



123456-2-X

Please place green collection kit barcode here.

Phone: 800-298-6470 / Fax: 646-859-6870  
 Branford CT Lic#: CL-0830  
 Stamford CT Lic#: CL-1016

**Please be sure to fill out all highlighted fields. Failure to fill them in may result in delayed testing and delivery of results.**

### PATIENT INFORMATION

LAST NAME <small>REQUIRED</small>	FIRST NAME <small>REQUIRED</small>	MI <small>REQUIRED</small>
CLIENT MRN	DATE OF BIRTH <small>MM / DD / YYYY</small>	SEX ASSIGNED AT BIRTH <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Intersex <small>REQUIRED</small>

### LEGAL GUARDIAN INFORMATION

*Sema4 will use this information to contact the patient via automatic email, SMS, and/or phone regarding payment, testing status, and online results access. By submitting this requisition, I confirm that I have obtained the patient's authorization to be contacted by Sema4 by these means (email address must be specific to patient listed on form).*

GUARDIAN EMAIL ADDRESS <small>RECOMMENDED</small>	GUARDIAN MOBILE/PRIMARY NUMBER <small>REQUIRED</small>
LAST NAME <small>REQUIRED</small>	FIRST NAME <small>REQUIRED</small>
MI <small>REQUIRED</small>	MI <small>REQUIRED</small>
ADDRESS <small>REQUIRED</small>	CITY / STATE / ZIP <small>REQUIRED</small>
MOBILE/PRIMARY NUMBER <small>REQUIRED</small>	EMAIL ADDRESS <small>RECOMMENDED</small>

Select patient pay or institutional billing below. For patient pay orders, Sema4 will send the guardian an email to complete payment online after our lab receives the specimen(s).

Patient pay  Institutional billing

**Guardian Payment Agreement:** I understand that I am financially responsible for these service and that my insurance will not be billed. I will contact Sema4 with any billing inquiries at 800-298-6470.

SIGNATURE \_\_\_\_\_ DATE MM / DD / YYYY \_\_\_\_\_

### ORDERING PROVIDER INFORMATION

NAME <small>REQUIRED</small>	GENETIC COUNSELOR
ADDRESS <small>REQUIRED</small>	CLINIC / INSTITUTION <small>REQUIRED</small>
	TELEPHONE
	FAX

**PROVIDER SIGNATURE OF CONSENT (REQUIRED):** I certify that this patient (and/or their legal guardian, as necessary) has been informed of the benefits, risks, and limitations of the laboratory test(s) requested. I have answered this person's questions. I have obtained a signed informed consent from this patient or their legal guardian for this testing in accordance with applicable laws and regulations, including N.Y. Civil Rights Law Section 79-L, and will retain this consent in the patient's medical record.

SIGNATURE \_\_\_\_\_ DATE MM / DD / YYYY \_\_\_\_\_

### PATIENT SPECIMEN INFORMATION

SPECIMEN TYPE  
 BLOOD  SALIVA  CHEEK SWAB (preferred)  OTHER \_\_\_\_\_

DATE OF COLLECTION: MM / DD / YYYY \_\_\_\_\_

INDICATION FOR TEST:  
**ICD10 Dx CODE(S)**  Z13.9: Encounter for screening, unspecified  
 P09: Abnormal findings on neonatal screening  
 Z13.228: Encounter for screening for other metabolic disorders  
 Other (please specify ICD10): \_\_\_\_\_

### PARENTAL SPECIMEN INFORMATION

Please also provide specimen for one biological parent  
 Biological mother  Biological father  Not available

SPECIMEN TYPE  
 BLOOD  SALIVA  CHEEK SWAB (preferred)  OTHER \_\_\_\_\_

DATE OF COLLECTION: MM / DD / YYYY \_\_\_\_\_

### LABORATORY TEST(S) ORDERED

Test Selection (Required)

#### Molecular

- Natalis**  
 Includes 166 genes associated with genetic conditions (individual genes listed on reverse side)
- Natalis with pharmacogenetic analysis**  
 Includes 166 genes associated with genetic conditions and 10 pharmacogenetic genes (individual genes listed on reverse side of Page 2)

**Please Note:** Consent must be collected on all individuals who are submitting a sample to Sema4. Please complete the back of Page 3 for Patient consent and the back of Page 4 for Biological Parent consent.

### SEMA4 NATALIS FAMILY MEDICAL HISTORY QUESTIONNAIRE

- What is the ethnicity of the child?** (Please check all that apply.)
 

<input type="checkbox"/> African American	<input type="checkbox"/> North African
<input type="checkbox"/> Ashkenazi Jewish	<input type="checkbox"/> North/Central American
<input type="checkbox"/> Caucasian	<input type="checkbox"/> Sephardic Jewish
<input type="checkbox"/> Cajun/French Canadian	<input type="checkbox"/> South American
<input type="checkbox"/> East Asian	<input type="checkbox"/> South Asian
<input type="checkbox"/> Hispanic Caribbean	<input type="checkbox"/> Sub-Saharan African
<input type="checkbox"/> Mizrahi Jewish	<input type="checkbox"/> Other: _____
- Were there any abnormal prenatal testing results during the pregnancy?** (Please check all that apply.)
  - Abnormal ultrasound
  - Fetal AFP analysis
  - Fetal chromosome analysis
  - Fetal chromosomal microarray
  - Maternal serum screening (First Trimester Screening, AFP, Quadruple Screen, etc.)
  - Noninvasive prenatal testing (NIPT)
  - None
  - Not sure
- Do the biological parents/relatives have any of the conditions tested in this screening?**

Yes If yes, what is the condition(s) name(s)? \_\_\_\_\_

Who is the family member with the condition(s)? \_\_\_\_\_

No
- What is the primary reason for pursuing testing?**
  - The family is interested in additional screening for their healthy child
  - The child is suspected of having an inherited condition and seeking a diagnosis.
- Has the child had a bone marrow transplant or a stem cell transplant?**

Yes

No
- Has the child had routine state newborn screening?**

Yes

No

Unsure
- Is the child generally healthy with no major physical medical problems and not currently under the care of a medical specialist with exception of optometrist, dentist, and allergist, or specialist associated with traumatic injury?**

Yes

No
- Is the child currently receiving any medications other than antibiotics?**

Yes

No

**GENES INCLUDED ON NATALIS**

DISEASE GENES	
ABCC8	Familial Hyperinsulinism (ABCC8-Related)
ABCD1	Adrenoleukodystrophy, X-Linked
ACADM	Medium Chain Acyl-CoA Dehydrogenase Deficiency
ACADVL	Very Long Chain Acyl-CoA Dehydrogenase Deficiency
ACAT1	Beta-Ketothiolase Deficiency
ADA	Adenosine Deaminase Deficiency
AGL	Glycogen Storage Disease, Type III
AGXT	Primary Hyperoxaluria, Type 1
AKR1D1	Congenital Bile Acid Synthesis Defect (AKR1D1-Related)
ALDH7A1	Pyridoxine-Dependent Epilepsy
ALDOB	Hereditary Fructose Intolerance
ALPL	Hypophosphatasia
ANK1	Spherocytosis, Type 1
AQP2	Nephrogenic Diabetes Insipidus, Type II
ARG1	Argininemia
ARSA	Metachromatic Leukodystrophy
ARSB	Mucopolysaccharidosis Type VI
ASL	Argininosuccinic Aciduria
ASS1	Citrullinemia, Type 1
AVPR2	Nephrogenic Diabetes Insipidus (AVPR2-Related) / Nephrogenic Syndrome of Inappropriate Antidiuresis
BCKDHA	Maple Syrup Urine Disease, Type 1a
BCKDHB	Maple Syrup Urine Disease, Type 1b
BTD	Biotinidase Deficiency
CASR	Neonatal Hyperparathyroidism / Autosomal Dominant Hypocalcemia
CBS	Homocystinuria (CBS-Related)
CD3D	Immunodeficiency 19
CD3E	Immunodeficiency 18
CFTR	Cystic Fibrosis
COL4A3	Alport Syndrome (COL4A3-Related)
COL4A4	Alport Syndrome (COL4A4-Related)
COL4A5	Alport Syndrome (COL4A5-Related)
CPS1	Carbamoylphosphate Synthetase I Deficiency
CPT1A	Carnitine Palmitoyltransferase IA Deficiency
CPT2	Carnitine Palmitoyltransferase II Deficiency
CTNS	Cystinosis
CYBA	Chronic Granulomatous Disease (CYBA-related)
CYBB	Chronic Granulomatous Disease (CYBB-related)
CYP11B1	Congenital Adrenal Hyperplasia due to 11-Beta-Hydroxylase Deficiency
CYP11B2	Corticosterone Methyloxidase Deficiency
CYP27A1	Cerebrotendinous Xanthomatosis
DBT	Maple Syrup Urine Disease, Type 2
DCLRE1C	Omenn Syndrome / Severe Combined Immunodeficiency, Athabaskan-Type
DLD	Lipoamide Dehydrogenase Deficiency
DUOX2	Thyroid Dysmorphogenesis 6
DUOXA2	Thyroid Dysmorphogenesis 5
EPB42	Spherocytosis, Type 5
ETFA	Glutaric Acidemia, Type IIa
ETFB	Glutaric Acidemia, Type IIb
ETFDH	Glutaric Acidemia, Type IIc
ETHE1	Ethylmalonic Encephalopathy
F9	Factor IX Deficiency
FAH	Tyrosinemia, Type I
FBN1	Marfan syndrome and other FBN1-related disorders
FBP1	Fructose-1,6-Bisphosphatase Deficiency
FOLR1	Neurodegeneration due to Cerebral Folate Transport Deficiency
G6PC	Glycogen Storage Disease, Type Ia
G6PD	Hemolytic Anemia (G6PD-Related)
GAA	Glycogen Storage Disease, Type II
GALE	Galactose Epimerase Deficiency
GALK1	Galactokinase Deficiency
GALNS	Mucopolysaccharidosis Type IVa
GALT	Galactosemia
GAMT	Cerebral Creatine Deficiency Syndrome 2
GATM	Cerebral Creatine Deficiency Syndrome 3
GCDH	Glutaric Acidemia, Type I
GCH1	Dopa-Responsive Dystonia / BH4-Deficient Hyperphenylalaninemia B
GLA	Fabry Disease

GLUD1	Hyperinsulinism-Hyperammonemia Syndrome
GRHPR	Primary Hyperoxaluria, Type 2
GSS	Glutathione Synthetase Deficiency
GYS2	Glycogen storage disease, Type 0
HADH	Familial Hyperinsulinemic Hypoglycemia 4 / 3-Hydroxyacyl-CoA Dehydrogenase Deficiency
HADHA	Long-Chain 3-Hydroxyacyl-CoA Dehydrogenase Deficiency
HADHB	Mitochondrial Trifunctional Protein Deficiency (HADHB-Related)
HAX1	Congenital Neutropenia (HAX1-Related)
HBA1/HBA2	Alpha-Thalassemia (copy number)
HBB	Beta-Globin-Related Hemoglobinopathies
HLCS	Holocarboxylase Synthetase Deficiency
HMGCL	HMG-CoA Lyase Deficiency
HMGCS2	HMG-CoA Synthase 2 Deficiency
HOGA1	Primary Hyperoxaluria, Type 3
HPD	Tyrosinemia, type III
HSD3B2	3-Beta-Hydroxysteroid Dehydrogenase Type II Deficiency
HSD3B7	Congenital Bile Acid Synthesis Defect (HSD3B7-Related)
IDS	Mucopolysaccharidosis Type II
IDUA	Mucopolysaccharidosis Type I
IGSF1	Central Hypothyroidism and Testicular Enlargement
IL2RG	X-Linked Severe Combined Immunodeficiency
IL7R	Severe Combined Immunodeficiency (IL7R-Related)
INS	Permanent Neonatal Diabetes Mellitus (INS-Related)
IVD	Isovaleric Acidemia
IYD	Thyroid Dysmorphogenesis 4
JAG1	Alagille syndrome 1 / Tetralogy of Fallot
JAK3	Severe Combined Immunodeficiency (JAK3-Related)
KCNJ11	Familial Hyperinsulinism (KCNJ11-Related)
KCNQ2	Early Infantile Epileptic Encephalopathy 7 / Benign Neonatal Seizures 1
LDLR	Familial Hypercholesterolemia
LHX3	Combined Pituitary Hormone Deficiency 3
LIPA	Wolman Disease / Cholesteryl Ester Storage Disease
LMBRD1	Methylmalonic Aciduria and Homocystinuria, Cobalamin F Type
LPL	Lipoprotein Lipase Deficiency
MAT1A	Methionine Adenosyltransferase I/III Deficiency
MCCC1	3-Methylcrotonyl-CoA Carboxylase Deficiency (MCCC1-Related)
MCCC2	3-Methylcrotonyl-CoA Carboxylase Deficiency (MCCC2-Related)
MCEE	Methylmalonyl-CoA Epimerase Deficiency
MLYCD	Malonyl-CoA Decarboxylase Deficiency
MMAA	Methylmalonic Acidemia (MMAA-Related)
MMAB	Methylmalonic Acidemia (MMAB-Related)
MMACHC	Methylmalonic Aciduria and Homocystinuria, Cobalamin C Type
MMADHC	Methylmalonic Aciduria and Homocystinuria, Cobalamin D Type
MPI	Congenital Disorder of Glycosylation, Type Ib
MPL	Congenital Amegakaryocytic Thrombocytopenia
MTR	Homocystinuria-Megaloblastic Anemia, Cobalamin G Type
MTRR	Homocystinuria, Cobalamin E Type
MTTP	Abetalipoproteinemia
MUT	Methylmalonic Acidemia (MUT-Related)
NAGS	N-Acetylglutamate Synthase Deficiency
OAT	Ornithine Aminotransferase Deficiency
OTC	Ornithine Transcarbamylase Deficiency
PAH	Phenylalanine Hydroxylase Deficiency
PAX8	Congenital Hypothyroidism due to Thyroid Dysgenesis or Hypoplasia
PCBD1	BH4-deficient Hyperphenylalaninemia D
PCCA	Propionic Acidemia (PCCA-Related)
PCCB	Propionic Acidemia (PCCB-Related)
PHGDH	3-Phosphoglycerate Dehydrogenase Deficiency
PHKB	Glycogen Storage Disease, Type IXb
PNPO	Pyridoxamine 5'-Phosphate Oxidase Deficiency
POU1F1	Combined Pituitary Hormone Deficiency 1
PROP1	Combined Pituitary Hormone Deficiency 2
PRRT2	Familial Infantile Convulsions with Paroxysmal Choreoathetosis

PTPRC	Severe Combined Immunodeficiency (PTPRC-Related, CD45)
PTS	6-Pyruvoyl-Tetrahydropterin Synthase Deficiency
PYGL	Glycogen storage disease, Type VI
QDPR	BH4-deficient Hyperphenylalaninemia C
RAG1	Omenn syndrome and other RAG1-related disorders
RAG2	Omenn Syndrome (RAG2-Related)
RB1	Retinoblastoma
SCN2A	Early Infantile Epileptic Encephalopathy 11 / Benign Familial Infantile Seizures 3
SCN8A	Early Infantile Epileptic Encephalopathy 13 / Benign Familial Infantile Seizures 5
SLC22A5	Primary Carnitine Deficiency
SLC25A13	Citrin Deficiency
SLC25A15	Hyperornithinemia-Hyperammonemia-Homocitrullinuria Syndrome
SLC25A20	Carnitine Acylcarnitine Translocase Deficiency
SLC2A1	Glucose transporter 1 deficiency syndrome and other SLC2A1-related disorders
SLC39A4	Acrodermatitis Enteropathica
SLC4A1	Distal Renal Tubular Acidosis / Spherocytosis, Type 4
SLC5A5	Thyroid Dysmorphogenesis 1
SLC7A7	Lysinuric Protein Intolerance
SMN1	Spinal Muscular Atrophy (copy number)
SMPD1	Niemann-Pick Disease (SMPD1-Related)
SPR	Sepiapterin Reductase Deficiency
STAR	Lipoid Adrenal Hyperplasia
TAT	Tyrosinemia, Type II
TAZ	Barth Syndrome
TCIRG1	Osteopetrosis 1
TG	Thyroid Dysmorphogenesis 3
TH	Segawa Syndrome
THRA	Congenital Nongoitrous Hypothyroidism 6
TPO	Thyroid Dysmorphogenesis 2A
TRHR	Generalized Thyrotropin-Releasing Hormone Resistance
TRMU	Acute Infantile Liver Failure
TSHB	Congenital Nongoitrous Hypothyroidism 4
TSHR	Congenital Nongoitrous Hypothyroidism 1 / Nonautoimmune Hypothyroidism
TTPA	Ataxia With Isolated Vitamin E Deficiency
UGT1A1	Crigler-Najjar Syndrome, Types 1 & 2 / Gilbert Syndrome
WT1	Wilms tumor, type 1 and other WT1-related disorders

PHARMACOGENETIC GENES	
CYP2C19	Cytochrome P450-2C19
CYP2C9	Cytochrome P450-2C9
CYP2D6	Cytochrome P450-2D6
CYP3A5	Cytochrome P450-3A5
DPYD	Dihydropyrimidine dehydrogenase
MT-RNR1	Mitochondrially encoded 12S RNA
SLC01B1	Solute Carrier Organic anion transporter family member 1B1
TPMT	Thiopurine S-methyltransferase
UGT1A1	UDP glucuronosyltransferase family 1 member A1
VKORC1	Vitamin K epoxide reductase complex subunit 1

## Sema4 Natalis Informed Consent for Children

**If you are under eighteen (18) years of age, a legal representative who is at least eighteen (18) years of age and has the legal authority and capacity to do so must sign this consent and authorization on your behalf.**

This informed consent describes the benefits, risks, and limitations of undergoing DNA testing for certain genetic conditions with Sema4 Natalis. I understand that this is a voluntary test and I may wish to seek additional, independent genetic counseling prior to agreeing to this form. If I have any questions about medical care, I should seek the advice of my physician or other qualified healthcare provider.

### What is this test?

Natalis has two components. The first screening tests whether a child is affected or at risk to be affected with one of the genetic conditions included on Natalis. If ordered, the second component will test for genes that predict drug response variability to certain medications.

The screening component of this test looks at genetic material for evidence of disease-related changes in specific genes. These genes are associated with diseases that occur in infancy or early childhood. There is treatment or medical management for these diseases that, when administered early in an infant or child's life, may significantly improve their clinical outcome. This test will only report back genetic changes (variants) that indicate a child is affected with the disease. This test will not report back whether the child is a "carrier" of genetic changes which are not expected to cause symptoms of a disease. The test will only report variants that have been classified as "pathogenic" or "likely pathogenic", which means that they are known or likely to cause a disease, according to the laboratory standards and guidelines published by The American College of Genetics and Genomics.

If ordered, this test also looks at an additional ten genes that are implicated in drug response variability—referred to as "pharmacogenetic" or PGx genes—for a subset of medications that may be prescribed during childhood. For these genes, only genetic changes that are clinically relevant and that have therapy recommendations affiliated with them will be reported. Please note that these genetic changes are much more common than the disease-causing changes included in the screening component of this test, and most people carry at least one genetic change in these ten pharmacogenetic genes.

A complete list of the genes and corresponding conditions screened for by the screening and the PGx components of the test may be found at [www.sema4.com/elements/natalis/conditions/](http://www.sema4.com/elements/natalis/conditions/).

### Is genetic counseling included?

Board eligible/certified genetic counselors are available to support physicians in the event that there are any positive results. Genetic counselors are available to explain any positive pharmacogenetic results. Since the genetic counselors conduct focused sessions via telephone and/or video, it is strongly recommended that all positive disease-related results be discussed in the setting of a formal evaluation by a clinical geneticist (or similar provider).

### What are the possible benefits of this test?

The screening results may help identify a previously undiagnosed genetic disease that has a specific treatment or medical management plan that could improve clinical outcome and aid in reproductive planning for future pregnancies. Furthermore, the pharmacogenetic component of this test may help guide physicians when selecting appropriate medications.

### What are the limitations and risks of this test?

This test is designed to detect gene variants associated with only certain genetic diseases and PGx genes. It cannot detect every variant associated with each disease, nor does it look for all known genetic diseases.

Negative results do not guarantee a healthy child. No single genetic test can detect all of the possible gene variants that could cause a disease. This test only reports variants that have been classified as pathogenic or likely pathogenic and will not report a

variant that is classified as of uncertain significance, benign, or likely benign. Even if a child tests negative, there is a chance that they may still develop one of the genetic conditions on this test. In addition, it is possible that a child may receive a positive result for a disease and be affected differently than expected or not affected at all.

Some biological factors, such as a history of bone marrow transplantation or recent blood transfusions, may limit the accuracy of results. As with all medical tests, there is a chance of a "false positive" or a "false negative" result. A false positive result means that a gene variant was detected, but that the child does not actually have it. Similarly, a false negative result means the test did not identify a gene variant that a child actually has.

Additionally, I understand that genetic testing may reveal sensitive information about my own health or that of relatives. Test results may reveal incidental, unsuspected information, such as discovering an undiagnosed disorder, revealing cases of adoption, or demonstrating that a person is not the father or mother of this child. I understand that this testing may yield results that are of unknown clinical significance and that parental or other relative's specimens may also be tested to determine whether a specific finding was inherited. An error in the diagnosis may occur if the true biological relationships of the family members involved are not as I have described.

I understand that the results of this testing will become part of my medical record and may only be disclosed to individuals who have legal access to this record or to individuals I designate to receive this information. My test results will be explained to me by a genetic counselor or by my healthcare provider, who will have the opportunity to discuss my results with a geneticist.

There are federal and state laws that address genetic discrimination. The US Genetic Information Nondiscrimination Act (GINA) may prohibit discrimination based on genetic information by employers and health insurers. This law, however, does not protect people in the military nor protect against discrimination by other types of insurance, such as life, disability, or long-term care insurance.

### Sample management

Sema4 may deidentify and retain your left-over sample to use for operational, quality control, validation and improvement purposes. Other than retention for these uses, your sample will be destroyed at the end of the testing process or within 60 days of sample collection, whichever is longer.

### De-identified research

Sema4 may de-identify and use all data and information generated and received in connection with this test to support medical and academic research relating to health, disease prevention, drug development, and other scientific purposes.

I will receive no compensation in connection with such research. Data and information are "de-identified" by removing any information that could be used to identify a specific person, such as a name, email address, or date of birth. Sema4 may also give the de-identified data and information to its research partners and may submit it to research databases for use in scientific and medical research. Examples of such research include projects to understand the risk factors and outcomes for various conditions and can be found at [www.sema4.com/research](http://www.sema4.com/research).

If I do not want to have my de-identified data and information used in research as set forth above, I may withdraw this consent by emailing [privacy@sema4.com](mailto:privacy@sema4.com), and I understand that the change will apply to all data generated from tests that I have undergone with Sema4. I further understand that this withdrawal will not apply to any information that has already been de-identified and cannot be identified by Sema4.

### Permission to contact

I understand that Sema4 may wish to contact me in the future, including for the following reasons: research purposes, the provision of general information about research findings, and/or the provision of information about the results of tests on my sample(s). If I wish to opt-out of future contact for research purposes, I will notify Sema4 by emailing [privacy@sema4.com](mailto:privacy@sema4.com).

My questions regarding this testing have been answered to my satisfaction, and I hereby consent to have my specimen tested. I understand that I have the option to speak with a healthcare provider should I have additional questions or want counseling regarding this testing. If my legal representative is signing this consent and authorization, my legal representative is satisfied that they have received enough information to sign on my behalf.

Please complete all required (\*) fields and optional applicable fields below:

Patient Name*	Patient's DOB*	Date*
Signature of Patient or Legal Representative*	Email Address*	Phone Number*
Legal Representative Name (if applicable)		

## Sema4 Natalis Informed Consent for Parents

**Sema4's Natalis has been ordered for my child. This informed consent describes the benefits, risks, and limitations of providing a specimen to be used for targeted molecular genetic testing solely so that Sema4 may better interpret test results for my child's test.**

**What is this test?**

My sample will undergo a DNA extraction process allowing for the storage of my DNA, should it be needed for testing. Should my child's preliminary Natalis results identify a genetic finding that warrants additional interpretation, I understand that my extracted DNA sample will be used for targeted molecular genetic testing so that Sema4 may better interpret test results for my child. The presence/absence of genetic findings in my DNA may impact the interpretation of my child's test results.

Sema4's Natalis has two components. The first screening tests whether my child is affected or at risk to be affected with one of the genetic conditions included on Natalis. If ordered, the second component will test for genes that predict my child's drug response variability to certain medications. A complete list of the genes and corresponding conditions screened for by the screening component of the test may be found in the test information sheet and a complete list of the genes and medications included in the PGx component of this test may also be found at [sema4.com/elements/natalis/conditions/](http://sema4.com/elements/natalis/conditions/).

**What are the risks of this test?**

I understand that genetic testing may reveal sensitive information about my child's health, my own health, or that of my relatives. Test results may reveal incidental, unsought information, such as discovering an undiagnosed disorder, revealing cases of adoption, or demonstrating that a person is not the father or mother of this child. I understand that this testing may yield results that are of unknown clinical significance and that parental or other relative's specimens may also be tested to determine whether a specific finding was inherited. An error in the diagnosis may occur if the true biological relationships of the family members involved are not as I have described. I understand that this testing might identify me as being a "carrier" of genetic changes which are not expected to cause symptoms of a disease. My status as a carrier may clarify a finding in my child.

I understand that the results of this testing will become part of my medical record and may only be disclosed to individuals who have legal access to this record or to individuals I designate to receive this information. My test results will be explained to me by a genetic counselor or by my healthcare provider, who will have the opportunity to discuss my results with a geneticist.

There are federal and state laws that address genetic discrimination. The US Genetic Information Nondiscrimination Act (GINA) may prohibit discrimination based on genetic information by employers and health insurers. This law, however, does not protect people in the military nor protect against discrimination by other types of insurance, such as life, disability, or long-term care insurance.

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I will receive no compensation in connection with such research. Data and information are "de-identified" by removing any information that could be used to identify a specific person, such as a name, email address, or date of birth. Sema4 may also give the de-identified data and information to its research partners and may submit it to research databases for use in scientific and medical research. Examples of such research include projects to understand the risk factor and outcomes for various conditions and can be found at [www.sema4.com/research](http://www.sema4.com/research).

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**Permission to contact**

I understand that Sema4 may wish to contact me in the future, including for the following reasons: research purposes, the provision of general information about research findings, and/or the provision of information about the results of tests on my sample(s). If I wish to opt-out of future contact for research purposes, I will notify Sema4 by emailing [privacy@sema4.com](mailto:privacy@sema4.com).

My questions regarding this testing have been answered to my satisfaction, and I hereby consent to have my specimen tested. I understand that I have the option to speak with a healthcare provider should I have additional questions or want counseling regarding this testing. If my legal representative is signing this consent and authorization, my legal representative is satisfied that they have received enough information to sign on my behalf.

Please complete all required (\*) fields and optional applicable fields below:

Patient Name*	Patient's DOB*	Date*
Signature of Patient or Legal Representative*	Email Address*	Phone Number*
Legal Representative Name (if applicable)		