal Study, although there have only been limited discussions with the FDA or a comparable foreign regulator in this regard. [2]Will seek to leverage data from HTN+P pilot and pivotal trials to support clinical and regulatory development for High-Risk HTN indication given that age and other demographic factors of the target population are expected to be similar, the type of hypertension treated will likely be isolated systolic hypertension which is predominant in the HTN+P population, and other co-morbidities are also expected to be common to both target populations. However, there have been no discussions with the FDA or a comparable foreign regulator in this regard. [3]The balloon dilatation of the stenotic portion (up to 26 mm length) of a stented coronary artery (in-stent restenosis (ISR)) that is 2.25 to 4.0 mm in diameter, for the purpose of improving lumen diameter; [4]The balloon dilation of the de novo stenotic portion (up to 26mm in lesion length) of a native coronary artery of 2.0 mm to 2.5 mm in diameter (small coronary arteries), for the purpose of improving lumen diameter; [5]The balloon dilatation of the stenotic portion (up to 18 mm length) of an infrapopliteal artery (P-3 segment or distal, below the knee, with reference vessel diameter (RVD) 2.25 - 4.0 mm), for the purpose of improving lumen diameter. [6]All references to clinical study initiations for HTN+P, Coronary ISR and Coronary SV indications are based on ongoing interactions with US FDA regarding IDE approvals or Japan PMDA regarding CTN approvals which are required to start clinical studies; FDA & PMDA responses are expected approximately 30 days following formal submissions; clinical study enrollment is expected to begin approximately 6-8 weeks after regulatory approvals; study enrollment timelines currently estimated to be 12-18 months for all referenced studies although actual study enrollment timeframes may be longer; final primary endpoint results for all studies are at 12 months from enrollment with exception of Japan Coronary ISR & SV studies, which are expected to be at 6 months from enrollment.

Orchestra BioMed™

BackBeat Cardiac Neuromodulation Therapy (CNT™)

Orchestra BioMed™

BackBeat CNT™ Overview

Opportunity

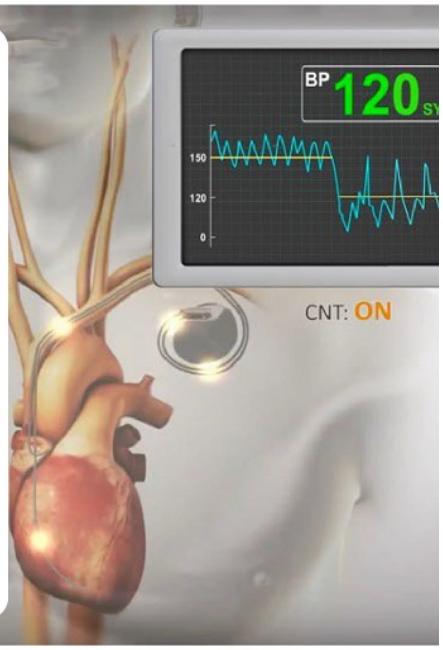
- ***Hypertension is #1 comorbidity in pacemaker population affecting over 70% of patients***[1]
- Older population at ***increased risk for major events*** & challenges with drug compliance

Innovation

- Bioelectronic therapy ***designed to substantially & persistently lower blood pressure***
- ***Compatible with standard pacemaker device*** & leverages existing treatment paradigm
- ***Compelling clinical data from double-blind randomized study:*** significant 8.1 mmHg net reduction in 24-Hr aSBP at 6 months & 17.5 mmHg reduction in oSBP at 2 years[2,3]

Collaboration with **Medtronic**

- Global pacemaker leader providing technology and development/clinical/regulatory support for Orchestra BioMed-sponsored global pivotal trial
- Following regulatory approval, Medtronic has exclusive global rights to commercialization in the pacemaker-indicated patient population with ***double-digit revenue sharing for Orchestra BioMed*** of BackBeat CNT-enabled pacemaker sales



[1]Company estimates based on published sources, including National Inpatient Survey (NIS) and National Health and Nutrition Examination Survey (NHANES); [2]Kalaras et al. Journal of the American Heart Association. ahajournals.org/doi/10.1161/JAHA.120.020492; [3]Burkhoff. MODERATO II Study 2-Year Results TCT 2021;. ***Definitions:*** Ambulatory Systolic Blood Pressure (aSBP) and Office Systolic Blood Pressure (oSBP)

Orchestra BioMed™

Large Global Opportunity for Treating Hypertension in Target Populations

>$10 Billion Potential Annual Global Market Opportunity*

HTN + Pacemaker

- Over 70% of pacemaker patients have HTN[1]
- Older, co-morbid population at increased risk of major events[2]

High Risk HTN (Non-pacemaker)

- Older patients with isolated systolic hypertension (ISH) and comorbidities

>3.1 M Addressable HTN Patients

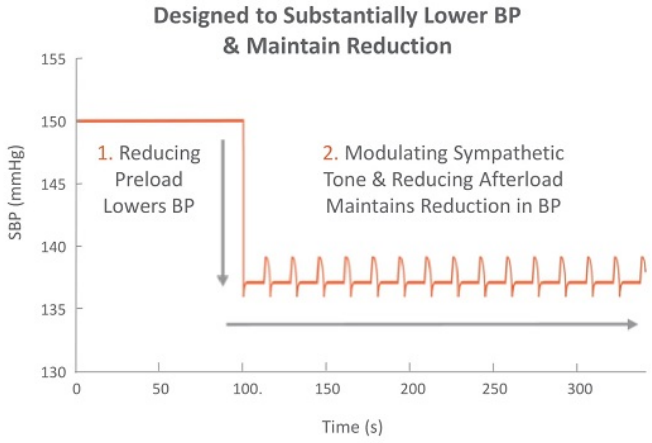
*Total addressable market in 2025 based on company estimates; [1]Company estimates based on published sources, including National Inpatient Survey (NIS) and National Health and Nutrition Examination Survey (NHANES); [2]Known and well-characterized population, multiple references available; ***Definition:*** Hypertension (HTN)

Orchestra BioMed™

BackBeat CNT™

Designed to Substantially and Persistently Lower Blood Pressure

- Bioelectronic therapy designed to leverage standard rhythm management device procedures (dual-chamber pacemaker)
  - Same implant procedure and lead positions
  - Large trained physician pool
  - Same target patient population
  - Leverageable existing reimbursement
- Mechanism of action
  - Designed to substantially reduce blood pressure by reducing preload through programmed pacing with short AV delays
  - Designed to maintain reduction by modulating sympathetic tone and reducing afterload through programmed variable pressure patterns



Orchestra BioMed™

MODERATO II Double-Blind, Randomized Results

BackBeat CNT™ showed encouraging results in MODERATO II, a prospective, multi-center, randomized, (BackBeat CNT + Medical Therapy vs. Continued Medical Therapy), double-blind, pilot study of pacemaker patients with persistent hypertension

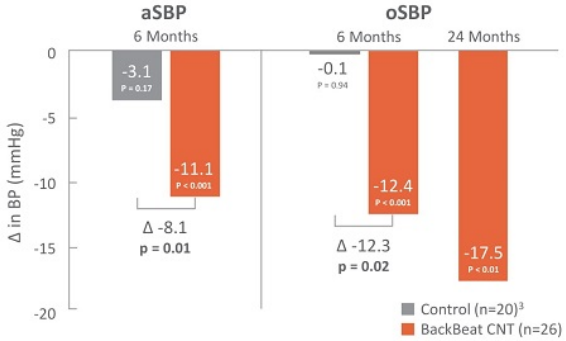
-11.1 mmHg in 24-Hour aSBP at 6 months

-17.5 mmHg in oSBP at 2 years

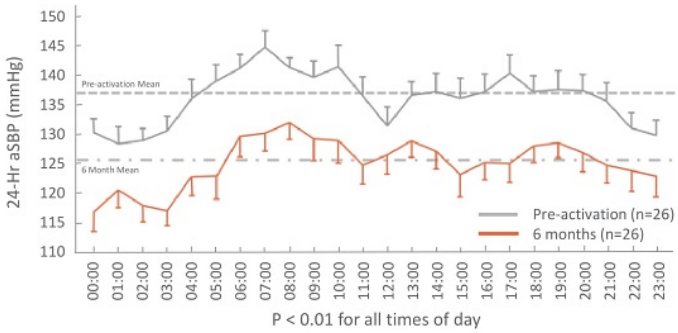
0% MACE vs. 9.5% in control group at 6 months

85% of patients with reduction in aSBP

Significant Reduction in 24-Hr aSBP and oSBP[1,2]



Significant Reduction in aSBP 24 Hours a Day



P < 0.01 for all times of day

[1]Kalaras et al. Journal of the American Heart Association. 2021;10:e020492 ahajournals.org/doi/10.1161/JAHA.120.020492; [2]Burkhoff MODERATO II Study 2-Year Results TCT 2021; [3]24-Hr aSBP Control (n=19),1 control patient could not be measured despite repeat measurement (patient had extremely high blood pressure); ***Definitions:*** Major Adverse Cardiac Events (MACE) included death, heart failure, clinically significant arrhythmias (i.e., persistent or increased atrial fibrillation, serious ventricular arrhythmias), myocardial infarction, stroke and renal failure in treatment group calculated per patient, Office Systolic Blood Pressure (oSBP), Ambulatory Systolic Blood Pressure (aSBP)

Orchestra BioMed™

BackBeat CNT™ Medtronic Collaboration

Aligned with Global Market Leader in Pacemakers and Device-based Hypertension Treatment

- Medtronic is the global leader in pacemakers
  - >$1.5 billion annual pacemaker revenues[1]
- Key Terms: (Hypertension + Pacemaker population)
  - Orchestra BioMed drives and finances development as sponsor of global pivotal trial
  - Medtronic provides certain development/clinical/regulatory resources funded by Orchestra to support integration into a Medtronic pacemaker and execution of the pivotal trial
  - Medtronic has exclusive global rights for commercialization upon regulatory approval
  - Orchestra is expected to receive between $500 and $1,600 per BackBeat CNT enabled device sold based on a formula of the higher of (1) a fixed dollar amount per device (amount varies materially on a country-by-country basis) or (2) a percentage of sales.
  - BackBeat CNT enabled devices expected to be ***sold under existing reimbursement codes***.
  - Medtronic has a right of first negotiation to expand its global rights to BackBeat CNT for the treatment of HTN patients not indicated for a pacemaker
- Medtronic invested $40 million in Orchestra BioMed's $110 million Series D financing and will invest an additional $10M in HSAC2 merger transaction

Medtronic

[1]Based on MDTs consolidated financial results for the fiscal year ended April 29, 2022

Orchestra BioMed™

BackBeat CNT™ Pivotal Trial Design

Current anticipated trial design:

- Randomization of ~650-750 patients with uncontrolled HTN despite medical therapy who are indicated for a dual-chamber pacemaker
- Inclusion and exclusion criteria for enrollment in the BackBeat CNT Pivotal Study will be similar to the criteria used in the MODERATO II study
- Patients will be randomized 1:1 in a double-blinded manner to either active treatment with the BackBeat CNT-with continued antihypertensive drug treatment **or** to standard pacing-only with continued antihypertensive drug therapies
- Anticipated primary efficacy and safety endpoints:
  - ***Efficacy endpoint:*** Superiority of treatment as compared to control based on mean change in 24-hour aSBP at 3 months post randomization
  - ***Safety endpoint:*** Non-inferiority between the treatment and control groups comparing Major Adverse Cardiovascular Events (MACE) at 12 months post randomization
- Enroll patients across ~80 study sites planned for United States, Europe and, potentially, Japan

Orchestra BioMed™

Virtue® Sirolimus AngioInfusion™ Balloon (SAB)

Orchestra BioMed™

Virtue® SAB Overview

Opportunity

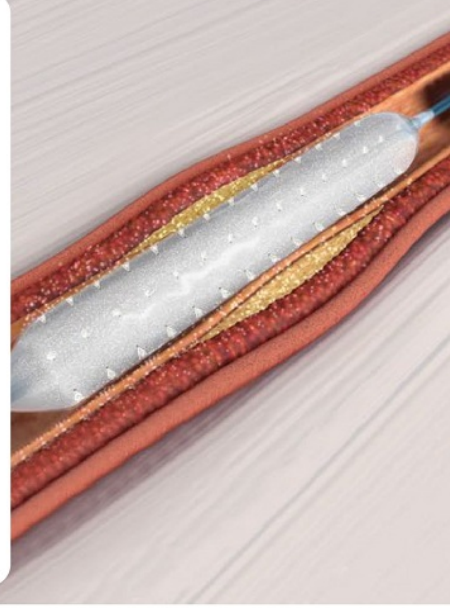
- Significant need for "leave nothing behind" treatment for coronary and peripheral indications representing an >***$3B global market opportunity***[1]
- Current drug-eluting stents (DES) carry risks of long-term restenosis and late thrombosis; require extended dual antiplatelet therapy; not effective/approved for select patients/lesions

Innovation

- ***Highly-differentiated, non-coated drug/device combination*** product candidate designed to enable angioplasty with protected delivery of extended release sirolimus
- ***Compelling clinical results in multi-center coronary ISR clinical trial*** with 3-year follow-up[2]
- ***FDA Breakthrough Device Designation*** received for indications in coronary ISR[3], coronary SV[4] and BTK[5]

Partnership with TERUMO

- ***Global commercial leader*** with >$2.5B annual interventional cardiology revenue responsible for commercializing ***Virtue SAB as flagship therapeutic offering***
- Collaboration driving multi-indication pivotal trial program starting with coronary ISR
- ***Orchestra BioMed to receive double-digit royalties and per unit drug payments***



[1]Total addressable market is 2025 market data based on company estimates; [2]von Birgelen et al. JACC Vol. 59, No. 15, 2012 April 10, 2012:1350–61; Virtue SAB has received Breakthrough Device Designation for: [3]The balloon dilatation of the stenotic portion (up to 26 mm length) of a stented coronary artery (in-stent restenosis (ISR)) that is 2.25 to 4.0 mm in diameter, for the purpose of improving lumen diameter; [4]The balloon dilation of the de novo stenotic portion (up to 26mm in lesion length) of a native coronary artery of 2.0 mm to 2.5 mm in diameter (small coronary arteries), for the purpose of improving lumen diameter; [5]The balloon dilatation of the stenotic portion (up to 18 mm length) of an infrapopliteal artery (P-3 segment or distal, below the knee, with reference vessel diameter (RVD) 2.25 - 4.0 mm), for the purpose of improving lumen diameter.

Orchestra BioMed™

Large Opportunity for Leave Nothing Behind Solution

>$3 Billion Annual Global CAD & PAD Market Opportunity*

- Artery disease is the primary cause of death worldwide
- Large mature market with significant unmet need
  - Suboptimal treatments for coronary ISR, coronary SV *de novo* and BTK
- Designed to leverage existing treatment paradigm & established technologies: sirolimus and balloon angioplasty

>3.2M Addressable CAD & PAD Patients

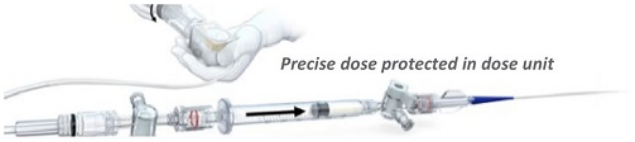
*Total addressable market in 2025 based on company estimates; ***Definitions:*** Coronary Artery Disease (CAD), Peripheral Artery Disease (PAD), In-stent Restenosis (ISR), Small Vessel (SV, ≤2.5mm), High bleeding Risk De Novo (>2.5mm), Below-the-Knee (BTK, Rutherford 3-6, w/out severe comorbidities).

Orchestra BioMed™

Virtue® SAB

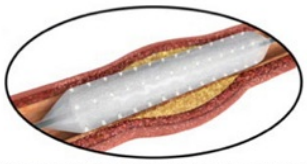
Designed to Enable Angioplasty with Protected Sirolimus Delivery while Leaving No Metal Behind

AngioInfusion™ Balloon designed to enable angioplasty with protected drug delivery to dilate vessel, to consistently deliver intended dose and to leave no metal behind



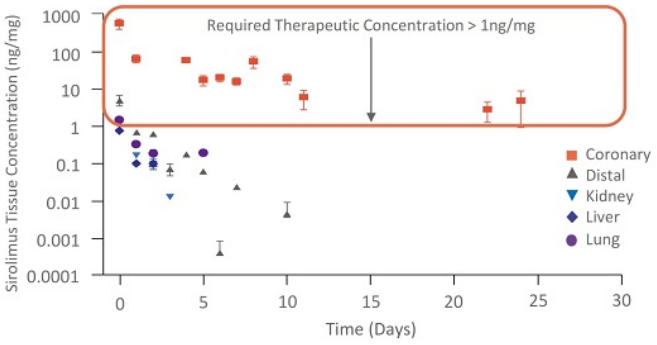
Protected Delivery/No Drug Coating

- No drug loss in transit
- No time limits on delivery
- No drug coating particulates



Inflated to deliver dose through micropores

SirolimusEFR™ Formulation provided extended focal release of therapeutic levels of sirolimus through critical healing period (≈30 days)[1]



N = 753 porcine coronary artery segments

Lung, liver & kidney below level of assay quantification (0.1 ng/mg) in <1 week

[1]Granada et al. EuroIntervention 2016;12:740-747

Orchestra BioMed™

Compelling SABRE Trial Results in Coronary ISR Patients

Virtue® SAB preliminarily demonstrated encouraging safety and efficacy results in patients with coronary in-stent restenosis (ISR) in prospective, multi-center SABRE Trial[1]

0.12mm LLL at 6-months

2.8% Target Lesion Failure at 1 year

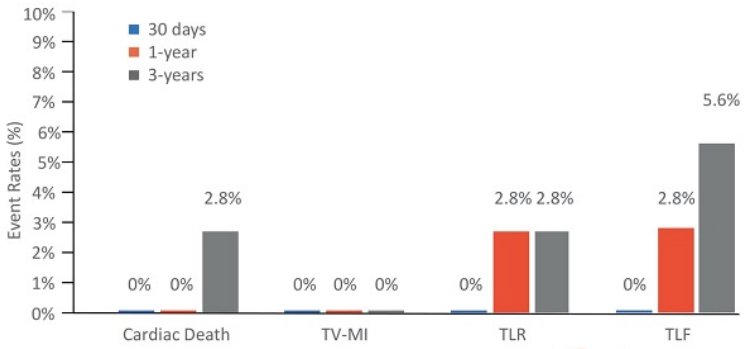
0% New TLR between 1 to 3 years

Preliminary Efficacy Results Showed Low 0.12mm Late Loss

	Per Protocol[4]
n	36
Reference Vessel Diameter (RVD) mm[1]	2.52 ± 0.32
Minimum Lumen Diameter (MLD) mm	1.96 ± 0.32
% Diameter Stenosis	22.3 ± 9.4
Change in % Diameter Stenosis	5.2 ± 11.4
Late Lumen Loss (LLL) mm[2]	0.12 ± 0.33
Binary Restenosis[3]	2.8%

[1]RVD reported using Internormal values; [2]Trial primary performance endpoint; [3]Trial secondary performance endpoint (binary restenosis = >50% lumen diameter stenosis). [4]Data is based on per protocol population criteria revised to be consistent with proposed Virtue ISR-US pivotal study population.

Preliminarily Demonstrated Safety with Low Event Rates Out to 3 Years[2]



[1]Verheye et al. JACC Cardiovasc Interv 2017 Oct 23;10(20):2029-2037. DOI: 10.1016/j.jcin.2017.06.021. [2]Granada 3-Year Clinical Results TCT 2018. 3-Year SABRE Trial Clinical Report on file. ***Definitions:*** Target lesion failure (TLF), late lumen loss (LLL), target lesion revascularization (TLR) and Myocardial Infarction (MI).

Orchestra BioMed™

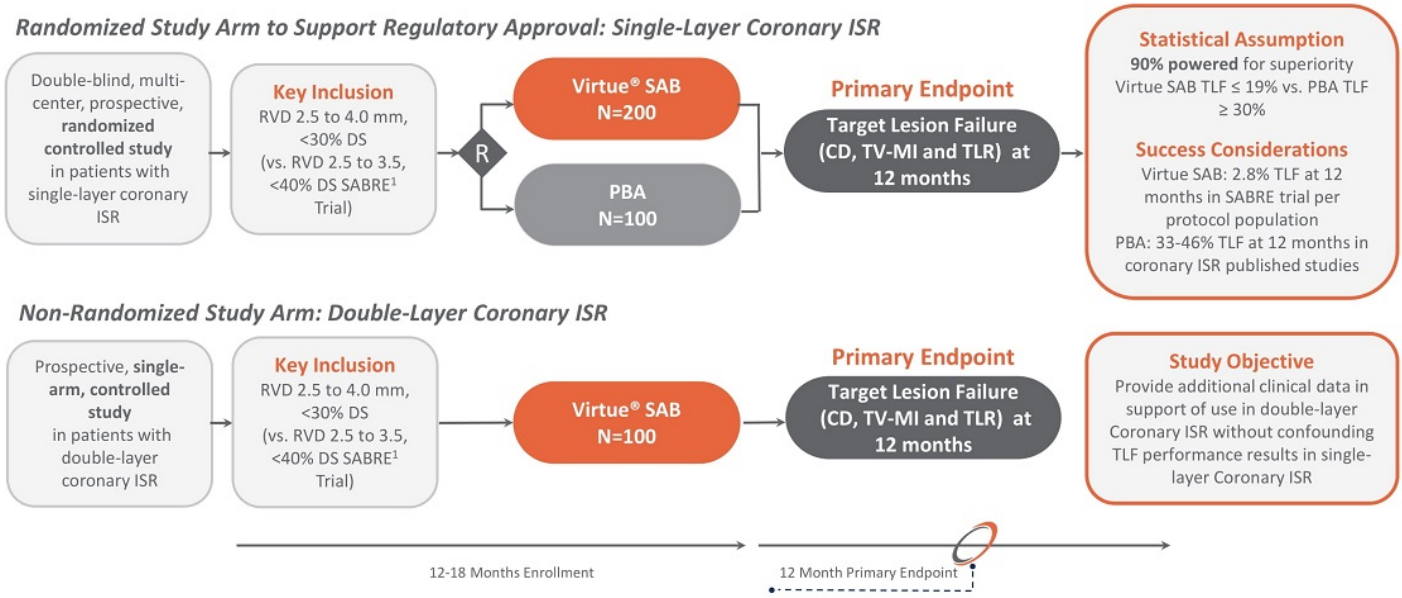
Virtue® SAB Terumo Partnership

Multinational Market Leader Provides Global Commercial Reach and Long-Term Alignment

- Terumo is a global leader with >$2.5 billion annual interventional cardiology revenues[1]
- Virtue SAB positioned to become Terumo's **flagship** therapeutic offering with potential to drive significant future growth
- Key Terms:
  - $30 million upfront and potential future clinical and regulatory milestones
  - $5 million equity investment including participation in Series D financing
  - Terumo responsible for clinical and regulatory expenses, excluding Virtue ISR-US study which Orchestra BioMed is sponsoring
  - Terumo responsible for device supply chain and commercialization expenses
  - Orchestra BioMed receives 10-15% royalty PLUS per unit payments for SirolimusEFR™ as exclusive supplier
  - Orchestra BioMed retains rights to Virtue SAB in all clinical applications outside of vascular indications

[1]Based on Terumo's consolidated financial results for the fiscal year ended March 31, 2022

Virtue® SAB – Coronary ISR US Pivotal Trial



[1]Verheye S. JACC Cardiovasc Interv. 2017; 10: 2029-37. ***Definitions:*** Coronary In-stent Restenosis (ISR), Diameter Stenosis (DS), Plain Balloon Angioplasty (PBA). Revised per protocol analysis set meets the criteria of the proposed In-Stent Restenosis IDE study population.

Orchestra BioMed™

2023 - Anticipated Milestones

H1 2023

Corporate
- Close Business Combination
- List on Nasdaq (OBIO)

Virtue SAB – Coronary ISR
- Virtue ISR-US FDA IDE Approval
- 1st Pt. Enrollment (US)

Corporate
BackBeat CNT / CNT-HF
Virtue SAB
SirolimusEFR

H2 2023

BackBeat CNT – HTN + Pacemaker
- FDA IDE Approval
- 1st Pt. Enrollment (EU & US)
- Japan PMDA CTN Approval
- 1st Pt. Enrollment (Japan)

CNT-HF
- Acute Clinical Results

Virtue SAB – Coronary ISR
- Japan PMDA CTN Approval[1]
- 1st Pt. Enrollment (Japan)[1]

Virtue SAB – Coronary SV
- Japan PMDA CTN Approval[1]
- 1st Pt. Enrollment (Japan)[1]

SirolimusEFR
- Preclinical Feasibility Results[2]

[1]Timing estimated and subject to Terumo execution since Terumo controls development of Virtue SAB for SV indication and for ISR in Japan
[2]Assumes focus on a device/drug combination balloon-based solution targeting indication such as urethral strictures or BPH

Use of Proceeds

H2 2022 - 2025 Expenses by Category

Activity	Description	Estimated Expenses H2 2022 - 2025
General Research & Development	• BackBeat CNT - Firmware integration into Medtronic device; testing and validation activities - Clinical trial planning and preparation - IDE preparation and submission • Virtue SAB - GLP and biocompatibility testing for IDE submission - SirolimusEFR production and process scale-up activities - Clinical trial materials (device and drug) manufacturing and testing - IDE preparation and submission • CNT-HF and SirolimusEFR feasibility work	$35-45M[1]
Backbeat CNT & Virtue SAB Pivotal Trials	• Execution of multinational BackBeat CNT HTN+P pivotal trial • Execution of Virtue SAB ISR-US pivotal trial	$55-65M
General & Administrative	• General overhead including public company expenses	~$3M avg. per quarter

Definitions: Coronary In-stent Restenosis (ISR), Research & Development (R&D), Investigation Device Exemption (IDE), Good Laboratory Practice (GLP)

[1]Net of anticipated milestone payments

Orchestra BioMed™

Bringing Medical InnOvations to Life Through Partnerships



Partnership-Enabled Business Model & Accomplished Leadership Team

- Designed to accelerate innovation to patients, enable pipeline expansion and drive strong partner and shareholder value
- Highly experienced team with proven track record of innovation and execution

Two Programs Targeting Large Markets Supported by Promising Trial Data Entering Pivotal Trials

- **BackBeat CNT™**
  - >$10 billion annual market
  - Randomized, controlled study shows efficacy potential
  - Collaboration with **Medtronic**
- **Virtue® SAB**
  - ~$3 billion annual market
  - 3-year pilot study results show potential safety & efficacy
  - Partnered with TERUMO

Strong Balance Sheet with Financial Runway into 2026 and Committed Investors

Medtronic

rtw

PERCEPTIVE ADVISORS

TERUMO

Partnership-Enabled Business Model

Orchestra BioMed™

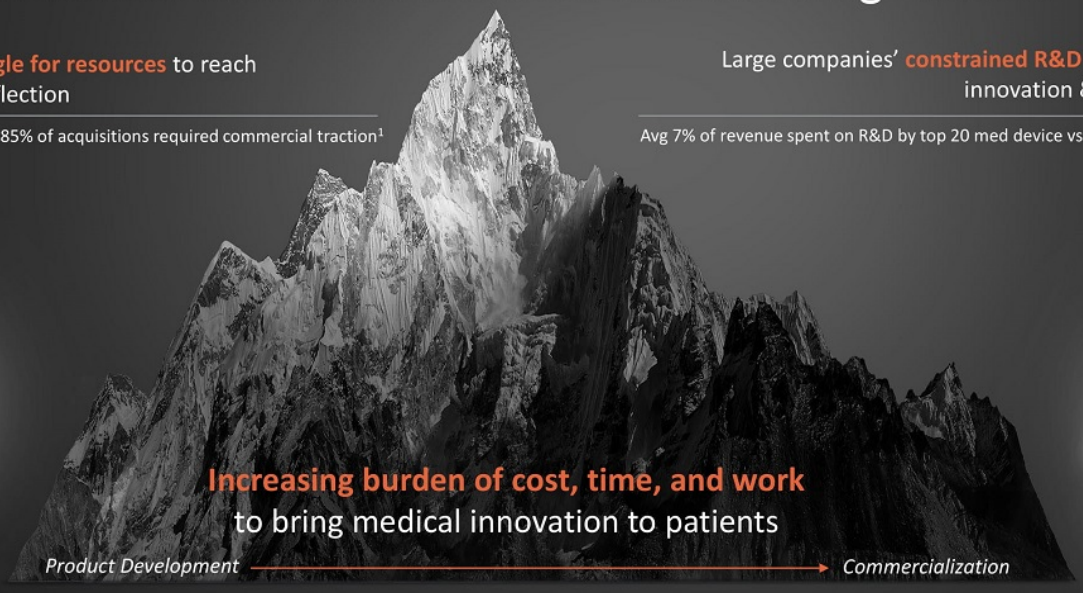
Significant Barriers Prevent Innovation From Reaching Patients

Startups often **struggle for resources** to reach commercial value inflection

Avg $60M funding needed, 85% of acquisitions required commercial traction[1]

Large companies' **constrained R&D budgets** limit innovation & acquisitions

Avg 7% of revenue spent on R&D by top 20 med device vs. 20% in pharma[2,3]



Increasing burden of cost, time, and work
to bring medical innovation to patients

Product Development → *Commercialization*

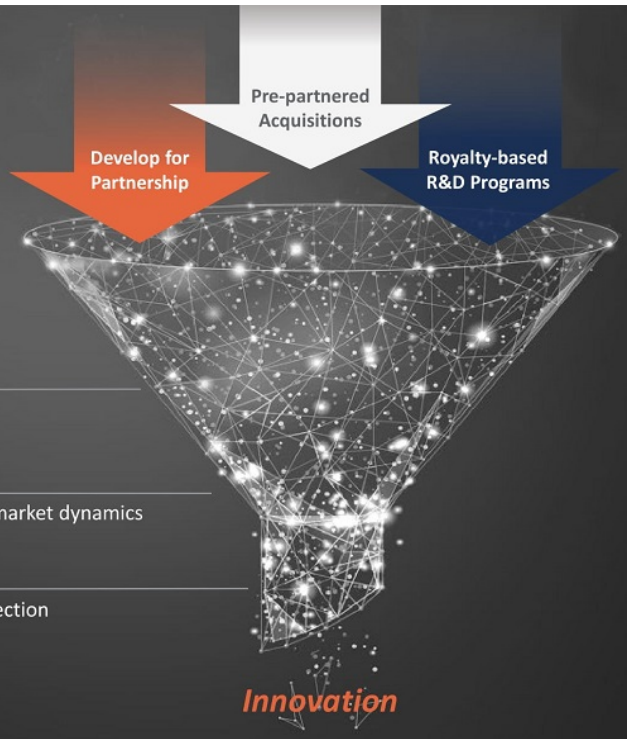
[1]Pitchbook – Analysis of 430 companies since 2015 that completed at least Series B financing [2]SVB Healthcare Report 2019 [3]Capital IQ

Orchestra BioMed™

Orchestra BioMed Can Accelerate Innovation to Patients

Orchestra BioMed™

Selecting Optimal Opportunities



Key Pipeline Criteria

Large Market with Unmet Needs

Large market, significant unmet needs, established distribution channels

Potential for High Impact

Designed to improve standard of care, fit existing treatment paradigm, disrupt market dynamics

Favorable for Partnering

Significant differentiation, attractive economics for partnership, durable IP protection

Orchestra BioMed™

Orchestrating Innovation

Accomplished Leadership Team

Created Pipeline, Pioneered Business Model and Established Partnerships

Orchestra BioMed™

Appendix: Summary of Risk Factors

Risks Related to Orchestra's Business and Products

- Orchestra has a history of net losses, expects to continue to incur losses for the foreseeable future and may never become profitable.
- If Orchestra does not achieve its projected development and commercialization goals, its business may be harmed.
- Even if Orchestra obtains all necessary FDA approvals and clearances, its product candidates may not achieve or maintain market acceptance.
- Orchestra may be unable to compete successfully with larger companies in its highly competitive industry.
- Orchestra may expend its limited resources to pursue a particular product or indication and fail to capitalize on products or indications that may be more profitable or for which there is a greater likelihood of success.
- Orchestra's operating results may fluctuate significantly, which makes its future operating results difficult to predict and could cause operating results to fall below expectations or any guidance it may provide.
- A pandemic, such as the COVID-19 pandemic, could adversely impact our business, including our clinical trials and financial condition.
- Orchestra's loan and security agreement contains operating covenants and restrictions that may restrict its business and financing activities.
- If Orchestra's clinical trials are unsuccessful or significantly delayed, or if Orchestra does not complete its clinical trials, its business may be harmed.
- Interim, ''top-line'' and preliminary data from Orchestra's clinical trials that it announces or publishes from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.
- Orchestra's product candidates may be associated with serious adverse events, undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.
- Orchestra depends on attracting, retaining and developing key management, clinical, scientific and sales and marketing personnel, and
- losing these personnel could impair the development and sales of our products or product candidates.
- If Orchestra makes acquisitions, it could incur significant costs and encounter difficulties that harm its business.
- Product liability and other claims may reduce demand for Orchestra's products or result in substantial damages.
- The misuse or off-label use of Orchestra's products may harm its reputation in the marketplace, result in injuries that lead to product liability suits or result in costly investigations, fines or sanctions by regulatory bodies if Orchestra is deemed to have engaged in the promotion of these uses, any of which could be costly to its business.
- Orchestra's internal computer systems, or those of any of its contract research organizations, manufacturers, other contractors, consultants, collaborators or potential future collaborators, may fail or suffer security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of proprietary or confidential data, employee data, or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to Orchestra's brand and material disruption of its operations.
- Economic conditions, including inflation caused by, among other things, the ongoing invasion of Ukraine by Russia, may adversely affect Orchestra's business, financial condition and share price.
- Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, cleared or approved or commercialized in a timely manner or at all, which could negatively impact Orchestra's business.
- In the future, we expect to be subject to a variety of risks associated with marketing and distributing our products internationally that could materially adversely affect our business.
- The sizes of the markets for product candidates have not been established with precision, and may be smaller than Orchestra estimates.
- Orchestra may in the future bring certain validation testing and pharmaceutical manufacturing capabilities in-house, and it may not be able to do so successfully or in compliance with FDA regulations.

Orchestra BioMed™

Appendix: Summary of Risk Factors (Cont'd)

Risks Related to Orchestra BioMed's Reliance on Third Parties

- Orchestra expects to be highly dependent on partners and third-party vendors to manufacture and provide important materials and components for its products and product candidates.
- Orchestra may be unable to reach certain milestones under its agreement with Terumo by the dates specified or at all.
- Orchestra expects to be highly dependent on partners to drive the successful marketing and sale of our initial product candidates.
- Orchestra and its partners may be unable to sustain revenue growth.
- From time to time, Orchestra engages outside parties to perform services related to certain of its clinical studies and trials, and any failure of those parties to fulfill their obligations could cause costs and delays.
- The continuing development of many of Orchestra's products and product candidates depends upon maintaining strong working relationships with physicians.
- Orchestra has limited pharmaceutical manufacturing experience and may experience development or manufacturing problems or delays in producing its products and planned or future products that could limit the potential growth of revenue or increase losses.
- Orchestra sources certain products from foreign suppliers, making it vulnerable to supply problems or price fluctuations caused by trade conflicts and other geopolitical events.
- The ongoing Russian invasion in Ukraine may have an adverse effect on the operations of our partners.

Risks Related to Government Regulation and Orchestra BioMed's Industry

- Healthcare reform initiatives and other administrative and legislative proposals may adversely affect Orchestra's business.
- Orchestra may not obtain the necessary approvals and failure to obtain timely regulatory approval, if at all, would adversely affect its business.
- Orchestra's medical device products must be manufactured in accordance with federal and state regulations, and it or any of its suppliers or third-party manufacturers could be forced to recall installed systems or terminate production if we or they fail to comply with these regulations.
- Even if Orchestra obtains regulatory approval for a product candidate, its products will remain subject to regulatory scrutiny and post-marketing requirements and failure to comply with post-marketing regulatory requirements could subject us to enforcement actions, including substantial penalties, and might require us to recall or withdraw a product from the market.
- Orchestra's medical device products, if approved, may cause or contribute to adverse medical events or be subject to failures or malfunctions that Orchestra is required to report to the FDA, and if we fail to do so, we would be subject to sanctions that could harm our reputation, business, financial condition and results of operations.
- The discovery of serious safety issues with Orchestra's products, or a recall of our products either voluntarily or at the direction of the FDA or another governmental authority, could have a negative impact on us.
- Virtue SAB is a drug/device combination, which may result in additional regulatory and other risks.
- If the FDA does not conclude that SirolimusEFR as a standalone product candidate satisfies the requirements for the Section 505(b)(2) regulatory approval pathway, or if the requirements for such product candidates under Section 505(b)(2) are not as Orchestra expects, the approval pathway for those product candidates may likely take significantly longer, cost significantly more and entail significantly greater complications and risks than anticipated, and in either case may not be successful.
- Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.
- Orchestra's relationships with physicians, patients and payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, and other healthcare laws and regulations.
- Healthcare cost containment pressures and legislative or administrative reforms resulting in restrictive coverage and reimbursement practices of third-party payors could decrease the demand for Orchestra's products, the prices that customers are willing to pay for those products and the number of procedures performed using its devices, which could have an adverse effect on its business.
- Changes in and failures to comply with U.S. and foreign privacy and data protection laws, regulations and standards may adversely affect Orchestra's business, operations and financial performance.
- Environmental and health safety laws may result in liabilities, expenses and restrictions on Orchestra's operations.
- Orchestra is subject to anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act, and violations of these laws could result in substantial penalties and prosecution.

Orchestra BioMed™

Appendix: Summary of Risk Factors (Cont'd)

Risks Related to Orchestra's Intellectual Property

- Orchestra may be unable to protect or enforce its intellectual property rights.
- Third parties may assert that Orchestra's employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.
- Orchestra may be involved in litigation or other proceedings relating to patent, trade secret and other intellectual property rights, which could cause substantial costs and liability.
- Patents covering Orchestra's technology or products could be found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad.
- Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by government patent agencies, and Orchestra's patent protection could be reduced or eliminated for non-compliance with these requirements.
- Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Orchestra's ability to protect its products.
- Orchestra may be subject to claims challenging the ownership or inventorship of its patents and other intellectual property and, if unsuccessful in any of these proceedings, Orchestra may be required to obtain licenses from third parties, which may not be available on commercially reasonable terms, or at all, or to cease the development, manufacture and commercialization of one or more of its products.
- Patent terms may be inadequate to protect Orchestra's competitive position on its product candidates for an adequate amount of time.
- Orchestra may be unable to acquire patent term extension in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation.
- Orchestra may need to obtain intellectual property rights from third parties, and may not be successful in obtaining necessary rights to develop any future product through acquisitions and in-licenses.
- If Orchestra's trademarks and trade names are not adequately protected, then Orchestra may not be able to build name recognition in its markets of interest and its business may be adversely affected.

Risks Related to HSAC2 and the Business Combination

- If the Business Combination's benefits do not meet the expectations of investors or securities analysts, the market price of the post-combination entity's securities may decline.
- The consummation of the Business Combination is subject to a number of conditions and if those conditions are not satisfied or waived, the Business Combination may be terminated in accordance with its terms and the merger may not be completed.
- Subsequent to the completion of the Business Combination, the combined company may be required to take write-downs or write-offs, restructuring and impairment or other charges that could have a significant negative effect on the combined company's financial condition, results of operations and stock price, which could cause you to lose some or all of your investment.
- Following the consummation of the Business Combination, the combined company will incur significant increased expenses and administrative burdens as a public company, which could negatively impact its business, financial condition and results of operations.
- A significant portion of combined company common stock following the Business Combination will be restricted from immediate resale, but may be sold into the market in the future. Future sales could cause the market price of combined company common stock to drop significantly, even if the combined company's business is doing well.
- HSAC2's board of directors did not obtain a third-party valuation or fairness opinion in determining whether or not to proceed with the Business Combination.
- HSAC2 and Orchestra have incurred and expect to incur significant costs associated with the Business Combination.
- The Sponsor and HSAC2's officers and directors own common shares and private warrants that will be worthless, and have incurred reimbursable expenses that may not be reimbursed or repaid, if the Business Combination is not approved and HSAC2 is not able to complete an alternative business combination by the applicable deadline. Such interests may have influenced their decision to approve the Business Combination.