



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

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).

PATIENT EMAIL ADDRESS <i>RECOMMENDED</i>	PATIENT MOBILE/PRIMARY NUMBER <i>REQUIRED</i>
LAST NAME <i>REQUIRED</i>	FIRST NAME <i>REQUIRED</i> MI
DATE OF BIRTH <i>MM / DD / YYYY</i>	BIOLOGICAL GENDER <input type="checkbox"/> M <input type="checkbox"/> F <i>REQUIRED</i>
PATIENT/CLIENT MRN	
ADDRESS <i>REQUIRED</i>	CITY / STATE / ZIP <i>REQUIRED</i>
ETHNICITY (Check all that apply) <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: _____	

REFERRING PROVIDER INFORMATION

Name <i>REQUIRED</i>	Genetic Counselor / Additional Clinician
NPI#	Clinic / Institution <i>REQUIRED</i>
Address <i>REQUIRED</i>	Telephone
	Fax
Sending Physician Practice: <input type="checkbox"/> Doctor's Office <input type="checkbox"/> Referral Lab <input type="checkbox"/> Hospital - Inpatient <input type="checkbox"/> Hospital - Outpatient	

MEDICAL PROVIDER SIGNATURE OF CONSENT REQUIRED BELOW: I certify that the patient specified above and/or their legal guardian 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 informed consent from the patient or their legal guardian for this testing.

SIGNATURE _____ DATE *MM / DD / YYYY*

BILLING INFORMATION

Bill to: Client/Institution Insurance Self Pay/No Insurance

POLICYHOLDER LAST NAME <i>REQUIRED</i>	POLICYHOLDER FIRST NAME <i>REQUIRED</i>	POLICYHOLDER DOB <i>MM / DD / YYYY</i>
INSURANCE CARRIER <i>REQUIRED</i>	INSURANCE ID <i>REQUIRED</i>	GROUP NO. <i>REQUIRED</i>
BILLING ADDRESS <i>REQUIRED</i>		
SECONDARY INSURANCE <input type="checkbox"/> YES <input type="checkbox"/> NO		
SECONDARY INSURANCE NAME		GROUP NO.

INDICATIONS FOR TESTING

PATIENT CLINICAL HISTORY: None Yes (turn form over)

PATIENT TESTING HISTORY: None Yes (turn form over)

FAMILY HISTORY: None Yes (turn form over)

ICD10 Dx CODE(S) - REQUIRED

<input type="checkbox"/> C61 - Malignant Neoplasm of Prostate	<input type="checkbox"/> Z85.07 - Personal history of malignant neoplasm of pancreas
<input type="checkbox"/> Z85.3 - Personal history of malignant neoplasm of breast	<input type="checkbox"/> Z85.46 - Personal history of malignant neoplasm of prostate
<input type="checkbox"/> Z85.43 - Personal history of malignant neoplasm of ovary	<input type="checkbox"/> Z80.42 - Family history of malignant neoplasm of prostate
<input type="checkbox"/> Z80.3 - Family history of malignant neoplasm of breast	<input type="checkbox"/> Z80.4 - Family history of malignant neoplasm of prostate
<input type="checkbox"/> Z80.41 - Family history of malignant neoplasm of ovary	<input type="checkbox"/> Z80.8 - Family history of malignant neoplasm of other organ
<input type="checkbox"/> Z80.0 - Family history of malignant neoplasm of digestive organs	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Z85.00 - Personal history of malignant neoplasm of unspecified digestive organ	

Pre-Authorization #: _____ Please include a copy of all insurance paperwork.

ASSIGNMENT AND RELEASE: I hereby authorize my insurance benefits be paid directly to the provider and I understand that I am financially responsible for uncovered services. I also authorize the release of any information required to process the claim. Billing inquiries, please call 800-298-6470, Option 3.

SIGNATURE _____ DATE *MM / DD / YYYY*

COLLECTION DATE: *MM / DD / YYYY*

SPECIMEN TYPE: (# of samples sent): PURPLE (EDTA) _____ SALIVA _____ OTHER _____

This patient has a history of bone marrow transplant*
 This patient had a blood transfusion in the last 4 weeks*
 *Buccal swab or skin biopsy is required

LABORATORY TEST(S) ORDERED - SEE REVERSE FOR FULL GENE LISTING

SEMA4 SIGNAL HEREDITARY CANCER TESTING MENU

<p>Test Selection (Required)</p> <p>Comprehensive Hereditary Cancer</p> <p><input type="checkbox"/> Universal Panel (112 genes) ◆</p> <p><input type="checkbox"/> Comprehensive Panel (72 genes) ◆</p> <p><input type="checkbox"/> High Prevalence Panel (36 genes) ◆</p> <p>Hereditary Breast and Ovarian Cancer</p> <p><input type="checkbox"/> BRCA1 and BRCA2 Panel (2 genes) ◆</p> <p><input type="checkbox"/> Ashkenazi Jewish BRCA Panel (3 variants)</p> <p><input type="checkbox"/> Breast Guidelines Panel (11 genes) ◆ (includes guideline recommendations)</p> <p><input type="checkbox"/> Run STAT for surgical decision making</p> <p><input type="checkbox"/> Breast and Gynecological Panel (27 genes) ◆</p> <p>Hereditary Colon Cancer</p> <p><input type="checkbox"/> Lynch Syndrome Panel (5 genes)</p> <p><input type="checkbox"/> Colorectal Panel (20 genes)</p> <p>Hereditary Brain Tumors/Cancers</p> <p><input type="checkbox"/> Brain/Neurological Panel (32 genes)</p>	<p>Hereditary Melanoma</p> <p><input type="checkbox"/> Melanoma Panel (9 genes)</p> <p>Hereditary Pancreatic Cancer</p> <p><input type="checkbox"/> Pancreatic Panel (21 genes) ◆</p> <p><input type="checkbox"/> Pancreatic Plus Panel (27 genes) ◆</p> <p>Hereditary Prostate Cancer</p> <p><input type="checkbox"/> Prostate Panel (15 genes) ◆</p> <p>Hereditary Endocrine Tumors/Cancers</p> <p><input type="checkbox"/> Endocrine Tumor Panel (21 genes)</p> <p>Hereditary Renal/Urinary Cancer</p> <p><input type="checkbox"/> Renal/Urinary Panel (25 genes)</p> <p>Pediatric Cancers</p> <p><input type="checkbox"/> Pediatric Panel (49 genes)</p> <p>Genetic Counseling:</p> <p><input type="checkbox"/> Pre- and post-test genetic counseling to be provided by GeneScreen</p>	<p><input type="checkbox"/> Reflex testing</p> <p>1st Test: _____</p> <p>2nd Test: _____</p> <p><input type="checkbox"/> Custom gene(s) testing : _____</p> <p>List gene(s) here or select appropriate genes on the Hereditary Cancer Gene List document.</p> <p>Testing for known familial variant(s)</p> <p>Please attach a copy of the relative's test report (required)</p> <p><input type="checkbox"/> Targeted Testing (Pathogenic / L. Pathogenic variant)</p> <p>Gene(s): _____ Variant(s): _____</p> <p>This relative's variant was identified at Sema4:</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes Sema4 ID: _____</p> <p>Patient's relationship to relative: _____</p> <p><input type="checkbox"/> VUS (variant of uncertain significance) resolution</p> <p>For details please visit: Sema4.com/vus</p> <p>Gene(s): _____ Variant(s): _____</p> <p>Sema4 ID (required): _____</p> <p>Female Breast Cancer Risk Calculation</p> <p><input type="checkbox"/> Add on Tyrer-Cuzick (TC) risk calculation for eligible patients (only available for tests that include both BRCA1 and BRCA2 denoted with ◆)</p> <p>Please attach the completed Tyrer-Cuzick Risk Calculation Order Form (required)</p> <p>Sema4 ID (required if an eligible panel was previously reported): _____</p>
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PATIENT CLINICAL HISTORY			PATIENT TESTING HISTORY (IF APPLICABLE)		
Please include a copy of medical consult notes, if available, for billing investigation purposes.			<input type="checkbox"/> NO PREVIOUS GENETIC TESTING		
<input type="checkbox"/> No personal history of cancer			<input type="checkbox"/> Germline genetic test(s) performed:		
Cancer/Tumor	Age at Dx	Pathology and Other info	Result(s): _____		
Brain tumor			<input type="checkbox"/> Somatic/tumor profile test(s) performed:		
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	Result(s): _____		
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	<input type="checkbox"/> Microsatellite instability analysis:		
Colorectal		Location:	<input type="checkbox"/> Stable (MSS)		
Melanoma			<input type="checkbox"/> Unstable/high (MSI-H)		
Ovarian		<input type="checkbox"/> Fallopian tube <input type="checkbox"/> Primary peritoneal	<input type="checkbox"/> Unstable/low (MSI-L)		
Pancreatic			<input type="checkbox"/> IHC, if multiple primaries, tumor used:		
Prostate		<input type="checkbox"/> Gleason Score: Metastatic: <input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Proteins present: _____		
Uterine			<input type="checkbox"/> Proteins absent: _____		
Hematologic*		Type:			
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+			
Other clinical history:					

FAMILY HISTORY								
Maternal (mother's side) family history of cancer <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			Paternal (father's side) family history of cancer <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			Other (siblings/children) family history of cancer <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
Relation to patient	H/o cancer/polyps	Dx age	Relation to patient	H/o cancer/polyps	Dx age	Relation to patient	H/o cancer/polyps	Dx age
<input type="checkbox"/> There is a known variant identified in the family. Gene: _____ Variant: _____ (please attach report)								

HEREDITARY CANCER PANELS	
Universal Panel (112 genes)	AIP, ALK, APC, ATM, AXIN2, BAP1, BARD1, BLM, BMPR1A, BRCA1, BRCA2, BRIP1, CASR, CDC73, CDH1, CDK4, CDKN1B, CDKN1C, CDKN2A, CEBPA, CFTR, CHEK2, CPA1, CTC1, CTRC, DDB2, DICER1, DIS3L2, DKC1, EGFR, EPCAM, ERCC3, ERCC5, ERCC4, ERCC5, FANCA, FANCB, FANCC, FANCD2, FANCE, FANCF, FANGC, FANCI, FANCL, FANCM, FH, FLCN, GATA2, GPC3, GREM1, HOXB13, HRAS, KIT, MAX, MEN1, MET, MIF, MLH1, MRE11, MSH2, MSH6, MUTYH, NBN, NF1, NF2, NHP2, NOP10, NTHL1, PALB2, PDGFRA, PHOX2B, PMS2, POLD1, POLE, POLH, POT1, PRKAR1A, PRSS1, PTCH1, PTEN, RAD50, RAD51C, RAD51D, RB1, RECQL4, RET, RTEL1, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SLX4, SMAD4, SMARCA4, SMARCB1, SPINK1, STK11, SUFU, TERC, TERT, TINF2, TMEM127, TP53, TSC1, TSC2, VHL, WT1, XPA, XPC, XRCC2
High Prevalence Panel (36 genes)	APC, ATM, AXIN2, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDK4, CDKN2A, CHEK2, DICER1, EPCAM, GREM1, HOXB13, MLH1, MSH2, MSH6, MUTYH, NBN, NF1, PALB2, PMS2, POLD1, POLE, PTEN, RAD51C, RAD51D, SMAD4, SMARCA4, STK11, TSC1, TSC2, TP53, VHL
Comprehensive Panel (72 genes)	AIP, ALK, APC, ATM, AXIN2, BAP1, BARD1, BLM, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDK4, CDKN1B, CDKN2A, CEBPA, CHEK2, DICER1, EGFR, EPCAM, FH, FLCN, GATA2, GREM1, HOXB13, HRAS, KIT, MAX, MEN1, MET, MIF, MLH1, MSH2, MSH6, MUTYH, NBN, NF1, NF2, NTHL1, PALB2, PDGFRA, PHOX2B, PMS2, POLD1, POLE, POT1, PRKAR1A, PTCH1, PTEN, RAD51C, RAD51D, RB1, RET, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL, WT1, XRCC2
Ashkenazi Jewish BRCA Panel (3 variants)	BRCA1:c.68_69delAG and c.5266dupC, BRCA2:c.5946delT
BRCA1 and BRCA2 Panel (2 genes)	BRCA1, BRCA2
Breast Guidelines Panel (11 genes)	ATM, BRCA1, BRCA2, CDH1, CHEK2, NBN, NF1, PALB2, PTEN, STK11, TP53
Breast and Gynecological Panel (27 genes)	ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, DICER1, EPCAM, FANCC, MLH1, MRE11, MSH2, MSH6, MUTYH, NBN, NF1, PALB2, PMS2, PTEN, RAD50, RAD51C, RAD51D, SMARCA4, STK11, TP53, XRCC2
Lynch Syndrome Panel (5 genes)	EPCAM, MLH1, MSH2, MSH6, PMS2
Colorectal Panel (20 genes)	APC, ATM, AXIN2, BMPR1A, CDH1, CHEK2, EPCAM, GREM1, MLH1, MSH2, MSH6, MUTYH, NTHL1, PMS2, POLD1, POLE, PTEN, SMAD4, STK11, TP53
Pancreatic Panel (21 genes)	APC, ATM, BMPR1A, BRCA1, BRCA2, CDK4, CDKN2A, EPCAM, MEN1, MLH1, MSH2, MSH6, NF1, PALB2, PMS2, SMAD4, STK11, TP53, TSC1, TSC2, VHL
Pancreatic Plus Panel (27 genes)	APC, ATM, BMPR1A, BRCA1, BRCA2, CDK4, CDKN2A, EPCAM, MEN1, MLH1, MSH2, MSH6, NF1, PALB2, PMS2, SMAD4, STK11, TP53, TSC1, TSC2, VHL, CASR, CFTR, CPA1, CTRC, PRSS1, SPINK1
Prostate Panel (15 genes)	ATM, BRCA1, BRCA2, CHEK2, EPCAM, HOXB13, MLH1, MSH2, MSH6, NBN, PALB2, PMS2, RAD51C, RAD51D, TP53
Melanoma Panel (9 genes)	BAP1, BRCA2, CDK4, CDKN2A, MIF, POT1, PTEN, RB1, TP53
Endocrine Tumor Panel (21 genes)	AIP, APC, CDC73, CDKN1B, CHEK2, DICER1, FH, MAX, MEN1, NF1, PRKAR1A, PTEN, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, TMEM127, TP53, VHL
Brain/Neurological Panel (32 genes)	AIP, ALK, APC, BAP1, BARD1, CDKN1B, CDKN2A, DICER1, EPCAM, GPC3, HRAS, MEN1, MLH1, MSH2, MSH6, NBN, NF1, NF2, PHOX2B, PMS2, POT1, PRKAR1A, PTCH1, PTEN, RB1, SMARCA4, SMARCB1, SUFU, TP53, TSC1, TSC2, VHL
Renal/Urinary Panel (25 genes)	BAP1, CDC73, DICER1, DIS3L2, EPCAM, FH, FLCN, MET, MIF, MLH1, MSH2, MSH6, PMS2, PTEN, SDHA, SDHB, SDHC, SDHD, SMARCA4, SMARCB1, TP53, TSC1, TSC2, VHL, WT1
Pediatric Panel (49 genes)	ALK, APC, ATM, BLM, BMPR1A, CDC73, CDKN1C, CEBPA, DICER1, DIS3L2, EPCAM, FH, GATA2, GPC3, HRAS, MAX, MEN1, MLH1, MSH2, MSH6, NBN, NF1, NF2, PHOX2B, PMS2, PRKAR1A, PTCH1, PTEN, RB1, RECQL4, RET, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMARCA4, SMARCB1, STK11, SUFU, TERC, TERT, TMEM127, TP53, TSC1, TSC2, VHL, WT1

*Blood/saliva sample are acceptable unless patient has CLL, active hematologic malignancy, and/or bone marrow involvement in which case buccal swab or skin biopsy are required

HEREDITARY CANCER GENE LIST

<input type="checkbox"/> AIP	<input type="checkbox"/> EGFR	<input type="checkbox"/> MRE11	<input type="checkbox"/> RTEL1
<input type="checkbox"/> ALK	<input type="checkbox"/> EPCAM	<input type="checkbox"/> MSH2	<input type="checkbox"/> RUNX1
<input type="checkbox"/> APC	<input type="checkbox"/> ERCC2	<input type="checkbox"/> MSH3	<input type="checkbox"/> SDHA
<input type="checkbox"/> ATM	<input type="checkbox"/> ERCC3	<input type="checkbox"/> MSH6	<input type="checkbox"/> SDHAF2
<input type="checkbox"/> AXIN2	<input type="checkbox"/> ERCC4	<input type="checkbox"/> MUTYH	<input type="checkbox"/> SDHB
<input type="checkbox"/> BAP1	<input type="checkbox"/> ERCC5	<input type="checkbox"/> NBN	<input type="checkbox"/> SDHC
<input type="checkbox"/> BARD1	<input type="checkbox"/> FANCA	<input type="checkbox"/> NF1	<input type="checkbox"/> SDHD
<input type="checkbox"/> BLM	<input type="checkbox"/> FANCB	<input type="checkbox"/> NF2	<input type="checkbox"/> SLX4
<input type="checkbox"/> BMPR1A	<input type="checkbox"/> FANCC	<input type="checkbox"/> NHP2	<input type="checkbox"/> SMAD4
<input type="checkbox"/> BRCA1	<input type="checkbox"/> FANCD2	<input type="checkbox"/> NOP10	<input type="checkbox"/> SMARCA4
<input type="checkbox"/> BRCA2	<input type="checkbox"/> FANCE	<input type="checkbox"/> NTHL1	<input type="checkbox"/> SMARCB1
<input type="checkbox"/> BRIP1	<input type="checkbox"/> FANCF	<input type="checkbox"/> PALB2	<input type="checkbox"/> SPINK1
<input type="checkbox"/> CASR	<input type="checkbox"/> FANCG	<input type="checkbox"/> PDGFRA	<input type="checkbox"/> STK11
<input type="checkbox"/> CDC73	<input type="checkbox"/> FANCI	<input type="checkbox"/> PHOX2B	<input type="checkbox"/> SUFU
<input type="checkbox"/> CDH1	<input type="checkbox"/> FANCL	<input type="checkbox"/> PMS2	<input type="checkbox"/> TERC
<input type="checkbox"/> CDK4	<input type="checkbox"/> FANCM	<input type="checkbox"/> POLD1	<input type="checkbox"/> TERT
<input type="checkbox"/> CDKN1B	<input type="checkbox"/> FH	<input type="checkbox"/> POLE	<input type="checkbox"/> TINF2
<input type="checkbox"/> CDKN1C	<input type="checkbox"/> FLCN	<input type="checkbox"/> POLH	<input type="checkbox"/> TMEM127
<input type="checkbox"/> CDKN2A	<input type="checkbox"/> GATA2	<input type="checkbox"/> POT1	<input type="checkbox"/> TP53
<input type="checkbox"/> CEBPA	<input type="checkbox"/> GPC3	<input type="checkbox"/> PRKAR1A	<input type="checkbox"/> TSC1
<input type="checkbox"/> CFTR	<input type="checkbox"/> GREM1	<input type="checkbox"/> PRSS1	<input type="checkbox"/> TSC2
<input type="checkbox"/> CHEK2	<input type="checkbox"/> HOXB13	<input type="checkbox"/> PTCH1	<input type="checkbox"/> VHL
<input type="checkbox"/> CPA1	<input type="checkbox"/> HRAS	<input type="checkbox"/> PTEN	<input type="checkbox"/> WT1
<input type="checkbox"/> CTC1	<input type="checkbox"/> KIT	<input type="checkbox"/> RAD50	<input type="checkbox"/> XPA
<input type="checkbox"/> CTRC	<input type="checkbox"/> MAX	<input type="checkbox"/> RAD51C	<input type="checkbox"/> XPC
<input type="checkbox"/> DDB2	<input type="checkbox"/> MEN1	<input type="checkbox"/> RAD51D	<input type="checkbox"/> XRCC2
<input type="checkbox"/> DICER1	<input type="checkbox"/> MET	<input type="checkbox"/> RB1	
<input type="checkbox"/> DIS3L2	<input type="checkbox"/> MITF	<input type="checkbox"/> RECQL4	
<input type="checkbox"/> DKC1	<input type="checkbox"/> MLH1	<input type="checkbox"/> RET	

Informed Consent for Hereditary Cancer Genetic Testing

I, _____, hereby request genetic testing for

Myself

My child _____

I have received verbal and written information (please see sema4.com/testcatalog for test-specific information sheet) from my physician or from a genetic counselor that described, in words that I understood, the nature of the genetic testing that I/my child am about to undergo in connection with this consent, as well as the accuracy, risks and limitations of the test(s). I am aware that I may speak to my provider or call Sema4 at 1-800-298-6470 option 2 with any questions about this test.

I understand that specimen(s), such as peripheral blood, saliva, cheek swab, or skin biopsy will be taken from me/my child. I understand that the samples will be used for determining if I have /my child has a genetic disease, are carriers of a genetic disease or are more susceptible to develop a genetic disease or medical condition. The results may also suggest that I am affected with condition that is different than, and/or that is in addition to, those considered for the purpose of consenting for this test. I further understand that my or my child's genetic test results may have implications for the rest of the family as genetic changes can be inherited.

I understand that this test will include exome sequencing, which generates data on the portion of my/my child's DNA selected by Sema4 that is comprised of key genes that carry instructions for the body's development and function. However, only the information from the test(s) ordered in connection with this consent will be reported back to me, and no test will be performed on my/child's sample other than the one(s) authorized by me and my healthcare provider.

I understand that there are several types of genetic test results, including:

- **Positive**, meaning that a pathogenic/likely pathogenic variant that is associated with an increased risk to develop cancer has been identified. The specific type(s) of these risks can vary depending on the gene in which the variant is found. A positive result may have medical management implications. For certain genes/variants, the cancer risks are not well established at this time, and more data and specific medical management recommendations related to these genes may evolve over time.
- **Negative**, meaning that no pathogenic/likely pathogenic variant(s) were identified. A negative result reduces, but does not eliminate, the possibility that I carry / my child carries pathogenic/likely pathogenic variant(s) in the genes analyzed or in other genes that are not included in the test. I/my child still have the general population's risk for developing cancer and may also be at a higher risk to develop cancer based on personal/family history.
- **Inconclusive**, meaning that an alteration was identified in the genes tested where there is insufficient information at this time to determine if such alteration is associated with increased cancer risks.

I will discuss any appropriate medical intervention with my healthcare provider before taking any action based on my/my child's results, and I will provide my/my child's genetic test result and personal/family history to my healthcare providers so that they can make an appropriate recommendation.

I understand that although the likelihood of an incorrect diagnosis or a misinterpretation of the result is extremely small, infrequent errors may occur. I understand that this testing may yield results that are of unknown clinical significance and that parental and/or other relative's specimens may also be tested or requested to determine whether a specific finding is inherited. In addition, incidental findings that are not related to the primary diagnosis may be identified in me/my child. An error in the diagnosis may occur if the true biological relationships of the family members involved in this study are not as I have stated.

There are some federal and state laws that address genetic discrimination. The US Genetic Information Nondiscrimination Act (GINA) may prohibit discrimination by employers and health insurances. This law, however, does not protect people in the military nor possible discrimination by other types of insurance such as life, disability or longterm care.

I understand that my healthcare provider may have ordered a personalized cancer risk score calculation that will compare my risk of developing a certain cancer(s) to the general population risk, and that if ordered, this risk score will be included in my clinical laboratory genetic test report or will be calculated and reviewed with me during my post-test genetic counseling session. I understand that, depending on my risk score and other personal and family history factors, my healthcare provider may recommend that I receive modified cancer screening.

Sample storage for future clinical purposes

Sema4 may securely store a portion of my/my child's sample indefinitely for the sole purpose of performing future clinical testing that I authorize and consent to. My sample will not be used for any other purpose without my consent, and no test will be performed on my sample other than the one(s) authorized by me and my healthcare provider.

If I do not want to have any of my/my child's sample stored for future clinical testing that I request, I may initial here _____, and my/my child's sample will be destroyed at the end of the testing process or not more than 60 days after collection. I may withdraw this consent by contacting Sema4, including by emailing privacy@sema4.com.

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, and 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, including scientific databases that are maintained by the federal government, such as a database kept by the National Institutes of Health ("NIH") (an agency of the federal government that funds research). Researchers have to apply to the NIH to see the information in the database.

If I do not want to have any of my/my child's de-identified data and information used in research consistent with this consent, I may initial here _____, or I may withdraw this consent by contacting Sema4, including by emailing privacy@sema4.com.

Permission to contact

I understand that Sema4 may wish to contact me/my child 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/my child's sample(s). I understand that I may notify Sema4 to opt out of such future contact, including by emailing privacy@sema4.com.

The results of my/or my child's test will be explained to me by a genetic counselor or by my physician who will have the opportunity to discuss my results with a geneticist. I have had the opportunity to have all of my questions answered. If I am signing this form on behalf of a minor for whom I am the legal guardian, I am satisfied that I have received enough information to sign on his or her behalf.

I understand that this consent is being obtained in order to protect my right to have all of my questions answered before testing. 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 who I designate to receive this information.

Signature of person being tested (or guardian)

Date