Orchestra BioMed™ Granted FDA Approval of IDE for U.S. Pivotal Study of Virtue® Sirolimus AngioInfusion Balloon™ in Patients with Coronary In-Stent Restenosis

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- *Virtue® Sirolimus AngioInfusion Balloon ("SAB") is the only non-coated angioplasty system providing protected delivery of extended release sirolimus under clinical investigation worldwide*
- *Virtue ISR-US pivotal study focused on coronary in-stent restenosis ("ISR"), a difficult-to-treat and serious complication of coronary stenting, currently expected to start before the end of 2023*
- *Strategic partnership with Terumo Corporation ("Terumo") targets coronary ISR and multiple additional vascular indications for Virtue SAB globally*

NEW HOPE, Pa., Aug. 08, 2023 (GLOBE NEWSWIRE) -- Orchestra BioMed Holdings, Inc. (Nasdaq: OBIO, "Orchestra BioMed" or the "Company"), a biomedical company accelerating high-impact technologies to patients through risk-reward sharing partnerships, today announced the U.S. Food and Drug Administration (the "FDA") granted investigational device exemption ("IDE") approval with conditions to initiate the Virtue ISR-US pivotal study evaluating the efficacy and safety of Virtue® SAB for the treatment of patients with coronary ISR. Virtue SAB is a novel AngioInfusion balloon for the treatment of artery disease that is designed to enable protected delivery of SirolimusEFR™, a proprietary, investigational, extended release formulation of sirolimus, to the artery during balloon angioplasty without the need for balloon coating or a permanent implant.

"We believe that Virtue SAB has the potential to address a significant unmet clinical need and improve outcomes for a patient population with suboptimal treatment options. In a field currently dominated by paclitaxel-coated balloons, Virtue SAB is the only device that provides protected delivery of extended release sirolimus, the class of drugs used on all currently marketed coronary drug-eluting stents, to the treated artery during angioplasty without the need for a coating or a permanent implant," commented Darren R. Sherman, President, Chief Operating Officer and Founder of Orchestra BioMed. "This IDE approval and forthcoming pivotal study reflect our commitment to accelerating innovation through our differentiated, partnership-enabled business model. We look forward to continued collaboration with our partners at Terumo, as well as with the FDA as we work to deliver this highly differentiated, leave-nothing-behind therapy to patients."

The Virtue SAB IDE approval was supported by encouraging three-year follow-up results from the pilot SABRE Study, a European multi-center, prospective, independent core lab-adjudicated clinical trial in coronary ISR patients. The Virtue ISR-US pivotal study is a randomized, prospective, double-blind, multi-center, controlled study of Virtue SAB vs. Plain Old Balloon Angioplasty ("POBA") in the treatment of single-layer coronary ISR. The study's primary efficacy and safety endpoint is target lesion failure ("TLF") at 12 months. The study will randomize approximately 300 participants 2:1 to Virtue SAB or POBA. In parallel to the randomized arm of the study, Orchestra BioMed plans to enroll a non-randomized arm consisting of approximately 100 participants with double-layer coronary ISR for treatment with Virtue SAB.

Dean J. Kereiakes, M.D., FACC, MSCAI, President of The Christ Hospital Heart & Vascular Institute, Medical Director of The Christ Hospital Research Institute, Professor of Clinical Medicine at The Ohio State University, and the Principal Investigator for the Virtue ISR-US study commented, "Virtue SAB's differentiated design, as well as the encouraging three-year clinical results from the pilot SABRE study make it a potentially compelling treatment option for coronary artery disease indications. The IDE approval of this study represents a crucial step toward generating important data for establishing Virtue SAB's safety and efficacy and advancing this unique, sirolimus-based leave-nothing-behind therapy to coronary ISR patients."

The Company is permitted to begin enrollment upon completion of standard clinical trial initiation activities including clinical center Institutional Review Board approvals. The conditional approval also requires the Company to submit additional information to the FDA.

About Coronary In-Stent Restenosis (ISR)
Coronary ISR is a serious complication of coronary stenting which can increase the risk of life-threatening heart problems. It is characterized by a re-narrowing of a coronary artery segment that was previously treated with a stent. According to the National Cardiovascular Data Registry, coronary ISR occurs in up to 10% of stented patients during the first year and continues at a rate of up to 3% per year thereafter, resulting in an estimated over 325,000 coronary ISR lesions annually worldwide that may require treatment. The only device treatments currently approved by the FDA for use in coronary ISR lesions are balloon angioplasty and intravascular radiation therapy known as brachytherapy. Traditional balloon angioplasty has high retreatment rates and brachytherapy is considered a last resort treatment due to radiation burden, expense, limited availability, and long-term requirement for dual antiplatelet therapy. If left untreated, coronary ISR may lead to stable angina, unstable angina, acute coronary syndrome, acute myocardial infarction, or death.

About Virtue SAB
Virtue SAB is a patented drug/device combination product candidate in development for the treatment of certain forms of artery disease that is designed to deliver a proprietary, investigational, extended-release formulation of sirolimus, SirolimusEFR™, to the vessel wall during balloon angioplasty without any coating on the balloon surface or the need to leave a stent or other permanent implant in the artery. Virtue SAB demonstrated positive three-year clinical data in coronary ISR in the SABRE study, a multi-center prospective, independent core lab-adjudicated clinical study of 50 patients conducted in Europe. Virtue SAB has been granted Breakthrough Device designation by the FDA for specific indications relating to coronary ISR, coronary small vessel disease and peripheral artery disease below-the-knee.

Orchestra BioMed has a strategic partnership with Terumo (Terumo, TSE: 4543), a global leader in medical technology committed to minimally

invasive treatments in coronary and vascular intervention, headquartered in Tokyo, Japan, as well as Terumo Medical Corporation, its U.S. subsidiary, to collaborate on the global development and commercialization of Virtue SAB in coronary and peripheral vascular indications.

About Orchestra BioMed

Orchestra BioMed (Nasdaq: OBIO) is a biomedical innovation company accelerating high-impact technologies to patients through risk-reward sharing partnerships with leading medical device companies. Orchestra BioMed's partnership-enabled business model focuses on forging strategic collaborations with leading medical device companies to drive successful global commercialization of products it develops. Orchestra BioMed's flagship product candidates include BackBeat Cardiac Neuromodulation Therapy™ (CNT™) for the treatment of hypertension, a significant risk factor for death worldwide, and Virtue® Sirolimus AngioInfusion™ Balloon (SAB) for the treatment of atherosclerotic artery disease, the leading cause of mortality worldwide. Orchestra BioMed has a strategic collaboration with Medtronic, one of the largest medical device companies in the world, for development and commercialization of BackBeat CNT for the treatment of hypertension in pacemaker-indicated patients, and a strategic partnership with Terumo, a global leader in medical technology, for development and commercialization of Virtue SAB for the treatment of artery disease. Orchestra BioMed has additional product candidates and plans to potentially expand its product pipeline through acquisitions, strategic collaborations, licensing, and organic development. For further information about Orchestra BioMed, please visit www.orchestrabiomed.com, and follow us on LinkedIn and Twitter.

References to information included on, or accessible through, websites and social media platforms do not constitute incorporation by reference of the information contained at or available through such websites or social media platforms, and you should not consider such information to be part of this press release.

Forward-Looking Statements

Certain statements included in this press release that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements generally are accompanied by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "should," "would," "plan," "predict," "potential," "seem," "seek," "future," "outlook" and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements relating to the initiation and design of the Virtue ISR-US pivotal study, the FDA's conditional approval of the Virtue ISR-US pivotal study, the Company providing additional information to the FDA and the Company's late-stage development programs, strategic partnerships and plans to expand its product pipeline. These statements are based on various assumptions, whether or not identified in this press release, and on the current expectations of the Company's management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as and must not be relied on as a guarantee, an assurance, a prediction, or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and may differ from assumptions. Many actual events and circumstances are beyond the control of the Company. These forward-looking statements are subject to a number of risks and uncertainties, including changes in domestic and foreign business, market, financial, political, and legal conditions; failure to realize the anticipated benefits of the business combination; risks related to regulatory approval of the Company's product candidates; the timing of, and the Company's ability to achieve, expected regulatory and business milestones; the impact of competitive products and product candidates; and the risk factors discussed under the heading "Item 1A. Risk Factors" in the Company's quarterly report on Form 10-Q filed with the U.S. Securities and Exchange Commission on May 12, 2023, as updated by any risk factors disclosed under the heading "Item 1A. Risk Factors" in the Company's subsequently filed quarterly reports on Form 10-Q.

The Company operates in a very competitive and rapidly changing environment. New risks emerge from time to time. Given these risks and uncertainties, the Company cautions against placing undue reliance on these forward-looking statements, which only speak as of the date of this press release. The Company does not plan and undertakes no obligation to update any of the forward-looking statements made herein, except as required by law.

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