INVITAE

Dear Healthcare Provider:

Your patient is interested in ordering a proactive genetic test through Invitae. Proactive genetic testing offers healthy adults without a strong personal or family history of disease an opportunity to learn about how their genes could impact their health. **Invitae has found that about 16% of healthy adults carry a serious health-related genetic risk.**[1] By identifying if your patient is at risk, you may be able to initiate early care, schedule regular monitoring, suggest lifestyle modifications, and potentially start early intervention to prevent the onset of disease.

Invitae offers three testing options that analyze genes for variants that are well-established indicators of a significantly increased risk of developing hereditary cancers, cardiovascular conditions, and other medically important disorders. Our test options, which are explained in more detail, include:

- **Invitae Cancer Screen:** analyzes a variety of hereditary cancers
- **Invitae Cardio Screen:** analyzes a variety of cardiovascular conditions
- **Invitae Genetic Health Screen:** analyzes hereditary cancers, cardiovascular conditions, and other medically important disorders

Due to the potential health implications of this test, Invitae proactive screens must be ordered by a healthcare provider on behalf of their patients. Place an order online in minutes by visiting **www.invitae.com/proactive**. You can also place your order using the US or International requisition forms in this packet. You or your patient may order a sample collection kit by visiting **www.invitae.com/request-a-kit**.

If you are unsure what type of genetic testing is suitable for your patient, we have included a tool to help you decide, based on your patient's personal and family medical history.

If you have any questions, please do not hesitate to reach out to our team:

Client Services
800-436-3037
clientservices@invitae.com

[1]Haverfield EV. Genetic screening for healthy individuals: Preliminary results from a medically actionable genetic screening panel. Presented at the American Society of Human Genetics; October 2017; Orlando, FL.

Proactive or diagnostic? Choose the right test

If your patient is unsure or does not have sufficient information to provide a definitive answer, please leave blank. For the Genetic Health Screen, please complete both sections.

CANCER SCREEN

Do any of the following apply to your patient or their close blood relative[1]?	YES	NO
Early-onset breast cancer (at age 45 or younger), triple-negative breast cancer (ER-, PR-, HER2-; at age 60 or younger), breast cancer in a male, or breast cancer in an individual with Ashkenazi Jewish ancestry		
Ovarian cancer		
Colorectal cancer or endometrial cancer (younger than age 50)		
Diffuse gastric cancer		
Metastatic prostate cancer		
10 or more colon polyps		

CARDIO SCREEN

*Do any of the following apply to your patient or their close blood relative[1]?	YES	NO
Diagnosis of a potentially hereditary cardiovascular condition such as cardiomyopathy[2], arrhythmia[3], aortopathy[4], familial hypercholesterolemia, pulmonary arterial hypertension, or hereditary hemorrhagic telangiectasia		
Early-onset cardiovascular disease:		
ICD/Pacemaker (younger than age 50)		
Heart failure or heart transplant (younger than age 60)		
Early "heart attack", coronary artery disease, or stroke (males younger than age 55; females younger than age 65)		
Aortic aneurysm/dissection (younger than age 50)		
Untreated LDL ≥190		
Unexplained cardiac arrest(s) or sudden death, or sudden infant death syndrome (SIDS)		
Unexplained syncope or syncope with exercise or emotional distress		

If you checked "No" to all questions, your patient is likely a good candidate for proactive genetic testing. If you checked "Yes" for any of the boxes above, you may want to consider further evaluation to determine whether diagnostic testing is more appropriate for your patient. For additional information about our diagnostic test options, please visit www.invitae.com/physician/panelsgenes. Should your patient not have access to diagnostic testing or not meet guidelines for diagnostic testing, they may chose to pursue proactive testing. To discuss your patient's case with a member of our clinical team, please contact clinconsult@invitae.com or 800-436-3037.

1. Close blood relatives include sibling, half-sibling, parent, child, aunt/uncle, niece/nephew, grandparent, or grandchild
2. Cardiomyopathies include hypertrophic cardiomyopathy, familial or idiopathic dilated cardiomyopathy, arrhythmogenic right ventricular dysplasia/cardiomyopathy, peripartum cardiomyopathy, left ventricular non-compaction, restrictive cardiomyopathy, and familial amyloidosis
3. Arrhythmias include long QT syndrome, Brugada syndrome, catecholaminergic polymorphic ventricular tachycardia, familial atrial fibrillation, progressive conduction system disease, and short QT syndrome
4. Aortopathies include Marfan syndrome, Loeys-Dietz syndrome, and vascular Ehlers-Danlos syndrome

***Adapted from:** National Society of Genetic Counselors (NSGC) Cardiovascular Genetics Pocket Guide. 3/20/18. Available at: http://www.nsgc.org/cardioguide

HEADQUARTERS & LABORATORY | 1400 16th Street, San Francisco, CA 94103 | **ONLINE** | www.invitae.com | **CONTACT** | www.invitae.com/contact

INVITAE

ORDER ONLINE at www.invitae.com/signin.

ORDER ID
For Invitae internal use only

INVITAE REQUISITION FORM

PATIENT INFORMATION

First name | MI | Last name | Date of birth (MM/DD/YYYY)

Sex: ○ M ○ F

MRN (medical record number)

Ancestry
○ Asian ○ Black/African American ○ White/Caucasian ○ Ashkenazi Jewish ○ Hispanic ○ Native American
○ Pacific Islander ○ French Canadian ○ Sephardic Jewish ○ Mediterranean ○ Other: _____

Email address (for report access after release by medical professional) | Phone

Address

City | State | ZIP code | Country

ORGANIZATION INFORMATION

Organization name and address

Organization name			Phone
Address			Fax
City	State	ZIP code	Country

Primary clinical contact

Name	NPI
Email address (for report access)	Phone

Ordering physician

○ **Same as primary clinical contact**

Name	NPI
Email address (for report access)	Phone

Additional clinical or laboratory contacts (optional)

Name	Email address (for report access)	Name	Email address (for report access)
Name	Email address (for report access)	Name	Email address (for report access)

○ INSURANCE BILLING (Please attach a copy of the patient's card.)

We do not accept insurance for certain tests *or* patients outside the US. Before completing this section, confirm your test is eligible at www.invitae.com/billing.

Primary insurance company name	Primary member ID#
Secondary insurance company name	Secondary member ID#
○ Patient has Medicare and was treated as a hospital inpatient (>24 hour stay) in the last 14 days.	Prior-authorization #

Letter of Medical Necessity (LMN)

○ I have attached an LMN and/or other documents for insurance billing purposes.

○ I agree to allow Invitae to transfer the information from this requisition to an LMN and/or other documentation using the ordering physician's name as the signature for insurance billing.

○ INSTITUTIONAL BILLING

Invitae will send an invoice to the organization address above.
Please contact Invitae if this order should be billed to a different location.

○ PATIENT PAY BILLING

Invitae will send an electronic invoice to the patient email listed above

○ OTHER BILLING

Invitae partner code:

INVITAE

Patient's first name

Patient's last name

INVITAE PROACTIVE SCREENS REQUISITION FORM

SPECIMEN INFORMATION

Label each tube with the patient's full name, date of birth, and specimen collection date. A requisition form MUST accompany each specimen. www.invitae.com/specimen-requirements

Collection date (MM/DD/YYYY)

If not provided, date will be 1 day prior to our receipt of specimen.

Specimen type (only blood or saliva is accepted for this test)

○ Blood ○ Saliva

We are unable to accept blood/saliva from patients with allogeneic bone marrow transplants or blood transfusion <2 weeks prior to specimen collection.

Special cases

○ Resubmission

Specimen ID (IB# found on tube) - optional:

OPTIONAL: PERSONAL OR FAMILY HEALTH HISTORY

TEST INFORMATION

*Invitae continually updates its panels based on the most recent evidence. Please note that if an order is placed using an older version of these forms, Invitae reserves the right to upgrade any ordered panel(s) to the current version(s). To avoid confusion, please consider placing your order using our online test catalog. To view a full gene list for the panels, please visit our website **www.invitae.com** and indicate your selections below.*

Test code	Test name	# gene(s)
○ 11001	Invitae Genetic Health Screen	147
○ 12001	Invitae Cancer Screen	61
○ 13001	Invitae Cardio Screen	77

To request a complimentary specimen collection kit visit
www.invitae.com/request-a-kit

SHIPPING INSTRUCTIONS

Please ship specimen overnight in insulated containers:

Attn: Invitae Client Services
1400 16th Street, San Francisco, CA 94103, USA

By signing this form, the medical professional acknowledges that the individual/family member authorized to make decisions for the individual (collectively, the "Patient") has been supplied information regarding and consented to undergo genetic testing, substantially as set forth in Invitae's Informed Consent for Genetic Testing (for patients in the US: www.invitae.com/proactive-consent; for patients outside the US: www.invitae.com/proactive-consent-international), has been informed that Invitae may notify them of clinical updates related to genetic test results (in consultation with the ordering medical professional as indicated), and for orders originating outside the US, has been informed that the Patient's personal information and specimen will be transferred to and processed in the US. The Patient has further been informed and authorizes Invitae Corporation ("Invitae") and its designees to release information concerning testing to their insurer, if applicable, in order to process and/or appeal claims on behalf of the Patient. If a letter of medical necessity (LMN) has not been provided, the medical professional agrees to allow Invitae to transfer the information from this requisition to a LMN and/or other documentation using the medical professional's name as the signature for insurance billing. For amounts received directly, the Patient has agreed to remit payment to Invitae for testing services rendered. I acknowledge that I offered pre-test genetic counseling to the Patient, if required by their insurer. In addition to the above, I attest that I am the ordering physician, or I am authorized by the ordering physician to order this test, or I am authorized under applicable law to order this test.

Medical professional signature	Date

PATIENT CONSENT FOR PROACTIVE TESTING

I, _____, request and permit Invitae to analyze the genes indicated on the test requisition form in my sample.

I UNDERSTAND THAT:

1. More information about the Invitae Proactive tests is available from my healthcare provider.
2. The results of this DNA test could be:
   a. Positive, and may:
      i. alert me to a predisposition or an increased risk for developing a genetic disease in the future.
      ii. have implications for risk of disease in other family members.
   b. Negative, and may:
      i. indicate disease risks close to that of the general population but do not eliminate the risk for developing a genetic disease in the future.
3. Molecular genetic tests may or may not provide actionable information or have an implication for my medical management.
4. Some types of DNA changes that could cause a specific genetic disorder may not be detected by this test. As with most molecular genetic tests, Invitae's test has technical limitations that may prevent detection of certain changes due to poor DNA quality, inherent DNA sequence properties, or other types of limitations.
5. There may be possible sources of error including, but not limited to, trace contamination, rare technical errors in the laboratory, rare DNA variants that compromise data analysis, inconsistent scientific classification systems, and inaccurate reporting of family relationships or clinical diagnosis information.
6. Invitae will only interpret the parts of the DNA sequence of the genes indicated on the requisition form by my physician.
7. Invitae's clinical reports are released only to me and the certified healthcare professional(s) listed on the test requisition form. Clinical reports are confidential and will only be released to other medical professionals with my explicit written consent.
8. It is my responsibility to consider the possible impact of my test results as they relate to insurance rates, obtaining disability or life insurance, implications for family members, and employment. The Genetic Information Nondiscrimination Act (GINA), a federal law, provides some protections against genetic discrimination. For information on GINA visit http://www.genome.gov/10002328.
9. The Invitae Proactive tests are screening genetic tests. This means that DNA variants that provide medically relevant information for me or have implications for my medical management will be reported by this test. I may also receive a result that indicates that I carry a genetic change that does not increase my own risk of developing a specific medical condition, but that may be passed within my family (also known as carrier status).
10. I will be offered genetic counseling with a geneticist, genetic counselor or other qualified healthcare provider who can answer questions, provide information and advise about alternatives before and after having this test. Further testing or additional physician consults may be warranted.
11. My data and personal information will be stored and protected in strict confidence complying with regulatory requirements (e.g. HIPAA and equivalent protections), and acknowledge that I have read and understand Invitae's Privacy Policy and Notice of Privacy Practices. My individually identifiable health information (i.e., "Protected Health Information" under HIPAA) will NOT be used in FOR PROFIT research without my additional, explicit consent.
12. Because the understanding of genetic information will improve over time, Invitae may notify me of clinical updates related to my genetic profile (in consultation with my primary clinician as indicated).
13. I have the right to receive a copy of this consent form.

BY SIGNING BELOW, I ATTEST TO THE FOLLOWING:

1. I have been informed of the likelihood of finding a change in the genes for which I am being tested and have received test-specific clinical information.
2. I have read and understand the information provided on this form and have had an opportunity to have any questions answered by my healthcare provider.

Patient signature	Date
Print name of patient	Email address

☐ Check here to opt out of being contacted for research studies (doing so will not affect the care provided to you by Invitae).

HEALTHCARE PROVIDER STATEMENT: By signing below, I attest that I am the referring physician or authorized healthcare professional. I have explained the purpose of test described above. The patient has had the opportunity to ask questions regarding this test and/or seek genetic counseling. The patient has voluntarily decided to have this test performed by Invitae.

Healthcare provider signature	Date

PATIENT CONSENT FOR PROACTIVE TESTING

I, _____, request and permit Invitae to analyze the genes indicated on the test requisition form in my sample.

I UNDERSTAND THAT:

1. More information about the Invitae Proactive tests is available from my healthcare provider.
2. The results of this DNA test could be:
   a. Positive, and may:
      i. alert me to a predisposition or an increased risk for developing a genetic disease in the future.
      ii. have implications for risk of disease in other family members.
   b. Negative, and may:
      i. indicate disease risks close to that of the general population but do not eliminate the risk for developing a genetic disease in the future.
3. Molecular genetic tests may or may not provide actionable information or have an implication for my medical management.
4. Some types of DNA changes that could cause a specific genetic disorder may not be detected by this test. As with most molecular genetic tests, Invitae's test has technical limitations that may prevent detection of certain changes due to poor DNA quality, inherent DNA sequence properties, or other types of limitations.
5. There may be possible sources of error including, but not limited to, trace contamination, rare technical errors in the laboratory, rare DNA variants that compromise data analysis, inconsistent scientific classification systems, and inaccurate reporting of family relationships or clinical diagnosis information.
6. Invitae will only interpret the parts of the DNA sequence of the genes indicated on the requisition form by my physician.
7. Invitae's clinical reports are released only to me and the certified healthcare professional(s) listed on the test requisition form. Clinical reports are confidential and will only be released to other medical professionals with my explicit written consent. It has been explained to me that my clinical report is available for me to view or download at the Invitae website (www.invitae.com) after it has been released by my healthcare professional(s). Alternatively, my clinical report can be made immediately available upon completion of the test with the prior approval of my healthcare professional, as indicated on the test requisition form.
8. It is my responsibility to consider the possible impact of my test results as they relate to insurance rates, obtaining disability or life insurance, implications for family members, and employment.
9. The Invitae Proactive tests are screening genetic tests. This means that DNA variants that provide medically relevant information for me or have implications for my medical management will be reported by this test. I may also receive a result that indicates that I carry a genetic change that does not increase my own risk of developing a specific medical condition, but that may be passed within my family (also known as carrier status).
10. I will be offered genetic counseling with a geneticist, genetic counselor or other qualified healthcare provider who can answer questions, provide information and advice about alternatives before and after having this test. Further testing or additional physician consults may be warranted.
11. Invitae may store my DNA sample indefinitely except as prohibited by law. Samples may be de-identified and retained for the purpose of internal assay improvement, validation and research. Unused blood samples will be destroyed.
    ☐ I consent to my blood sample being saved for future research activities described in this consent form. If I do not consent to opt in, it will not affect the genetic testing services being conducted as it is requested.
12. My data and personal information will be stored and protected in strict confidence complying with regulatory requirements (e.g. HIPAA and equivalent protections), and acknowledge that I have read and understand Invitae's Privacy Policy and Notice of Privacy Practices. My individually identifiable health information (i.e., "Protected Health Information" under HIPAA) will NOT be used in FOR PROFIT research without my additional, explicit consent.
13. Because the understanding of genetic information will improve over time, Invitae may notify me of clinical updates related to my genetic profile (in consultation with my primary clinician as indicated).
    ☐ I consent to being contacted by Invitae for clinical updates and research studies (If I do not consent to opt in, it will not affect the services being provided as requested).
14. My sample will be sent for testing to Invitae's laboratory located in the United States, and that my data and personal information, including my test results, will be stored in the United States.
15. I have the right to receive a copy of this consent form.

BY SIGNING BELOW, I ATTEST TO THE FOLLOWING:

1. I have been informed of the likelihood of finding a change in the genes for which I am being tested and have received test-specific clinical information.
2. I have read and understand the information provided on this form and have had an opportunity to have any questions answered by my healthcare provider.

Patient signature	Date
Print name of patient	Email address

HEALTHCARE PROVIDER STATEMENT: By signing below, the clinician acknowledges that the individual/family member authorized to make decisions for the individual (collectively, the "Patient") has been supplied information regarding and consented to undergo genetic testing. For amounts received directly, the Patient agrees to remit payment to Invitae for testing services rendered. For allied health professionals: In addition to the above, I attest that I'm licensed, certified, and authorized, in the manner authorized by my employer and under applicable licensing laws to order a genetic test for the Patient.

Healthcare provider signature	Date