

Organovo Sponsors Pioneering Research With Amgen and Medikine in Critical Areas of Liver and Kidney Disease

August 23, 2017

SAN DIEGO, Aug. 23, 2017 (GLOBE NEWSWIRE) -- Organovo Holdings, Inc. (NASDAQ:ONVO) ("Organovo") today announced it has awarded the 2017 ExVive 3D Tissue Application Award to researchers at Amgen, Inc and Medikine, Inc. The program is designed to explore new applications using Organovo's ExVive Liver and Kidney Tissues in collaboration with biopharmaceutical partners. The Company had many applicants for its awards, with the winners submitting the two most creative and novel proposals with the aim of bridging preclinical and clinical research. The projects will be performed by Organovo and include comprehensive studies and data analysis.

"Amgen consistently works to develop improved *in vitro* models that can more accurately predict potential safety issues before an investigational medicine ever reaches the clinic," said Cindy Afshari, vice president, Comparative Biology and Safety Sciences, Amgen. "Current *in vitro* models lack the sensitivity to detect drug-induced fatty liver, a common reason drugs fail in clinical development, due to a variety of technical limitations. We look forward to collaborating with Organovo to further explore the utility of the ExVive Human Liver Tissue in addressing those issues."

"Genetic and biochemical evidence indicates that key factors play a crucial role in the progression of renal fibrosis, sclerosis and subsequent organ dysfunction," said Bill Dower, chief scientific officer of Medikine, Inc. "However, no therapeutic agents based on these key pathways have been developed to treat kidney disease. We are excited to be chosen for this award. We believe the ExVive Kidney Tissue is an excellent tool to study progression and reversal of fibrosis because of its multicellular nature."

Organovo continues to partner with industry leaders to target attractive markets with critical unmet needs. Fatty liver disease and renal fibrosis are critical research areas for the Company's clients, and customer demand for more predictive 3D solutions is robust. For example, the Company's solutions can use both healthy and diseased cells in building bioprinted liver tissues to model clinical pathologies of a disease. Organovo is working to create 'human preclinical models' to enable earlier insights in drug discovery. In addition, deteriorating liver and kidney health around the world makes it critical to understand how new and existing drugs perform in these expanding patient populations. Accurately modeling these diseases will be critical for our clients as they strive to assess the efficacy and safety of their drugs in real-world populations, and the Company believes regulators around the world will expect more representative human studies before approving a new drug.

"We are pleased to support innovative applications using our dynamic liver and kidney tissue systems," noted Taylor J. Crouch, CEO, Organovo. "Through our grant program, Organovo will work closely with partners to design 3D tissue solutions in vital areas of high-value drug profiling. These applications will support the increased demand for translational *in vitro* models and benefit a broader customer base."

About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for use in medical research and therapeutic applications. The Company develops 3D human tissue models through internal development and in collaboration with pharmaceutical, academic and other partners. Organovo's 3D human tissues have the potential to accelerate the drug discovery process, enabling treatments to be developed faster and at lower cost. The Company's ExVive Human Liver and Kidney Tissues are used in toxicology and other preclinical drug testing. The Company also actively conducts early research on specific tissues for therapeutic use in direct surgical applications. In addition to numerous scientific publications, the Company's technology has been featured in The Wall Street Journal, Time Magazine, The Economist, Forbes, and numerous other media outlets. Organovo is changing the shape of life science research and transforming medical care. Learn more at www.organovo.com.

Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Any forward-looking statements contained herein are based on current expectations, but are subject to a number of risks and uncertainties. The factors that could cause the Company's actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to develop, market and sell products and services based on its technology; the expected benefits and efficacy of the Company's products, services and technology; the Company's ability to successfully complete studies and provide the technical information required to support market acceptance of its products, services and technology, on a timely basis or at all; the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies, including its use of third party distributors; the Company's ability to successfully complete the contracts and recognize the revenue represented by the contracts included in its previously reported total contract bookings and secure additional contracted collaborative relationships; the final results of the Company's preclinical studies may be different from the Company's studies or interim preclinical data results and may not support further clinical development of its therapeutic tissues; the Company may not successfully complete the required preclinical and clinical trials required to obtain regulatory approval for its therapeutic tissues on a timely basis or at all; and the Company's ability to meet its fiscal year 2018 outlook. These and other factors are identified and described in more detail in the Company's filings with the SEC, including its Annual Report on Form 10-K filed with the SEC on June 7, 2017. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that the Company may issue in the future. Except as required by applicable law, including the securities laws of the United States, the Company does not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances or to reflect the occurrence of unanticipated events.

Investor Contact:

Steve Kunszabo Organovo Holdings, Inc. +1 (858) 224-1092 skunszabo@organovo.com

Press Contact:

Jessica Yingling Little Dog Communications +1 (858) 480-2411 jessica@litldog.com



Organovo, Inc.