

# Preimplantation Genetic Testing for Monogenic Disorders (PGT-M): The Igenomix Experience for You and Your Patients

- 1. Reproductive endocrinologist completes initial consultation to discuss the option of PGT-M
  - ⇒ Discuss the option of PGT-A (preimplantation genetic testing for an euploidy), if applicable.
- 2. Complete the Igenomix PGT-M Test Requisition Form (TRF). Please include <u>patient/partner genetic reports</u> and relevant medical and family history with the TRF. Igenomix will confirm receipt. The records and TRF can be sent over email or fax:
  - ⇒ Email: gc@igenomix.com and infousa@igenomix.com or Fax: (786) 401-7546
- 3. Within one week of receiving the TRF and genetic report(s), our genetic counseling team will review the case.
  - ⇒ If PGT-M is not available: A genetic counselor will reach out to your clinic to explain why.
  - ⇒ If PGT-M is available: The patient will receive a welcome letter email from Igenomix outlining next steps. A genetic counselor will also reach out to the patient by phone for a ~20 minute PGT-M intake call. During the intake, the genetic counselor will collect a brief family history to understand who in the family is affected, and who is available to provide a DNA sample for probe development.
- 4. Within 1-2 days of PGT-M intake, Igenomix will determine whether the case can be formally accepted.
  - ⇒ Both the clinic and patient will be notified via email. A patient care coordinator will reach out to the patient for financial consultation (if necessary) within 2-4 days. A genetic counseling assistant will reach out to the patient regarding shipment of DNA kits and completion of consent forms.
  - ⇒ Igenomix may request additional information in certain cases. This may include documentation of outside genetic counseling and/or additional family members' genetic reports.
- 5. Patient to read and sign the Igenomix **PGT-M Consent Form and HIPAA Form**. Fax or email only the pages with the signatures to Igenomix.
- 6. For clinics with Patient Bill option: Patient provides advance payment to Igenomix. Patients can direct their billing questions to Igenomix at <a href="mailto:infousa@igenomix.com">infousa@igenomix.com</a> or (305) 501-4948.
- 7. Within one week of receiving completed consents, advance payment, mailing addresses, and any required documentation, **DNA collection kits** (blood tubes and/or cheek swabs) will be shipped.
- 8. Patient is encouraged to schedule a **comprehensive genetic counseling consultation** with Igenomix to review the benefits, risks, and limitations of PGT-M, and PGT-A, if applicable. A consultation summary note will be emailed to the clinic.
- 9. Following receipt of all required DNA samples, **probe development** will be complete in either 3 weeks for common cases or 6 weeks for uncommon cases.
  - ⇒ Patient will be notified of probe completion over the phone and clinic will be notified over email and receive a Pre-PGT-M Report.
  - ⇒ Igenomix recommends delaying stimulation until probe development is complete.
- 10. **Email Igenomix** with the egg retrieval date when the date is known (when patient triggered). Notify Igenomix with any changes or cancellations. Embryo biopsy at Day 5 is preferred.
- 11. By default **results** will be provided to your clinic within ~15 days of receiving embryo samples. If an alternate testing plan is requested please notify Igenomix before embryo biopsy receipt. See FAQs for details.





## **PGT-M Frequently Asked Questions**

### Q: I have a question about a patient's PGT-M case. Who can I contact at Igenomix?

- A: General inquiries can go to our main genetic counseling phoneline or email. We have a team of ten genetic counselors and genetic counseling assistants who would be happy to help. If your patient's PGT-M case was already accepted they will have a dedicated genetic counselor whose contact information can be found in the case acceptance email.
  - ⇒ Genetic Counseling General Phoneline: (786) 485-0014
  - ⇒ Genetic Counseling Email: gc@igenomix.com

#### Q: What conditions can you test for?

A: If a disease-causing genetic variant/s has been identified in a patient and/or their partner which is known to be associated with an increased risk to have a child with a genetic disease, it is likely that we will be able to offer PGT-M. Igenomix has successfully designed probes for hundreds of different genetic conditions and receives TRFs for new conditions on a weekly basis. If you have any questions about whether PGT-M may be available for your patient, please feel free to contact the genetic counseling team at Igenomix. Remember, even if a probe has been developed for a specific condition in the past, a new probe is custom designed for each family based on their unique genetic information. Below is a list of some of the most common conditions we design probes for at Igenomix. Importantly, there are exceptions depending on the specific gene variant and family history, so a PGT-M case can never be officially accepted until the reports are reviewed and intake is complete.

| Examples of PGT-M Conditions                            |                               |
|---|-------------------------------|
| Alpha Thalassemia / Beta Thalassemia                    | Gaucher Disease               |
| Autosomal Dominant Polycystic Kidney Disease            | GJB2-related Hearing Loss     |
| BRCA1/2-Related Hereditary Breast and Ovarian<br>Cancer | Hemophilia A / B              |
| Congenital Adrenal Hyperplasia (CAH)                    | Huntington Disease            |
| Cystic Fibrosis   | Sickle Cell Disease           |
| Duchenne and Becker Muscular Dystrophy                  | Spinal Muscular Atrophy (SMA) |
| Fragile X Syndrome                                      | Tay-Sachs Disease             |

#### Q: My patient wants to start stimulation prior to the PGT-M probe being completed. Is that recommended?

A: Igenomix recommends that all patients wait to begin their IVF cycle until the probe is complete. There is always a small chance that probe development may not be possible due to an unforeseen technical problem. Unsuccessful cases are exceedingly rare, however it is most conservative that a patient wait to cycle until you are notified that their PGT-M probe is complete. The patients are counseled that while this is our lab's recommendation, the timing of their cycle is at the discretion of their clinic, so exceptions may be made.

#### Q: Do you have any options for patients besides simultaneous PGT-M and PGT-A testing?

A: The default strategy is to complete both PGT-A and PGT-M simultaneously. We also offer a multicycle/batching option, during which PGT-A is completed after each cycle and PGT-M is later performed on all samples when the batching period is complete or clinician notifies us to test. Additionally, we offer a PGT-M add-on option for patients with infertility who are testing for mild conditions. With this option, PGT-A is completed first to ensure they obtain enough euploid embryos to wish to proceed with PGT-M. PGT-M probe development is not initiated until after PGT-A results are released and patient informs us they wish to proceed.

#### Q: Do you offer non-disclosure testing for adult onset conditions like Huntington's disease?

A: Yes, Igenomix offers non-disclosure PGT-M. There may be additional requirements and the timeline may vary for non-disclosure cases.