



OvaScience and Intrexon Collaborate to Accelerate Development of OvaScience's OvaTureSM Technology for Infertility Treatments

December 19, 2013

Companies also Form Joint Venture to Develop Applications to Prevent Inherited Human Diseases and Improve Animal Health

CAMBRIDGE, Mass. & GERMANTOWN, Md.--(BUSINESS WIRE)--Dec. 19, 2013-- OvaScience, (NASDAQ: OVAS), a life sciences company focused on the discovery, development and commercialization of new treatments for infertility, and Intrexon Corporation (NYSE: XON), a leader in synthetic biology, today announced an agreement to access Intrexon's portfolio of technologies to accelerate the development of OvaScience's OvaTureSM technology platform. Separately, the companies established a Joint Venture, called OvaXon, to combine their unique technology platforms to create new applications for improving human and animal health.

"We are accelerating the development for OvaTure by applying Intrexon's industrialized synthetic biology platform to enhance our process for the maturation of egg precursor cells (EggPCs) into high quality eggs," said Michelle Dipp, M.D., Ph.D., Chief Executive Officer of OvaScience. "This is a major step toward our goal of bringing new treatments to women seeking further options for infertility. At the same time, the joint venture with Intrexon will allow us to broaden the potential of our EggPCSM platform to develop therapeutics for the prevention of inherited diseases in future generations."

OvaTureSM is OvaScience's next-generation approach to *in vitro* fertilization (IVF) using a woman's own EggPCs, which are immature egg cells found in the outer edge of the ovaries. OvaScience uses proprietary methods to identify, isolate and mature EggPCs into high quality eggs for *in vitro* fertilization without the need for hormone injections. Importantly, OvaTure may provide a new treatment option for women with compromised eggs, or who may be unwilling or unable to undergo hormone hyperstimulation, such as women diagnosed with cancer who seek to preserve their future fertility.

Through the Exclusive Channel Collaboration (ECC) between the companies, Intrexon will use its proprietary Cell Systems Informatics, UltraVector[®], RheoSwitch[®], AttSite[®], and LEAP[™] technologies, to develop methodologies to enable the accelerated and scalable development of OvaTure. In addition and as part of the Joint Venture, the combination of OvaScience's EggPC platform with Intrexon's genome engineering capabilities offers an innovative approach to the prevention of inherited diseases in humans, such as mitochondrial and other genetic disorders.

Samuel Broder, M.D., Senior Vice President of Intrexon's Health Sector and former Director of the National Cancer Institute, underscored the potential for this collaboration.

"Our collective expertise and technologies can help OvaScience to revolutionize the future of *in vitro* fertilization," Dr. Broder said. "I am also excited to be working together to correct genetic diseases that have been identified through the Human Genome Project, one of the most important scientific research endeavors of our time, and one in which I participated."

Arthur Tzianabos, Ph.D., OvaScience Chief Science Officer, noted that the Intrexon collaboration could expand opportunities in the development of the OvaTure platform.

"Intrexon has been successful in applying their proprietary synthetic biology capabilities across industries and we look forward to working with them to mature EggPCs into high quality, fertilizable eggs *in vitro*," Tzianabos said. "The formation of OvaXon also creates unique technical synergies and therapeutic opportunities for developing a superior approach to eradicating diseases that are transmitted through family lines."

Randal J. Kirk, Chairman and Chief Executive Officer of Intrexon, said "OvaScience is at the forefront of developing new infertility treatments and these agreements demonstrate the tremendous value that we believe can be created by combining our respective technologies and expertise. It also reflects our shared commitment to develop new ways to prevent serious diseases in children around the world."

Under the ECC agreement, OvaScience will gain access to all Intrexon technologies and expertise to accelerate development of OvaTure in exchange for a \$2.5 million payment by OvaScience to Intrexon in common stock due upon signing, and \$2.5 million due one year later. The agreement also provides for a commercial milestone payment as well as royalties, which are dependent upon timing of completion by Intrexon. OvaScience will retain all commercial rights to OvaTure.

Under the terms of the OvaXon Joint Venture, each company will share equally in the research and development costs associated with leveraging the value of the combined technologies. OvaXon has been granted commercial and related intellectual property rights from OvaScience and Intrexon outside the field of human fertility to apply the combined technologies of Intrexon and OvaScience within fields-of-use defined under the Joint Venture, which include prevention of genetic disease and animal health.

About OvaScience

OvaScience (NASDAQ: OVAS) is a life sciences company focused on the discovery, development and commercialization of new treatments for infertility. The Company's patented technology is based on the discovery of egg precursor cells (EggPCSM), which are found in the ovaries. By applying proprietary technology to identify and purify EggPCs, OvaScience is developing potential next generation *in vitro* fertilization (IVF) technologies. The Company currently has two product candidates in development: OvaTureSM, which seeks to create mature fertilizable eggs from a woman's own EggPCs without the need for hormone injections, and AUGMENTSM, which aims to improve egg quality and increase the success of IVF. OvaScience's team of scientists, physicians and advisers includes recognized leaders in the field of reproductive medicine. For more information, please visit www.ovascience.com and connect with us on [Twitter](#) and [Facebook](#).

About Intrexon Corporation

Intrexon Corporation (NYSE: XON) is a leader in synthetic biology focused on collaborating with companies in Health, Food, Energy and the Environment to create biologically-based products that improve the quality of life and the health of the planet. Through the company's proprietary UltraVector[®] platform, Intrexon provides its partners with industrial-scale design and development of complex biological systems. The UltraVector[®] platform delivers unprecedented control over the quality, function, and performance of living cells. We call our synthetic biology approach and integrated technologies **Better DNA[®]**, and we invite you to discover more at www.dna.com.

Trademarks

Intrexon, UltraVector, AttSite, RheoSwitch, LEAP, and Better DNA are trademarks of Intrexon and/or its affiliates. Other names may be trademarks of their respective owners. OvaScienceSM, OvaTureSM, and EggPCSM are service marks of OvaScience.

Safe Harbor Statement

Some of the statements made in this press release are forward-looking statements. These forward-looking statements are based upon our current expectations and projections about future events and generally relate to our plans, objectives and expectations for the development of our business and our development goals. All forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this press release.

Source: OvaScience

OvaScience, Inc.
Theresa McNeely, +1 617-299-7356
EVP, Strategic Corporate Communications
tmcneely@ovascience.com

or

Intrexon Corporation
Peter McLaughlin, +1 561-410-7023
Vice President, Corporate Communications
PublicRelations@intrexon.com