THE OHIO STATE UNIVERSITY
HEALTH PLAN

Subject: Preimplantation Genetic Diagnosis and Screening Policy

Effective Date: 04/2016
Revision Date: 07/2018

DESCRIPTION

Preimplantation genetic screening (PGS) applies when the genetic parents are known or presumed to be chromosomally normal and their embryos are screened for aneuploidy by using molecular analysis techniques on single cells removed from the embryo.

Preimplantation genetic diagnosis (PGD) applies when one or both genetic parents carry a gene mutation or a balanced chromosomal rearrangement and testing is performed to determine whether that specific mutation or an unbalanced chromosomal complement has been transmitted to the oocyte or embryo.

POLICY

Pre-implantation genetic diagnosis (PGD) is covered in patients/couples who are undergoing IVF due to infertility who meet one of the following criteria:

- When one of the partners is known to harbor a balanced translocation
- Both partners are known carriers of a single autosomal recessive gene
- One partner is a known carrier of a single gene autosomal recessive disorder and the partners have one offspring that has been diagnosed with that recessive disorder
- One partner is known carrier of a single gene autosomal dominant disorder
- One partner is known carrier of a single gene x linked disorder

Couples who are considering PGD must be aware of its limitations, as well as the risk of misdiagnosis. Therefore, counseling by an experienced individual prior to proceeding is extremely important.

Refer to policy MMPP 3.0 for the definition of infertility and criteria for IVF coverage.

EXCLUSIONS

The OSU Health Plan considers preimplantation genetic screening (PGS) experimental and investigational for all indications, including the following:

- Advanced maternal age
- Recurrent pregnancy loss
- Repeated implantation failure (three or more failed IVF attempts)
- Male factor infertility

The OSU Health Plan does not cover preimplantation genetic diagnosis (PGD) for sex selection for nonmedical purposes.

PRIOR AUTHORIZATION

Prior authorization is required for both PGD and PGS.

RELATED CPT/HCPC CODES

CPT codes covered if selection criteria are met:	
89290 - 89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for pre-implantation genetic **diagnosis**); less than, equal, or greater than 5 embryos

CPT codes not covered for indications listed:	
89290 - 89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for pre-implantation genetic **screening**); less than, equal, or greater than 5 embryos

REFERENCES

Aetna. (2017, July 28). Invasive prenatal diagnosis of genetic diseases. Retrieved July 20, 2018, from http://www.aetna.com/cpb/medical/data/300_399/0358.html

American Congress of Obstetricians and Gynecologists. (2009). Preimplantation genetic screening for aneuploidy. *ACOG Committee Opinion, 430*, 1-2.

American Society for Reproductive Medicine. (2008). Preimplantation genetic testing: A Practice Committee opinion. *Fertility and Sterility, 90*(3), S136-S143.

Schattman, G.L. (2015, March 11). Preimplantation genetic diagnosis. Retrieved April 7, 2016, from http://www.uptodate.com/contents/preimplantation-genetic-diagnosis?source=search_result&search=preimplantation+genetic+diagnosis&selectedTitle=1~51