

**COMPLETE ENTIRE FORM TO AVOID DELAYS**

PATIENT INFORMATION					
Name (Last, First, MI)		Date of Birth (MM/DD/YY)	Date of Death (if applicable)	Phone Number/Email	
Address	City	State/Province	Postal Code	Country	Biological Sex <input type="checkbox"/> F <input type="checkbox"/> M
Ethnicity: <input type="checkbox"/> African American <input type="checkbox"/> Asian <input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic <input type="checkbox"/> Jewish (Ashkenazi) <input type="checkbox"/> Portuguese <input type="checkbox"/> Other:					
SPECIMEN INFORMATION*					
Type(s) <input type="checkbox"/> Blood (EDTA preferred) <input type="checkbox"/> Saliva <input type="checkbox"/> DNA <input type="checkbox"/> Other:			<input type="checkbox"/> Personal history of allogenic bone marrow or peripheral stem cell transplant		
Collection Date	Specimen ID		Medical Record #		
*Blood or saliva from patients with active/recent hematological disease will undergo additional review and may not be accepted in some cases. For these, cultured fibroblasts or fresh/fresh frozen normal tissue are preferred. See <a href="http://ambrygen.com/specimen-requirements">ambrygen.com/specimen-requirements</a> for details.					
INDICATION(S) FOR TESTING					
ICD-10 code(s):					
PRENATAL SAMPLES ONLY					
Sample type: <input type="checkbox"/> Direct CVS <input type="checkbox"/> Cultured CVS <input type="checkbox"/> Cultured amnio <input type="checkbox"/> POC <input type="checkbox"/> Cultured POC					Gestational age at sample collection
ORDERING LICENSED PROVIDER/SENDING FACILITY (Each listed person will receive a copy of the report)					
Facility Name (Facility Code)		Address			
City	State/Province	Postal Code	Country	Phone	
Ordering Licensed Provider Name (Last, First)(Code)		NPI#	Phone	Fax/Email	
ADDITIONAL RESULTS RECIPIENTS					
Genetic Counsellor or Other Medical Provider Name (Last, First) (Code)			Phone/Fax/Email		
Genetic Counsellor or Other Medical Provider Name (Last, First) (Code)			Phone/Fax/Email		
CONFIRMATION OF INFORMED CONSENT AND MEDICAL NECESSITY FOR GENETIC TESTING					
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 consent. I confirm that testing is medically necessary and that test results may impact medical management for the patient. Furthermore, all information on this TRF is true to the best of my knowledge. My signature applies to the attached letter of medical necessity (unless this box is checked <input type="checkbox"/> ).					
Signature Required for Processing Medical Professional Signature:					Date:
<input type="checkbox"/> INSTITUTIONAL BILLING (to be completed by institution or health authority providing payment)					
Facility Name		Address (with country)			
Contact Name		Phone Number	E-mail/Fax		
<input type="checkbox"/> PATIENT PAYMENT <input type="checkbox"/> Check (Payable to Ambry Genetics) <input type="checkbox"/> Credit card (Call +1 949-900-5794)					
Additional billing comments or other order #s (i.e. POs)					
<b>Patient Acknowledgement:</b> I acknowledge that the information provided by me is true and correct. <b>For patient payment by credit card:</b> I hereby authorize Ambry Genetics Corporation to bill my credit card as indicated above. I authorize Ambry Genetics Corporation to verify the above information for the sole purpose of assessing financial need, including the right to seek supporting documentation.					
Signature Required for Self-Pay Patients and Research Consent Patient or Legal Guardian Signature:					Date:

# International Test Requisition Form - Page 2 of 7

**CLINICAL HISTORY**
**PLEASE ATTACH PEDIGREE /CLINICAL CONSULTATION NOTES, IF AVAILABLE**

<b>Birth and Neonatal History</b> <input type="checkbox"/> Not Applicable  Gestational age at birth: _____ Birth weight: _____ Head circumference at birth (if available): _____ <input type="checkbox"/> Congenital anomalies, explain: _____ <input type="checkbox"/> Positive newborn screen, explain: _____	<b>Developmental History</b> <input type="checkbox"/> Not Applicable  Developmental delay: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown Delay prior to seizure onset: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown <input type="checkbox"/> N/A Type of delay (choose all that apply): <input type="checkbox"/> motor <input type="checkbox"/> language <input type="checkbox"/> global Intellectual disability: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown Regression or plateau: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown Does patient meet DSM-V diagnostic criteria for an autism spectrum disorder?: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown
<b>Seizure History</b> <input type="checkbox"/> Not Applicable  Age at first unprovoked seizure (first seizure without fever or other acute metabolic or structural cause): _____ Seizure types (choose all that apply): <input type="checkbox"/> Infantile/epileptic spasms <input type="checkbox"/> Myoclonic <input type="checkbox"/> Generalized tonic clonic <input type="checkbox"/> Tonic <input type="checkbox"/> Typical absence <input type="checkbox"/> Focal seizures <input type="checkbox"/> Atonic <input type="checkbox"/> Atypical absence Are seizures: <input type="checkbox"/> refractory <input type="checkbox"/> well-controlled Has this patient been diagnosed with an epilepsy syndrome? <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown If yes, please specify: _____	<b>Cardiac History</b> <input type="checkbox"/> Not Applicable  Sudden cardiac arrest <input type="checkbox"/> Y <input type="checkbox"/> N (if yes): # Episodes: _____ Age first incident: _____ # Episodes: _____ Age first incident: _____ Syncope <input type="checkbox"/> Y <input type="checkbox"/> N If yes, # Episodes: _____ Age first incident: _____ History of cardiomyopathy <input type="checkbox"/> Y <input type="checkbox"/> N Age at dx: _____ <input type="checkbox"/> HCM <input type="checkbox"/> DCM <input type="checkbox"/> ARVD <input type="checkbox"/> LVNC <input type="checkbox"/> RCM <input type="checkbox"/> Other cardiomyopathy types: _____ History of Arrhythmia <input type="checkbox"/> Y <input type="checkbox"/> N Age at dx: _____ <input type="checkbox"/> Long QT <input type="checkbox"/> Short QT <input type="checkbox"/> Brugada <input type="checkbox"/> CPVT <input type="checkbox"/> ARVD <input type="checkbox"/> Other arrhythmia types: _____ <input type="checkbox"/> Congenital heart defect
<b>Pulmonology History</b> <input type="checkbox"/> Not Applicable  <input type="checkbox"/> Positive newborn screen <input type="checkbox"/> CBAVD <input type="checkbox"/> Meconium ileus <input type="checkbox"/> Infections: _____ <input type="checkbox"/> Sweat chloride: _____mmol/L <input type="checkbox"/> Sweat chloride: <input type="checkbox"/> <40 <input type="checkbox"/> 40-60 <input type="checkbox"/> >60 <input type="checkbox"/> Pancreatic insufficiency IRT level: _____ <input type="checkbox"/> Respiratory distress, explain: _____ <input type="checkbox"/> Respiratory assistance devices: _____ <input type="checkbox"/> Ultrasound findings: _____	<b>Other History</b> <input type="checkbox"/> Not Applicable  <input type="checkbox"/> Hearing problems: _____ <input type="checkbox"/> Vision problems: _____ <input type="checkbox"/> Migraine: _____ <input type="checkbox"/> Psychiatric: _____ <input type="checkbox"/> Hematological: _____ <input type="checkbox"/> Suspected genetic condition: _____ <input type="checkbox"/> Other clinical findings: _____

**Cancer History**  Not Applicable

Cancer/Tumor	Age at Dx	Pathology and Other Info
Brain		
Breast		Type: ER <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk PR <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk HER2/neu <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk
2nd primary breast		Type: ER <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk PR <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk HER2/neu <input type="checkbox"/> (+) <input type="checkbox"/> (-) <input type="checkbox"/> unk
Colorectal		Location: _____
Ovarian		<input type="checkbox"/> Fallopian tube <input type="checkbox"/> Primary peritoneal
Melanoma/skin		
Prostate		Gleason Score: _____ Metastatic: <input type="checkbox"/> Yes <input type="checkbox"/> No
Uterine		
Hematologic*		Type: <input type="checkbox"/> Allogenic bone marrow or peripheral stem cell transplant*
Other Cancer		Type: _____
GI polyps		<input type="checkbox"/> Adenomatous Polyp #: <input type="checkbox"/> 1 <input type="checkbox"/> 2-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> 10-19 <input type="checkbox"/> 20-99 <input type="checkbox"/> 100+ <input type="checkbox"/> Other type: Polyp #: <input type="checkbox"/> 1 <input type="checkbox"/> 2-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> 10-19 <input type="checkbox"/> 20-99 <input type="checkbox"/> 100+

\*Blood or saliva from patients with active/recent hematological disease will undergo additional review and may not be accepted in some cases. For these, cultured fibroblasts or fresh/fresh frozen normal tissue are preferred. See [ambrygen.com/specimen-requirements](http://ambrygen.com/specimen-requirements) for details.

**PREVIOUS TEST HISTORY** (Please include copy of test results if performed at another laboratory)

Previously Detected Alteration(s): \_\_\_\_\_ Gene Name: \_\_\_\_\_ Testing Lab: \_\_\_\_\_  
 Patient previously tested at Ambry?  Yes  No Family previously tested at Ambry?  Yes  No  
 Name: \_\_\_\_\_ DOB: \_\_\_\_\_ Relation: \_\_\_\_\_

**FAMILY HISTORY** (Completion of this section is required for orders including parental samples)

Mother:  unaffected  affected, list symptoms/dx: \_\_\_\_\_ Dx age: \_\_\_\_\_  
 Father:  unaffected  affected, list symptoms/dx: \_\_\_\_\_ Dx age: \_\_\_\_\_

Relation to patient	Maternal	Paternal	Disease	Dx age
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		

# International Test Requisition Form - Page 3 of 7

ORDERING CHECKLIST	
<input type="checkbox"/>	Clinic notes (with pedigree if available)
<input type="checkbox"/>	Clinician & patient signatures

Please check the box next to the test(s) being ordered below.

All tests include gene sequence and deletion/duplication analyses unless otherwise indicated.

If this TRF is sent to Ambry without or ahead of the sample, it will be treated as a preverification. If test ordered is different than the test preverified, we will honor what is on the TRF order form with the sample.

For multiple test orders, testing will be run concurrently (multiple tests initiated at the same time) unless otherwise specified. To order reflexive testing (second test starts pending first test outcome), please clearly indicate the order of reflexive tests in the notes section or next to the test check box. For reflex test orders, any positive findings (pathogenic/likely pathogenic) in the first test will be reported out to the clinician, and the requested second test will be canceled; all other findings will automatically reflex (including VUS).

ALLERGY AND IMMUNOLOGY			
<input type="checkbox"/>	Angioedema, hereditary	2746	SERPING1

CANCER							
Multi-Gene Testing							
<input type="checkbox"/>	BrainTumorNext	8847	27 gene brain tumor test	<input type="checkbox"/>	MelanomaNext	8849	8 gene melanoma test
<input type="checkbox"/>	BRCAPlus	8836	6 gene breast cancer test	<input type="checkbox"/>	OvaNext	8830	25 gene ovarian/breast/uterine cancer test
<input type="checkbox"/>	BRCAPlus-Expanded	8837	8 gene breast cancer test	<input type="checkbox"/>	PancNext	8042	13 gene pancreatic cancer test
<input type="checkbox"/>	BreastNext	8820	17 gene breast cancer test	<input type="checkbox"/>	Pancreatitis panel	8022	4 gene pancreatitis test
<input type="checkbox"/>	CancerNext	8824	34 gene cancer test	<input type="checkbox"/>	PGLNext	5504	12 gene PGL/PCC test
<input type="checkbox"/>	CancerNext-Expanded	8874	67 gene cancer test	<input type="checkbox"/>	ProstateNext	8845	14 gene prostate cancer test
<input type="checkbox"/>	ColoNext	8822	17 gene colorectal cancer test	<input type="checkbox"/>	RenalNext	5900	19 gene renal cancer test
<input type="checkbox"/>	CustomNext-Cancer	9510	Up to 67 gene custom test*				
<input type="checkbox"/>	GYNplus	8835	13 gene ovarian/uterine cancer test				

See Hereditary Cancer Testing Supplemental Information on page 7 for details, such as included genes.

\*Required: completed CustomNext-Cancer supplemental form. [ambrygen.com/forms](http://ambrygen.com/forms)

Single Syndrome Orders				Single Syndrome Orders			
Check to order	Test Name	Test Code	Description	Check to order	Test Name	Test Code	Description
<b>Hereditary Breast and/or Ovarian Cancer</b>				<b>Gastrointestinal Cancer (Cont.)</b>			
<input type="checkbox"/>	ATM	9014	Ataxia-telangiectasia	<input type="checkbox"/>	MSH6	8512	Lynch syndrome
<input type="checkbox"/>	BRCA1/2	8838	Hereditary breast and ovarian cancer	<input type="checkbox"/>	MUTYH	4661	MUTYH-associated polyposis
<input type="checkbox"/>	BRCA1/2 del/dup only	5890		<input type="checkbox"/>	PMS2	4646	Lynch syndrome
<input type="checkbox"/>	BRCA1/2 Ashkenazi Jewish 3-site mutation panel	5892		<input type="checkbox"/>	POLD1 and POLE gene sequence	8877	Polymerase proofreading-associated polyposis
<input type="checkbox"/>	BRCA1/2 Ashkenazi Jewish 3-site mutation panel with reflex to BRCA1/2 analysis if negative	5894		<input type="checkbox"/>	STK11	2766	Peutz-Jeghers syndrome
<input type="checkbox"/>	CHEK2	9016			<b>Genitourinary Cancer</b>		
<input type="checkbox"/>	DICER1	5260		<input type="checkbox"/>	BAP1	9044	
<input type="checkbox"/>	PALB2	2366		<input type="checkbox"/>	FH	6301	Hereditary leiomyomatosis and renal cell cancer
<input type="checkbox"/>	PTEN	2106	PTEN-related disorders (including Cowden syndrome)	<input type="checkbox"/>	FLCN	5921	Birt-Hogg-Dubé syndrome
<input type="checkbox"/>	SMARCA4	9028	Rhabdoid tumor predisposition syndrome type 2	<input type="checkbox"/>	VHL	2606	Von-Hippel Lindau disease
<input type="checkbox"/>	TP53	2866	Li-Fraumeni syndrome	<input type="checkbox"/>	TSC1 and TSC2	5904	Tuberous sclerosis complex
<b>Gastrointestinal Cancer</b>				<b>Endocrine Tumors</b>			
<input type="checkbox"/>	APC	3040	Familial adenomatous polyposis	<input type="checkbox"/>	MAX	9062	Hereditary PGL/PCC
<input type="checkbox"/>	APC and MUTYH concurrent	8726	Adenomatous polyposis	<input type="checkbox"/>	MEN1	2646	Multiple endocrine neoplasia type 1
<input type="checkbox"/>	BMPRIA and SMAD4 concurrent	8604	Juvenile polyposis syndrome	<input type="checkbox"/>	RET gene sequence	2680	Multiple endocrine neoplasia type 2
<input type="checkbox"/>	CDH1	4726	Hereditary diffuse gastric cancer	<input type="checkbox"/>	SDHA	9052	Hereditary PGL/PCC
<input type="checkbox"/>	EPCAM del/dup	8519	Lynch syndrome	<input type="checkbox"/>	SDHAF2	9060	Hereditary PGL/PCC
<input type="checkbox"/>	GREM1 duplication	8878	Mixed polyposis syndrome	<input type="checkbox"/>	SDHB	9054	Hereditary PGL/PCC
<input type="checkbox"/>	Lynch syndrome (concurrent)	8517	MLH1, MSH2, MSH6, PMS2 + EPCAM del/dup	<input type="checkbox"/>	SDHC	9056	Hereditary PGL/PCC
<input type="checkbox"/>	Lynch syndrome (sequential)	8515	Step 1: MLH1, MSH2, and MSH6 + EPCAM del/dup; Step 2: PMS2	<input type="checkbox"/>	SDHD	9058	Hereditary PGL/PCC
<input type="checkbox"/>	MLH1	8508	Lynch syndrome	<input type="checkbox"/>	TMEM127	9066	Hereditary PGL/PCC
<input type="checkbox"/>	MSH2 + EPCAM del/dup	8510	Includes MSH2 inversion	<b>Skin Cancer/Melanoma</b>			
<input type="checkbox"/>	MSH2 inversion	2226	Lynch syndrome	<input type="checkbox"/>	CDKN2A and CDK4 concurrent	4708	Familial atypical multiple mole melanoma (FAMMM)
				<input type="checkbox"/>	PTCH1	5684	Gorlin syndrome
				<b>Other Hereditary Cancer Testing</b>			
				<input type="checkbox"/>	NF1	5704	Neurofibromatosis type 1
				<input type="checkbox"/>	RB1	5426	Hereditary retinoblastoma
				<b>Other Single Syndrome Orders</b>			
<input type="checkbox"/>	Please visit <a href="http://ambrygen.com/hereditary-cancer-single-gene-tests">ambrygen.com/hereditary-cancer-single-gene-tests</a> for details.						
	Test Code(s): _____ Gene/Test Name(s): _____						

# International Test Requisition Form - Page 4 of 7

CARDIOLOGY							
Check to order	Test Name	Test Code	Description	Check to order	Test Name	Test Code	Description
<b>Thoracic Aortic Aneurysms and Related Disorders</b>				<b>Cardiomyopathy Panels</b>			
<input type="checkbox"/>	TAADNext	8789	22 genes for thoracic aortic aneurysms/dissections	<input type="checkbox"/>	DCMNext	8884	36 genes for dilated cardiomyopathy
<input type="checkbox"/>	Marfan syndrome	8781	<i>FBN1</i>	<input type="checkbox"/>	CMNext without <i>TTN</i>	8886	54 genes for hereditary cardiomyopathy
<input type="checkbox"/>	Marfan reflex to TAADNext	8783	<i>FBN1</i> reflex to TAADNext	<input type="checkbox"/>	CMNext with <i>TTN</i>	8887	55 genes for hereditary cardiomyopathy
<input type="checkbox"/>	Ehlers-Danlos vascular type (EDS IV)	8790	<i>COL3A1</i>	<input type="checkbox"/>	ARVDNext	8904	9 genes for arrhythmogenic right ventricular dysplasia
<input type="checkbox"/>	Ehlers-Danlos reflex to TAADNext	8791	<i>COL3A1</i> reflex to TAADNext	<input type="checkbox"/>	LVNCNext	8906	8 genes for left ventricular non-compaction
<b>Arrhythmia, Long QT, and Brugada Panels</b>				<b>Comprehensive Cardiovascular Panels</b>			
<input type="checkbox"/>	RhythmFirst	8888	12 genes for long QT syndrome	<input type="checkbox"/>	CardioNext without <i>TTN</i>	8910	84 genes for hereditary cardiomyopathies and arrhythmias
<input type="checkbox"/>	RhythmNext	8900	36 genes for inherited arrhythmias	<input type="checkbox"/>	CardioNext with <i>TTN</i>	8911	85 genes for hereditary cardiomyopathies and arrhythmias
<input type="checkbox"/>	RhythmNext Reflex	8901	RhythmFirst reflex to RhythmNext	<input type="checkbox"/>	CustomNext-Cardio <sup>**</sup>	9520	Up to 106 gene custom hereditary cardiomyopathies and arrhythmias test
<input type="checkbox"/>	CPVTNext	8902	6 genes for catecholaminergic polymorphic ventricular tachycardia	<b>Familial Hypercholesterolemia</b>			
<b>Cardiomyopathy Panels</b>				<input type="checkbox"/>	FHNNext	8680	4 genes ( <i>APOB</i> , <i>LDLR</i> , <i>LDLRAP1</i> , <i>PCSK9</i> )
<input type="checkbox"/>	HCMFirst	8935	<i>MYBPC3</i> , <i>MYH7</i>	<input type="checkbox"/> Check this box if you would like to have the <i>SLC01B1</i> c.521T>C polymorphism reported, which has been associated in medical literature with statin-induced myopathies			
<input type="checkbox"/>	HCMNext	8936	27 genes for hypertrophic cardiomyopathy				
<input type="checkbox"/>	HCMNext Reflex	8883	HCMFirst reflex to HCMNext				
CLINICAL GENOMICS							
<input type="checkbox"/>	Karyotype	3660	Chromosome analysis (requires green-top sodium-heparin tube)	<input type="checkbox"/> Must be ordered through AP2*	ExomeNext-Select	9500	Up to 500 gene custom exome sequencing test
<input type="checkbox"/>	Karyotype, rule out mosaic	3662	Chromosome analysis (requires green-top sodium-heparin tube)				
<input type="checkbox"/>	SNP Array	5490	Chromosomal microarray (>2.6 million copy number probes and 750,000 SNP probes)	*AP2 is AmbryPort 2.0, our online portal <a href="http://ambrygen.com/ap2">ambrygen.com/ap2</a>			
<input type="checkbox"/>	Follow-up parental FISH studies - ONLY available following SNP Array (5490) completed at Ambry	3750	Sodium heparin tube, submit proband sample for positive control. Name of proband tested at Ambry: _____	If ordering ExomeNext/ExomeNext-Rapid, please complete: <b>Secondary Findings Report:</b> Check below to order the ACMG Recommended List of secondary findings. If neither box is checked secondary findings will not be reported. Secondary findings results are issued in a separate report. (For expanded secondary findings options and pricing please complete the "ExomeNext Expanded Secondary Findings Request Form" and submit with sample).			
<input type="checkbox"/>	ExomeNext	9999	<input type="checkbox"/> Opt-out of analysis and reporting of Novel Genetic Etiologies	<input type="checkbox"/> Yes: I choose to receive the ACMG Recommended List of secondary findings			
<input type="checkbox"/>	ExomeNext-Rapid	9999R	<input type="checkbox"/> Opt-out of analysis and reporting of Novel Genetic Etiologies	<input type="checkbox"/> No: I choose to decline the ACMG Recommended List of secondary findings			
ENDOCRINOLOGY							
<input type="checkbox"/>	Hereditary leiomyomatosis renal cell carcinoma	6301	<i>FH</i>	<input type="checkbox"/>	Neurofibromatosis type 1	5704	<i>NF1</i>
<input type="checkbox"/>	Maturity-onset diabetes of the young	8310	<i>HNFA1</i> , <i>HNFA4</i> , <i>HNFB</i> , <i>GCK</i> , <i>PDX1</i>	<input type="checkbox"/>	PGLFirst	5419	7 gene non-syndromic PGL/PCC test
<input type="checkbox"/>	Multiple endocrine neoplasia type I	2646	<i>MEN1</i>	<input type="checkbox"/>	PGLNext	5504	12 gene PGL/PCC test
<input type="checkbox"/>	Multiple endocrine neoplasia type 2 and familial medullary thyroid cancer (FMTC)	2680	<i>RET</i> gene sequence	<input type="checkbox"/>	von-Hippel Lindau disease	2606	<i>VHL</i>
GASTROENTEROLOGY							
<input type="checkbox"/>	Alagille syndrome	1640	<i>JAG1</i>	<input type="checkbox"/>	Wilson disease	1840	<i>ATP7B</i>
<input type="checkbox"/>	Alpha-1 antitrypsin deficiency	1140	<i>SERPINA1</i>	<input type="checkbox"/>	<i>CFTR</i> gene sequence	1000	
<input type="checkbox"/>	Hirschsprung disease ( <i>RET</i> -related)	2680	<i>RET</i> gene sequence	<input type="checkbox"/>	<i>CFTR</i> gene sequence with reflex to deletion/duplication analysis	1006	<input type="checkbox"/> Report poly T/TG status
<input type="checkbox"/>	Juvenile polyposis syndrome	8604	<i>BMPRIA</i> , <i>SMAD4</i>	<input type="checkbox"/>	<i>CFTR</i> gene sequence and deletion/duplication analysis	1007	<input type="checkbox"/> Report poly T/TG status
<input type="checkbox"/>	Pancreatitis	8022	<i>PRSS1</i> , <i>SPINK1</i> , <i>CFTR</i> , <i>CTRC</i>				
<input type="checkbox"/>	Peutz-Jeghers syndrome	2766	<i>STK11</i>				
HEMATOLOGY/ONCOLOGY							
<input type="checkbox"/>	DBANext	8550	11 genes for Diamond-Blackfan anemia	<input type="checkbox"/>	<i>HBB</i> -related disorders	1048	<i>HBB</i>
<input type="checkbox"/>	DCNNext	8161	7 genes for dyskeratosis congenita	<input type="checkbox"/>	Shwachman-Diamond syndrome	1440	<i>SBDS</i>

 \*Required: completed CustomNext-TAAD Supplemental Ordering Form. [ambrygen.com/forms](http://ambrygen.com/forms)

 \*\*Required: completed CustomNext-Cardio Supplemental Ordering Form. [ambrygen.com/forms](http://ambrygen.com/forms)

# International Test Requisition Form - Page 5 of 7

INHERITED METABOLIC DISORDERS							
Check to order	Test Name	Test Code	Description	Check to order	Test Name	Test Code	Description
<b>Lysosomal Storage Disorders</b>				<b>Leukodystrophies</b>			
<input type="checkbox"/>	NCLNext	7025	13 genes for neuronal ceroid lipofuscinosis/Batten disease <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Canavan disease	1226	ASPA
<input type="checkbox"/>	CLN1- Batten	7050	PPT1	<input type="checkbox"/>	Pelizaeus-Merzbacher disease	4180	PLP1
<input type="checkbox"/>	CLN2- Batten	7051	TPP1	<input type="checkbox"/>	X-linked adrenoleukodystrophy	3760	ABCD1
<input type="checkbox"/>	CLN3- Batten	7054	CLN3	<b>Other</b>			
<input type="checkbox"/>	CLN10- Batten	7052	CTSD	<input type="checkbox"/>	Lesch-Nyhan syndrome	3940	HPRT1
<input type="checkbox"/>	Gaucher disease	1820	GBA	<input type="checkbox"/>	Menkes and related syndromes	3800	ATP7A
<input type="checkbox"/>	Hunter syndrome	1940	IDS	<input type="checkbox"/>	Ornithine transcarbamylase (OTC) deficiency	4100	OTC
<input type="checkbox"/>	Niemann-Pick disease, type C	8740	NPC1, NPC2	<input type="checkbox"/>	Wilson disease	1840	ATP7B
<input type="checkbox"/>	Tay-Sachs disease	1240	HEXA				
<b>MULTIPLE CONGENITAL ANOMALIES</b>							
<input type="checkbox"/>	Alagille syndrome	1640	JAG1	<input type="checkbox"/>	Prader-Willi syndrome	2440	Chromosome 15q11.2-q13 methylation studies
<input type="checkbox"/>	CHARGE syndrome	2380	CHD7	<input type="checkbox"/>	RAF1 - Noonan	2320	RAF1
<input type="checkbox"/>	Coffin-Lowry syndrome	4240	RPS6KA3	<input type="checkbox"/>	Rubinstein-Taybi syndrome	7083	CREBBP
<input type="checkbox"/>	CdLSNext - Cornelia de Lange syndrome	7040	NIPBL, SMC1A, HDAC8, RAD21, SMC3	<input type="checkbox"/>	SOS1 - Noonan	2300	SOS1
<input type="checkbox"/>	Kleefstra syndrome	7095	EHMT1	<input type="checkbox"/>	Simpson-Golabi-Behmel syndrome	4420	GPC3
<input type="checkbox"/>	KRAS - Noonan	2340	KRAS	<input type="checkbox"/>	Smith-Lemli-Opitz syndrome	2180	DHCR7
<input type="checkbox"/>	Lowe syndrome	4600	OCRL	<input type="checkbox"/>	Smith-Magenis syndrome	7163	RAI1
<input type="checkbox"/>	Noonan syndrome	8402	PTPN11, SOS1, KRAS, RAF1	<input type="checkbox"/>	Sotos syndrome	7143	NSD1
<input type="checkbox"/>	Oral-facial-digital syndrome	4080	OFD1				
<input type="checkbox"/>	PTPN11- Noonan	2280	PTPN11				
<b>NEUROLOGY</b>							
<b>Ataxia</b>				<b>Epilepsy (Cont.)</b>			
<input type="checkbox"/>	Ataxia-telangiectasia	9014	ATM	<input type="checkbox"/>	Tuberous sclerosis (infantile spasms)	5904	TSC1, TSC2
<b>Epilepsy</b>				<input type="checkbox"/>	EpiFirst-Neonate	7015	10 genes for neonatal seizures <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	EpiRapid **blood only, no saliva**	7033	16 epilepsy genes with treatment associations	<input type="checkbox"/>	EpiFirst-Neonate reflex to EpilepsyNext	7016	10 genes for neonatal seizures, reflex to 100 genes for epilepsy <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	EpiRapid reflex to EpilepsyNext **blood only, no saliva**	7034	16 epilepsy genes with treatment associations, reflex to 100 genes for epilepsy	<input type="checkbox"/>	EpilepsyNext	7019	100 genes for epilepsy <input type="checkbox"/> Check if parental samples are included
Please complete the following for any EpiRapid test order: Phone number for verbal results: _____ Name of provider to receive results: _____ Secure email: _____ If there is no answer at the above number, we will send an email to the address provided above. Please send an email prior to shipment including FedEx tracking number to <a href="mailto:receiving@ambrygen.com">receiving@ambrygen.com</a> .				<input type="checkbox"/>	PMEFirst	7020	CSTB, EPM2A, NHLRC1 (includes CSTB repeat expansion) <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	CustomNext-Epilepsy*	9530	Up to 100 gene custom epilepsy test <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	PMENext	7022	21 genes for progressive myoclonus epilepsy (includes CSTB repeat expansion) <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	EpiFirst-Fever	7011	13 genes for febrile seizures <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	PMEFirst reflex to PMENext	7021	CSTB, EPM2A, NHLRC1, reflex to 21 genes for progressive myoclonus epilepsy (includes CSTB repeat expansion) <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	EpiFirst-Fever reflex to EpilepsyNext	7012	13 genes for febrile seizures, reflex to 100 genes for epilepsy <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	CSTB repeat expansion	7084	CSTB repeat expansion analysis
<input type="checkbox"/>	EpiFirst-Focal	7017	11 gene for non-lesional focal epilepsy <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Neurodevelopment-Expanded	7028	196 genes for epilepsy, intellectual disability, autism spectrum disorders <input type="checkbox"/> Check if parental samples are included
<input type="checkbox"/>	EpiFirst-Focal reflex to EpilepsyNext	7018	11 gene for non-lesional focal epilepsy, reflex to 100 genes for epilepsy <input type="checkbox"/> Check if parental samples are included	<b>Hereditary Neuropathy</b>			
<input type="checkbox"/>	EpiFirst-IS	7013	17 genes for infantile spasms <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Familial transthyretin amyloidosis	1560	TTR
<input type="checkbox"/>	EpiFirst-IS reflex to EpilepsyNext	7014	17 genes for infantile spasms, reflex to 100 genes for epilepsy <input type="checkbox"/> Check if parental samples are included	<b>Migraine</b>			
<input type="checkbox"/>	Familial hemiplegic migraine	7035	ATP1A2, CACNA1A, PRRT2, SCN1A <input type="checkbox"/> Check if parental samples are included				

 \*Required: completed CustomNext-Epilepsy Supplemental Ordering Form. [ambrygen.com/forms](http://ambrygen.com/forms)

## International Test Requisition Form - Page 6 of 7

NEUROLOGY (CONT.)							
Neurodevelopmental Disorders				Neurocutaneous/Neuro-Oncology Disorders			
<input type="checkbox"/>	AutismFirst	7023	16 genes for syndromic autism spectrum disorders <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Ataxia-telangiectasia	9014	ATM
<input type="checkbox"/>	AutismNext	7024	48 genes for syndromic and non-syndromic autism spectrum disorders <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	BrainTumorNext	8847	27 genes for brain tumors
<input type="checkbox"/>	Autism, macrocephaly	2106	PTEN	<input type="checkbox"/>	HHTFirst	8673	ACVRL1, ENG, SMAD4
<input type="checkbox"/>	Fragile X syndrome	4544	FMR1 repeat expansion analysis and methylation studies	<input type="checkbox"/>	HHTNext	8672	ACVRL1, ENG, SMAD4, GDF2, RASA1
<input type="checkbox"/>	IDNext	7027	140 genes for syndromic and non-syndromic intellectual disability <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	HHTFirst reflex to HHTNext	8671	ACVRL1, ENG, SMAD4 reflex to GDF2, RASA1
<input type="checkbox"/>	Neurodevelopment-Expanded	7028	196 genes for intellectual disability, autism spectrum disorders, and epilepsy <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Legius syndrome	5724	SPRED1
<input type="checkbox"/>	Angelman syndrome	7029	Methylation studies of 15q11-13, reflex to UBE3A	<input type="checkbox"/>	Li-Fraumeni syndrome	2866	TP53
<input type="checkbox"/>	Rett/AngelmanNext	7026	22 genes for Rett, Angelman, and related syndromes <input type="checkbox"/> Check if parental samples are included	<input type="checkbox"/>	Neurofibromatosis 1	5704	NF1
<input type="checkbox"/>	Rett syndrome	2026	MECP2	<input type="checkbox"/>	NF1 reflex to Legius	5730	NF1 reflex to SPRED1
				<input type="checkbox"/>	Nevoid basal cell carcinoma syndrome/Gorlin syndrome	5684	PTCH1
				<input type="checkbox"/>	Tuberous sclerosis complex	9050	SUFU
				<input type="checkbox"/>	von Hippel-Lindau disease	5904	TSC1, TSC2
				<input type="checkbox"/>		2606	VHL
PULMONOLOGY							
Check to order	Test Name	Test Code	Description	Check to order	Test Name	Test Code	Description
Cystic Fibrosis				Alpha-1 Antitrypsin Deficiency			
<input type="checkbox"/>	508 ONLY	1008	CFTR deltaF508 mutation analysis	<input type="checkbox"/>	Alpha-1 antitrypsin deficiency	1140	SERPINA1
<input type="checkbox"/>	508 FIRST	1002	CFTR deltaF508 mutation analysis with reflex to CFTR gene sequence and deletion/duplication	Congenital Central Hypoventilation Syndrome			
<input type="checkbox"/>	CF 102	1018	102 CFTR disease-causing mutation panel	<input type="checkbox"/>	Congenital central hypoventilation syndrome	1580	PHOX2B gene sequence
<input type="checkbox"/>	CFTR gene sequence with reflex to deletion/duplication analysis	1006	<input type="checkbox"/> Report poly T/TG status	Primary Ciliary Dyskinesia			
<input type="checkbox"/>	CFTR gene sequence and deletion/duplication analysis	1007	<input type="checkbox"/> Report poly T/TG status	<input type="checkbox"/>	PCDNext	8122	21 genes for primary ciliary dyskinesia
<input type="checkbox"/>	CFTR gene sequence	1000		Pulmonary Fibrosis			
<input type="checkbox"/>	CFTR deletion/duplication analysis	1004		<input type="checkbox"/>	Telomere-related pulmonary fibrosis	8140	TERT, TERC
<input type="checkbox"/>	Poly T/TG repeat analysis	1010	Poly T repeat analysis with reflex to TG repeat analysis	Respiratory Distress Syndrome			
<input type="checkbox"/>	CFTR SSA	1008	CFTR Single Site Analysis Mutation: _____	<input type="checkbox"/>	Surfactant dysfunction (respiratory distress syndrome)	8100	ABCA3, SFTPB, SFTPC gene sequence
				<input type="checkbox"/>	ABCA3-related surfactant dysfunction	1300	ABCA3 gene sequence
				<input type="checkbox"/>	Surfactant protein B deficiency	1160	SFTPB gene sequence
				<input type="checkbox"/>	Surfactant protein C deficiency	1180	SFTPC gene sequence
RHEUMATOLOGY							
<input type="checkbox"/>	Familial Mediterranean fever	5000	MEFV				
VASCULAR							
<input type="checkbox"/>	HHTFirst - Hereditary hemorrhagic telangiectasia	8673	ACVRL1, ENG, SMAD4	<input type="checkbox"/>	GDF2 and RASA1	8674	
<input type="checkbox"/>	HHTNext	8672	ACVRL1, ENG, SMAD4, GDF2, RASA1	<input type="checkbox"/>	Ehlers-Danlos type IV, vascular type	8790	COL3A1
<input type="checkbox"/>	HHTReflex to HHTNext	8671	ACVRL1, ENG, SMAD4 reflex to GDF2, RASA1	<input type="checkbox"/>	EDS IV reflex to TAADNext	8791	COL3A1 reflex to TAADNext
				<input type="checkbox"/>	TAADNext	8789	22 genes for thoracic aortic aneurysms
SINGLE SITE ANALYSIS (Please include a copy of relative's report)							
Gene(s): _____		Mutation(s): _____		Relative Name: _____			
Relationship to Relative: _____				Accession # (if tested at Ambyr): _____			
Positive control sample: <input type="checkbox"/> will be provided <input type="checkbox"/> already at Ambyr <input type="checkbox"/> not available							
FOR PRENATAL SPECIMENS ONLY: MATERNAL CELL CONTAMINATION (Required for fetal specimens)							
<input type="checkbox"/>	1260 MCC for amniotic fluid culture or CVS (run concurrently with test)			<input type="checkbox"/>	1262 MCC Reference for maternal blood sample (No Charge)		



International TRF - **Hereditary Cancer Testing Supplemental Information** - Page 7 of 7

**Hereditary Cancer Multi-Gene Tests**

Test Name	Test Code	Genes
Adenomatous polyposis	8726	APC, MUTYH
BrainTumorNext (27 genes)	8847	AIP, ALK, APC, CDKN1B, CDKN2A, DICER1, MEN1, MLH1, MSH2, MSH6, NBN, NF1, NF2, PHOX2B, PMS2, POT1, PRKARIA, PTCH1, PTEN, SMARCA4, SMARCB1, SMARCE1, SUFU, TP53, TSC1, TSC2, VHL
BRCAPlus (6 genes)	8836	BRCA1, BRCA2, CDH1, PALB2, PTEN, TP53
BRCAPlus-Expanded (8 genes)	8837	ATM, BRCA1, BRCA2, CDH1, CHEK2, PALB2, PTEN, TP53
BreastNext (17 genes)	8820	ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, MRE11A, MUTYH, NBN, NF1, PALB2, PTEN, RAD50, RAD51C, RAD51D, TP53
CancerNext (34 genes)	8824	APC, ATM, BARD1, BRCA1, BRCA2, BRIP1, BMPR1A, CDH1, CDK4, CDKN2A, CHEK2, DICER1, EPCAM, GREM1, HOXB13, MLH1, MRE11A, MSH2, MSH6, MUTYH, NBN, NF1, PALB2, PMS2, POLD1, POLE, PTEN, RAD50, RAD51C, RAD51D, SMAD4, SMARCA4, STK11, TP53
CancerNext-Expanded (67 genes)	8874	AIP, ALK, APC, ATM, BAP1, BARD1, BLM, BRCA1, BRCA2, BRIP1, BMPR1A, CDH1, CDK4, CDKN1B, CDKN2A, CHEK2, DICER1, EPCAM, FANCC, FH, FLCN, GALNT12, GREM1, HOXB13, MAX, MEN1, MET, MIF, MLH1, MRE11A, MSH2, MSH6, MUTYH, NBN, NF1, NF2, PALB2, PHOX2B, POT1, PMS2, POLD1, POLE, PRKARIA, PTCH1, PTEN, RAD50, RAD51C, RAD51D, RB1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL, XRCC2
ColoNext (17 genes)	8822	APC, BMPR1A, CDH1, CHEK2, EPCAM, GREM1, MLH1, MSH2, MSH6, MUTYH, PMS2, POLD1, POLE, PTEN, SMAD4, STK11, TP53
CustomNext-Cancer (up to 67 genes) Required: complete CustomNext-Cancer supplemental form. <a href="http://ambrygen.com/forms">ambrygen.com/forms</a>	9510	AIP, ALK, APC, ATM, BAP1, BARD1, BLM, BRCA1, BRCA2, BRIP1, BMPR1A, CDH1, CDK4, CDKN1B, CDKN2A, CHEK2, DICER1, EPCAM, FANCC, FH, FLCN, GALNT12, GREM1, HOXB13, MAX, MEN1, MET, MIF, MLH1, MRE11A, MSH2, MSH6, MUTYH, NBN, NF1, NF2, PALB2, PHOX2B, POT1, PMS2, POLD1, POLE, PRKARIA, PTCH1, PTEN, RAD50, RAD51C, RAD51D, RB1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL, XRCC2
GYNplus (13 genes)	8835	BRCA1, BRCA2, BRIP1, EPCAM, MLH1, MSH2, MSH6, PALB2, PMS2, PTEN, RAD51C, RAD51D, TP53
HBOC	8838	BRCA1, BRCA2
Lynch syndrome/HNPCC	8517	MLH1, MSH2, MSH6, PMS2 + EPCAM del/dup
MelanomaNext (8 genes)	8849	BAP1, BRCA2, CDK4, CDKN2A, MIF, PTEN, RB1, TP53
OvaNext (25 genes)	8830	ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, DICER1, EPCAM, MLH1, MRE11A, MSH2, MSH6, MUTYH, NBN, NF1, PALB2, PMS2, PTEN, RAD50, RAD51C, RAD51D, SMARCA4, STK11, TP53
PancNext (13 genes)	8042	APC, ATM, BRCA1, BRCA2, CDKN2A, EPCAM, MLH1, MSH2, MSH6, PALB2, PMS2, STK11, TP53
Pancreatitis panel (4 genes)	8022	CFTR, PRSS1, SPINK1, CTSC
PGLNext (12 genes)	5504	FH, MAX, MEN1, NF1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, TMEM127, VHL
ProstateNext (14 genes)	8845	ATM, BRCA1, BRCA2, CHEK2, EPCAM, HOXB13, MLH1, MSH2, MSH6, NBN, PALB2, PMS2, RAD51D, TP53
RenalNext (19 genes)	5900	BAP1, EPCAM, FH, FLCN, MET, MIF, MLH1, MSH2, MSH6, PMS2, PTEN, SDHA, SDHB, SDHC, SDHD, TP53, TSC1, TSC2, VHL