

REQUEST FORM CONSTITUTIONAL GENETIC ANALYSIS

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Label sample



BELAC 141-MED accredited according to quality standard ISO15189:2012

CENTRE FOR MEDICAL GENETICS
UZ Brussel

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<https://www.uzbrussel.be/web/centrum-voor-medische-genetica/>

Identification patient * * Mandatory data

Name: Sticker

First name: _____

Date of birth: _____ Gender (M/F): _____

Residential address: identification patient

Invoice address: _____

Email address: _____

Phone: _____

National registry N°: _____

Ethnic origin: _____

Identification referring physician *

Name: Stamp

First name: _____

Referring service: _____

Address: referring physician

Email address: _____

Phone: _____

RIZIV/INAMI number: _____

Signature *: _____

Sample data *

Sample type Blood

Dried blood spots

Biopsy Specify: _____

DNA from Specify: _____

Tissue culture Fibroblast culture or skin biopsy

Other Specify: _____

Stock sample Reason: _____

Collection date: _____

Request date *: _____

Your reference: _____

Copy result to: _____

Address: _____

Genetisch rapport in Nederlands Genetics report in English

Indication *

Diagnostic analysis

Check familial DNA variant/chromosomal aberration (1)/(2) required

Presymptomatic analysis 2nd independent sample required

Research Specify: _____

Other Specify: _____

Urgent Reason: _____

Urgent = minimal turn-around-time
Final decision urgency is determined by lab

Clinical information * add in capitals please

Symptomatic Asymptomatic

Family data

Family member followed elsewhere Specify: _____

Name family member: _____

First name family member: _____

Date of birth family member: _____ Gender (M/F): _____

Relation patient to family member: _____

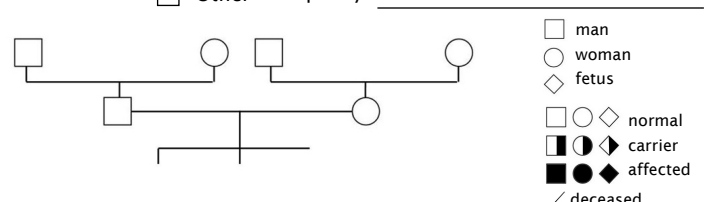
Clinical findings family member (1): _____

Genetic defect in family member (2) : addition genetic report required

Consanguinity Between partner and patient

Between parents of patient

Other Specify: _____



Additional information other family members: _____

Extra data in attachment

Informed consent

Pedigree

Clinical report/checklist

Genetic report (index patient)

Chromosomal analysis

Sampling	Chromosomal analysis	Specification	TAT
H	<input type="checkbox"/> Conventional karyotyping	:	4-10 weeks
E	<input type="checkbox"/> Molecular karyotyping	:	2-12 weeks
E	<input type="checkbox"/> QF-PCR (chr X, Y, 13, 18, 21)	:	2- 6 weeks
H	<input type="checkbox"/> FISH	:	2-12 weeks

Biochemical analysis

Sampling	Lysosomal storage disease	Enzyme	Specification	TAT
S E	<input type="checkbox"/> Chitotriosidase activity	chitotriosidase	:	2-3 months
H	<input type="checkbox"/> Fabry (only analysed for male)	α-galactosidase	:	2-3 months
H	<input type="checkbox"/> Gaucher	β-glucosidase	:	2-3 months
H	<input type="checkbox"/> MPS1-Hurler-Scheie	α-L-iduronidase	:	2-3 months
F @/@	<input type="checkbox"/> Pompe	α-glucosidase	:	2-3 months

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Name & first name patient: _____
 Date of birth: _____ Gender (M/F): _____

Legend		* mandatory data
E	EDTA blood min. 4ml	IC informed consent required
F	only fibroblasts	KV clinical report required
H	Na-Hep blood min. 7ml	T trio (index+parents) required
S	tube without additive 5ml (serum)	/@ only after phone/mail consult

Molecular (DNA) analysis (Detailed information gene panels see <http://www.brightcore.be/gene-panels>)

Sampling	Disorders	Gene	Specification	TAT
E	<input type="checkbox"/> Hemochromatosis	HFE p.His63Asp & p.Cys282Tyr	Serum ferritine*: _____ Transferrine sat*: _____	2-4 weeks
E	<input type="checkbox"/> Hemoglobinopathy	<input type="checkbox"/> HbS <input type="checkbox"/> HbC <input type="checkbox"/> α-thal <input type="checkbox"/> β-thal	α-thal and β-thal: prior Hb-electrophoresis required	1-3 months
Sampling	Blood coagulation problems	Gene (variant)	Specification	TAT
E	<input type="checkbox"/> Antithrombin deficiency	<input type="checkbox"/> gene SERPINC1 <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Complement factor H	<input type="checkbox"/> gene CFH <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Factor II/Prothrombin	F2 c.*97G>A	_____	2-4 weeks
E	<input type="checkbox"/> Factor V/APC-cofactor	F5 c.1601G>A p.Arg506Gln	APC resistance*: _____	2-4 weeks
E IC	<input type="checkbox"/> Protein C deficiency	<input type="checkbox"/> gene PROC <input type="checkbox"/> targeted	_____	1-3 months
Sampling	Cardiac disorders	Gene panel/targeted	Specification	TAT
E IC KV	<input type="checkbox"/> Cardiomyopathie	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC KV	<input type="checkbox"/> Primary cardiac arrhythmia	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
Sampling	Endocrinological disorders	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> Androgen receptor	<input type="checkbox"/> gene AR <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Calcium-sensing receptor	<input type="checkbox"/> gene CASR <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Combined pituitary hormone deficiency	<input type="checkbox"/> gene PROP1 <input type="checkbox"/> gene POU1F1 <input type="checkbox"/> targeted	_____	1-6 months
E IC	<input type="checkbox"/> Hypogonadotropic hypogonadism	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Obesity, monogenic, early onset	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Thyroid dysgenesis	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E	<input type="checkbox"/> Thyroid hormone resistance	<input type="checkbox"/> gene THRB <input type="checkbox"/> targeted	_____	1-3 months
Sampling	Familial cancer	Gene/gene panel/targeted	Specification	TAT
E IC	<input type="checkbox"/> Breast and/or ovarian carcinoma	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	1-3 months
E IC	<input type="checkbox"/> Colon carcinoma (Lynch/polyposis)	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	1-3 months
Sampling	Metabolic disorders	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> Aldolase B/fructose intolerance	<input type="checkbox"/> gene ALDOB <input type="checkbox"/> targeted	_____	2-4 weeks
E IC	<input type="checkbox"/> Congenital defects of glycosylation	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Glycogen storage disease	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Lysosomal storage disease	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Neurotransmitter aandoening	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Organic aciduria	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Peroxisomal disorder	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC	<input type="checkbox"/> Metabolic disorder (other)	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
Sampling	Mitochondrial disorders	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> Aminoglycoside induced deafness	MT-RNR1	_____	2-6 months
E	<input type="checkbox"/> Leigh or NARP syndrome	_____	_____	2-6 months
E	<input type="checkbox"/> LHON syndrome	MT-ND1 m.3460, MT-ND4 m.11778, MT-ND6 m.14484	_____	2-4 weeks
E	<input type="checkbox"/> MERRF/MELAS (incl.MIDD)	MT-TK tRNA ^{Lys} , MT-TL1 tRNA ^{Leu}	_____	2-6 months
E IC KV	<input type="checkbox"/> Mitochondrial disorder, nuclear	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E	<input type="checkbox"/> MNGIE	_____	_____	2-6 months
E IC	<input type="checkbox"/> mtDNA deletions	_____	_____	2-6 months
E IC	<input type="checkbox"/> mtDNA depletie syndrome (MDDS)	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC KV	<input type="checkbox"/> mtDNA resequencing	complete mtDNA	_____	2-6 months
E	<input type="checkbox"/> Polymerase G	<input type="checkbox"/> gene POLG <input type="checkbox"/> targeted	_____	2-6 months
Sampling	Neurological/neurodegenerative disorder	Gene/gene panel/targeted	Specification	TAT
E IC KV	<input type="checkbox"/> Epilepsy (incl. EIEE)	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E	<input type="checkbox"/> GTP cyclohydrolase I deficiency (Segawa AD)	<input type="checkbox"/> gene GCH1 <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> PLA2G6-ass neurodegenerative disorder	<input type="checkbox"/> gene PLA2G6 <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Spinocerebellar ataxia-DRPLA	SCA 1, 2, 3, 6, 7, 8, 17 + ATN1	_____	3-6 months
E	<input type="checkbox"/> Tyrosine hydroxylase (Segawa AR)	<input type="checkbox"/> gen TH <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Huntington disease	HTT CAG-repeat	_____	2-3 months
E	<input type="checkbox"/> Kennedy disease	AR CAG-repeat	_____	2-3 months
Sampling	(Neuro)development- and growth disorders	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> Achondroplasia	FGFR3 c.1123G>T, p.Gly375Cys & c.1138G>A, p.Gly380Arg & c.1138G>C, p.Gly380Arg	_____	2-4 weeks
E IC KV	<input type="checkbox"/> Congenital malformation(s)/MCA	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC KV	<input type="checkbox"/> Cortical malformations	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E	<input type="checkbox"/> Fragile-X syndrome	FMR1 CGG-repeat	_____	2-4 weeks
E KV	<input type="checkbox"/> Hydrocephaly, X-linked	<input type="checkbox"/> gene L1CAM <input type="checkbox"/> targeted	_____	1-3 months
E IC KV	<input type="checkbox"/> Neurological development disorders	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E IC KV	<input type="checkbox"/> Skelet dysplasia	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
Sampling	(Neuro)muscular disorders	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> AMP deaminase	<input type="checkbox"/> gene AMPD1 <input type="checkbox"/> targeted	_____	2-4 weeks
E	<input type="checkbox"/> Becker-Thomsen myotonia	<input type="checkbox"/> gene CLCN1 <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Congenital (para)myotonia	<input type="checkbox"/> gene SCN4A <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> Myotonic dystrophy/Steinert disease	DMPK CTG-repeat	_____	2-3 months
E IC	<input type="checkbox"/> Neuromuscular disorder	<input type="checkbox"/> gene panel <input type="checkbox"/> targeted	_____	2-6 months
E	<input type="checkbox"/> Spinal muscular atrophy	SMN1 del ex7	_____	2-4 weken
Sampling	Diverse	Gene/gene panel/targeted	Specification	TAT
E	<input type="checkbox"/> Mucoviscidosis	CFTR frequent variants	_____	2-4 weeks
E	<input type="checkbox"/> Incontinentia pigmenti	<input type="checkbox"/> gene IKBKG <input type="checkbox"/> targeted	_____	1-3 months
E	<input type="checkbox"/> X-inactivation	_____	_____	1-3 months
E @/	<input type="checkbox"/> Other	_____	_____	1-6 months

We strive to complete the analyses within the set turnaround times (TAT). In exceptional situations, we may deviate from the standard turnaround time.



Identification patient *

* Mandatory data

Name: _____
First name: _____
Date of birth: _____ Gender (M/F): _____
Residential address: _____
Email address: _____
Phone: _____
National registry N°: _____

Sticker

identification patient

GENETIC TEST

1. Diagnostic genetic test

I, the undersigned, agree to perform a diagnostic genetic test on a blood sample, or other samples, of the above person for the following condition:

The diagnostic genetic test that will be performed is:

- a limited analysis or 'targeted' analysis of gene(s)
 a broad analysis or 'non-targeted' genome-wide analysis**

2. Scientific research

After a diagnostic genetic test is done for a condition, some material usually remains. This material can be preserved as it can be useful for further diagnostic testing with broader genetic analyses** at a later date and/or for scientific research (see the explanation below).

With regard to the preservation of remaining samples, the genetic data, and medical data for later scientific research:

- I agree
 I do not agree

**Broad genetic analysis:

Broad genetic analyses can lead to an incidental and/or secondary discovery of genetic results unrelated to the condition for which the test was performed. I realize that such results can have implications for myself and my family. I would like to be informed about genetic results that present an increased risk for diseases for which:

- appropriate follow-up, prevention, or treatment is available (such as a risk for cancer, heart disease)
 no prevention or treatments exist (such as for dementia; NB only adult mentally competent persons may choose this option)

With regard to the storage and exchange of data/ samples as part of the diagnostic process and scientific research, I understand that:

- the exchange of medical and genetic data between experts is important to improve knowledge of genetic diseases.
- this exchange can be done in the context of diagnostic testing and/or scientific projects approved by the relevant Ethics Committee.
- the exchange of data may lead to improved diagnosis for myself or others, improved healthcare, improved prevention, improved therapeutic means; and may be published in scientific journals, or presented at scientific meetings.
- my samples, genetic data, and relevant medical data are labelled with a code (see explanation on the next page).
- my encoded genetic samples can be used as control material for the general improvement or development of tests.
- genetic and relevant medical data can be re-analyzed in the context of diagnostic tests that are available at a later stage and/or within approved research projects, without me being informed in advance.
- the knowledge and possibilities for analysis and interpretation of genetic research will increase in the future and re-analysis can reveal a (new) diagnosis. There is currently no systematic re-analysis of data.
- if my health insurance does not reimburse the costs for the original genetic test, these will be invoiced to me in full.
- I reserve the right to change my consent at any time, for one or more of the various points described. The withdrawal of consent will not adversely affect my general medical treatment (unrelated to the genetic test for which this consent was given). I understand that my withdrawal cannot be applied to the results and data collected before my request for withdrawal.
- my participation is voluntary and will not be linked to financial benefits.

- I agree with the above
 I do not agree with the above

To be completed by patient or representative*

I confirm that I am well informed about the objectives and nature of the analyses related to my condition. I received the necessary information from the healthcare provider and/or I read the corresponding information leaflet. I have had the time and opportunity to ask questions and I am satisfied with the answers and supplemented explanations.

Date: _____
Signature*: _____

If representative
Relation to patient _____
Name: _____
First name: _____

To be completed by healthcare provider *

I hereby confirm that I have informed the undersigned patient and answered questions in the best possible way with regard to the possible results, limitations and options for the test(s) mentioned above.

Date: _____
Signature*: _____

Name: _____
First name: _____

Stamp
healthcare provider



EXPLANATION ON STORAGE AND USE OF SAMPLES

After a diagnostic genetic test is done, a part of the material remains for which there is no immediate purpose. This material could be destroyed, but often it is useful not to do so. In some cases, it can be used in a meaningful way. The following four possibilities are considered:

- 1) a different diagnostic test within the scope of your original question;
- 2) scientific research within the scope of your original question;
- 3) genetic research of a general nature, with which you mainly help other people;
- 4) you and/or your descendants have a new question or condition that requires genetic testing.

Explanation

It is possible that a different diagnostic test is possible at a later date, for a condition that affects you or your family (1). Moreover, scientific research could be carried out in order to search for more understanding on this condition (2). The material that was previously obtained from you can be used for these tests. This material, and any encrypted medical data, will then be used further and examined at a national or international level. For research into rare diseases, such an approach can speed up the identification of an explanation for the condition. When performed, your data will always be encrypted in order to fully protect the privacy of you and your genetic and medical information.

Body material is often valuable for developing new scientific knowledge, or for testing diagnostic devices in the laboratory (3). This scientific knowledge is usually not directly applicable in practice at the beginning, but can become important for patients at a later date. A great deal of knowledge that is now used daily by doctors in patient care has arisen from such scientific research, of which the practical significance was initially not entirely clear.

Examples of further use

- 1) and 2) After diagnostic genetic testing the remaining material is stored after use but identified via a code. This means that your personal data will be replaced by a random number. The list that indicates which number (code) belongs to which patient is stored by an administrator in a safe place. The people who use the material only see the random number (code) associated with the material. The code can be traced back to your personal data if a researcher - sometimes years later - finds a genetic change in a coded sample, which explains your original question or may be of interest to your state of health. An example is an inherited predisposition to cancer or to heart disease, for which prevention, treatment or surveillance options are available. The likelihood of finding such a genetic change is usually small. There is also a chance that we may find a genetic change that could affect your treatment, such as an adjustment in your medication. The researcher who makes such a discovery passes on the code number to the administrator who can link the code to the name of the patient and to the name of the practitioner/doctor with whom that patient has been in contact. Subsequently, an assessment is made on whether the genetic change is indeed important for you and your health. This assessment is done in consultation with an independent committee of doctors and other experts, which helps to decide whether the genetic change should be linked back to you. If so, you will be contacted by your treating physician to inform you of the genetic change. This finding will then have to be confirmed with a new independent test.
- 3) Your material can also be used for scientific research that only provides general knowledge and can not be individually applied. An example of this is when your material is used as a control sample for a test, which has nothing to do with the condition for which you had genetic testing in the first place. Samples and encrypted data from groups of patients are then compared with those of other groups of patients or healthy individuals. The results of such scientific research are usually not reported back to you. In the case that there would be feedback, it could be many years later.
- 4) After your original question has been answered, you and/or your descendants may have a new question concerning genetics. In that case, your sample can be used for a new genetic test.

In conclusion

We hope to have given you sufficient information to make an informed decision about the storage and use of your samples and of your medical and genetic data. For more information, you may wish to contact the Medical Genetics Centre of UZ Brussel. <https://www.uzbrussel.be/web/genetics>
More information on privacy may be found at: <https://www.uzbrussel.be/web/neem-zelf-uw-zorg-in-handen-/patiëntenrechten>