

Preimplantation Genetic Testing (PGT)

**Four Questions to Ask
Your Doctor about PGT**



The
Prelude
Network®

As you continue on your fertility journey, you're likely to have many questions — especially if you are considering in-vitro fertilization (IVF). One of the key decisions you'll need to make is whether you want to include preimplantation genetic testing (PGT) as part of your fertility plan.

Start your journey off right by asking these questions about PGT at your very first appointment with your reproductive endocrinologist.

But first... What is PGT?

Preimplantation genetic testing (PGT) is a way to screen embryos for genetic differences before they are transferred to a uterus as part of in-vitro fertilization (IVF). Unlike first-trimester prenatal screening, which is usually conducted 10-13 weeks into a pregnancy, **PGT takes place immediately after an egg is fertilized.**

The most common type of PGT (PGT-A) involves counting the number of chromosomes in a sampling of cells from each embryo produced during your IVF cycle. **Embryos with missing or extra chromosomes, known as aneuploid, have a high risk of implantation failure and miscarriage.**

When an aneuploid embryo is able to develop fully, the child may be born with genetic differences such as Down Syndrome (Trisomy 21). Aneuploid embryos are unfortunately common for women of advanced maternal age.

64% of embryos tested from women ages **38-40** are aneuploid, with the incidence increasing for women over **40**.¹

There are different types of PGT that may be right for you depending on your personal and family history.

PGT-A:

Counts the number of chromosomes to check for **aneuploidy**: missing or extra chromosomes. This is the most common type of PGT, and is often recommended for women over 35 or those who have experienced multiple unexplained miscarriages.

PGT-M:

Looks for **monogenic** conditions: genetic variants that effect only a single gene. Patients with a family history of inherited genetic conditions such as Huntington's disease, muscular dystrophy or sickle-cell anemia may be good candidates for PGT-M.

PGT-SR:

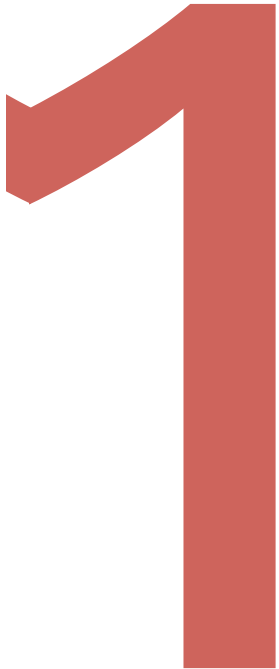
Screens embryos for **missing** and **extra chromosomal** material: similar to PGT-A, but at a more detailed level. This specialized form of PGT is only recommended if you are known to have a structural rearrangement of your own chromosomes, and may be customized to your personal profile and needs.

Be sure to ask your fertility care provider what types of PGT they offer, and which they recommend for you.



Four Questions to Ask Your Doctor

Is PGT is a good option for me?



PGT can benefit many women who are trying to conceive through IVF, especially those over 35 and those who have had multiple miscarriages or failed embryo transfers. IVF is a significant investment — not only in terms of money, but also time and emotions. PGT can help you make the most of that investment by:

- Reducing the risk of pregnancy loss (miscarriage) or complications related to chromosomal differences
- Increasing the likelihood of a successful pregnancy from a single embryo transfer
- Improving the efficiency of your IVF cycles – fewer embryo transfers needed (on average) to achieve pregnancy

Of course, the benefits and risks vary from person to person. Your fertility care team should be able to guide you through the decision-making process.

What happens after I get the results?



Your fertility care team, including a genetic counselor, should meet with you to discuss the results in detail. The next steps will depend greatly on personal factors, including how many embryos you began the process with. In an ideal situation, you will get at least one normal (euploid) embryo. This outcome will set you on a good path for a single euploid embryo transfer — in other words, transferring one high-quality embryo.

Single embryo transfers are highly recommended to reduce the chance of multiples, helping to minimize the overall risk and complexity of your pregnancy.

Any additional high-quality embryos from your cycle will remain frozen for future use.

How will my IVF cycle be different if I do PGT?

3

The egg retrieval and fertilization phases of your IVF cycle will look the same regardless of whether you choose PGT. However, there are a few key differences when it comes time for embryo selection and implantation.

Those differences start on day 5 following egg retrieval (4 days after fertilization). On day 5 of a standard IVF cycle without PGT, one or more embryos can be transferred to the woman's uterus. This is known as a synchronous transfer because fertilization takes place during the same menstrual cycle as retrieval.

On day 5 of an IVF cycle with PGT, all embryos remain in the lab where they are biopsied by a skilled embryologist, and then frozen while the samples are sent to a specialized lab for genetic testing. You can expect to receive PGT-A results within about 10 to 14 days, with a slightly longer timeline for more complex types of PGT. You'll then meet with a genetic counselor to go over the results and plan your next steps.

Because of the extra time and care needed for PGT, synchronous transfers are not possible as part of this treatment. Talk to your care team about the relative advantages of synchronous and asynchronous transfers at your first appointment.

SYNCHRONOUS Embryo transfer – no PGT



DAY 0

Egg retrieval
and fertilization



DAY 1

Receive
fertilization
results



DAY 5

Select embryo(s)
for transfer based on
non-chromosomal factors

IMMEDIATELY: Transfer embryo(s)

ASYNCHRONOUS Embryo transfer with PGT



DAY 0

Egg retrieval
and fertilization



DAY 1

Receive
fertilization
results



DAY 5

Embryos carefully
biopsied and sent
to specialty lab

IMMEDIATELY: Embryos frozen/ preserved



**DAY
15-18**

Receive PGT
results, meet with
genetic counselor,
and select embryo(s)

ON YOUR SCHEDULE: Transfer embryo(s)

When do I need to make a decision?



It's best to decide whether your IVF cycle will include PGT at the same time you decide to begin IVF. Because of the extra steps involved when adding PGT to your fertility program, and the slightly different timeline for embryo transfer, it takes some extra planning to ensure everything is aligned. Your financial counselor can also factor this into your overall fertility financing plan.

Your fertility care team is your best resource for personalized guidance as you make this decision.

We recommend printing out the last page of this guide and bringing it to your initial consultation to help you make an informed and confident decision about where you go for fertility care, and what your path to parenthood looks like.

Notes

Four Questions to Ask Your Doctor about Preimplantation Genetic Testing (PGT)

At The Prelude Network®, we believe in empowering patients with the right information to make the best possible decisions for you and your family. Start your fertility journey off right by asking these questions at your very first appointment with your reproductive endocrinologist.

1. Is PGT a good option for me?

Make sure to let your doctor know what's most important to you in building your family, including your ideal family size and any timing considerations.

Notes

2. What happens after I get the results?

Timelines may vary depending on the type of PGT selected and which genetic testing partner(s) your fertility care provider works with.

3. How will my IVF cycle be different if I do PGT?

Remember to discuss the difference between synchronous and asynchronous embryo transfers.

Notes

4. When do I need to make a decision?

Knowing the time frame and expectations up front can relieve a lot of stress down the line!

Additional Notes

Send us a message at
info@prelude.com
or call (888) 279-3118.

© The Prelude Network® 2023. All rights reserved.

