ObsEva Announces Clearance to Initiate Pivotal US Phase 3 Clinical Trial (IMPLANT 3) of Nolasiban in Women Undergoing Embryo Transfer Following IVF

FDA Allows IMPLANT 3 Trial to Begin

Geneva, Switzerland and Boston, MA – October 31, 2019 – ObsEva SA (NASDAQ: OBSV / SIX: OBSN), a 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 the U.S. Food and Drug Administration (FDA) has allowed the Company to begin enrolling patients in IMPLANT 3, the U.S pivotal Phase 3 clinical trial of nolasiban in women undergoing embryo transfer (ET) following in-vitro fertilization (IVF).

Nolasiban is an oral oxytocin receptor antagonist currently being studied for this use in a confirmatory Phase 3 European trial known as IMPLANT 4. Based on communications between ObsEva and FDA (including an End of Phase 2 meeting early this year), ObsEva submitted the current IMPLANT 3 protocol to the Company's IND, seeking to conduct the Phase 3 clinical trial. IMPLANT 3 is the first study of nolasiban in the United States and will evaluate efficacy in increasing the number of live births and safety compared to placebo, in a total of approximately 1,100 women undergoing a Day 5 transfer of a single, fresh embryo.

"FDA clearance of the protocol, allowing us to conduct a pivotal Phase 3 clinical trial for nolasiban in IVF, is a critical step in continuing to advance our development plan for this compound. We are extremely pleased with the collaborative and constructive relationship we have had so far with the FDA that has led us to this important point. With the IMPLANT 4 results anticipated this quarter, and subsequent planned MAA filing in Europe, we are rapidly progressing toward our goal of bringing a major therapeutic advancement to patients undergoing IVF," said Ernest Loumaye, CEO and co-Founder of ObsEva. "There remain important milestones, of course, but we are confident and look forward to European and U.S. review of our applications, once submitted," continued Loumaye.

About Assisted Reproductive Technology (ART)

Infertility affects approximately 10% of reproductive-aged couples, with more than 2 million ART treatments (including IVF and ICSI) performed worldwide each year. Currently in the United States, 62%

of fresh embryo transfers are performed on Day 5 and 30% on Day 3 (CDC Assisted Reproductive Technology report, 2016 data).

While the success of ART depends on multiple factors such as embryo quality and ET procedures, successful embryo implantation and subsequent pregnancy ultimately hinge on endometrial receptivity, which may be reduced by excessive uterine contractions and suboptimal blood flow to the uterus at the time of embryo transfer.

About Nolasiban

Nolasiban (previously known as OBE001), is an oral oxytocin receptor antagonist that was shown in a first European Phase 3 trial (IMPLANT 2) to increase ongoing pregnancy rate and live birth rate in patients undergoing single embryo transfer. The maternal, neonatal and infant safety data from the study showed no difference between nolasiban and placebo. 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 statements regarding the potential for nolasiban to increase live birth rates following embryo transfer, expectations regarding the clinical development of nolasiban, data from clinical trials and the Company’s regulatory plans regarding nolasiban. 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 and clinical development and related regulatory reviews and approvals, including the risk that the results of earlier clinical trials may not be predictive of the results of later-stage 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 Annual Report on Form 20-F for the year ended December 31, 2018, 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.

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