

## Clinical Policy: PPO In Vitro Fertilization

Reference Number: AR.QC.CP.031

Last Review Date: 04/25/2025

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

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### Description

1. If your plan documents coverage of In Vitro Fertilization (IVF), the following criteria must be met:
  - a) The patient is the Certificate Holder or the Certificate Holder's spouse; and
  - b) The member meets the medical criteria below; and
  - c) IVF procedures are performed at a facility licensed by the Arkansas Department of Health as an In vitro fertilization clinic, or if such licensed clinic is unavailable, in a clinic elsewhere which is approved by QualChoice.
  
2. The lifetime maximum benefits available under this Certificate for all approved In vitro fertilization services, including all drug therapy, and any other service related to infertility shall not exceed one cycle.
  - a) One cycle ends when a diagnosis of pregnancy is made, regardless of the final outcome of that pregnancy.
  
3. In vitro fertilization benefits are not available to either the husband or the wife, whether covered under this Certificate or not, when either one of the spouses has previously undergone voluntary sterilization.

### Policy/Criteria

- I. It is the policy of QualChoice that In vitro is **medically necessary** for the following indications:
  - A. The patient and the patient's spouse have a history of unexplained infertility of at least two (2) years duration: or
  
  - B. Infertility is associated with one or more of the following medical conditions:
    - i. Endometriosis
    - ii. Exposure in utero to Diethylstilbestrol (DES);
    - iii. Blockage of or removal of one or both fallopian tubes is not a result of voluntary sterilization.
    - iv. Abnormal male factors contributing to such infertility is not a result of voluntary sterilization.
    - v. The patient's oocytes must be fertilized with the sperm of the patient's spouse when any fertilization procedures are performed.
    - vi. In vitro fertilization procedures must be performed at a facility licensed by the Arkansas Department of Health as an In vitro fertilization clinic, or if such licensed clinic is unavailable, in a clinic elsewhere which is approved by QualChoice.

- C. In vitro fertilization is limited to a lifetime of maximum of one cycle, not to exceed one year.
- i. The cycle includes but is not limited to all diagnostic testing, medications required for ovarian stimulation or other purposes related to IVF, retrieval of eggs, and embryo transfer.
  - ii. Cryopreservation of oocytes and sperm are covered for the duration of the cycle.
  - iii. The cycle ends with a diagnosis of pregnancy.
- D. Artificial insemination methods for intrauterine (IUI) and intracervical (ICI) are not covered.

### **Background**

In Vitro Fertilization and Embryo Transfer (IVF-ET) In Vitro fertilization (IVF) involves fertilization of an egg with sperm outside of the body in a laboratory. The resulting embryo is then placed into the uterus at later time. One cycle of IVFET includes:

- Ovulation stimulation and monitoring- the patient starts ovulation drugs to stimulate the ovaries to produce multiple eggs. Ovulation drugs are given over a period of eight to 14 days. During this time the patient is monitored for follicular development with frequent ultrasounds and blood tests. The eggs are retrieved before ovulation occurs.
- Oocyte (egg) retrieval is usually accomplished by ultrasound guided aspiration performed in the office.
- Sperm preparation and capacitation- sperm are placed together with eggs and stored in an incubator.
- Embryo transfer- including frozen embryo transfer (FET) involves embryo transfer to the uterus any time between one to six days after egg retrieval, or after cryopreservation in FET.

**Gamete Intra-Fallopian Transfer (GIFT)** A laparoscope is used to aspirate one or more mature oocytes from the ovaries. Oocytes are then mixed with sperm and transferred to the Fallopian tube via a catheter. GIFT, although more invasive than IVF, may be an appropriate choice in patients who, for religious or personal reasons, do not wish to have embryos created in the laboratory. It is also appropriate for those who have failed donor insemination or require laparoscopy for other reasons. The success rate is similar to those undergoing IVF.

**Zygote Intra-Fallopian Transfer (ZIFT)** This procedure involves placement of fertilized eggs (zygotes) or embryos into the fallopian tube. It is analogous to GIFT in that laparoscopy is needed to place the zygotes in the fallopian tubes. Whereas overall success rates are similar to IVF, ZIFT may offer some advantages to patients with difficult trans-cervical embryo transfer, uterine abnormalities (such as those caused by diethylstilbestrol (DES) exposure), or recurrent failure with standard IVF.

Intra-Cytoplasmic Sperm Injection (ICSI) ICSI involves injecting the sperm into the egg in a dish in the laboratory to fertilize it, rather than allowing the sperm to penetrate the egg naturally. Embryos are then transferred to the uterus as in usual ET or cryopreserved in preparation for future FET.

ICSI should be available to patients with previously failed fertilization who demonstrate either abnormal or normal semen profiles and to patients with spermatozoa concentration and motility too low to expect any success with conventional IVF. Patients should be counseled carefully regarding the outcomes and potential risks of ICSI. If there is a risk of adverse neonatal outcome associated with ICSI, it appears to be small.

**Coding Implications**

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CPT® Codes	Description
58321	Artificial insemination; intra-cervical
58322	Artificial insemination; intra-uterine
58323	Sperm washing for artificial insemination
58750	Tubotubal Anastomosis
58752	Tubo-Uterine Implant
58760	Fimbrioplasty
58770	Salpingostomy
58970	Follicle Punct oocyte retrieval any method
58974	Embryo transfer, intrauterine
58976	Gamete, zygote, or embryo intrafallopian tube transfer; any method
89250	Culture of oocyte(s)/embryo(s), less than 4 days
89251	Culture of oocyte(s)/embryo(s), less than 4 days; with co-culture of oocyte(s)/embryo(s)
89254	Oocyte identification from follicular fluid
89255	Preparation of embryo for transfer (any method)
89257	Sperm identification from aspiration (other than seminal fluid)
89258	Cryopreservation; embryo(s)
89259	Cryopreservation; sperm
89264	Sperm identification from testis tissue, fresh or cryopreserved
89272	Extended culture of oocyte(s)/embryo(s), 4-7 days
89280	Assisted oocyte fertilization, microtechnique, less than or equal to 10 oocytes
89281	Assisted oocyte fertilization, microtechniques; greater than 10 oocytes.

CPT® Codes	Description
89290	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for preimplantation genetic diagnosis); greater than 5 embryos
89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for preimplantation genetic diagnosis); greater than 5 embryos
89337	Cryopreservation, mature oocyte(s)
89352	Thawing of cryopreserved; embryo(s)
89353	Thawing of cryopreserved; sperm/semen, each aliquot
89356	Thawing of cryopreserved; oocytes, each aliquot

HCPCS Codes	Description
S4011	In vitro fertilization; including but not limited to identification and incubation of mature oocytes, fertilization with sperm, incubation of embryo(s), and subsequent visualization for determination
S4013	Complete cycle, gamete intrafallopian transfer (GIFT), case rate
S4014	Complete cycle, zygote intrafallopian transfer (ZIFT), case rate
S4015	Complete in vitro fertilization cycle, not otherwise specified, case rate
S4016	Frozen in vitro fertilization cycle, case rate
S4017	Incomplete cycle, treatment canceled prior to stimulation, case rate
S4018	Frozen embryo transfer procedure canceled before transfer, case rate
S4020	In vitro fertilization procedure canceled before aspiration, case rate
S4021	In vitro fertilization procedure canceled after aspiration, case rate
S4022	Assisted oocyte fertilization, case rate
S4023	Donor egg cycle, incomplete, case rate
S4025	Donor services for in vitro fertilization (sperm or embryo), case rate
S4026	Procurement of donor sperm from sperm bank
S4028	Microsurgical epididymal sperm aspiration (MESA)
S4037	Cryopreserved embryo transfer, case rate

Reviews, Revisions, and Approvals	Date	Approval Date
Original approval date		

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**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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