CARDIOLOGY

BARCODE

ORDER FORM

HEALTH CARE PROVIDER INFORMATION

INSTITUTION/PRACTICE	ADDRESS (STREET NAME, NO., CITY, POSTCODE, COUNTRY)
FIRST NAME	TELEPHONE NUMBER (COUNTRY CODE & NUMBER)
LAST NAME	E-MAIL ADDRESS (FOR REPORT ACCESS)

PATIENT INFORMATION

FIRST NAME	ADDRESS (STREET NAME, NO., CITY, POSTCODE, COUNTRY)
LAST NAME	TELEPHONE NUMBER (COUNTRY CODE & NUMBER)
DATE OF BIRTH (DD/MM/YYYY)	IDENTIFICATION NO. (IF APPLICABLE)

GENETIC SEX ☐ FEMALE ☐ MALE
☐ OTHER (SPECIFY KARYOTYPE IF KNOWN):

DECLARATION OF CONSENT IN ACCORDANCE WITH THE GERMAN GENETIC DIAGNOSTICS ACT (GenDG)

I confirm that I consent to the collection and analysis of the necessary genetic sample, and that I have been fully informed in accordance with Section 9 of the German Genetic Diagnostics Act (GenDG), regarding, but not limited to, the following:

- the purpose, nature, scope, and significance of the genetic test,
- the results that may be obtained,
- the intended use of the genetic sample and the test results,
- my right to withdraw my consent with effect for the future, as well as my right not to know and my right to request destruction of the test result, or parts thereof.

In rare cases, incidental findings may be identified that do not correspond to the test request but are clinically relevant (procedure in accordance with ACMG recommendations).

I would like to be informed about these genetic findings.
☐ Yes ☐ No

After the analysis is completed, I allow the use of the genetic sample and the genetic data generated from it, after removal of any personal data, for:

- quality assurance measures
☐ Yes ☐ No
- publications / conference presentations
☐ Yes ☐ No

No selection will be regarded as "No."

If I withdraw my consent before receiving the results, I agree to cover the costs incurred by the laboratory up to that point.

I acknowledge that the sample(s) and results may be stored for an extended period at my request. Should this be relevant now or in the future (e.g., in the case of irreplaceable material), I will enter into a separate agreement with the laboratory.

PLACE, DATE | NAME (BLOCK LETTERS) | X SIGNATURE OF PATIENT OR LEGAL REPRESENTATIVE

According to the GenDG, predictive diagnostics may only be ordered by medical specialists in human genetics or, depending on the specific field, by appropriately qualified specialists in that field. I hereby confirm, as the treating physician, that I possess the necessary qualifications. I understand that specialists in human genetics are available to communicate the results of incidental findings that fall outside my area of expertise.

PLACE, DATE | NAME OF RESPONSIBLE MEDICAL PROFESSIONAL (BLOCK LETTERS) | X SIGNATURE OF RESPONSIBLE MEDICAL PROFESSIONAL

PLEASE NOTE: If the patient did not sign this order form: I, the responsible medical professional, confirm that the patient received genetic counselling and agrees with the genetic testing. The patient's consent has been obtained in writing.

X SIGNATURE OF RESPONSIBLE MEDICAL PROFESSIONAL

MVZ Martinsried GmbH
Lochhamer Str.29, 82152 Martinsried, Germany
www.medicover-genetics.com

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CLINICAL INFORMATION

Indication: _____

☐ Diagnostic ☐ Predictive

Is there a pregnancy / partner's pregnancy? ☐ No ☐ Yes Gestational week _____ + _____

Family history

Are there other affected family members with similar symptoms? ☐ Yes ☐ No ☐ Unknown

If yes, relationship(s): _____ *(If yes, please attach a copy of the report)*

Previous genetic testing in the patient and/or family? ☐ Yes ☐ No ☐ Unknown *If yes, attach report / add details under clinical symptoms*

CLINICAL SYMPTOMS

CARDIAC SYMPTOMS

- ☐ Syncope
- ☐ Hypertrophic cardiomyopathy
- ☐ Ventricular septal hypertrophy: _____ mm
- ☐ Left ventricular hypertrophy: _____ mm
- ☐ Sudden cardiac death / cardiac arrest
- ☐ Dilated cardiomyopathy
- ☐ Left ventricular dilation
- ☐ Right ventricular dilation
- ☐ Structural abnormalities of the myocardium: _____
- ☐ Left ventricular noncompaction cardiomyopathy
- ☐ Reduced left ventricular ejection fraction: _____ %
- ☐ Reduced right ventricular ejection fraction: _____ %
- ☐ Atrial septal defect
- ☐ Ventricular septal defect
- ☐ Tetralogy of Fallot
- ☐ Hypoplastic left heart syndrome
- ☐ Aortic stenosis
- ☐ Pulmonary stenosis
- ☐ Atrioventricular septal defect
- ☐ Valve defect (specify): _____

ECG FINDINGS

- ☐ Prolonged QTc interval: _____ ms
- ☐ Torsades de Pointes
- ☐ Stress-induced polymorphic ventricular tachycardia
- ☐ Brugada type 1 ECG
- ☐ J wave
- ☐ Epsilon wave
- ☐ ST-segment elevation
- ☐ T-wave inversion
- ☐ Delta wave
- ☐ Ventricular tachycardia
- ☐ Ventricular extrasystoles
- ☐ Atrial fibrillation
- ☐ Ventricular fibrillation
- ☐ Atrioventricular block
- ☐ Right bundle branch block
- ☐ Left bundle branch block

LABORATORY PARAMETERS *(please attach corresponding abnormal lab findings)*

- ☐ Total cholesterol: _____
- ☐ Triglycerides: _____
- ☐ HDL cholesterol: _____
- ☐ Abnormal enzyme level: _____
- ☐ LDL cholesterol: _____

OTHER ABNORMALITIES

- ☐ Sensorineural hearing loss
- ☐ Diabetes mellitus
- ☐ Periodic paralysis
- ☐ Smoker
- ☐ Systolic blood pressure: _____ mmHg
- ☐ Other abnormalities: _____

☐ Further clinical information attached

SAMPLE MATERIAL

Collection date: _____

Time: _____

- ☐ EDTA blood (2-5 mL)
- ☐ DNA from _____ (≥ 250 ng; ≥ 100 ng/µL)
- ☐ Other (specify): _____ *(Prior approval is required, please contact us in advance for more information)*

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TEST REQUEST

☐ **Targeted testing for a known familial variant**

Please include a copy of the findings or specify the exact gene, variant, and transcript:

Gene: _____ Variant: _____ Transcript: _____

☐ **00583 Cardiology – comprehensive panel**

Includes all tests from the following indication groups: arrhythmias / ion channel disorders, cardiomyopathies, connective tissue and aortic disorders, lipid metabolism disorders, storage diseases, and congenital heart defects. Recommended in cases of unclear, overlapping, or syndromic cardiovascular symptoms.

ARRHYTHMIAS / ION CHANNEL DISORDERS

- ☐ **00229 Arrhythmia – comprehensive panel**
- ☐ 00224 Atrial fibrillation
- ☐ 00219 Brugada syndrome
- ☐ 00220 Calcium release deficiency syndrome
- ☐ 00218 Catecholaminergic polymorphic ventricular tachycardia
- ☐ 00554 Early repolarisation syndrome
- ☐ 00240 Long QT syndrome
- ☐ 00221 Progressive cardiac conduction disease
- ☐ 00455 Short QT syndrome
- ☐ 00223 Sinus node disease

CARDIOMYOPATHIES

- ☐ **00228 Cardiomyopathies – comprehensive panel**
  (also recommended in cases of recurrent myocarditis)
- ☐ 00061 Arrhythmogenic cardiomyopathy
- ☐ 00233 Dilated cardiomyopathy
- ☐ 00232 Hypertrophic cardiomyopathy
- ☐ 00217 Left ventricular non-compaction cardiomyopathy (LVNC)
- ☐ 00216 Restrictive cardiomyopathy

CONGENITAL HEART DEFECTS[1]

- ☐ **00002 Congenital heart defects – comprehensive panel**
- ☐ 00049 Alagille syndrome
- ☐ 00003 Heterotaxy
- ☐ 00311 RASopathies (incl. Noonan syndrome)

[1] *In selected cases of suspected genetically determined congenital heart defects, comprehensive whole-exome analysis may be considered in line with European Society of Cardiology (ESC) guidance on genetic testing in congenital heart disease.*

To request whole exome sequencing, please complete the relevant order form.

CONNECTIVE TISSUE AND AORTIC DISORDERS

- ☐ 00074 Bicuspid aortic valve with risk of aortic valve stenosis and dilatation
- ☐ 00814 Vascular Ehlers-Danlos syndrome
- ☐ 00276 Loeys-Dietz syndrome
- ☐ 00274 Marfan syndrome
- ☐ 00213 Thoracic aortic aneurysm and dissection

ADDITIONAL ANALYSES

LIPID METABOLISM DISORDERS

- ☐ 00004 Familial hypercholesterolaemia
- ☐ 00115 Hyperlipidaemia
- ☐ 00098 Hypobetalipoproteinaemia
- ☐ 00090 LCAT deficiency / Norum disease / Fish eye disease
- ☐ 00111 Primary hypertriglyceridaemia / Familial chylomicronaemia syndrome
- ☐ 00813 Sitosterolaemia
- ☐ 00105 Tangier disease

STORAGE DISEASES

- ☐ 00030 Fabry disease
- ☐ 00404 Hereditary ATTR amyloidosis
- ☐ 00031 Glycogen storage disease II (Pompe disease)

PHARMACOGENETICS[2]

- ☐ 00821 PGx Cardiovascular
- ☐ 00479 PGx Mavacamten

CYTOGENOMICS[2]

- ☐ 00822 Postnatal genome-wide CNV analysis
- ☐ 00599 Chromosomal microarray analysis (CMA)

TRINUCLEOTIDE REPEAT DISORDERS[2]

- ☐ 00402 Myotonic dystrophy type 1
- ☐ 00446 Friedreich ataxia

[2] *Not included in Cardiology - comprehensive panel*

For further information on specific tests and/or gene content, please visit our website: www.medicover-genetics.com.
If you have additional questions or concerns, please contact us at info.genetics@medicover.com

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CARD-OF-V3-10/26

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INFORMATION FOR PATIENTS

A genetic test has been recommended for you, or for a person under your care, to help investigate specific health concerns. In accordance with the **German Genetic Diagnostics Act (GenDG)**, you must be informed about the test before it is performed and must provide **written consent**. The physician ordering the test is responsible for this process.

PROCEDURE OF GENETIC TESTING

Purpose of the test: The genetic analysis aims to identify alterations in your genetic material that may be responsible for your symptoms or conditions, or for diseases that are already known in your family. The results may support medical care, disease management, and family planning decisions.

Methods of testing: Various methods can be used for genetic testing, such as chromosome analysis (cytogenetic analysis) or DNA analysis (molecular genetic analysis). The best-suited method will be chosen by the laboratory based on the specific question to be answered. In some cases, a combination of methods may be used to increase the likelihood of detecting a genetic alteration.

Conducting the test: The test is typically carried out using a blood sample. The venipuncture generally poses no health risks.

The sample and results will be used only for the purpose of the requested test.

POSSIBLE RESULTS OF THE GENETIC TEST

Genetic test results are interpreted together with your clinical information, symptoms, medical and family history, and previous diagnoses. Results are confidential and are usually explained by your ordering physician, including any limitations, next steps, and possible unexpected findings. The following are possible results of the test:

1. Identification of a disease-related genetic alteration:
- If a (likely) pathogenic genetic alteration is identified that is linked to your condition, this indicates that the alteration is most likely the cause of your symptoms or condition.
- You will be provided with detailed information about the condition, including its progression and treatment options, if available.

2. No identification of a disease-related genetic alteration:
- Even if no disease-related genetic alteration is found, a genetic cause for your condition cannot be ruled out.
- This is due to the fact that not all clinical abnormalities can be genetically explained, as environmental factors may also play a role. Additionally, it is possible that the genetic cause could not be detected by the methods currently used.
- For this reason, a follow-up consultation and possibly a re-evaluation in 2-4 years is recommended if the results are unremarkable.

3. Identification of genetic alterations with unclear clinical significance:
- Sometimes, genetic alterations are identified whose clinical significance is not yet clear. These so-called variants of uncertain signifcance (VUS) may be either harmless or disease-related, but their effect is not yet fully understood at the time of testing.
- For this reason, a follow-up consultation and re-evaluation of the genetic analysis in 2-4 years is recommended for any identified VUS.
- You will be informed of such genetic alterations, and discussions will be held with you regarding their potential implications for your health and the health of your family.

4. Incidental and secondary findings:
- In comprehensive genetic analyses, such as exome or genome sequencing, clinically relevant genetic alterations may be identified that are unrelated to the original reason for testing. These findings are classified as incidental findings when they are discovered unintentionally while investigating the primary clinical question, or as secondary findings when they are deliberately and systematically searched for despite being unrelated to the original indication for testing.
- Example: In a test for a developmental disorder, a genetic predisposition to a heart arrhythmia may also be discovered.
- Your decision: You may specify in the consent form whether you wish to be informed of such findings. Typically, only those incidental or secondary findings are reported that are related to conditions for which medical treatment options are available, or preventive measures can be taken.

CONFIDENTIALITY AND DATA PROTECTION

Your genetic test results will be stored exclusively in a secure laboratory information system and are only accessible to authorised personnel. All data protection regulations will be adhered to according to the applicable legal requirements. The results must be stored for 10 years, after which the data will be destroyed unless you have made other arrangements. Please refer to our full Privacy Policy available on our website.

REVOCATION OF CONSENT

You can **revoke** your consent for the genetic test at any time, either fully or partially, without providing any reasons. You can also stop the test and request the destruction of the tested material before the results are communicated. However, any costs incurred prior to your objection may be charged.

FURTHER QUESTIONS?

If you have any questions about the methods, results, or any other aspects of the genetic test, please contact your responsible physician.

For additional information, please visit our website at www.medicover-genetics.com.

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