Blank space reserved for Igenomix use only

Test Requisition Form CGT for Donors

The fields marked with * are mandatory to carry out the test

* SELECT A PRODUCT

☐ **CGT Bank** ☐ **CGT Plus**

CLINICIAN INFORMATION

***Clinic:** _____

***Referring Clinician:** _____ Contact person: _____

E-mail or phone number:_____ ***Email for delivery of results:** _____

Address: _____

City: _____ County/Province/State: _____ ZIP/ Postal Code: _____

PATIENT 1 - INFORMATION

***MRN/Unique patient ID:** _____ If not available, please state NOT APPLICABLE

***Patient full name:** _____

***Date of birth:** _____ Email: _____

***Sex:** ☐ Male ☐ Female

Ethnic group **(we strongly recommend including this)**. Please select all that apply.

☐ Caucasian ☐ East Asian ☐ South Asian ☐ Arab / ME ☐ Other _____

☐ Ashkenazi J. ☐ Hispanic ☐ Romani ☐ Afro-_____ ☐ Unknown

PATIENT 1 - CLINICAL INFORMATION

***Date of sample collection:** _____ Sample collection performed by (full name): _____ Sample type: ☐ Blood

☐ ***DONOR** (check if yes) ☐ Saliva

***Relevant clinical information for the test**

☐ Bone marrow transplant ☐ Recent blood transfusion (<60 days) ☐ Congenital or acquired chimera

☐ N/A

***Indication for test:**

☐ No Family History ☐ Known Family History (2) ☐ Known Carrier (2)

(2) Specify condition: _____

PATIENT CONSENT

By signing this application form, I voluntarily ask Igenomix to perform the test indicated above. I have read and received a copy of the informed consent included in these pages. I have also been adequately informed of the risks, benefits and limitations of this test.

*Signature of Patient_____ Date: _____/_____/_____

HEALTHCARE SPECIALIST AUTHORISATION

I certify that the patient and prescribing doctor's details given in this request form are accurate to the best of my knowledge and that I have requested the test indicated above based on my professional criteria. I have explained the limitations of this test and have answered any questions based on medical judgement. I understand that Igenomix may require further information and I agree to provide this information if necessary.

*Healthcare Specialist's signature_____ Date: _____/_____/_____

CONSENT FOR THE CARRIER GENETIC TEST – CGT

DESCRIPTION, PURPOSE AND ADVANTAGES OF ANALYSES

The primary function of the Carrier Genetic Test is to identify individuals (including gamete donors) or couples at increased risk of having a child with a genetic disorder, which provides the opportunity to consider additional reproductive options that can reduce the risk of transmission of autosomal recessive and X-linked disorders included in the test.

Scientific studies estimate that most healthy people, on average, are carriers of 1 or 2 mutations that can, in certain circumstances which depend on the mutation, lead to severe genetic disorders in offspring. In most cases, carriers show no symptoms and have no known family history of the disorder. For the symptoms of recessive disorders to develop, it is necessary for the two copies of a gene inherited by an individual (one inherited from the father and one inherited from the mother) to be altered.

The aim of the test is to detect the presence of mutations in genes associated with autosomal recessive inheritance in a couple (and/or gamete donors) as well as mutations in genes linked to the X chromosome in women (including female donors). If both reproductive partners are carriers of mutations in the same gene associated with autosomal recessive inheritance, there will be an increased risk (25%; 1 in 4) of having a child affected with that specific disorder. If a female patient is a carrier of an X-linked disorder, any male offspring would have a 50% risk of being affected with that specific disorder and preventive measures are recommended. Female donors (egg donors) who are carriers of an X-linked disorder generally cannot contribute to gamete donation programs.

The test is recommended in assisted reproductive treatment but is also clinically valid in natural/non-assisted means of reproduction.

PROCEDURES, RISKS AND LIMITATIONS

The process for conducting the test is as follows:

1. Collect a blood/saliva sample.
2. Extraction of DNA from the sample.
3. Next Generation Sequencing (NGS) of the genetic regions where known mutations are located. Lists of genes and mutations analysed for each test are available at https://cgt.igenomix.com/diseases-list/
4. Additional studies to detect frequent mutations not analysed with NGS technology in some genes. Lists of genes and mutations analysed for each test are available at https://cgt.igenomix.com/diseases-list/
5. Bioinformatic analysis of the sequencing results (NGS).

To process the sample, the test requisition form will need to be correctly completed. If this is not the case, the analysis may suspended until the information required has been provided to the laboratory.

Given the complexity of the genetic tests and the significant implications of the test results, the results obtained must be interpreted in conjunction with family and clinical data, within the general context of a medical practice run by health professionals. The result reports are strictly confidential.

The results of the **CGT** test will be provided to the referring clinician within a period of no more than 25 working days. A small percentage of samples may be delayed due to unforeseeable causes. Should this occur, the corresponding clinic in charge will be notified.

While there are considerable benefits to the CGT test, limitations exist that are described below:

a. The test only includes the analysis of specific genes and mutations included in the list and no others. Lists of genes and mutations analysed for each test are available at https://cgt.igenomix.com/diseases-list/
   i. It does not include all existing genetic disorders since the genetic basis for many of them is still unknown. It does not include all monogenic diseases whose genetic basis is already known, for both monogenic recessive diseases and X-liked disorders.
   ii. Mitochondrial DNA diseases, autosomal dominant diseases, multifactorial diseases or those of digenic inheritance are not included, unless otherwise indicated. Some genes included in this test can be associated to dominant phenotypes, however, since this is not a diagnostic test, the genetic counselling will be only provided for recessive and X-linked phenotypes.

b. The Next Generation Sequencing technique has the following technical limitations:
   i. DNA changes caused by large rearrangements (deletions and duplications) cannot be detected, except for those included in the list at https://cgt.igenomix.com/diseases-list/.
   ii. Trinucleotide expansions are not detected, except for those included in the list at https://cgt.igenomix.com/diseases-list/.
   iii. Some mutations may not be detected in areas of low sequence coverage.

c. The CGT test has a high accuracy but as with all genetic tests, there are some factors that may affect to the results. Therefore, a negative test result reduces but does not rule out the possibility of having affected offspring, due to the following:
   i. De novo mutations in one of the parents' gamete cells cannot be assessed.
   ii. Presence of somatic or germline mosaicism that creates differences in the DNA between tissues cannot be ruled out. These types of mosaicism are created after the fusion of parental gametes and can affect some but not all parts of the body. This mosaicism cannot be detected if the tissue where it was created is not studied and also if it is not present in a significant portion of its cells. In any case, the incidence of this happening is relatively low.
   iii. Presence of rare polymorphisms and/or pseudogenes and/or homopolymers may lead to false negative and positive results.
   iv. In a specific sample, some of the variants may not pass our quality control parameters due to low coverage of the genomic region in question. In this case, that variant will be reported as non-informative.
   v. As in any laboratory test, there is a small chance that the result is inaccurate for a procedural reason, an error during the collection and labelling of the sample, an error in processing, data collection or interpretation.

vi. There may be other medical reasons that invalidate the test, which should be researched by the doctor before proposing the test, such as the presence of congenital or acquired chimera, temporarily through blood transfusion, or permanently through bone marrow transplant. The congenital chimerism develops when two twin embryos become one; the likelihood of this happening is low. Allogenic bone marrow transplants generate chimera or coexistence of the patient's own cells with others from the donor, including the possibility of an exclusive donor cell colonisation. It is important to consider that these circumstances will lead to discrepant findings if the analysed sample comes from peripheral blood. Scientific literature outlines the possibility of working with a saliva sample to avoid possible discrepancies in genetic findings in patients that have received bone marrow transplants.

DATA PRIVACY, STORAGE AND RESEARCH USE OF SAMPLES

Your privacy is a priority for the Igenomix Group ("**Igenomix**"). Your identity and all data referring to your personal information will be confidential and only Igenomix personnel will be permitted access to this information, along with the relevant authorities when required by the laws of the applicable jurisdiction. You will find further information on the Igenomix Privacy Policy, along with all your rights at www.igenomix.com, or this information may be provided to you upon request by sending an email to privacy@igenomix.com.

We would like to inform you that your personal data will only be processed to: (1) Fulfil the obligations arising from the provision of the services contracted by you; (2) Check and guarantee the quality of the services provided (internal audits, quality controls, laboratory validation studies); (3) For educational purposes, provided that it remains anonymous throughout and you cannot be identified during the analysis of the data, which will be removed from any publication; (4) For research purposes, scientific publications and presentations, provided that it remains anonymous throughout and you cannot be identified during the analysis of the data, which will be removed from any publication; (5) Personally address any doubts or suggestions made by the patient during the process and monitor the proper performance and resolution of the test, including the indefinite retention of your data, except where local laws of the applicable jurisdiction state otherwise; and (6) Contact you in the future to request an evaluation of the services received, send commercial communications (including 'cross-selling' and 'upselling') from associated companies, and also to invite you to participate in market research and the development of new products.

You also declare that you understand and accept that you will not obtain, either now or in the future, any economic benefit for any research carried out, and that there is no intention to compensate you for the products developed from any research.

The sample will be analysed by Igenomix or an associated group selected by Igenomix on an international level. Igenomix reserves the right to carry out part or all of the analyses included in the test through Third Party Laboratories certified with recognised international quality standards, or failing this, they will be periodically assessed by Igenomix. Any results obtained in this way will be inspected by Igenomix and this circumstance will be indicated in the final report issued.

Samples and all associated data will be retained in the laboratory in accordance with the Igenomix's specimen retention policy which is in accordance with all the legal requirements.

Pursuant to the laws on the Protection of Personal Data[1], the requesting party must have the patient's consent to perform the diagnostic tests requested and to process their data. You may, at any time, exercise your rights regarding access, rectification, opposition, erasure, automated decisions, limitation, portability, by sending an email to privacy@igenomix.com, providing proof of the requesting party's identity.

I have been informed that this consent may be withdrawn at any time. However, if such withdrawal takes place once the **CGT** test has been done, **IGENOMIX** may not continue using my genetic data in the computer system, unless it is disassociated from my identity and used for research purposes.

RESULTS PREFERENCES FOR DONORS ONLY: (INDICATE AN OPTION OF YOUR CHOICE)

☐ Not to receive any information at all: I don't want to have access to or to receive any information about the results of the test. However, if the information is necessary to avoid serious damage to my health or that of my biological relative(s), I understand that this information will be brought to the attention of my referring clinician, who will adhere to the required local legislation when considering the delivery of these results to me.

☐ To receive the CGT results: I would like Igenomix to inform the ordering healthcare provider about my CGT test results, accepting that such results might indicate the risk of transmitting hereditary conditions to my offspring, even though I may not show any symptoms of such conditions.

I have been informed that this consent may be withdrawn at any time. However, if such withdrawal takes place once the **CGT** test has been done, **IGENOMIX** may not continue using my genetic data in the computer system, unless it is disassociated from my identity and used for research purposes.

HAVING READ AND UNDERSTOOD THE FOREGOING, I AM AWARE OF:

The indications, procedure, success rate, risks and complications of the proposed test, as well as the financial cost of said test(s).

The fact that medical staff are at my disposal to expand on any aspect of the information that is not sufficiently clear to me.

I have understood the explanations given to me in clear and simple language, and the doctor who saw me allowed me to make comments, clarifying any issues I raised and informing me that I may freely withdraw my consent at any time.

I am satisfied with the information received and I freely consent to giving a blood/saliva sample at the Centre/Clinic which I have attended. I also consent to the sample being sent to Igenomix facilities for the purpose of carrying out the aforementioned test(s).

The results of the **CGT** test are limited to the version of the gene panel that is stated in the results report. The test detects only the mutations that are indicated on the website https://cgt.igenomix.com/diseases-list/ when the sample is analysed.

In any event, I declare that I have received adequate genetic counselling from qualified **DOCTOR / CLINICIAN / GENETIC COUNSELOR** who have offered me information about the importance of the test, including possible alternatives that I have chosen in view of the results thereof, and who are available to me for any questions or additional genetic counselling that I may require once the results of the **CGT** test are known. I also accept that the results of the test(s) may be passed on to my doctor, so that he or she can advise me correspondingly on the suitable treatment to follow.

[1] **For non-US patients:** customers residing outside the United States under certain jurisdictions may at any time request to have their personal information deleted from our active databases, subject to the applicable laws and regulations in each jurisdiction. Although we can delete your personal information from our active databases, part or all of your personal information shall remain stored in back-up files for the purpose of complying with legal, regulatory or other requirements. Information that has already been coded and/or anonymised may not be recoverable or traceable for destruction, deletion or modification. If you wish to have your personal information removed from our active databases, please contact us at privacy@igenomix.com.