

ObsEva SA Presents Clinical Data from Phase III IMPLANT 2 Trial of Nolasiban in IVF at the American Society of Reproductive Medicine (ASRM) Annual Meeting

- ***Abstract featuring-IMPLANT2 data awarded Prize Paper by Society for Assisted Reproductive Technology (SART)***
- ***Nolasiban treatment shown to significantly increase Live Birth Rate (LBR) in randomized clinical trial of patients undergoing In Vitro Fertilization (IVF)***

Geneva, Switzerland and Boston, MA – October 9, 2018 - ObsEva SA (NASDAQ: OBSV / SIX: OBSD), a Swiss clinical-stage 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 that IMPLANT 2 Phase 3 clinical data of its novel, oral, oxytocin receptor antagonist, nolasiban, in patients undergoing IVF were presented at the 74th annual meeting of the American Society of Reproductive Medicine (ASRM), taking place in Denver, Colorado, October 6-10, 2018.

"We feel honored that our commitment to improve the chances of success of IVF treatments is recognized by the award for IMPLANT 2 from SART, the primary organization of professionals dedicated to the practice of Assisted Reproductive Technologies (ART) in the United States. In addition, the new data showed an increase in live births resulting from a single nolasiban administration prior to embryo transfer (ET) which represents extremely important efficacy and safety follow-up from both a clinical trial and patient perspective," said Ernest Loumaye, co-founder and Chief Executive Officer of ObsEva. "We are continuing our nolasiban clinical development to bring the first treatment at the time of ET, to couples experiencing infertility and undergoing IVF treatment that can improve not only the likelihood of achieving pregnancy, but also the ultimate goal of bringing home a baby."

In the oral presentation entitled "A Placebo-controlled, Randomized, Double Blind, Phase 3 Study Assessing Ongoing Pregnancy Rates After Single Oral Administration of a Novel Oxytocin Receptor Antagonist, Nolasiban, Prior to Single Embryo Transfer" the primary endpoint results of the IMPLANT 2 trial showed an improvement in the rate of ongoing pregnancy 10 weeks post either Day 3 or Day 5 ET, with nolasiban treatment vs. placebo, 35.6% vs. 28.5% ($p=0.031$), a 25% increase. For women undergoing Day 5 ET, nolasiban resulted in an ongoing pregnancy rate of 45.9% vs. 34.7% for placebo ($p=0.034$), a 32% increase.

New data of this trial presented on live birth rate (LBR), also known as "Take Home Baby rate", showed that nolasiban treatment resulted in an improvement that was both statistically and clinically significant. Treatment with a single nolasiban 900 mg oral dose 4h prior to ET resulted in a live birth rate of 34.8% vs.

27.7% for patients receiving placebo ($p=0.025$), a 26% increase. The live birth rates from women undergoing Day 5 ET were 44.8% for those receiving nolasiban, vs. 33.2% for those receiving placebo (p value=0.025), a 35% increase.

Importantly, the tolerability and safety profile of nolasiban has been observed to be comparable to placebo, with no increase in serious adverse events, in ectopic pregnancy, nor in congenital birth defects. In addition, a secondary endpoint of miscarriage rate from weeks 2 to 24 of gestation showed a favourable impact from nolasiban treatment suggesting a reduced miscarriage rate following nolasiban treatment compared to placebo.

ObsEva recently announced regulatory feedback from authorities in Europe and, as initially planned, is proceeding with an additional Phase 3 clinical trial of nolasiban. This trial is expected to begin screening patients before the end of 2018, and will enroll up to approximately 1,000 patients undergoing IVF. Primary endpoint results measuring ongoing pregnancy rate 10 weeks post ET from this trial are anticipated before the end of 2019, and with positive results are intended to support Marketing Authorisation Application filing in the EU.

About the IMPLANT2 Clinical Trial

IMPLANT 2 is a Phase 3, randomized, double blind, clinical trial assessing nolasiban compared to placebo for improving the rate of pregnancy in patients undergoing IVF or ICSI. Following ovarian stimulation, egg retrieval and fertilization, eligible women are randomized to receive either a single, oral dose of 900 mg nolasiban or placebo 4 hours before Day 3 or Day 5 fresh, single ET. The primary endpoint is ongoing pregnancy at 10 weeks after ET. Women with confirmed pregnancies are monitored until delivery and the infants for up to 6 months following birth.

About Assisted Reproductive Technology (ART)

Infertility affects about 10 % of reproductive-aged couples, with more than 2 million ART treatments (most being IVF) performed worldwide each year. Currently 59% of fresh embryo transfers are performed on Day 5 and 31% on Day 3 in the United States (CDC report, 2015 data).

While the success of ART depends on multiple factors including ovarian response, fertilization, 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 reduced blood flow to the uterus, may impair the implantation of the embryo.

About Nolasiban

Nolasiban (previously known as OBE001), is a novel, oral, oxytocin receptor antagonist with the potential to decrease uterine 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 KGaA, Darmstadt, Germany, in 2013 and retains worldwide, exclusive, 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 IVF outcomes. ObsEva is listed on the NASDAQ Global Select Market and is trading under the ticker symbol "OBSV" and on the SIX Swiss Exchange where it is trading under the ticker symbol "OBSN". 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 clinical development of ObsEva's product candidates, the timing of enrollment in and data from clinical trials and the results of interactions with regulatory authorities. 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, clinical development and related interactions with regulators, 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 Annual Report on Form 20-F for the year ended December 31, 2017, and other filings ObsEva makes with the SEC. 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.

###

For further information, please contact:

Media Contact Switzerland and Europe:

Christophe Lamps

Dynamics Group

cla@dynamicsgroup.ch

+41 22 308 6220 Office

+41 79 476 26 87 Mobile

Media Contact U.S.:

Marion Janic
RooneyPartners LLC
mjanic@rooneyco.com
+1 212 223 4017 Office
+1 646 537 5649 Mobile

CEO Office Contact:

Shauna Dillon
Shauna.dillon@obseva.ch
+41 22 552 1550

Investor Contact:

Mario Corso
Senior Director, Investor Relations
mario.corso@obseva.com
+1 857 972 9347 Office
+1 781 366 5726 Mobile