

DEFINITIONS

Assisted reproductive technology (ART): All treatments or procedures that include the *in vitro* handling of human oocytes and sperm or embryos for the purpose of establishing a pregnancy. ART does not include artificial (intrauterine) insemination.

Biochemical pregnancy: Evidence of conception based only on biochemical data in the serum or urine before ultrasound evidence of a gestational sac.

Blastocyst: An embryo with a fluid-filled blastocoele cavity (usually developing by five or six days after fertilization).

Cancelled cycle: An ART cycle in which ovarian stimulation or monitoring has been carried out with the intent of undergoing ART but which did not proceed to follicular aspiration, or in the case of a thawed embryo, to transfer.

Clinical pregnancy rate: Number of clinical pregnancies expressed per 100 initiated cycles, aspiration cycles, or embryo transfer cycles. When clinical pregnancy rates are given, the denominator must be specified.

Clinical/definitive pregnancy: Evidence of pregnancy by clinical (fetal heartbeat) or ultrasound parameters (ultrasound visualization of a gestational sac, embryonic pole with heartbeat). It includes ectopic pregnancy. Multiple gestational sacs in one patient are counted as one clinical pregnancy.

Clomiphene citrate: An anti-estrogen drug used to induce ovulation.

Controlled ovarian hyperstimulation (COH): Medical treatment to induce the development of multiple ovarian follicles to obtain multiple oocytes at follicular aspiration.

Donor oocyte: Oocytes or embryos arise from assisted reproductive technology (ART) cycle of a donor patient (or couple) and are transferred into a recipient.

Ectopic pregnancy: A pregnancy in which implantation takes place outside the uterine cavity.

Embryo transfer (ET): Procedure in which the embryo(s) are placed in the uterus or fallopian tube.

Embryo transfer cycle: Assisted Reproductive Technology (ART) cycle in which one or more embryos are transferred into the uterus or fallopian tube.

Embryo: Product of conception from the time of fertilization to the end of the embryonic stage eight weeks after fertilization.

Endometrium: Uterine lining sheds monthly to produce a menstrual period.

Estrogen: The female sex hormone produced by the ovaries, responsible for the development of female sex characteristics. Estrogen is largely responsible for stimulating the uterine lining to thicken during the first half of the menstrual cycle in preparation for ovulation and possible pregnancy.

Fertilization: The penetration of the ovum by the spermatozoon and fusion of genetic materials resulting in the development of a zygote.

Follicle-stimulating hormone (FSH): The pituitary hormone responsible for the stimulation of estrogen production from the follicle cells around the egg.

Gestational sac: A fluid-filled structure containing an embryo that develops early in pregnancy usually within the uterus.

Gonadotropin-releasing hormone (GnRH): A hormone secreted by the hypothalamus that prompts the pituitary gland to release follicle stimulating hormone and luteinizing hormone into the blood stream.

Human chorionic gonadotropin (hCG): A hormone produced by the placenta during pregnancy that is often used with clomiphene or hMG to cause ovulation.

Human menopausal gonadotropin (hMG): An ovulation drug containing a mixture of follicle stimulating hormone and luteinizing hormone derived from the urine of postmenopausal women.

Hypothalamus: A thumb-sized area in the base of the brain that regulates the pituitary.

***In vitro* fertilization (IVF):** An Assisted Reproductive Technology (ART) procedure that involves *extracorporeal* fertilization.

Infertility: Failure to conceive after at least one year of unprotected *coitus* (intercourse).

Intracytoplasmic (intracytoplasmic) sperm injection (ICSI): IVF procedure in which a single spermatozoon is injected through the zona pellucida into the oocyte.

Intrauterine Insemination (IUI): Placement of spermatozoa that have been separated from the seminal fluid into the endometrial cavity through a small catheter.

Live birth: A birth in which a fetus is delivered with signs of life after complete expulsion or extraction from its mother, beyond 20 completed weeks of gestational age. (Live births are counted as birth events, e.g. a twin or triplet live birth is counted as one birth event.)

Live-birth delivery rate: Number of live-birth deliveries expressed per 100 initiated cycles, aspiration cycles or embryo transfer cycles. When delivery rates are given, the denominator must be specified.

Luteinizing hormone (LH): The hormone that triggers ovulation and stimulates the corpus luteum to secrete progesterone.

Micromanipulation (also referred to as **assisted fertilization**): The use of special micromanipulative technology that allows operative procedures to be performed on the oocyte, sperm or embryo.

Oocyte: An immature female reproductive cell, one that has not completed the maturing process to form an ovum (gamete).

Ovarian Hyperstimulation Syndrome (OHSS): Ovarian enlargement to a diameter of more than 6 cm as a result of stimulation of multiple follicles. This condition may be fatal in severe cases.

Ovulation: The expulsion of a mature egg from its follicle in the outer layer of the ovary. It occurs on approximately day 14 of a 28-day cycle and is usually determined clinically by a serum progesterone level.

Pituitary gland: A small gland just beneath the hypothalamus that secretes follicle stimulating hormone and luteinizing hormone, which stimulate egg maturation and hormone production by the ovary.

Progesterone: An ovarian hormone secreted by the corpus luteum during the second half of the menstrual cycle. Progesterone helps prepare the endometrium to receive and nourish an embryo.

Semen Analysis: Quantitation of various parameters of a recently ejaculated semen specimen analyzed after liquefaction has occurred.

Ultrasound: High frequency sound waves that produce an image on a monitor screen of internal organs.

Zygote: The diploid cell, resulting from the fertilization of an oocyte by a spermatozoon, which subsequently develops into an embryo.