Genetic Diagnostics

## Family Planning Panel

Risk Assessment of Potential Hereditary Diseases in Healthy Couples Wishing to Have Children





## Determine the Genetic Risk for Your Child Even before Pregnancy

Of nearly 800,000 newborns born in Germany each year, approximately 7 % (~56,000 affected individuals) exhibit various abnormalities. The causes and severity of such abnormalities are very diverse and include external as well as hereditary (genetic) factors. It is assumed that at least 20 % of all abnormalities have a genetic cause, i.e., are based on a change in the genetic material (DNA). Many people carry disease-causing variants in their genetic material without knowing it and without becoming ill themselves. This is referred to as "predisposition carriers" for a genetic disease. Predisposition carriers vary from person to person.

If both parents are healthy but carry a pathogenic variant in a gene that is causative for recessively inherited diseases, there is a 25 % risk that common offspring will be affected by the disease. Therefore, common, or similar carrier status can lead to a risk for the child.

With the Family Planning Panel you can determine the genetic risk for your child even before pregnancy and thus contribute to the health of your future child.



## How Does the Examination Proceed?



Genetic counseling by qualified specialists and blood or saliva collection for analysis



Sequencing all genes of the screening panel using next-generation sequencing



Analysis and interpretation of the sequencing data



Preparation of a **comprehensive** and **easy-to-understand medical report** with an interpretation of the findings and recommendations



Final **specialist discussion** of the findings and **recommendations** of the detailed medical report

# What Does the Family Planning Panel Include?

The Family Planning Panel is used to identify common genetic disorders, such as cystic fibrosis or spinal muscular atrophy (SMA), as well as very rare syndromes.

- $\chi~$  The panel includes 1,943 genes that cause severe diseases in early childhood.
- $\chi\,$  For the evaluation, we combine the genetic data of both parents and use it to determine the risk for your child.
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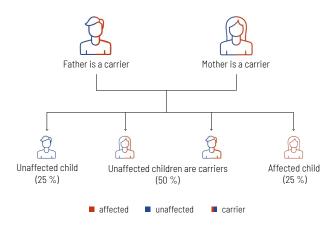
The result of the genetic examination, in combination with human genetic counselling, enables you to make an informed decision. In this way, you can find out at an early stage about the various options, such as prenatal diagnostics or early, targeted treatment of the newborn.



## Example of a Possible Inheritance Pattern

Every healthy person carries disease-causing genetic alterations that lead to the occurrence of a disease in certain constellations. Therefore, a genetic examination with the partner helps to estimate the risk for severe genetic diseases in common offspring.

The following graphic explains the inheritance pattern in a family constellation:



#### Are You Interested? We Look Forward to Hearing from You.

Contact us via email at **prevention@cegat.com** or call us at **+49 7071 565 44-238**. We will be glad to send you further information about our preventive care offer.



www.cegat.com/family-planning

## About Us

CeGaT is a global provider of genetic analyses for a wide range of medical, research, and pharmaceutical applications.

Founded in 2009 in Tübingen, Germany, the company combines state-of-the-art sequencing technology with medical expertise – with the aim of identifying the genetic causes of diseases and supporting patient care. For researchers and pharmaceutical companies, CeGaT offers a broad portfolio of sequencing services and tumor analyses. CeGaT generates the data basis for clinical studies and medical innovations and drives science forward with its own insights.

The owner-managed company stands for independence, comprehensive personal customer service, and outstanding quality. CeGaT's laboratory is accredited according to CAP/CLIA, DIN EN ISO 15189, DIN EN ISO/IEC 17025, and thus meets the highest international standards. To obtain first-class results, all processes are carried out in-house under scientific supervision. We would be pleased to provide you with our award-winning service.



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