General Information

Patient Surname: First name: Date of birth: Sex:	Sender / Clinic Surname: First name: Institution: Street: Postcode/City: Country: Phone: Email: VAT: If applicable, please include a VAT number or a combination of the patient / other street: Postcode/City: Country: First name: Street: Postcode/City: Country: Email: If you do not check these boxes, your country: Email: If you do not check these boxes, your country: Email: It consent to the storage of my genetic material for quality control (for max. 10 years). I consent to the storage of my test results beyond the (as required by German law). I consent to the pseudonymous storage and use of and/or test results for scientific research and in scientific. With regard to secondary findings I we like to be informed: Genetic variation may sometimes be identified, which genetic analysis (so-called secondary findings). The realterations (ACMG classes 4 and 5) within select action exists for you or your family (according to of Medical Genetics and Genomics; details on genetics analysis for your or your family (according to of Medical Genetics and Genomics; details on genetits for you or your family (according to of Medical Genetics and Genomics; details on genetits for you or your family (according to of Medical Genetics and Genomics; details on genetits for your or your family (according to of Medical Genetics and Genomics; details on genetits for your or your family (according to of Medical Genetics and Genomics; details on genetits for your your family (according to of Medical Genetics and Genomics; details on genetits for your your family (according to of Medical Genetics and Genomics; details on genetits for your your family (according to of Medical Genetics and Genomics; details on genetits for your your family (according to of Medical Genetics and Genomics; details on genetics for your your family (according to of Medical Genetics and Genomics; details on genetics for your your family (according to of Medical Genetics for your family (according to family family family family family famil	r answer will be recorded as "No". additional tests and/or
onsent of all legal guardians. If the patient did not sign this order form: I, the referring hysician, confirm that the patient received genetic counseling and agrees with the	counselling physician. Please indicate here the co	
Patient / Legal Guardian (Block letters) Patient / Legal Guardian (Date, Signature) Physican (Date, Signature)		DAKKS Deutsche Akkreditierungsstelle D-ML-13206-01-00 CAP ACCREDITED COLLEGE #I MARRICAN PATHOLOGISTS CLIA CERTIFIED ID: 99D2130225 CEGAT is accredited by DAKKS according to DIN EN ISO 15189:2014, the College of American Pathologists (CAP) and CLIA.

ORDER FORM EXOME For th

For the diagnosis of syndromal complex phenotypes



Indication & Clinical symptoms

Analysis type:	and is affected	tive testing)
Indication / suspected diagnosis:		
Preliminary genetic diagnostics:		
, g , g		
Transplants (bone marrow, tissue, stem	cells) No Yes, (please specify)	
	orts of your patient (with pictures, if available).	
Clinical symptoms		
	ion for your patient. Detailed clinical information will incre	
	ove the interpretation of identified variants. The absence information for genetic analyses. Please take the opport	
unknown' in the relevant phenotype sections		anity to malacio no abnormanico di nocoxamino
Drawatal madical history	Drain abnormalities	Nouvelenies I symptome
Prenatal medical history: ☐ Normal	Brain abnormalities ☐ Lissencephaly	Neurological symptoms ☐ Seizures (☐ generalized/☐ focal)
☐ Prematurity	□ Schizencephaly	□ Encephalopathy
☐ Intrauterine growth restriction (IUGR)	□ Porencephaly	☐ Abnormal nerve conduction velocity
☐ Poly- / Oligohydramnios☐ Decreased fetal movement	☐ Pachygyria☐ Polymicrogyria	☐ Neuropathy (☐ motor/☐ sensory) ☐ Ataxia
☐ Other:	☐ Band heterotopia	☐ Tremor
	→ Abnormality of corpus callosum (B) (B) (C) (C) (C) (C) (D) (D) (D) (D	☐ Dystonia
Developmental disorders	(Please specify:)	☐ Chorea ☐ Spasticity
☐ Intellectual disability (☐ mild, ☐ moderate, ☐ severe)	☐ Hydrocephalus	☐ Gait disturbances
☐ Global developmental delay	☐ Holoprosencephaly☐ Abnormality of basal ganglia	□ Nystagmus
☐ Delayed motor milestones	☐ Leukoencephalopathy	☐ Mood disturbances(☐ anxiety, ☐ depression, ☐ psychosis)
☐ Delayed speech / language developmen		☐ Migraine, ☐ Headaches
☐ Autism spectrum disorder☐ Developmental regression	☐ Ventriculomegaly☐ Other:	☐ Sleep disturbances
☐ Other:	□ Normal brain MRI	☐ Unexplained pain☐ Other:
☐ No intellectual disability	□ Not examined / unknown	□ No neurological symptoms
□ No developmental disorder		☐ Not examined / unknown
☐ Not examined / unknown	Respiratory symptoms ☐ Respiratory insufficiency	
Craniofacial anomalies	☐ Respiratory failure	Eye defects ☐ Visual impairment (bilateral? ☐ yes/☐ no)
☐ Macrocephaly	☐ Apnea	(Please specify:
☐ Microcephaly☐ Craniosynostosis	☐ Recurrent infections☐ Bronchiectasis	☐ Anophthalmia/☐ Microphthalmia
☐ Broad forehead	☐ Other:	(bilateral? □ yes/□ no)
☐ Cleft lip palate	☐ No respiratory symptoms	☐ Strabismus (bilateral? ☐ yes/☐ no)
☐ Hypertelorism☐ Hypotelorism	□ Not examined / unknown	□ Congenital bilateral cataract□ Other:
☐ Abnormality of the nose		
(Please specify:)	□ No eye defects□ Not examined / unknown
☐ Abnormal ears	_	
(Please specify:)	
☐ Micrognathia	_	
☐ Oligodontia		
□ Other:	<u></u>	
☐ No craniofacial anomalies		
□ Not examined / unknown		

ORDER FORM EXOME For th

For the diagnosis of syndromal complex phenotypes



Clinical symptoms

Hearing defects and vestibular abnormalities □ Sensorineural hearing impairment (bilateral? □ yes/□ no) □ Conductive hearing impairment (bilateral? □ yes/□ no) □ Abnormality of vestibular system (□ vertigo, □ dizziness, □ imbalance, □ spatial disorientation) □ Other:	Immunological and hematological abnormalities Autoinflammatory disease Immunodeficiency (Please specify: Recurrent infections Anemia (Erythrocytes) Neutropenia Thrombocytopenia Abnormal coagulation	Hepatic dysfunction Liver dysfunction (Please specify: Recurrent acute liver failure Hepatic cysts Cholestasis Hypercholanemia Hepatomegaly Other:
No hearing defectsNo vestibular abnormalities	Megaloblastic anemiaBone marrow failure	□ No hepatic abnormalities□ Not examined / unknown
□ Not examined / unknown Musculoskeletal symptoms	☐ Hemochromatosis ☐ Other: ☐ No immunological abnormalities	Skin, nails and hair Abnormality of connective tissue
 Muscular hypotonia Muscular hypertonia Elevated creatine kinase Ptosis 	 □ No immunological abnormalities □ No hematological abnormalities □ Not examined / unknown 	(Please specify:) ☐ Multiple cafe-au-lait spots ☐ Port-wine stain ☐ Albinism
 ☐ Flexion contracture ☐ Arthrogryposis (congenital? ☐ yes/☐ no) ☐ Short stature (skeletal dysplasia? ☐ yes/☐ no) 	Metabolic and endocrine defects ☐ Failure to thrive ☐ Obesity ☐ Suspected mitochondriopathy	□ Progeroid appearance□ Skin lesions□ Eczema□ Edema
☐ Tall stature (overgrowth? ☐ yes/☐ no) ☐ Joint Hypermobility ☐ Hand-/☐ Foot polydactyly (bilateral? ☐ yes/☐ no)	□ Lactic acidosis□ Proteinuria□ Hyperglycemia□ Hypoglycemia	☐ Ichthyosis ☐ Dysplastic nails ☐ Anhidrosis ☐ Hyperhidrosis
☐ Hand-/☐ Foot syndactyly (bilateral? ☐ yes/☐ no) ☐ Camptodactyly of finger ☐ Clubfoot (congenital? ☐ yes/☐ no)	□ Ketosis□ Hypercalcemia□ Diabetes mellitus□ Diabetes insipidus	☐ Alopecia ☐ Hypertrichosis (Where?) ☐ Other:
□ Scoliosis □ Pectus excavatum □ Pectus carinatum □ Hemihypertrophy	 ☐ Hypothyroidism ☐ Hypoparathyroidism ☐ Exocrine pancreatic insufficiency ☐ Other: 	□ No abnormalities of skin, nails and hair □ Not examined / unknown
☐ Abnormality of bone density (☐ increased/☐ decreased) ☐ Exostosis ☐ Delayed bone age ☐ Other:	 □ No metabolic abnormalities □ No endocrine abnormalities □ Not examined / unknown □ Copy of laboratory findings attached 	Other Organomegaly (which? Neoplasm / □ Cancer Pancreatitis Episodic fever
□ No muscular abnormalities □ No skeletal abnormalities □ Not examined / unknown	Renal and genitourinary tract abnormalities ☐ Renal cysts ☐ Renal agenesis ☐ Horseshoe kidney	 ☐ Hyperthermia ☐ Hypothermia ☐ Constipation, ☐ Obstipation ☐ Diarrhea
Cardiovascular defects Atrial septal defect Ventricular septal defect Abnormality of cardiac ventricle Tetralogy of Fallot Cardiomyopathy Arrhythmia	 ☐ Hypercalciuria ☐ Hematuria ☐ Proteinuria ☐ Hypospadias ☐ Cryptorchidism ☐ Ambiguous genitalia ☐ Other: 	☐ Episodic vomiting ☐ Other:
□ Aortic aneurysm □ Abnormality of vasculature (Please specify: □ Pulmonary arterial hypertension	 □ No renal abnormalities □ No genitourinary abnormalities □ Not examined / unknown 	
□ Other: □ No cardiac abnormalities □ Not examined / unknown		





Indication

Pedigree	Consanguinity: ☐ Yes ☐ No	Ethnic origin:		
			not affected	
			■ affected	
			• known carrier	
			∅	
			unrelated parents	
			consanguine parents	
			unborn child	
			↓ abortion, stillborn child	
			person of unknown sex	
			identical twins (monozygous)	
			fraternal twins	
			(dizygous)	
Family medical history				
Are there other family members who	currently have or have had the same or	a similar disease as th	ne patient?	
If yes, please list the affected family r	If yes, please list the affected family members:			
Name	Relationship to the patient	Age of onset	Diagnosis / Symptoms	
(not required)	(e.g. mother)			

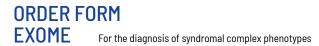




Inquiry

nqı	iry
Sin	gle Exome Diagnostics:
	□ ExomeFocus®: Exome diagnostics based on our proprietary, high-quality exome enrichment. The medical report focuses on pathogenic and likely-pathogenic variants in the context of the patient's phenotype (ACMG classes 3, 4, 5) (EXM01FOCUS).
	□ ExomeXtra ®: Exome diagnostics based on our proprietary, high-quality exome enrichment. The medical report focuses on pathogenic, likely-pathogenic variants and VUS in the context of the patient's phenotype (ACMG classes 3, 4, 5) and comprises a discussion of these variants (EXM01).
Cor	nparative Exome Diagnostics:
	□ Duo ExomeXtra ®: Comparative exome diagnostics between patient and a family member, incl. a medical report with a discussion of variants in the context of the patient's phenotype; reporting ACMG classes 3 , 4, 5 (EXM02Duo)
	 □ Trio ExomeXtra®: Comparative exome diagnostics between patient and his/her parents, incl. a medical report with a discussion of variants in the context of the patient's phenotype; reporting ACMG classes 3 , 4, 5 (EXM02) □ Upgrade ExomeFocus® to Trio ExomeXtra®: Expansion of a Single ExomeFocus® analysis to a Trio ExomeXtra®. Please provide in addition to the parental samples, CeGaT-ID of the previously analysed index:
	analysis of the patient and both non-affected parents (Trio Exome) allows a more efficient evaluation of the variants identified in the index patient and s to an increased chance of positive identification of disease causing variants.
	itional analyses (additional fees may apply) Genes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only):
-	
- - -	Senes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only):
- - - -	Genes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Please perform array-CGH diagnostics
) _ _ 1 0	Genes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Please perform array-CGH diagnostics I prior or
	Benes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Please perform array-CGH diagnostics I prior or I parallel
	Genes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Please perform array-CGH diagnostics I prior or I parallel Dexome diagnostics.
)	Senes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Please perform array-CGH diagnostics I prior or I parallel December 2 of parallel December 3 only (Please perform array-CGH) December 4 perform array-CGH diagnostics December 5 only (Please perform array-CGH) December 6 only (Please perform array-CGH) December 7 only (Please perform array-CGH) December 6 only (Please perform array-CGH) December 7 only (Please perform array-CGH) December 6 only (Please perform array-CGH) December 7 only (Please perform array-CGH) December 8 only (Please perform array-CGH) December 9 only (Please perf
	Denes to be considered in the context of Single Exome Diagnostics (ExomeXtra® only): Delease perform array-CGH diagnostics Delease perform array-CGH diagnostics Description or Description or Description or Description or Deletion / Duplication analysis (MLPA), gene(s) of interest: Deletion / Duplication analysis (MLPA), gene(s) of interest: Description of Duplication analysis (MLPA),
	Please perform array-CGH diagnostics It prior or It parallel Description of publication analysis (MLPA), gene(s) of interest: Repeat expansion: Repeat expansion: REA-Typing (HLA01) Would like to receive an additional report stating the HLA alleles (HLA class I (Gene A, B, C) and HLA class II (Gene DPA1, DPB1, DQA1, DQB1, DRB3, DRB4, DRB5)). RCMG genes diagnostics Would like to be informed of relevant alterations within the list of recommended genes for secondary analysis, according to the current guidelines of the American College Medicial Genetics and Genomics. The analysis is restricted to the sequence data, re-sequencing of regions with poor sequence coverage will not typically be performed, negative "ACMG genes" report cannot be used to rule out (genetic) disease risk. Additional fees may apply. According to German legislation, predictive tests for minors ay not be performed for diseases which have an onset in adulthood. Therefore, some genes will not be analyzed for minors, unless the phenotypic spectrum is within the zope of the primary medical indication of the patient.

For further information and advice please do not hesitate to contact our Diagnostic Support team. www.cegat.com/diagnostic-support | sales@cegat.com | Phone +497071 565 44-55



CeGaT

Additional Information

Please use this space to provide any additional relevant information.			



Declaration of consent Parent 1			
Personal data (Family member)			
Surname: First name:			
Date of birth: Sample ID:			
Relationship to the patient			
☐ Father ☐ Mother ☐ Other; please state:			
Does the family member suffer from the same or similar illness as the index	patient?		
□ No □ Yes, symptoms are:			
☐ HLA-Typing (HLA01) I would like to receive an additional report stating the HLA alleles (HLA DRB1, DRB3, DRB4, DRB5)).	class I (Gene A, B, C) and HLA class II (Gene DPA1, DPB1	I, DQA1, [DQB1,
□ ACMG genes diagnostics I would like to be informed of relevant alterations within the list of recommended ger of Medical Genetics and Genomics. The analysis is restricted to the sequence data, A negative "ACMG genes" report cannot be used to rule out (genetic) disease risk, may not be performed for diseases which have an onset in adulthood. Therefore, so scope of the primary medical indication of the patient. Details on genes and associated diseases can be found at https://www.cegat.com/a	, re-sequencing of regions with poor sequence coverage will not typic Additional fees may apply. According to German legislation, prediction ome genes will not be analyzed for minors, unless the phenotypic spe	cally be performers	formed. minors
□ Pharmacogenetics (PGX) (22 genes) ABCG2, CACNA1S, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5 SLCO1B1, TPMT, UGT1A1, VKORC1 I would like to receive an additional report analyzing known variants that are		T15, POR,	RYR1,
Declaration of consent	If you do not check these boxes, your answer will be re	ecorded a	as "No"
By signing this form, I declare that I have received comprehensive information regarding the genetic background related to the disease in question, as well as the	I consent to the storage of my genetic material for additional tests and/or quality control (for max. 10 years).	☐ Yes	□ N
possibilities and limitations of molecular genetic testing. I understand that I have the right to withdraw my consent for genetic analyses.	I consent to the storage of my test results beyond the timespan of 10 years (as required by German law).	☐ Yes	□ N
I have been informed, and agree, that my personal data and the data obtained in the analysis will be recorded, evaluated or stored in an pseudonymized form in scientific databases, and that further, in accordance with data protection and	I consent to the pseudonymous storage and use of surplus genetic material and/or test results for scientific research and in scientific literature.	□ Yes	□ N
medical confidentiality, the request, or parts thereof, may be transmitted to a specialized cooperating laboratory.	With regard to secondary findings I would like to be informed:	□ Yes	□ N
I consent to the re-evaluation of my test results within the data storage period. If significant alterations become apparent, my doctor will be informed by e-mail.	Genetic variation may sometimes be identified, which does not fit within the genetic analysis (so-called secondary findings). The reporting of these variants		
I have been informed, and agree to the electronic storage, processing, use, and transmission of all data collected by CeGaT GmbH.	alterations (ACMG classes 4 and 5) within selected genes, for which a action exists for you or your family (according to the current guidelines of	treatment or of the Americ	r course can Colleg
For more detailed information on data privacy as well as your rights please refer to www.cegat.de/en/privacy-policy	of Medical Genetics and Genomics; details on genes and associated dis https://www.cegat.com/acmg-genes/). There is no claim of a comprehensive a An absence of secondary findings cannot be used to indicate a reduced disease.	analysis of thi	
Please Note	Targeted analysis of the ACMG genes according to cu	ırrent rec	ommer
All genes, including the complete mtDNA are sequenced when exome diagnostics is performed. The diagnostic evaluation is limited to variants in genes relevant to the provided phenotypic information. Correct family relationships are assumed for comparative exome analysis using data from several family members (e.g. trio exome analysis).	dations can be requested as "additional analyses". According to German Genetic Diagnostic Act (GenDG) we will issue the counselling physician. Please indicate here the contact email of the cour		
This declaration of consent can be completely or partially withdrawn at any time. I have had sufficient time to consider giving my consent.	Email:		
I, the referring physician, confirm that I am authorized to request genetic testing for the above-mentioned patient. For predictive testing, I confirm that I am authorized, and that I have fulfilled the requirements, to request this testing. For minors, I declare that I have the consent of all legal guardians.			

Doctor's stamp / Barcode





CeGaT is accredited by DAkkS according to DIN EN ISO 15189:2014, the College of American Pathologists (CAP) and CLIA.

If the patient did not sign this order form: I, the referring physician, confirm that

the patient received genetic counseling and agrees with the genetic testing. The

Patient (Date, Signature)

(Block letters)

patient's consent has been obtained in writing.

Doctor (Date, Signature)

(Block letters)



Declaration of consent Parent 2

Personal data (Family member)			
Relationship to the patient			
☐ Father ☐ Mother ☐ Other; please state:			
Does the family member suffer from the same or similar illness as the index	•		
□ No □ Yes, symptoms are:			
☐ HLA-Typing (HLA01) I would like to receive an additional report stating the HLA alleles (HLA c DRB1, DRB3, DRB4, DRB5)).	class I (Gene A, B, C) and HLA class II (Gene DPA1	, DPB1, DQA1, D	QB1,
□ ACMG genes diagnostics I would like to be informed of relevant alterations within the list of recommended gen of Medical Genetics and Genomics. The analysis is restricted to the sequence data, A negative "ACMG genes" report cannot be used to rule out (genetic) disease risk. I may not be performed for diseases which have an onset in adulthood. Therefore, so scope of the primary medical indication of the patient. Details on genes and associated diseases can be found at https://www.cegat.com/ar.	re-sequencing of regions with poor sequence coverage will Additional fees may apply. According to German legislation, me genes will not be analyzed for minors, unless the phenot	not typically be perfo predictive tests for r	ormed. minors
□ Pharmacogenetics (PGX) (22 genes) ABCG2, CACNA1S, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, SLCO1B1, TPMT, UGT1A1, VKORC1	, CYP4F2, DPYD, G6PD, HLA-A, HLA-B, IFNL3, MT-RNR	1, NUDT15, POR, F	RYR1,
I would like to receive an additional report analyzing known variants that are i	involved in the metabolism of pharmaceutical products.		
Declaration of consent	If you do not check these boxes, your answer w	ill be recorded as	 s "No"
By signing this form, I declare that I have received comprehensive information regarding the genetic background related to the disease in question, as well as the	I consent to the storage of my genetic material for additional tests quality control (for max. 10 years).	s and/or	□ N
possibilities and limitations of molecular genetic testing. I understand that I have the right to withdraw my consent for genetic analyses.	I consent to the storage of my test results beyond the timespan of 1 (as required by German law).	10 years ☐ Yes	□ N
I have been informed, and agree, that my personal data and the data obtained in the analysis will be recorded, evaluated or stored in an pseudonymized form in scientific databases, and that further, in accordance with data protection and medical confidentiality, the request, or parts thereof, may be transmitted to a	I consent to the pseudonymous storage and use of surplus genetic and/or test results for scientific research and in scientific literature.	material	□ N
specialized cooperating laboratory.	With regard to secondary findings I would like to be informed:	☐ Yes	□ N
I consent to the re-evaluation of my test results within the data storage period. If significant alterations become apparent, my doctor will be informed by e-mail.	Genetic variation may sometimes be identified, which does not fit genetic analysis (so-called secondary findings). The reporting of these		
I have been informed, and agree to the electronic storage, processing, use, and transmission of all data collected by CeGaT GmbH.	d alterations (ACMG classes 4 and 5) within selected genes, for which a treatment or cou action exists for you or your family (according to the current guidelines of the American C of Medical Genetics and Genomics; details on genes and associated diseases can be for		
For more detailed information on data privacy as well as your rights please refer to www.cegat.de/en/privacy-policy			
Please Note	Targeted analysis of the ACMG genes according dations can be requested as "additional analyse	-	ommer
All genes, including the complete mtDNA are sequenced when exome diagnostics is performed. The diagnostic evaluation is limited to variants in genes relevant to the provided phenotypic information. Correct family relationships are assumed for comparative exome analysis using data from several family members (e.g. trio exome analysis).	According to German Genetic Diagnostic Act (GenDG) we will counselling physician. Please indicate here the contact email of	issue the medical rep	
This declaration of consent can be completely or partially withdrawn at any time. I have had sufficient time to consider giving my consent.	Email:		
I, the referring physician, confirm that I am authorized to request genetic testing for the above-mentioned patient. For predictive testing, I confirm that I am authorized, and that I have fulfilled the requirements, to request this testing. For minors, I declare that I have the consent of all legal guardians.			
If the patient did not sign this order form: I, the referring physician, confirm that the patient received genetic counseling and agrees with the genetic testing. The patient's consent has been obtained in writing.	Doctor's stamp / Barcode	DAKKS Deutsche Akkrediti D-ML-13:	e ierungsstel 206-01-00





CeGaT is accredited by DAkkS according to DIN EN ISO 15189:2014, the College of American Pathologists (CAP) and CLIA.

Patient

Patient (Date, Signature)

(Block letters)

Doctor

Doctor

(Block letters)

(Date, Signature)