Improved Pregnancy Rates and Healthy Births with OvaScience's AUGMENT Fertility Treatment to be Published in Peer-Reviewed Journal

August 10, 2015

- New Analysis Shows Statistically Significant Higher Rates of Ongoing Pregnancies when Eggs from the Same Woman are Treated with AUGMENT Treatment versus Standard IVF Alone -

- Higher Rate of Embryo Transfer with AUGMENT Treatment Based on Standard Embryo Quality Measures -

- Company to Hold Business Update Call on August 11 at 7:00 AM ET -

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Aug. 10, 2015-- OvaScience℠ (NASDAQ: OVAS), a global fertility company focused on the discovery, development and commercialization of new treatment options, announced today that a peer-reviewed journal will publish analyses of the AUGMENT℠ treatment that show statistically significant higher ongoing clinical pregnancy rates compared to standard *in vitro* fertilization (IVF). This will be the first publication of physician experience using the AUGMENT treatment and includes a new analysis by Fakih IVF in the United Arab Emirates (UAE) in which eggs from the same woman during the same IVF cycle were prospectively allocated to two treatment groups: one group of eggs received the AUGMENT treatment during IVF and the other group of eggs received only IVF. Higher rates of embryo transfer occurred with the AUGMENT treatment based on standard embryo quality measures.

Physician experiences from Michael Fakih, M.D., Co-Founder and Medical Director of Fakih IVF, and Robert F. Casper, M.D., F.R.C.S.(C), Medical Director of TCART Fertility Partners in Canada, are expected to appear in the August 25, 2015, peer-reviewed, *Journal of Fertilization: In Vitro– IVF-Worldwide Reproductive Medicine, Genetic & Stem Cell Biology*. The publication also includes a summary of over 90 patients treated at Fakih IVF and TCART, many of whom were the subject of previous presentations at recent fertility meetings. Drs. Fakih and Casper have used the AUGMENT treatment in clinical practice since 2014, each focusing initially on poor prognostic women with histories of failed IVF cycles. The AUGMENT treatment is not available in the United States.

"During our early offering of the AUGMENT treatment, we sought to quantify the impact it would have over the standard IVF procedure," said Michael Fakih, M.D., Co-Founder and Medical Director of Fakih IVF. "We found that the eggs receiving the AUGMENT treatment had better morphogenetic characteristics than those that only received IVF, and the improved clinical pregnancy rates with the AUGMENT treatment suggest higher egg and embryo quality. Based on these and the totality of outcomes we have seen with all patients treated to date, including the birth of two sets of twins, we intend to expand our offering of the AUGMENT treatment to more women."

At Fakih IVF, a new analysis of the eggs from 25 women with a poor prognosis for IVF success and no prior live births following an average of 4 IVF cycles was conducted. Eggs from the same woman were prospectively allocated to two treatment groups; one group of eggs received the AUGMENT treatment during IVF and the other group of eggs received only IVF. Embryo quality was assessed by standard morphogenetic analysis and this determined embryo selection for transfer. Morphogenetic analysis refers to selection based on morphology, which examines external physical characteristics such as fragmentation and symmetry, as well as preimplantation genetic diagnosis or screening (PGD/PGS). After morphogenetic assessment, the highest quality embryos from a single treatment group were transferred. Transfer was limited to the treatment group with the highest quality embryos. A retrospective analysis of the 25 intent-to-treat (ITT) patients was performed to compare the AUGMENT treatment to IVF. Statistically significant higher rates of embryo selection (based on morphogenetic analysis) and embryo transfers were observed among the AUGMENT-treated group of eggs compared to the IVF-only treated group of eggs. Further, the AUGMENT-treated eggs had statistically significant higher pregnancy rates, including ongoing clinical pregnancy rates.

Editor-in-Chief, Professor Zeev Shoam, of *Journal of Fertilization: In Vitro– IVF-Worldwide Reproductive Medicine, Genetic & Stem Cell Biology*, commented on the upcoming publication, "Promising technologic advancements, such as the AUGMENT treatment, may one day solve 'egg factor' problems. Declining mitochondrial function is one of the reasons why women's egg fertilization and embryo development efficacy decreases, impacting pregnancy rates, and the AUGMENT treatment is addressing these potential energy deficiencies."

The paper, "The AUGMENT℠ Treatment: Physician Reported Outcomes of the Initial Global Patient Experience" (Michael H Fakih, M.D., Mohamad El Shmoury, ELD (ABB), Julia Szeptycki, Ph.D.(c), Dennis B dela Cruz, B.Sc., Caroline Lux, R.N., Suleman Verjee, Ph.D., Colleen M Burgess, ELD (ABB), Gabriel Cohn, M.D., Robert F Casper, M.D.), is expected to be available at http://www.omicsgroup.org/journals/fertilization-in-vitro.php.

IVF is the standard treatment for infertility, yet it fails the majority of the time. Poor egg health is a major cause of IVF failure, and data has demonstrated that the decline in egg health is largely due to a reduction in energy production. The AUGMENT treatment is designed to improve egg health by supplementing the energy in mature eggs during IVF.

OvaScience management will host a call regarding the publication and other recent business updates, including geographic expansion, on Tuesday, August 11, 2015 at 7:00 AM ET. The call can be accessed by dialing (877) 930-8299 (U.S.) or (253) 336-8765 (international) five minutes prior to the start of the call and providing the passcode 9610719. A replay will be available approximately two hours after completion of the call and can be accessed by dialing (855) 859-2056 (U.S.) or (404) 537-3406 (international) and providing the passcode 9610719. The replay will be available for two weeks from the date of the call. Additionally, the live, listen-only webcast of the conference call can be accessed by visiting the Investors section of the Company's website at www.ovascience.com. A replay of the webcast will be archived on the Company's website for two weeks following the call.

About OvaScience

OvaScience (NASDAQ: OVAS) is a global fertility company dedicated to improving treatment options for women around the world. OvaScience is discovering, developing and commercializing new fertility treatments because we believe women deserve more options. Each OvaScience treatment is based on the Company's proprietary technology platform that leverages the breakthrough discovery of egg precursor (EggPC ^{SM}) cells – immature egg cells found inside the protective ovarian lining. The AUGMENT^{SM} treatment, a fertility option specifically designed to improve egg health, is available in certain IVF clinics in select international regions outside of the United States. OvaScience is developing the OvaPrime^{SM} treatment, which could increase a woman's egg reserve, and the OvaTure ^{SM} treatment, a potential next-generation IVF treatment that could help a woman produce healthy, young, fertilizable eggs without hormone injections. For more information, please visit www.ovascience.com and www.augmenttreatment.com and connect with us on Twitter and Facebook.

Forward-Looking Statements

This press release includes forward-looking statements about the Company's plans for the AUGMENT treatment and its two fertility treatments in development. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including risks related to: the possibility that international IVF clinics that we work with may determine not to begin or continue providing the AUGMENT treatment for commercial or other reasons; our expectation that the AUGMENT treatment and OvaPrime treatment meet the requirements of a class of products exempt from premarket review and approval under applicable regulations in those countries where we have launched or plan to introduce the AUGMENT treatment and plan to introduce the OvaPrime treatment; the commercial ramp up of the AUGMENT treatment, which we expect will depend upon the successful transition of ACE clinics to commercial operations, the addition of new ACE clinics, and the results from ACE clinic experience as they become available; the science underlying our treatment and treatments in development (including the AUGMENT, OvaPrime and OvaTure treatments), which is unproven; our ability to obtain regulatory approval where necessary for our potential treatments; our ability to develop our potential treatments, including the OvaPrime and OvaTure treatments, on the timelines we expect, if at all; our ability to commercialize the AUGMENT treatment and our potential treatments, including the OvaPrime treatment, on the timelines we expect, if at all; as well as those risks more fully discussed in the "Risk Factors" section of our most recently filed Quarterly Report on Form 10-Q and/or Annual Report on Form 10-K. The forward-looking statements contained in this press release reflect our current views with respect to future events. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements in the future, we specifically disclaim any obligation to do so. These forward-looking statements should not be relied upon as representing our view as of any date subsequent to the date hereof.

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