

Organovo Receives Strong Customer Response for ExVive Human Kidney Tissue Launch

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SAN DIEGO, Nov. 01, 2016 (GLOBE NEWSWIRE) -- Organovo Holdings, Inc. (NASDAQ:ONVO) ("Organovo"), a three-dimensional biology company focused on delivering scientific and medical breakthroughs using its 3D bioprinting technology, today announced that it has received a strong customer response for its second tissue service, the ExViveTM Human Kidney Tissue. This kidney proximal tubule model was launched in September, and is a natural expansion of the Company's preclinical product and service portfolio. Customers use Organovo's 3D bioprinted kidney tissue to study the effects of drug exposure through toxicology panels and transporter studies. The Company already has multiple commercial orders from several customers, including with two, global, top 25 pharmaceutical companies.

"Nephrotoxicity is a key concern in drug development and the proximal tubule is the primary site of renal toxicity," said Dr. Caroline Lee, senior director, Ardea Biosciences, Inc. "Specifically, transporters in the proximal tubule play a crucial role in the distribution and accumulation of drugs in the kidney. The ExVive Human Kidney Tissue provides an ideal means to study the impact of renal transporters on the disposition of drugs because it closely resembles native human kidney proximal tubule, with its polarized renal epithelial cells and tubulointerstitial interface and in particular its native expression level of transporters enabling formation of the transport network." Ardea Biosciences, Inc. is a wholly-owned subsidiary of AstraZeneca PLC.

"At La Jolla Pharmaceutical Company, we incorporate *in vitro* models to assess nephrotoxicity in the preclinical stage of drug development," said Dr. Andrew Seacat, director, preclinical development, La Jolla Pharmaceutical Company. "Early safety prediction of compounds is challenging and many drugs fail in the clinic because of renal toxicity. Organovo has developed an *in vitro* human kidney tissue model that allows for study of renal toxicity, biomarker expression, and overall cellular and tissue health following compound exposure. La Jolla currently utilizes the ExVive Human Kidney Tissue model to assess the renal impact of our compounds during development."

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 market acceptance of the Company's products and services; the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies; 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; the risk of further adjustments to the Company's select preliminary financial results for the second quarter of fiscal 2016; and the Company's ability to meet its fiscal year 2017 outlook and/or its long-range 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 9, 2016, its Quarterly Report on Form 10-Q filed with the SEC on August 4, 2016 and other filings with the SEC. 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 forwardlooking 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) 344-8091 jessica@litldog.com



Organovo, Inc.