Filed by Organovo Holdings, Inc. Pursuant to Rule 425 under the Securities Act of 1933, as amended, and deemed filed pursuant to Rule 14a-6(b) under the Securities Act of 1934, as amended

Subject Company: Tarveda Therapeutics, Inc. File No. of Related Registration Statement: 333-235683

On February 26, 2020, Organovo Holdings, Inc. ("Organovo") issued the following press release in connection with the proposed merger pursuant to the terms of an Agreement and Plan of Merger and Reorganization, dated December 13, 2019 and amended as of January 26, 2020, by and among Organovo, Opal Merger Sub, Inc. and Tarveda Therapeutics, Inc.

Organovo Files Definitive Proxy Statement and Sends Letter to Stockholders

Recommends Stockholders Vote "FOR" Proposed Merger with Tarveda

SAN DIEGO, Feb. 26, 2020 – Organovo Holdings, Inc. ("Organovo") (NASDAQ: ONVO) today announced that it has filed definitive proxy materials with the U.S. Securities and Exchange Commission and has mailed these materials and a letter to its stockholders in connection with the company's Special Meeting to be held on March 26, 2020. Stockholders of record as of February 14, 2020 will be entitled to vote at the meeting.

Organovo urges its stockholders to vote "FOR" the proposed merger with Tarveda Therapeutics, Inc. ("Tarveda"), the proposed reverse stock split and the other proposals outlined in the definitive proxy statement. After carefully conducting a thorough review of strategic alternatives, the Organovo Board of Directors and management determined that the proposed merger with Tarveda provides the best path forward for the Organovo stockholders to maximize return on their investment.

The full text of Organovo's letter to stockholders is as follows:

Dear Fellow Stockholders,

As most of you are aware, the past year has been challenging for Organovo. Throughout it all, the Board of Directors and management team have been sharply focused on identifying the best path to maximize value for you, our stockholders. In that spirit, I'm reaching out to you today to encourage you to read the definitive proxy statement/prospectus/information statement that was mailed to you on or around February 26, 2020, and to vote in support of the proposed merger with Tarveda Therapeutics, Inc. and the other proposals described in the definitive proxy statement/prospectus/information statement – which we believe provides the best opportunity to maximize value for our stockholders.

As a stockholder of record as of February 14, 2020, I ask you to consider carefully the Board's recommendation to:

- Authorize the merger with Tarveda by approving the issuance of Organovo's common stock to the Tarveda securityholders in accordance with the terms of the merger agreement;
- 2) Vote in favor of the proposed reverse stock split by approving an amendment to the Organovo certificate of incorporation (in order to maintain our Nasdaq listing, and to allow us to have sufficient shares of common stock to issue to the Tarveda securityholders); and
- 3) Vote in favor of the other items outlined in the definitive proxy statement/prospectus/information statement.

Your vote is very important, no matter how many shares you own. Please help us keep your company moving forward and support the Tarveda transaction and the other items outlined in the definitive proxy statement/prospectus/information statement by voting today.

Please follow the instructions on the proxy card you receive with the definitive proxy statement/prospectus/information statement to vote by telephone or Internet or sign, date and return the proxy card in the postage-paid envelope provided.

The Tarveda Opportunity

There continues to be a positive and receptive market for clinical stage biotech companies with robust technology platforms offering promising therapeutics in human clinical testing, particularly in the rapidly evolving field of cancer therapeutics. Against this backdrop, Organovo's Board and management team evaluated multiple opportunities to identify transactions that could maximize the value of our tangible and intangible assets, including our cash and public company profile, in order to provide our stockholders potential for growth and value.

We believe we found the right partner in Tarveda. Tarveda is a Boston-based, clinical stage biopharmaceutical company, developing a new class of potent and selective precision oncology medicines, referred to as *Pentarin* miniature drug conjugates. *Pentarin* miniature drug conjugates consist of three parts:

- 1) A tumor targeting component called a targeting moiety, which is typically a small molecule or peptide that binds to a target that is differentiated in tumor compared to normal tissue;
- 2) A potent anti-cancer payload that can kill tumor cells; and
- 3) An optimized linker that joins the targeting agent and the anti-cancer payload together.

Tarveda designs and develops its *Pentarin* miniature drug conjugates to penetrate solid tumors, selectively bind to the desired tumor targets, and accumulate the anti-cancer payloads directly in tumor cells. Tarveda is supported by a strong syndicate of investors including Novo Holdings A/S, Versant Ventures and ND Capital (NanoDimension), and a highly seasoned management team with prior public company experience.

Furthermore:

Tarveda has two product candidates, PEN-866 and PEN-221, in human clinical trials with on-going safety and efficacy data generated from
multiple patient cohorts in a range of solid tumor indications. We believe that Tarveda also has a defined path to multiple clinical data readouts over the next two years.

- Tarveda's Heat Shock Protein 90 (HSP90) binding miniature drug conjugate platform is an impressive, proprietary discovery platform off
 of which PEN-866 is the first miniature drug conjugate in the clinic, but which also includes programs in discovery designed to carry
 kinase inhibitors, radioisotopes, and other anti-cancer payloads to accumulate and release those payloads in solid tumors.
- Tarveda's clinical and preclinical programs have had data in peer-reviewed presentations and publications, including recent presentations at ESMO and ASCO.
- Tarveda has recently raised additional capital that along with Organovo's anticipated cash at close is expected to provide approximately \$35 million of combined funding and can fund the business into the second half of 2021. This funding is expected to be sufficient to achieve key upcoming clinical data milestones on both of Tarveda's current clinical programs and additional advancements from its HSP90 binding miniature drug conjugate platform.

Organovo's Strategic Alternatives Process

While we believe the Tarveda transaction is the right transaction for Organovo stockholders, it's also important that you understand how we arrived at this decision.

Organovo began 2019 with three fundamental goals:

- Advancing our lead 3D bioprinted liver tissue therapeutics program toward pre-Investigational New Drug (IND) and IND registrational status:
- Driving value and generating positive cash flow from our commercial businesses, grants, and partnering of other pipeline assets; and
- Financing Organovo's research-intensive efforts to achieve these objectives.

Unfortunately, as we examined the data from broad animal studies with our liver patches and other efforts, our management team, the Board and our many external expert advisors determined that we had not generated sufficiently compelling scientific data supporting the requisite long-term functionality and benefit of our lead therapeutic liver tissue candidate. We came to the very difficult conclusion that the redevelopment necessary to make our tissues commercially viable would require an inordinate amount of time, financial investment and development risk, and was unlikely to provide our existing stockholders with a sufficient return on capital.

Accordingly, we initiated a process to evaluate a full complement of strategic alternatives and find a new way forward that could maximize stockholder return. During this thorough and broad strategic alternatives process, we evaluated M&A, licensing, co-development, and other strategies across a broad spectrum of companies including: 1) major pharmaceutical companies who were clients or partners; 2) leading life science, biotech, 3D bio-printing, and regenerative medicine companies; and 3) private and public biotechnology companies with clinical stage pipelines and products, platform technologies or commercial products.

We negotiated confidentiality and standstill agreements and commenced the due diligence process with 51 of these companies. Of these, 49 were sent bid process instructions and 27 submitted non-binding indications of interest. We evaluated all 27 companies based on their submissions, data room documentation and external reviews, and ultimately selected 8 companies to present detailed presentations to the Special Committee of our Board of Directors. The definitive proxy statement/prospectus/information statement provides additional detail on the extensive efforts we undertook as we examined every aspect of our business and explored strategic alternatives to maximize stockholder value.

At the conclusion of this rigorous strategic alternatives review process, our Board determined that a merger with Tarveda was the best opportunity to maximize value for our stockholders. The Board firmly believes that the merger with Tarveda is the best path forward because of Tarveda's disruptive HSP90 binding miniature drug conjugate platform, which has already resulted in the PEN-866 clinical program and for which new conjugates with anticancer payloads are in preclinical testing, the fact it has two product candidates, PEN-866 and PEN-221 in human clinical trials, and importantly, we believe Tarveda has a defined path to several clinical data read-outs over the next two years.

For these reasons, the merger with Tarveda will create a more advanced biotech company providing you, as a stockholder of Organovo, with the opportunity to participate in a venture that could have a substantial impact on oncology medicine and generate stockholder returns in the future. We recommend strongly that our stockholders support the merger with Tarveda and the other matters discussed in the definitive proxy statement/prospectus/information statement.

Your vote is important. Please support the merger with Tarveda by voting today. Please follow the instructions on the proxy card you receive with the definitive proxy statement/prospectus/information statement to vote by telephone or Internet or sign, date and return the proxy card in the postage-paid envelope.

We thank all our stockholders for their continued support and hope that together with Tarveda, we will make 2020 a transformative year for the combined company.

Sincerely,

Taylor J. Crouch

Chief Executive Officer and President

About Organovo

Organovo has been a pioneer in the development of 3-D bioprinted tissues comprised of human cells. After Organovo concluded that it had not generated decisive scientific data supporting the prolonged functionality and therapeutic benefit of its lead therapeutic liver tissue candidate, Organovo implemented a restructuring plan to significantly reduce expenses in order to focus on evaluating strategic alternatives, while retaining certain key management, IP, licenses, collaborations, and proprietary equipment.

Forward-Looking Statements

This communication contains forward-looking statements (including within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended) concerning Organovo and Tarveda, the proposed merger, Tarveda's technology and product candidates and Tarveda's business and product development plans. These statements may discuss goals, intentions and expectations as to future plans, trends, events, results of operations or financial condition, or otherwise based on current beliefs of the management of Organovo and Tarveda, as well as assumptions made by, and information currently available to, the respective management teams. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "expect," "anticipate," "plan," "likely," "believe," "estimate," "project," "intend," and other similar expressions. Statements that are not historical facts are forward-looking statements. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the risk that the conditions to the closing of the proposed merger are not satisfied, including the failure to obtain stockholder approval for the merger and the related proposals in a timely manner

or at all; uncertainties as to the timing of the consummation of the proposed merger and the ability of each of Organovo and Tarveda to consummate the transaction; risks related to Organovo's continued listing on The Nasdaq Capital Market until closing of the proposed merger and the ability of the combined company to maintain its listing if the transaction is consummated; risks related to the ability of Organovo and Tarveda to correctly estimate their respective operating expenses, the expenses associated with the proposed merger and their net cash as of the closing of the transaction; the risk that as a result of adjustments to the exchange ratio, Organovo stockholders and Tarveda stockholders could own more or less of the combined company than is currently anticipated; unexpected costs, charges or expenses resulting from the proposed merger; potential adverse reactions or changes to business relationships resulting from the announcement or completion of the proposed merger; Tarveda has incurred significant net losses since inception and anticipates that it will continue to incur substantial net losses for the foreseeable future and may never achieve or maintain profitability; even after completion of the merger, Tarveda will require substantial additional funding to finance its operations and product development plans; Tarveda is early in its development efforts and its lead drug candidates, PEN-866 and PEN-221 are still in early stage clinical development and there is no assurance that Tarveda will successfully complete late stage clinical trials or ever obtain regulatory approval for any drug candidate; Tarveda's approach to the discovery and development of Pentarin miniature drug conjugates, including using its HSP90 binding miniature drug conjugate platform, is based on novel technologies that are unproven and may not result in marketable products; and other factors discussed in the risk factors included in Organovo's definitive proxy statement/prospectus/information statement, filed with the Securities and Exchange Commission (the "SEC") on February 24, 2020, and its most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K filed with the SEC. In addition, the forward-looking statements included in this communication represent Organovo's and Tarveda's views as of the date hereof. Organovo and Tarveda anticipate that subsequent events and developments will cause their respective views to change. However, while Organovo and Tarveda may elect to update these forward-looking statements at some point in the future, Organovo and Tarveda specifically disclaim any obligation to do so. These forwardlooking statements should not be relied upon as representing Organovo's or Tarveda's views as of any date subsequent to the date hereof.

Important Information and Where to Find It

This communication may be deemed to be solicitation material in respect to the proposed transaction between Organovo and Tarveda. On February 24, 2020, Organovo filed a definitive proxy statement/prospectus/information statement with the SEC. Organovo mailed the definitive proxy statement/prospectus/information statement to its stockholders on or about February 26, 2020. Each party may file other documents with the SEC in connection with the proposed merger. BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS AND STOCKHOLDERS ARE URGED TO READ THESE MATERIALS CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN IMPORTANT INFORMATION ABOUT ORGANOVO, TARVEDA THE PROPOSED MERGER AND RELATED MATTERS. Investors and stockholders may obtain, free of charge, copies of the definitive proxy statement/prospectus/information statement and any other documents filed by Organovo with the SEC in connection with the proposed transactions at the SEC's website (http://www.sec.gov) and on the investor relations section of Organovo's website at ir.organovo.com. Investors and stockholders are urged to read the definitive proxy statement/prospectus/information statement and the other relevant materials before making any voting or investment decision with respect to the proposed merger and the related proposals.

Non-Solicitation

This communication does not constitute an offer to sell or solicitation of an offer to buy any securities, nor will 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.

Participants in the Solicitation

Organovo and its directors and executive officers and Tarveda and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of Organovo in connection with the proposed merger. Information regarding the special interests of the Organovo and Tarveda directors and executive officers in the proposed merger is included in the definitive proxy statement/prospectus/information statement referred to above. Additional information regarding the directors and executive officers of Organovo is included in Organovo's definitive proxy statement on Schedule 14A relating to the 2019 Annual Meeting of Stockholders, filed with the SEC on July 26, 2019. These documents are available free of charge from the sources indicated above.

Organovo:

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