

WHAT IS INFERTILITY?

Infertility is the inability to achieve and maintain a pregnancy and is considered a major disease of the reproductive system. Infertility affects approximately **1 in 6 couples** worldwide.

In couples experiencing pregnancy delay, male infertility accounts for about 35% and female infertility for about 45% of the cases. The remaining cases are caused by a combination of male and female factor. 10-15% of men and women have genetic changes associated with infertility. Infertility genetic testing can identify these mutations, providing your healthcare provider with invaluable knowledge that will help them choose the best treatment plan for you.

WHY CHOOSE **Rodinia**?

Rodinia provides your healthcare provider with valuable genetic insight that could improve your chances of achieving pregnancy.



Identifies infertility-causing genetic changes



Provides deep insight that cannot be obtained with non-genetic tests



Guides your doctor to find the best therapy for you, based on the information provided



Uses painless and non-invasive collection method



Delivers time-sensitive and cost-effective genetic information

HOW IS **Rodinia** ADMINISTERED?



ASK YOUR DOCTOR ABOUT Rodinia



YOUR DOCTOR WILL COLLECT THE SAMPLE USING A BUCCAL SWAB



THE SAMPLE WILL BE SENT TO NIPD Genetics



THE SAMPLE WILL BE ANALYZED IN OUR LABORATORIES



RESULTS WILL BE SENT TO YOUR DOCTOR WITHIN 2-4 WEEKS FROM SAMPLE RECEIPT

MORE **QUESTIONS**?

If you have additional questions or concerns, please ask your doctor. You can also contact us:



NIPD Genetics
www.nipd.com
info@nipd.com

NIPD GENETICS **Rodinia** infertility test



Personalized insight for family planning

SAFE | SENSITIVE | RELIABLE

WHAT IS **Rodinia**?

Rodinia is a new test that screens for genetic changes (mutations) associated with infertility. By identifying the genetic cause of infertility, your healthcare provider will be able to take informed and accurate decisions on the best clinical management for you, which will help increase your chances of conceiving.

Rodinia is suitable for couples or individuals experiencing pregnancy delay, young people with a suspected disorder of sex development and people with family history of infertility.

HOW DOES **Rodinia** HELP ME?



Identifies the genetic cause for infertility



Enables accurate prognosis



Assists your doctor in deciding the most optimal treatment for you



Increases the chances of successful pregnancy



Informs your doctor on potential complications from treatment, such as ovarian hyperstimulation syndrome



Informs you and your doctor if early interventions are beneficial

WHO IS **Rodinia** FOR?



Couples or individuals experiencing delay in conceiving



Women with irregular or absent menstruation



Men with low sperm count, irregular sperm form or movement



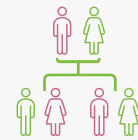
Individuals with external characteristics indicating a syndrome associated with sex development



Couples or individuals that will undergo assisted reproductive technology (ART) treatment



Candidates for sperm or oocyte donation



Individuals with family history of infertility

HOW CAN INFERTILITY GENETIC TESTING IMPROVE PROGNOSIS?

By identifying the genetic cause of infertility, genetic testing can lead to a **more personalized clinical management**, and assist in establishing the most fitting fertility treatment for each individual or couple.

In men with azoospermia, **genetic testing of the Y chromosome is recommended by the American Society for Reproductive Medicine**, as it can identify which men have a chance of recovering sperm through testicular sperm extraction*.

In women with primary ovarian insufficiency, genetic testing provides early identification which is invaluable as egg harvesting and cryopreservation at a young age can be performed to **preserve fertility**.

*Practice Committee of the American Society for Reproductive Medicine. Diagnostic evaluation of the infertile male: a committee opinion (2015)

WHAT DOES **Rodinia** TEST FOR?

Rodinia offers a female and a male infertility panel which detect numerous genetic mutations associated with infertility. Both panels also test for whole, partial and mosaic* sex chromosome changes which can cause fertility problems.

*Mosaicism refers to the condition of having two or more sets of cells that differ genetically from one another.



FEMALE INFERTILITY PANEL (55 genes)

Includes testing of the X chromosomes, and disorders such as primary ovarian insufficiency, polycystic ovary syndrome, hypogonadotropic hypogonadism and ovarian hyperstimulation syndrome.



MALE INFERTILITY PANEL (40 genes)

Includes testing of X and Y chromosomes, including Y-chromosome microdeletions, and disorders such as hypogonadotropic hypogonadism, like Kallmann syndrome.

ADD-ON PANEL



Haemophilia and Thrombosis panel (21 mutations)

Haemophilia and Thrombosis panel is available upon request and could be beneficial to couples or individuals with more than one miscarriage.

WHAT CAN I DO AFTER **Rodinia**?

Doctors use various methods to treat infertility. Based on Rodinia's results, doctors can identify the most beneficial treatment for you taking into consideration potential complications.



Lifestyle changes
eg. Maintain a healthy body weight, quit smoking, avoid alcohol



Medication
eg. Ovulation induction drugs, hormones



Surgical procedure
eg. Testicular sperm extraction



Cryopreservation
eg. Oocyte harvesting at a young age to preserve fertility



Assisted reproductive technology
eg. In vitro fertilization