

# Clinical Genomics Requisition Form

Please complete every field and tick box clearly.

## PATIENT INFORMATION

<input type="text"/>	<input type="text"/>	<input type="text" value="MM/DD/YYYY"/>
Patient's First Name	Middle Initial	Patient's Date of Birth

<input type="text"/>	<input type="text"/>
Patient's Last Name	Patient ID/MR Number

Biological Sex:  Male  Female  Unknown  
 Gender Identity (if different from above):

Patient's Street Address

<input type="text"/>	<input type="text"/>	<input type="text"/>
City / Town	State	Zip Code

<input type="text"/>	<input type="text"/>
Country	Patient's Preferred Phone

Patient's Email

Ethnicity (check all that apply):

<input type="radio"/> African-American	<input type="radio"/> Asian (China, Japan, Korea)
<input type="radio"/> Caucasian/N. European/S. European	<input type="radio"/> Finnish
<input type="radio"/> Hispanic	<input type="radio"/> French Canadian
<input type="radio"/> Jewish - Ashkenazi	<input type="radio"/> Jewish - Sephardic
<input type="radio"/> Mediterranean	<input type="radio"/> Middle Eastern (Saudi Arabia, Qatar, Iraq, Turkey)
<input type="radio"/> Native American	<input type="radio"/> E. Indian
<input type="radio"/> Southeast Asian (Vietnam, Cambodia, Thailand)	<input type="radio"/> South Asian (India, Pakistan)
<input type="radio"/> Other (specify) <input type="text"/>	

## ORDERING PROVIDER

Provider's First and Last Name

<input type="text"/>	<input type="text"/>
PKIG Ordering Provider Account Number	NPI

Clinic/Hospital/Institution Name

<input type="text"/>	<input type="text"/>
Provider's Email	Provider's Phone

Provider's Street Address

<input type="text"/>	<input type="text"/>	<input type="text"/>
City / Town	State	Zip Code

<input type="text"/>	<input type="text"/>
Country	Provider's Fax

## SEND ADDITIONAL COPY OF RESULTS TO (If applicable)

Name

<input type="text"/>	<input type="text"/>
PKIG Ordering Provider Account Number	Phone Number

<input type="text"/>	<input type="text"/>
Email Address	Fax Number

## PHYSICIAN CONFIRMATION OF INFORMED CONSENT AND MEDICAL NECESSITY

The undersigned person (or representative thereof) ensures he/she is a licensed medical professional authorized to order genetic testing and confirms that the patient has given appropriate informed consent for the testing ordered, including a discussion of the benefits and limitations. I confirm that testing is medically necessary and that test results may impact medical management for the patient. I understand and agree that, if the patient's insurance requires genetic counseling prior to performance of the ordered test, PerkinElmer will provide the patient information to a third party service so the patient can obtain genetic counseling. I understand and agree that a genetic counselor will be permitted to review the test(s) I have ordered and make changes based on clinical or payor related specifications, and that the genetic counselor will submit to the payor the required documentation in support of the test as ordered or with any recommended changes. I attest that all information on this TRF is true to the best of my knowledge. My signature applies to the entirety of the statement above and/or attached letter of medical necessity.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## PATIENT SAMPLE INFORMATION

**SAMPLE TYPE:**  Saliva Swab  Whole Blood  Dried Blood Spots  Other \_\_\_\_\_

Collection Date:

Was this sample collected in NY State:  yes  no

## INDICATION FOR TESTING (Required)

ICD10 Code(s): \_\_\_\_\_  
 Clinical Diagnosis: \_\_\_\_\_  
 Age at Initial Presentation: \_\_\_\_\_

## TEST MENU

CNGnome™ Test

**Whole Exome Sequencing Testing Options**

- Exome – Proband Only
- Exome – DUO (Proband Report Only)\*
- Exome – DUO (Proband and Family Member Reports)\*
- Exome – TRIO (Proband Report Only)\*
- Exome – TRIO (Proband and Family Member Reports)\*

## Whole Genome Sequencing Testing Options

- Genome – Proband Only
- Genome – DUO (Proband Report Only)\*
- Genome – DUO (Proband and Family Member Reports)\*
- Genome – TRIO (Proband Report Only)\*
- Genome – TRIO (Proband and Family Member Reports)\*

## Whole Genome Sequencing Optional Enhancements – PROBAND ONLY

Add these enhancements to any WGS order for proband only.  
Checking these boxes will add these services to your order without additional costs to the patient.

Not checking these boxes means that these services will not be included in the order.

**Congenital Cytomegalovirus (cCMV) Screening** – Not valid after 21 days of age. The most common long-term health problem in babies born with congenital CMV infection is hearing loss, which may be detected soon after birth or later in childhood.

**StepOne® Newborn Screening Panel** – The StepOne Comprehensive Biochemical Profile is a newborn screening test that can detect more than 70 disorders in newborns from just a few drops of blood. The analyses conducted by PerkinElmer Genomics produce results that can be used by qualified physicians in the diagnosis of disorders. Evidence of these conditions can be detected in most affected individuals; however, due to genetic variability, age of patient at time of specimen collection, quality of specimen, health status of the patient, and other variables, such conditions may not be detected in all affected patients. Adult reference ranges are unavailable. For information on DNA carrier testing for children over 90 days of age, please call 866.463.6436.

**Metagenomic Clinical Research Report** – The patient consents to participate in a metagenomic screening clinical research study conducted by PerkinElmer Genomics. In this study, whole genome sequencing data will be used to screen for pathogenic microorganisms in the patient's sample (at the time of specimen collection) to assist in unbiased culture-independent detection. A research-use-only report will be provided with screening results on potentially disease-causing microbes in the patient's sample.

## Other Testing Options:

Test code: \_\_\_\_\_  
 Test name: \_\_\_\_\_

**! Please fill out family member section on page two. This is REQUIRED for DUO and TRIO orders. Additional samples MUST be received within 3 weeks.**

FOR INTERNAL USE ONLY				
Date Rec'd	_____	Rec'd	_____	
TEMP	SPEC	COL	#TUBES	VOL
R/C/F				
R/C/F				
R/C/F				

**FAMILIAL INFORMATION (Required with DUO and TRIO orders)**

<p><b>FAMILY MEMBER 1:</b></p> <p>_____</p> <p>Last name, First name</p> <p>_____</p> <p>Relationship to Patient</p> <p>Date of Birth: <u>MM/DD/YYYY</u></p> <p>Symptomatic (clinically affected)? <input type="radio"/> yes <input type="radio"/> no</p> <p>Sample: <input type="radio"/> Included - Collection Date <u>MM/DD/YY</u> <input type="radio"/> To be sent later</p>	<p><b>FAMILY MEMBER 2:</b></p> <p>_____</p> <p>Last name, First name</p> <p>_____</p> <p>Relationship to Patient</p> <p>Date of Birth: <u>MM/DD/YYYY</u></p> <p>Symptomatic (clinically affected)? <input type="radio"/> yes <input type="radio"/> no</p> <p>Sample: <input type="radio"/> Included - Collection Date <u>MM/DD/YY</u> <input type="radio"/> To be sent later</p>
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**INSURANCE BILLING (Include a copy of both sides of insurance card)**

<p>_____</p> <p>Insurance Carrier</p> <p>_____</p> <p>Policy Holder Name</p> <p>Policy Holder Relationship to Patient: <input type="radio"/> Self <input type="radio"/> Parent <input type="radio"/> Spouse <input type="radio"/> Other: _____</p>	<p>_____</p> <p>Insurance ID</p> <p><u>MM/DD/YYYY</u></p> <p>Policy Holder DOB</p>
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**Benefit Investigation and Out-of-Pocket Cost Policy**

PerkinElmer will contact the patient for any estimated out-of-pocket costs that are greater than \$100 USD before proceeding with testing. The patient's sample will be placed on hold (for up to 30 days) until authorization to proceed is received from the patient. If the patient does not respond to PerkinElmer within 30 days to discuss estimated out-of-pocket costs, the test order may be cancelled. Please note that failure by the patient to respond to PerkinElmer in a timely fashion regarding estimated out-of-pocket costs may cause a delay in the receipt of the results report.

**Patient Billing Acknowledgement:**

By signing this form, I certify that the insurance information that I have provided is accurate, complete and current and that no other coverage or insurance exists. I hereby authorize PerkinElmer Genetics, Inc. ("PerkinElmer") to bill my designated insurance carrier(s) and share health information as needed for the purposes of billing and reimbursement, and I request that payment of authorized benefits be made on my behalf to PerkinElmer for any services furnished the patient listed above by PerkinElmer. If any insurance benefits are remitted to me for services performed by PerkinElmer for the patient, I will forward said benefits to PerkinElmer. I authorize PerkinElmer to file an appeal on my behalf for any denial of payment and/or adverse benefit determination related to services and care provided. I agree to pay all charges for services provided by PerkinElmer to the patient which are not covered by my health insurance plan or which I am responsible for payment under my health insurance plan. Furthermore, I grant PerkinElmer permission to share health information with my insurance as needed for the purposes of billing and reimbursement.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**INSTITUTIONAL BILLING**

<p>_____</p> <p>Institution/Organization Name</p> <p>_____</p> <p>Contact Name</p>	<p>_____</p> <p>PerkinElmer Genomics Billing Account ID</p> <p>_____</p> <p>Contact Phone</p>
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**PATIENT (SELF) PAYMENT**

By providing payment information, you are authorizing PerkinElmer to process payment at the associated charge for tests ordered. Test cost may be confirmed by calling 877-475-4436. Payment is required prior to test initiation. The patient's sample will be placed on hold (for up to 30 days) until payment is secured. If the patient does not provide payment to PerkinElmer within 30 days, the test order may be canceled. Please note that failure by the patient to respond in a timely fashion to PerkinElmer's attempts to obtain payment may cause a delay in the receipt of the results report.

**CHECK:** \$ \_\_\_\_\_ Amount Enclosed (Please make checks payable to: PerkinElmer Genetics, Inc.)

**CREDIT CARD** (Please fill out all information):

<p>_____</p> <p>Credit Card Number</p>	<p><u>MM/YY</u></p> <p>Card Exp. Date</p>	<p>_____</p> <p>CVV</p>	<p>_____</p> <p>Cardholder Printed Name as Appears on Card</p>	<p>_____</p> <p>Amount</p>
<p>_____</p> <p>Credit Card Billing Street Address</p>		<p>_____</p> <p>City / Town</p>	<p>_____</p> <p>State</p>	<p>_____</p> <p>Zip Code</p>
<p>_____</p> <p>Cardholder Signature</p>			<p>_____</p> <p>Cardholder Phone</p>	

**CONTACT PATIENT FOR PAYMENT INFORMATION**

<p>_____</p> <p>Mobile Phone</p> <p>_____</p> <p>Email Address</p>	<p>_____</p> <p>Home Phone</p>
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**DETAILED MEDICAL RECORDS, CLINICAL SUMMARY, PICTURES AND FAMILY HISTORY MUST BE ATTACHED FOR ALL CASES.  
CLINICAL INFORMATION IS CRUCIAL FOR ACCURATE INTERPRETATION OF RESULTS.**

**ADDITIONAL OPTIONAL PHENOTYPE / PATIENT HISTORY SECTION (Check all that apply)**

Face2Gene ID (if applicable): \_\_\_\_\_

Clinical diagnosis: \_\_\_\_\_

Age of manifestation: \_\_\_\_\_ ICD-10 Codes: \_\_\_\_\_

<p><b>A. NEUROLOGY</b></p> <p><b>1. Behavioral abnormality</b></p> <p><input type="checkbox"/> 1.1 Autism</p> <p><input type="checkbox"/> 1.2 Attention deficit disorder</p> <p><input type="checkbox"/> 1.3 Psychiatric diseases</p> <p><b>2. Brain imaging</b></p> <p><input type="checkbox"/> 2.1 Abnormal myelination</p> <p><input type="checkbox"/> 2.2 Abnormal cortical gyration</p> <p><input type="checkbox"/> 2.3 Agenesis of corpus callosum</p> <p><input type="checkbox"/> 2.4 Brain atrophy</p> <p><input type="checkbox"/> 2.5 Cerebellar hypoplasia</p> <p><input type="checkbox"/> 2.6 Heterotopia</p> <p><input type="checkbox"/> 2.7 Holoprosencephaly</p> <p><input type="checkbox"/> 2.8 Hydrocephalus</p> <p><input type="checkbox"/> 2.9 Leukodystrophy</p> <p><input type="checkbox"/> 2.10 Lissencephaly</p> <p><b>3. Developmental delay</b></p> <p><input type="checkbox"/> 3.1 Delayed motor development</p> <p><input type="checkbox"/> 3.2 Delayed language development</p> <p><input type="checkbox"/> 3.3 Developmental regression</p> <p><input type="checkbox"/> 3.4 Intellectual disability</p> <p><b>4. Movement abnormality</b></p> <p><input type="checkbox"/> 4.1 Ataxia</p> <p><input type="checkbox"/> 4.2 Chorea</p> <p><input type="checkbox"/> 4.3 Dystonia</p> <p><input type="checkbox"/> 4.4 Parkinsonism</p> <p><b>5. Neuromuscular abnormality</b></p> <p><input type="checkbox"/> 5.1 Muscular hypotonia</p> <p><input type="checkbox"/> 5.2 Muscular hypertonia</p> <p><input type="checkbox"/> 5.3 Hyperreflexia</p> <p><input type="checkbox"/> 5.4 Spasticity</p> <p><b>6. Seizures</b></p> <p><input type="checkbox"/> 6.1 Febrile seizures</p> <p><input type="checkbox"/> 6.2 Focal seizures</p> <p><input type="checkbox"/> 6.3 Generalized seizures</p> <p><b>7. Others</b></p> <p><input type="checkbox"/> 7.1 Craniosynostosis</p> <p><input type="checkbox"/> 7.2 Dementia</p> <p><input type="checkbox"/> 7.3 Encephalopathy</p> <p><input type="checkbox"/> 7.4 Headache / Migraine</p> <p><input type="checkbox"/> 7.5 Macrocephaly</p> <p><input type="checkbox"/> 7.6 Microcephaly</p> <p><input type="checkbox"/> 7.7 Neuropathy</p> <p><input type="checkbox"/> 7.8 Stroke</p>	<p><b>B. METABOLISM</b></p> <p><input type="checkbox"/> 1. Abnormal creatine kinase</p> <p><input type="checkbox"/> 2. Decreased plasma carnitine</p> <p><input type="checkbox"/> 3. Hyperalaninemia</p> <p><input type="checkbox"/> 4. Hypoglycemia</p> <p><input type="checkbox"/> 5. Increased CSF lactate</p> <p><input type="checkbox"/> 6. Increased serum pyruvate</p> <p><input type="checkbox"/> 7. Ketosis</p> <p><input type="checkbox"/> 8. Lactic acidosis</p> <p><input type="checkbox"/> 9. Organic aciduria</p> <p><b>C. EYE</b></p> <p><input type="checkbox"/> 1. Blepharospasm</p> <p><input type="checkbox"/> 2. Cataract</p> <p><input type="checkbox"/> 3. Coloboma</p> <p><input type="checkbox"/> 4. Glaucoma</p> <p><input type="checkbox"/> 5. Microphthalmos</p> <p><input type="checkbox"/> 6. Nystagmus</p> <p><input type="checkbox"/> 7. Ophthalmoplegia</p> <p><input type="checkbox"/> 8. Optic atrophy</p> <p><input type="checkbox"/> 9. Ptosis</p> <p><input type="checkbox"/> 10. Retinitis pigmentosa</p> <p><input type="checkbox"/> 11. Retinoblastoma</p> <p><input type="checkbox"/> 12. Strabismus</p> <p><input type="checkbox"/> 13. Visual impairment</p> <p><b>D. MOUTH, THROAT AND EAR</b></p> <p><input type="checkbox"/> 1. Abnormality of dental color</p> <p><input type="checkbox"/> 2. Cleft lip / palate</p> <p><input type="checkbox"/> 3. Conductive hearing impair.</p> <p><input type="checkbox"/> 4. External ear malformation</p> <p><input type="checkbox"/> 5. Hypodontia</p> <p><input type="checkbox"/> 6. Sensorineural hearing impair.</p> <p><b>E. SKIN, INTEGUMENT AND SKELETAL</b></p> <p><b>1. Skeletal</b></p> <p><input type="checkbox"/> 1.1 Abnormal limb morphology</p> <p><input type="checkbox"/> 1.2 Abnormal skeletal system</p> <p><input type="checkbox"/> 1.3 Abnormal vertebral column</p> <p><input type="checkbox"/> 1.4 Joint hypermobility</p> <p><input type="checkbox"/> 1.5 Multiple joint contractures</p> <p><input type="checkbox"/> 1.6 Polydactyly</p> <p><input type="checkbox"/> 1.7 Scoliosis</p> <p><input type="checkbox"/> 1.8 Syndactyly</p> <p><input type="checkbox"/> 1.9 Talipes equinovarus</p>	<p><b>2. Skin and integument</b></p> <p><input type="checkbox"/> 2.1 Abnormal skin pigmentation</p> <p><input type="checkbox"/> 2.2 Abnormal hair</p> <p><input type="checkbox"/> 2.3 Abnormal nail</p> <p><input type="checkbox"/> 2.4 Hyperextensible skin</p> <p><input type="checkbox"/> 2.5 Ichthyosis</p> <p><b>F. CARDIOVASCULAR</b></p> <p><input type="checkbox"/> 1. Angioedema</p> <p><input type="checkbox"/> 2. Aortic dilatation</p> <p><input type="checkbox"/> 3. Arrhythmia</p> <p><input type="checkbox"/> 4. Coarctation of aorta</p> <p><input type="checkbox"/> 5. Defect of atrial septum</p> <p><input type="checkbox"/> 6. Defect of ventricular septum</p> <p><input type="checkbox"/> 7. Dilated Cardiomyopathy</p> <p><input type="checkbox"/> 8. Hypertension</p> <p><input type="checkbox"/> 9. Hypertrophic Cardiomyopathy</p> <p><input type="checkbox"/> 10. Hypotension</p> <p><input type="checkbox"/> 11. Lymphedema</p> <p><input type="checkbox"/> 12. Malf. of heart and great vessels</p> <p><input type="checkbox"/> 13. Myocardial infarction</p> <p><input type="checkbox"/> 14. Stroke</p> <p><input type="checkbox"/> 15. Tetralogy of Fallot</p> <p><input type="checkbox"/> 16. Vasculitis</p> <p><b>G. GASTROINTESTINAL, GENITOURINARY, ENDOCRINE</b></p> <p><b>1. Gastrointestinal</b></p> <p><input type="checkbox"/> 1.1 Aganglionic megacolon</p> <p><input type="checkbox"/> 1.2 Constipation</p> <p><input type="checkbox"/> 1.3 Diarrhea</p> <p><input type="checkbox"/> 1.4 High hepatic transaminases</p> <p><input type="checkbox"/> 1.5 Gastroschisis</p> <p><input type="checkbox"/> 1.6 Hepatic failure</p> <p><input type="checkbox"/> 1.7 Hepatomegaly</p> <p><input type="checkbox"/> 1.8 Obesity</p> <p><input type="checkbox"/> 1.9 Pyloric stenosis</p> <p><input type="checkbox"/> 1.10 Vomiting</p> <p><b>2. Genitourinary</b></p> <p><input type="checkbox"/> 2.1 Abnormal renal morphology</p> <p><input type="checkbox"/> 2.2 Abnormal urinary system</p> <p><input type="checkbox"/> 2.3 Hydronephrosis</p> <p><input type="checkbox"/> 2.4 Renal agenesis</p> <p><input type="checkbox"/> 2.5 Renal cyst</p> <p><input type="checkbox"/> 2.6 Renal tubular dysfunction</p>	<p><b>3. Endocrine</b></p> <p><input type="checkbox"/> 3.1 Diabetes mellitus</p> <p><input type="checkbox"/> 3.2 Hypo / hyperparathyroidism</p> <p><input type="checkbox"/> 3.3 Hypo / hyperthyroidism</p> <p><b>H. REPRODUCTION</b></p> <p><input type="checkbox"/> 1. Abnormal external genitalia</p> <p><input type="checkbox"/> 2. Abnormal internal genitalia</p> <p><input type="checkbox"/> 3. Hypogonadism</p> <p><input type="checkbox"/> 4. Hypospadias</p> <p><input type="checkbox"/> 5. Infertility</p> <p><b>I. ONCOLOGY</b></p> <p><input type="checkbox"/> 1. Adenomatous polyposis</p> <p><input type="checkbox"/> 2. Breast carcinoma</p> <p><input type="checkbox"/> 3. Colorectal carcinoma</p> <p><input type="checkbox"/> 4. Leukemia</p> <p><input type="checkbox"/> 5. Myelofibrosis</p> <p><input type="checkbox"/> 6. Neoplasm of the lung</p> <p><input type="checkbox"/> 7. Neoplasm of the skin</p> <p><input type="checkbox"/> 8. Paraganglioma</p> <p><input type="checkbox"/> 9. Pheochromocytoma</p> <p><b>J. HEMATOLOGY AND IMMUNOLOGY</b></p> <p><input type="checkbox"/> 1. Abnormality of coagulation</p> <p><input type="checkbox"/> 2. Anemia</p> <p><input type="checkbox"/> 3. Immunodeficiency</p> <p><input type="checkbox"/> 4. Neutropenia</p> <p><input type="checkbox"/> 5. Pancytopenia</p> <p><input type="checkbox"/> 6. Abnormal hemoglobin</p> <p><input type="checkbox"/> 7. Splenomegaly</p> <p><input type="checkbox"/> 8. Thrombocytopenia</p> <p><b>K. PRENATAL AND DEVELOPMENT</b></p> <p><input type="checkbox"/> 1. Dysmorphic facial features</p> <p><input type="checkbox"/> 2. Failure to thrive</p> <p><input type="checkbox"/> 3. Hemihypertrophy</p> <p><input type="checkbox"/> 4. Hydrops fetalis</p> <p><input type="checkbox"/> 5. IUGR</p> <p><input type="checkbox"/> 6. Oligohydramnios</p> <p><input type="checkbox"/> 7. Overgrowth</p> <p><input type="checkbox"/> 8. Polyhydramnios</p> <p><input type="checkbox"/> 9. Premature birth</p> <p><input type="checkbox"/> 10. Short stature</p> <p><input type="checkbox"/> 11. Tall stature</p>
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**OTHER:** \_\_\_\_\_

PerkinElmer Genetics, Inc., (“PerkinElmer”) requires a completed Patient’s Informed Consent Form (ICF) for testing to be performed. The ICF must be completed by the patient, or a legally authorized representative of the patient (or by the healthcare provider where permitted under applicable law or regulation). For any patient below the age of majority, the ICF must be completed by the patient’s legally authorized representative.

The purpose of this ICF is to provide you with a description of the Test ordered, known risks and benefits of the Test, anonymization of personal health information (“PHI”), sample and data retention, research opportunities, and the reporting of secondary findings, if applicable. Given the complexity of the type of the Test, it is recommended that you and/or your child receive genetic counseling by a trained genetics professional before and after the testing is performed.

## TEST INFORMATION

Your healthcare provider (“HCP”) has recommended that you, or your child, receive enzymatic, biochemical or molecular genetics clinical testing (“Test”) indicated on the submitted Test Requisition Form (“Requisition”). For more information on the reasons your HCP has ordered the Test, and the disorders your HCP is having you tested for, please consult with your HCP. You are free to decide if you want this Test performed or not. Providing a Sample and undergoing the Test is voluntary and you may withdraw your consent without penalty at any time.

**Enzyme/Biomarker Test:** This type of test measures the presence or absence of enzymes/biomarkers and/or their level of activity in an individual. Only the enzymes/biomarkers identified on the requisition will be tested. Results from this type of Test may indicate the presence of a specific condition or conditions, and follow-up confirmatory testing may be recommended.

**Genetic/Genomic Test:** This type of Test analyzes one or more segments of your DNA depending on the assay requested. This Test is used to identify what, if any, DNA variant(s) you or your child is carrying which is causing the specific disease or condition you are being tested for. Identifying the mutation may be useful for diagnostic and treatment purposes, and allows at-risk family members to be tested. Only the genes identified on the Requisition will be analyzed. In some cases, we may not be able to determine with certainty which gene is actually causing the disease.

## TEST METHOD

If you consent to the Test, your HCP will take a sample of your and/or your child’s blood, saliva, body fluid, tissue or other sample type. Your Sample will be sent to PerkinElmer’s laboratories in the United States for the Test; the majority of testing will be performed at our laboratory headquarters in Pittsburgh, PA.

Under some circumstances, including inadequate or poor quality sample, an additional Sample may be required for Tests to be performed.

## TEST RESULTS

Your treating HCP has sole responsibility for all decisions concerning the possible management of your diagnosis and disease; PerkinElmer will not provide a diagnosis. PerkinElmer will report Test results only to your HCP via secure email, a secure internet portal, or fax. Your HCP is responsible for communicating with you regarding the results of the Test and may refer you or your child to a specialist for further clinical evaluation and confirmation of diagnosis, if applicable. Possible results for Genetic/Genomic Tests include:

- Positive:** A positive genetic test result may indicate that you are a carrier of, predisposed to, or have the specific disease or condition being tested for. A positive genetic test may limit your access to health insurance or life assurance coverage; for example, a life insurance company might ask you to provide genetic information indicating a disorder if this information is available to you.
- Negative:** A negative result indicates that no disease-causing variant was identified in the Test performed. No Test can rule out all genetic diseases or conditions. A negative result does not guarantee that you are free from genetic disorders or other medical conditions.
- Inconclusive/Variant of Uncertain Significance:** A variant of uncertain significance (VOUS) result indicates that a DNA change was detected, but it is currently unknown if the variant is associated with a genetic disorder. A VOUS is not the same as a positive result and does not clarify whether there is an increased risk to develop a genetic disorder. The variant could be a benign change or it could be indicative of disease/disease-causing.
- Unexpected Results:** In rare instances, this Test may reveal an important genetic change that is not directly related to the reason for ordering this test. This information would be disclosed to your HCP if it potentially impacts medical care, and you have consented to receive this type of result

## TEST REPORT

Reported disease-causing variants are described as pathogenic variant(s), likely pathogenic variant(s), or variant(s) of uncertain significance in genes interpreted to be responsible for, or potentially contributing to, a disease or condition. In addition, variants in genes not known to be associated with disease but for which there is evidence to suggest an association with disease may also be reported. For testing performed on prenatal samples or for screening of apparently healthy individuals, only variants classified as pathogenic or likely pathogenic will be reported.

When Whole Exome Sequencing (WES) or Whole Genome Sequencing (WGS) tests are ordered by your HCP, you have the option to receive some findings not directly related to the reason for ordering the Test called “Secondary Findings”. When Secondary Findings are requested, only Pathogenic or Likely Pathogenic findings will be reported, where applicable. Please read the Secondary Findings sections on page 3 and/or 4 of this consent form for more information, and available reporting options. For prenatal samples, secondary findings for the proband are not available.

## INFORMATION ABOUT PARENTAL AND FAMILIAL SAMPLES

In some circumstances, it may be helpful for additional family members to undergo testing in order to provide information that can aid in the interpretation of the WES/WGS test results. These Tests could be part of a TRIO Test or as stand-alone targeted testing. PerkinElmer, in consultation with the HCP, will decide if other family members need to be tested. If the HCP recommends testing for additional family members, only the Test performed will be reported. If undergoing a TRIO WES or WGS test, family members will have the option to receive information about secondary findings either as a part of the proband report or as a standalone parental report. A full analysis of the parental samples for secondary findings will only be completed if standalone reports are selected (for an additional charge). If family members elect to receive information about secondary findings either as part of the proband report or as a standalone report, the family member must sign all applicable sections on page 3 and/or 4 of this form.

## TEST LIMITATIONS

Due to current limitations in technology and incomplete knowledge of diseases and genes, some variants may not be detected by the Test ordered. There is a possibility that the Test result that is uninterpretable or of unknown significance may require further testing when more information is gained. In rare circumstances, Test results may be suggestive of a condition different from that which was originally considered for the purpose of consenting to this Test. The Test may also find variants or genes that lead to conditions for which you currently do not have symptoms or may not be related to your current condition.

## TEST RISKS

Patients and family members may experience anxiety before, during, and/or after testing. Testing multiple family members may reveal that familial relationships are not biologically what they were assumed to be. For example, the Test may indicate non-paternity (the stated father of an individual is not the biological father) or consanguinity (the parents of an individual are closely related by blood). These biological relationships may need to be reported to the HCP who ordered the test.

Taking a blood or tissue sample from you and/or your child may lead to mild pain, bruising, swelling, redness, and a slight risk of infection. Light-headedness, fainting or nausea may occur if your HCP collects blood or tissue samples. These side-effects are typically brief and transient, but you should contact your HCP if you and/or your child require treatment. Under some circumstances an additional sample may be required for Tests to be performed.

A positive test result may limit your access to health insurance or life assurance coverage; for example, a life insurance company might ask you to provide genetic information indicating a disorder if this information is available to you. Please refer to information on the Genetic Information Nondiscrimination Act (GINA) and applicable local laws for more information.



**ACMG RECOMMENDED SECONDARY FINDINGS: REQUIRED ONLY FOR WES/WGS**

Since many different genes and conditions are being analyzed during the genetic Test, some findings not directly related to the reason for ordering the Test may be revealed. These findings are called "secondary" and can provide information that was not anticipated when the Test was ordered. Secondary findings are variants found in genes that are unrelated to the individual's reported clinical features. One such group of secondary findings available to individuals undergoing WES or WGS are diagnostic findings in genes defined as highly penetrant and medically actionable by the American College of Medical Genetics and Genomics. Please see below for additional information.

The American College of Medical Genetics and Genomics (ACMG), has recommended that secondary findings should be offered for a specific subset of highly penetrant and medically actionable genes associated with various inherited disorders for all individuals undergoing WGS or WES. Please refer to the latest version of the ACMG Recommendations for Reporting of Secondary Findings in Clinical Exome and Genome Sequencing for complete details of genes and conditions at [www.acmg.net](http://www.acmg.net). Medically-actionable conditions are those for which there is currently recommended treatment or preventative actions that can be taken to reduce the risk of developing the disease. An example would be hereditary cancer syndromes such as Lynch syndrome.

We are unable to guarantee that the Test will find all medically-actionable conditions for which you have a pathogenic or likely pathogenic variant. You may have a pathogenic or likely pathogenic variant for a condition in which there was little or no coverage in the Test and therefore will not be detected. Additional testing for health purposes should be discussed with your doctor or genetic counselor.

**Secondary findings will only be reported if consent is given by the Patient or Parent/Guardian.** Each individual receiving secondary findings will need to fill out the appropriate section(s) below to indicate which secondary findings that they will receive. If a box is not checked or this form is not returned, it is assumed that the applicable individual does not want to receive the corresponding secondary finding(s).

**PATIENT SECONDARY FINDINGS CONSENT**

*Not available for prenatal samples.*

Check this box if you wish to receive a report on pathogenic or likely pathogenic findings in genes defined as highly penetrant and medically actionable by the American College of Medical Genetics and Genomics.

If ACMG recommended Secondary Findings are elected above, please choose if you would like only pediatric findings, only adult findings, or both as defined by Table 1 in PMID:27854360. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.

Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings

Check this box if you do NOT want to receive ACMG-recommended secondary findings.

\_\_\_\_\_  
Patient Signature (or Parent/Guardian if patient is minor)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Patient Name

\_\_\_\_\_  
Name and Relationship (Parent/Guardian if patient is minor)

**FAMILY MEMBER(S) SECONDARY FINDINGS CONSENT**

*Please note that this section is required if family members included as part of TRIO would like to receive secondary findings either as part of a proband report or as a standalone report.*

- Return of Secondary Findings results as part of the proband report will include only the parental inheritance of those findings reported in the proband. No other findings will be commented on. This option is not available for prenatal reports.
- Return of findings as a standalone report will include a full analysis of all selected Secondary Finding sections for each family member. A standalone family member report will only be issued if an appropriate test selection is made on the test requisition form AND this section is filled out entirely.

Check this box if you wish to receive a report on pathogenic or likely pathogenic findings in genes defined as highly penetrant and medically actionable by the American College of Medical Genetics and Genomics.

If ACMG recommended Secondary Findings are elected above, please choose if you would like only pediatric findings, only adult findings, or both as defined by Table 1 in PMID:27854360. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.

Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings

Check this box if you do NOT want to receive ACMG-recommended secondary findings.

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Family Member Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Family Member Name

\_\_\_\_\_  
Relationship to Patient

**FAMILY MEMBER(S) SECONDARY FINDINGS CONSENT**

*Please note that this section is required if family members included as part of TRIO would like to receive secondary findings either as part of a proband report or as a standalone report.*

- Return of Secondary Findings results as part of the proband report will include only the parental inheritance of those findings reported in the proband. No other findings will be commented on. This option is not available for prenatal reports.
- Return of findings as a standalone report will include a full analysis of all selected Secondary Finding sections for each family member. A standalone family member report will only be issued if an appropriate test selection is made on the test requisition form AND this section is filled out entirely.

Check this box if you wish to receive a report on pathogenic or likely pathogenic findings in genes defined as highly penetrant and medically actionable by the American College of Medical Genetics and Genomics.

If ACMG recommended Secondary Findings are elected above, please choose if you would like only pediatric findings, only adult findings, or both as defined by Table 1 in PMID:27854360. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.

Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings

Check this box if you do NOT want to receive ACMG-recommended secondary findings.

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Family Member Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Family Member Name

\_\_\_\_\_  
Relationship to Patient

**SUPPLEMENTAL SECONDARY FINDINGS OPTIONS: REQUIRED ONLY FOR WES/WGS**

Since many different genes and conditions are being analyzed during the genetic Test, some findings not directly related to the reason for ordering the Test may be revealed. These findings are called "secondary" and can provide information that was not anticipated when the Test was ordered. Secondary findings are variants found in genes that are unrelated to the individual's reported clinical features. In addition diagnostic findings in genes defined as highly penetrant and medically actionable by the American College of Medical Genetics and Genomics, PerkinElmer also offers individuals the ability to receive Secondary Findings from three additional categories as defined below:

- 1. Pharmacogenetic variants:** This category of Secondary Findings will include changes in the DNA that do not cause a disease but may be related to how your body processes certain medications, such as chemotherapy drugs, antipyretics, antidepressants, anticoagulants, and others. These variants may not be important to you if you are not taking the medications involved, but may tell you how well the medications will work or if you will have side effects if you do take the medications now or in the future.
- 2. Carrier status (ex. cystic fibrosis):** This category of Secondary Findings will include carrier findings for autosomal recessive conditions. A recessive condition is one in which two disease-causing variants in the same gene are required in order to show symptoms of the disease (one variant is inherited from each parent). Someone who has only one disease-causing variant does not show symptoms and is called a carrier. However, if we find a disease-causing variant in a recessive gene that is related to your disease, we will report it as a diagnostic finding. Please note that only Pathogenic or Likely Pathogenic variants will be reported if this category of Secondary Findings is selected. Further testing may be necessary to look for a second disease-causing variant in that gene not identified by WES/WGS. The Test is not designed to be a comprehensive carrier test. We are unable to guarantee that all conditions for which you are a carrier will be determined by the Test. You may be a carrier for a condition in which there was little or no coverage in the Testing and therefore will not be detected. Additional carrier testing for reproductive purposes should be discussed with your doctor or genetic counselor.
- 3. Diagnostic findings in all other disease-causing genes not related to your clinical features:** This category of Secondary Findings will include conditions that are medically-actionable but not included in the ACMG-recommended list, as well as conditions that are not medically-actionable (do not have recommended treatment or preventative measures), which may be childhood or adult onset. An example would be Alzheimer's disease. Please note that only Pathogenic or Likely Pathogenic variants will be reported if this category of Secondary Findings is selected. Furthermore, we are unable to guarantee that the Test will find all disease-causing variants in all disease-causing genes. You may have a disease-causing variant for a condition in which there was little or no coverage in the Test and therefore will not be detected. Additional testing for health purposes should be discussed with your doctor or genetic counselor.

**Secondary findings will only be reported if consent is given by the Patient or Parent/Guardian.** Each individual receiving secondary findings will need to fill out the appropriate section(s) below to indicate which secondary findings that they will receive. If a box is not checked or this form is not returned, it is assumed that the applicable individual does not want to receive the corresponding secondary finding(s).

**PATIENT SECONDARY FINDINGS CONSENT**

*Not available for prenatal samples.*

- Check this box if you wish to receive a report on pharmacogenetic variants (see category #1 above for details).
- Check this box if you wish to receive a report on carrier status – (see category #2 above for details).
- Check this box if you wish to receive a report including pathogenic or likely pathogenic findings in all other disease-causing genes (see category #3 above for details).  
If you selected to receive Secondary Findings from category #3 above, please choose if you would like only pediatric findings, only adult findings, or both. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.
  - Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings
- Check this box if you do NOT want to receive any of the secondary finding categories discussed on this page.

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Patient Signature (or Parent/Guardian if patient is minor)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Patient Name

\_\_\_\_\_  
Name and Relationship (Parent/Guardian if patient is minor)

**FAMILY MEMBER(S) SECONDARY FINDINGS CONSENT**

*Please note that this section is required if family members included as part of TRIO would like to receive secondary findings either as part of a proband report or as a standalone report.*

- Return of Secondary Findings results as part of the proband report will include only the parental inheritance of those findings reported in the proband. No other findings will be commented on. This option is not available for prenatal reports.*
- Return of findings as a standalone report will include a full analysis of all selected Secondary Finding sections for each family member. A standalone family member report will only be issued if an appropriate test selection is made on the test requisition form AND this section is filled out entirely.*

- Check this box if you wish to receive a report on pharmacogenetic variants (see category #1 above for details).  
This category of secondary findings for family members is only available when a standalone report is ordered for the family member. Parental inheritance of pharmacogenomic variants will not be included on a proband report.
- Check this box if you wish to receive a report on carrier status – (see category #2 above for details).
- Check this box if you wish to receive a report including pathogenic or likely pathogenic findings in all other disease-causing genes (see category #3 above for details).  
If you selected to receive Secondary Findings from category #3 above, please choose if you would like only pediatric findings, only adult findings, or both. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.
  - Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings
- Check this box if you do NOT want to receive any of the secondary finding categories discussed on this page.

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Family Member Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Family Member Name

\_\_\_\_\_  
Relationship to Patient

**FAMILY MEMBER(S) SECONDARY FINDINGS CONSENT**

*Please note that this section is required if family members included as part of TRIO would like to receive secondary findings either as part of a proband report or as a standalone report.*

- Return of Secondary Findings results as part of the proband report will include only the parental inheritance of those findings reported in the proband. No other findings will be commented on. This option is not available for prenatal reports.*
- Return of findings as a standalone report will include a full analysis of all selected Secondary Finding sections for each family member. A standalone family member report will only be issued if an appropriate test selection is made on the test requisition form AND this section is filled out entirely.*

- Check this box if you wish to receive a report on pharmacogenetic variants (see category #1 above for details).  
This category of secondary findings for family members is only available when a standalone report is ordered for the family member. Parental inheritance of pharmacogenomic variants will not be included on a proband report.
- Check this box if you wish to receive a report on carrier status – (see category #2 above for details).
- Check this box if you wish to receive a report including pathogenic or likely pathogenic findings in all other disease-causing genes (see category #3 above for details).  
If you selected to receive Secondary Findings from category #3 above, please choose if you would like only pediatric findings, only adult findings, or both. The lack of selection will result in return of ALL results ("both"). Please note, it is recommended that the patient be 18 years or older for the return of adult findings.
  - Pediatric Findings Only       Adult Findings Only       Both Pediatric and Adult Findings
- Check this box if you do NOT want to receive any of the secondary finding categories discussed on this page.

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Family Member Signature

\_\_\_\_\_  
Date

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Family Member Name

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Relationship to Patient