ObsEva Starts Phase 3 Clinical Program for Nolasiban in ART

- IMPLANT2 study to confirm efficacy and safety of novel, oral oxytocin receptor antagonist in infertile patients undergoing embryo transfer as part of assisted reproductive technology (ART) -

Geneva, Switzerland - 07 March 2017 – ObsEva SA (Nasdaq: OBSV), a Swiss biopharmaceutical company focused on the development and commercialization of novel therapeutics for serious conditions that compromise a woman's reproductive health and pregnancy, today announced initiation of its Phase 3 clinical program evaluating the efficacy and safety of nolasiban to improve pregnancy and live birth rates in women undergoing ART. The study is being conducted in 10 European countries.

Nolasiban is an oral oxytocin receptor antagonist that potentially improves pregnancy and live birth rates following embryo transfer (ET). In a completed Phase 2 study, 43 percent of patients treated with 900 mg of nolasiban before ET achieved a live birth compared to 29 percent of patients who received placebo.

"*Based on our promising Phase 2 data, we are starting a large confirmatory study to assess the efficacy and safety of a single, oral administration of 900 mg of nolasiban before embryo transfer on either Day 3 or Day 5 following egg retrieval,*" said Ernest Loumaye, MD, PhD, OB&GYN, CEO and Co-Founder of ObsEva. "*We believe that should this trial confirm an absolute increase in live birth rates of about 10 percent, or greater, it would represent a major advance for the patients undergoing these demanding procedures to fulfill their desire to have a child.*"

The IMPLANT2 clinical trial is being conducted at approximately 50 fertility clinics across Europe, and is expected to enroll about 760 women who are undergoing assisted reproduction by in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICSI) for low fertility. Following ovarian stimulation, egg retrieval and fertilization, eligible women will be randomized to receive either a single oral dose of 900 mg nolasiban or placebo a few hours before Day 3 or Day 5 ET. Treatment allocation will be blinded. A pregnancy test will be done after two weeks and pregnancies confirmed by ultrasound at 6 and 10 weeks. The primary outcome is ongoing pregnancy at 10 weeks after ET. Women with confirmed pregnancies will be monitored until the birth of their babies. Babies will be monitored for one to six months after birth.

About Assisted Reproductive Technology

Infertility affects about 10 percent of reproductive-aged couples, with approximately 1.6 million ART treatments (including IVF and ICSI) performed worldwide each year.

While the success of ART depends on multiple factors such as embryo quality and ET procedure, a successful pregnancy ultimately hinges on the receptivity of the uterus to accept embryo implantation. Uterine contractions at the time of ET, as well as suboptimal thickness of the uterine wall and blood flow to the uterus, may impair the implantation of the embryo.

About Nolasiban

Nolasiban (previously known as OBE001), is an oral oxytocin receptor antagonist with the potential to decrease contractions, improve uterine blood flow and enhance the receptivity of the endometrium to embryo implantation, all of which may increase the chance of successful pregnancy and live-birth among

patients undergoing ART. ObsEva licensed nolasiban from Merck-Serono in 2013 and retains worldwide commercial rights.

About ObsEva

ObsEva is a clinical-stage biopharmaceutical company focused on the clinical development and commercialization of novel therapeutics for serious conditions that compromise a woman's reproductive health and pregnancy. Through strategic in-licensing and disciplined drug development, ObsEva has established a late-stage clinical pipeline with development programs focused on treating endometriosis, uterine fibroids, preterm labor and improving ART outcomes. ObsEva is listed on The NASDAQ Global Select Market and is trading under the ticker symbol "OBSV". For more information, please visit www.ObsEva.com.

Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "believe", "expect", "may", "plan," "potential," "will," and similar expressions, and are based on ObsEva's current beliefs and expectations. These forward-looking statements include expectations regarding the trial design of OBE001, including total enrollment, as well as the potential benefits of OBE001. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the conduct of clinical trials, ObsEva's reliance on third parties over which it may not always have full control, and other risks and uncertainties that are described in the Risk Factors section of ObsEva's Registration Statement on Form F-1, as amended, declared effective by the Securities and Exchange Commission (SEC) on January 25, 2017, and other filings ObsEva makes with the SEC from time to time. These documents are available on the Investors page of ObsEva's website at http://www.obseva.com. Any forward-looking statements speak only as of the date of this press release and are based on information available to ObsEva as of the date of this release, and ObsEva assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.

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