NxGen MDx

Congratulations On Your Pregnancy!

This is a time for careful planning. For the health and well-being of your family, genetic screening options are available to help you make informed family planning choices. **We encourage you to discuss these options with your healthcare provider to see if they might be right for you and your pregnancy.**

Your genetic testing options include:

- Genetic Carrier Screening
- Non-Invasive Prenatal Screening
- Hereditary Cancer Testing

Depending on your family history, your provider may discuss additional genetic testing.

Carrier Screening

The American College of Obstetricians and Gynecologists recommends that "Information about genetic carrier screening should be provided to every pregnant woman."[1]

- Carrier screening identifies if you and your reproductive partner are carriers of a recessive genetic condition (carrier couple) that you could pass onto your child.
- Generally, carriers of recessive genetic conditions are healthy, but if you and your partner are a "carrier couple" for the same genetic condition, your baby may be affected.
- Using a comprehensive carrier screen that can detect most carriers, regardless of ethnicity or family history, is highly recommended.

Genetic Condition Fast Facts

- Most babies (80%) that are born with a genetic condition have no known family history of it.[2]
- 1 in 300 pregnancies will be affected by a recessive genetic condition.[3]
- Genetic conditions are becoming increasingly treatable when identified early.

If you and your partner are a carrier couple, options you may consider include:

Pregnancy Considerations
Prenatal diagnosis
Improved pregnancy and postnatal planning
Earlier diagnosis and timely treatment

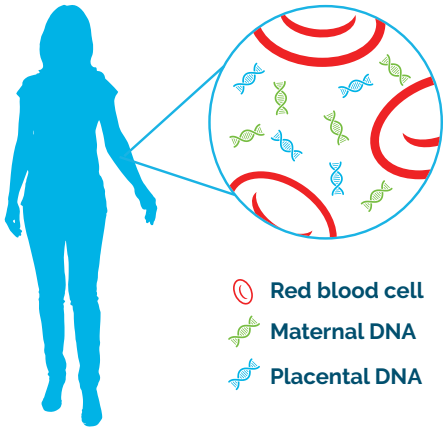
NxGen MDx's Super Panel screens for 145 common genetic conditions, providing you with actionable information to improve health outcomes for your child.

If you and your reproductive partner are identified as a carrier couple for the same condition, a genetic counselor can help you identify your options and how best to proceed.

Non-Invasive Prenatal Screening (NIPS)

The American College of Obstetricians and Gynecologists states that
"Cell-free DNA is the most sensitive and specific screening test for the common fetal aneuploidies."[4]

- Non-invasive prenatal screening (NIPS) is a genetic test that analyzes cell-free DNA that comes from the placenta and is found in the mother's blood.
- It can tell you if your baby has too few or too many chromosomes (aneuploidy) which can lead to health problems.
- An extra or missing chromosome can lead to several developmental and health issues.
- NIPS is non-invasive and does not jeopardize the health of your unborn baby.
- NxGen MDx's NIPS is available at or after 10 weeks into your pregnancy.
- NIPS helps identify pregnancies that may be at increased risk of certain chromosomal disorders.
- NIPS is not diagnostic, and if you receive a positive result, it should be confirmed through diagnostic testing.



What is an Aneuploidy?

- An aneuploidy is when you have too many or too few chromosomes
- Typically, individuals have 2 copies of each chromosome (23 pairs, 46 chromosomes total)

Possible Chromosome Arrangements

Typical Chromosome Arrangement | Monosomy (missing chromosome) | Trisomy (extra chromosome)

Aneuploidies Screened for by NxGen MDx NIPS:

Common Trisomies:

- 21 (Down Syndrome)
- 18 (Edwards Syndrome)
- 13 (Patau Syndrome)

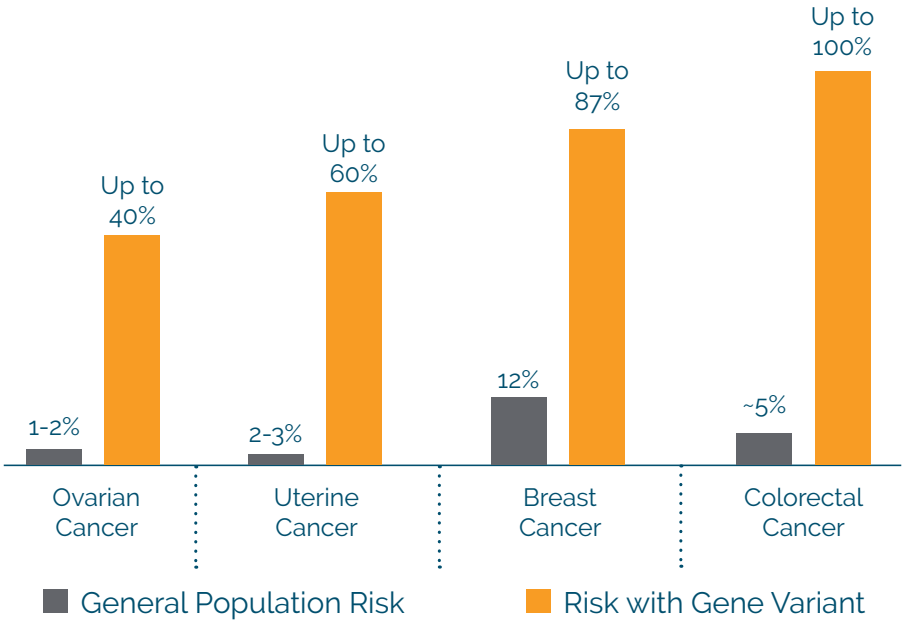
Sex Chromosome Aneuploidies:

- Monosomy X (Turner Syndrome)
- Trisomy X (Triple X Syndrome)
- XXY Syndrome (Klinefelter Syndrome)
- XYY Syndrome (Jacobs Syndrome)

Hereditary Cancer Testing

- While most cancers occur by chance, **approximately 10% of cancers are hereditary.**
- These hereditary cancers can be passed down from generation to generation.
- If you have a family history of multiple young or rare cancers, cancer genetic testing may be appropriate for you.
- Hereditary cancer testing will help you determine your personal risk of developing a hereditary cancer and can help you understand the likelihood of passing it on to the next generation.
- Your hereditary cancer test results can help you form a personalized cancer management plan to reduce your risk of developing a hereditary cancer.

Lifetime Risks for Common Cancers[5]



NxGen MDx's Hereditary Cancer Panel tests for your genetic risk in 8 different types of cancers including breast, ovarian, uterine, gastric, colorectal, pancreatic, prostate, and melanoma.

Click here to fill out the questionnaire and talk to your healthcare provider to see if Hereditary Cancer Testing might be appropriate for you.

Sources
1. Committee Opinion No. 691: Carrier Screening for Genetic Conditions. Obstet Gynecol. 2017 Mar;129(3):e41–55.
2. Blythe SA, Farrell PM. Advances in the diagnosis and management of cystic fibrosis. Clin Biochem. 1984 Oct;17(5):277–83.
3. Johansen Taber KA, Beauchamp KA, Lazarin GA, Muzzey D, Arjunan A, Goldberg JD. Clinical utility of expanded carrier screening: results-guided actionability and outcomes. Genet Med. 2019 May;21(5):1041–8.
4. ACOG Practice Bulletin 226
5. Adapted from NCCN data.

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Updated 9/1/22