



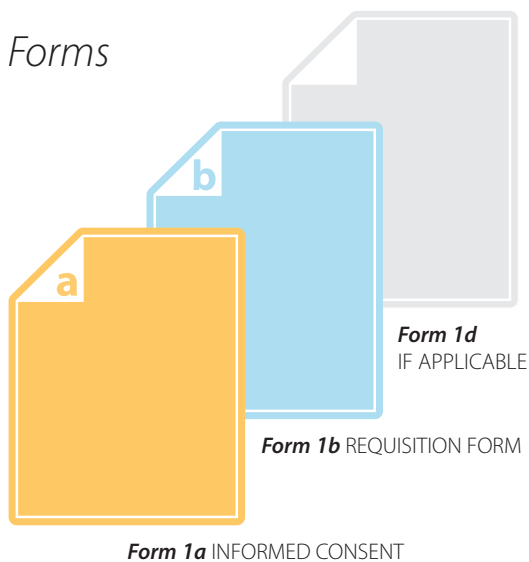
impact genetics

# HHT

Hereditary Hemorrhagic Telangiectasia

## Genetic Test Submission Guide

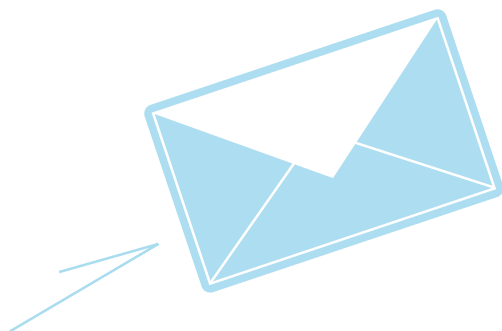
### 1 Forms



### 2 Samples



### 3 Ship



**Impact Genetics**  
115 Midair Court  
Brampton, ON L6T 5M3  
1-877-624-9769

## Results





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## **Form 1a: Informed Consent to Perform Genetic Testing**

The purpose of my DNA test/or my child's DNA test is to look for mutation(s) or genetic alterations known to be associated with the following genetic condition or disease: \_\_\_\_\_.

### **By signing below, I acknowledge that:**

1. My participation or, as applicable, my child's participation in this DNA testing is voluntary. The decision to consent to, or to refuse the above testing is entirely mine.
2. This testing is done on small biological samples.
3. It is possible that the quantity or quality of sample submitted may be inadequate for testing or that a mutation cannot be identified.
4. When DNA testing shows a mutation or alteration, then the person is a carrier or is affected with that condition or disease, or, in the case of cancer genetic testing, the person is a carrier of a mutation or alteration that may be associated with an increased risk for certain cancer(s) compared to the general population. Consulting a doctor or genetic counsellor is recommended to learn the full meaning of the results and to learn if additional testing might be necessary.
5. When the DNA testing does not show a known mutation or alteration, the chance that the person is a carrier or is affected is reduced, or, in the case of cancer genetic testing, the person's risk for certain cancer(s) compared to the general population will depend on additional personal factors. There is still a chance to be a carrier or to be affected because the current testing cannot find all the possible changes within a gene.
6. Impact Genetics will disclose the test results ONLY to the specialist designated on the Requisition Form (**Form 1b**), or to his/her agent, unless otherwise authorized by the patient or required by law, except as described in point 11 below, no information will be printed or released that discloses the patient's identity, or other confidential information.
7. Impact Genetics is not a DNA banking facility and patient DNA samples may not be available for future testing.
8. An error in diagnosis may occur if the true biological relationships of the family members are not as stated in the pedigree submitted with the Requisition Form (**Form 1b**). It is possible that the test may disclose non-paternity (someone who is not the biological father), or some other previously unknown information about family relationships, such as adoption, and I consent that this finding be reported to the referring specialist designated below.
9. There is a chance that the test may reveal unexpected abnormalities that may be of medical value in the patient's care. Impact Genetics will inform the referring specialist designated below.
10. Until the results of this test are reported, the patient and members of the patient's family should still undergo examinations as prescribed by the referring specialist.
11. If necessary to obtain reimbursement of test fees, Impact Genetics, its agents and legal representatives may disclose information that identifies the patient or other confidential information (including test results).
12. I have read or have had read to me, the above information and I understand it. I have also read or had explained to me the specific disease or condition tested for, and the specific test(s) I am having, including the test descriptions, principles and limitations. I have had the opportunity to discuss the purposes and possible risks of this testing with my doctor or someone my doctor has designated.

### **Consent for Future Research:**

After all analysis required to reach a genetic diagnosis is complete, Impact Genetics has my consent to use any surplus DNA or RNA in an **anonymous** fashion for research. No tests(s) will be performed and reported on my sample other than the one(s) authorized by my doctor.

YES    NO

**Signature of Patient:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature of Witness:** \_\_\_\_\_ **Date:** \_\_\_\_\_



## Form 1b: HHT Genetic Test Requisition

### Patient

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Gender:  Male  Female

Pregnant:  Yes  No

Expected delivery date: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

### Patient History

Confirmed clinical diagnosis

Suspected clinical diagnosis  Unaffected

Symptoms:

PAVM  Rare nose bleeds  Liver shunts

CAVM  Frequent nose bleeds  Stroke

Telangiectasia  Other: \_\_\_\_\_

### Family History

Isolated case  Positive family history

Family previously tested:  Yes  No

Mutation identified:  Yes  No

*If mutation identified at lab other than Impact Genetics please provide report.*

Proband name (first person in a family to be studied):  
\_\_\_\_\_

Mutation: \_\_\_\_\_

### Relationship To Proband

Proband  Parent of proband

Brother or sister of proband  Child of proband

Other: \_\_\_\_\_

### Specimen Information

Sample:

Blood sample for DNA

Blood sample for RNA (at Impact Genetics' request)

DNA from blood  DNA from tumor

Fresh tumor  Frozen tumor

Buccal swab (only for preapproved familial mutation confirmation, contact lab directly before submitting)

Other: \_\_\_\_\_

Pre-natal:

Cord blood  CVS  Cultured amniocytes

Direct amniotic fluid  DNA extracted from CVS

DNA extracted from amniocytes

Date of collection: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Time of collection: HH:MM (24hr) \_\_\_\_\_

Sample to test maternal cell contamination

### LAB USE ONLY DO NOT FILL OUT

Date received: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Specimen type: \_\_\_\_\_

Condition: \_\_\_\_\_

MRN: \_\_\_\_\_ Tech: \_\_\_\_\_

### Referring Specialist

Name: \_\_\_\_\_

Specialty: \_\_\_\_\_

Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Signature: \_\_\_\_\_

Institution: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ Prov/State: \_\_\_\_\_

Postal code: \_\_\_\_\_ Country: \_\_\_\_\_

Additional copies to: \_\_\_\_\_

Email: \_\_\_\_\_ Fax: \_\_\_\_\_

### Pedigree

*Please complete the following page for detailed family history information if available.*

### Billing

a) Institution

Provide details: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Patient Pay

*Complete Form 1d: Credit Card Authorization for Non-Covered Services.*

c) Third party insurance (USA only)

*Complete Form 1c: U.S. Insurance Information and to expedite testing, complete Form 1d: Credit Card Authorization for Non-Covered Services.*

115 Midair Court, Brampton, ON L6T 5M3

t: 647-478-4902 or 1-877-624-9769 f: 905-697-9786

e: info@impactgenetics.com *Please ensure to use secure email*



## HHT Genetic Test Requisition: Family History Information

Proband name: \_\_\_\_\_ Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Enter family members starting with the proband's parents and then brothers/sisters and biological children. Use additional sheets as needed to provide information on additional affected family members.

**Name of Family Member**  
**Relationship to Proband**

**Symptoms**

Please check all applicable boxes

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

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CAVM

Rare nose bleeds

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Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

Carries HHT mutation?

Yes  No  Unknown

PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

Stroke

Unaffected

Other (list below):  
\_\_\_\_\_  
\_\_\_\_\_

PLEASE DO NOT SEND FORM WITH SAMPLE;

Send this form to Impact Genetics

BY FAX TO 905-697-9786

For patient pay, testing will be held pending receipt  
of this completed form.



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## Form 1d: Credit Card Authorization for Non-Covered Services

To be completed by and returned to Impact Genetics *directly by the cardholder*.

### Billing Information

#### Laboratory Test:

- Retinoblastoma Genetic Test                       Uveal Melanoma Prognostic Genetic Test  
 NeuroSURE<sup>SM</sup>: Epilepsy Gene Panel Test                       BAP1-TPDS (BAP1 Tumor Predisposition Syndrome) Genetic Test  
 HHT Genetic Test  
 MLH1/MSH2/MSH6/PMS2/EPCAM Somatic Tumor MMR Genetic Test

Patient name: \_\_\_\_\_ Date of birth: Y \_\_\_\_\_ M \_\_\_\_\_ D \_\_\_\_\_

VISA     MASTERCARD

Name on card: \_\_\_\_\_

Billing address: \_\_\_\_\_

City: \_\_\_\_\_

Province/State: \_\_\_\_\_ Postal/Zip code: \_\_\_\_\_

Country: \_\_\_\_\_

Card #: \_\_\_\_\_ Expiration date: \_\_\_\_\_

CVC # (3-digit Card Verification Code at back of card): \_\_\_\_\_

### Contact Information

Impact Genetics will contact the cardholder prior to placing the credit card charge, to confirm the date and amount of the charge. Please **provide at least 2 contact methods** and check preferred:

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Fax: \_\_\_\_\_

### Statement of Financial Responsibility U.S. PATIENTS ONLY

Box below must be checked for testing to proceed.

- I understand that my insurance plan is not expected to pay for these test(s) at 100% and I agree to be personally and fully responsible for payment.

Cardholder's signature: \_\_\_\_\_ Date: \_\_\_\_\_



## **Step 2:** *HHT Genetic Test Sample Requirements*

### **Sample Requirements**

#### **Proband:**

- Blood or DNA from blood.

#### **Pre/peri-natal sample options:**

- Cultured amniocytes
- Direct amniotic fluid
- DNA extracted from amniocytes
- CVS tissue
- DNA extracted from CVS
- Cord blood

**Maternal blood or DNA from blood** (required for all pre/perinatal samples, to be submitted at same time or prior to procedure).

#### **Genetically related family member for known mutation:**

- Blood or DNA from blood;
- **Or** buccal swab (select cases only, contact lab directly to confirm if appropriate sample).

If genetic testing has been performed at a lab other than Impact Genetics, please provide copy of report.

### **Sample Preparation Instructions**

#### **Blood samples for DNA:**

- 10 mls in yellow-topped ACD tubes **or** lavender-topped EDTA tubes (for infants 2-5 mls in pediatric or small tubes) at room temperature, to be received within 5 days after draw.

#### **DNA from blood:**

- DNA concentration—100 nanograms/microliter.
- DNA quantity—150 microliters.

#### **Blood samples for RNA** (only if requested):

- 10 mls in lavender-topped EDTA tubes (for infants 2-5 mls in pediatric or small tubes) on 4°C cool packs, to be received within 48 hours after draw.

#### **Buccal swab:**

- Kit available (select cases only contact lab directly to request); follow included instructions.

#### **Amniocytes:**

- Two T25 flasks of cultured amniotic cells **or** DNA extracted from amniotic cells at room temperature (100 nanograms/microliter: minimum 20 microliters).

#### **Direct amnio:**

- As much volume as possible in conical tube at room temperature, to be received within 48 hours after draw.

#### **CVS:**

- Send CVS tissue in sterile tissue-culture medium at room temperature **or** DNA extracted from CVS tissue at room temperature (100 nanograms/microliter: minimum 20 microliters).

### **Sample Identification**

- Label each sample **with at least two** patient identifiers (e.g. name and date of birth).



### **Step 3:** *Shipping Requirements*

Multiple separated samples may be shipped in one box. Place multiple biohazard bags containing labeled samples into one box. Multiple boxes can be shipped in one courier envelope.

#### **Shipping Instructions**

- Ship samples to Impact Genetics at address shown on this page using a courier envelope.
- Include HHT Informed Consent and Requisition Forms (**1a** and **1b**) with the samples. Patients in the U.S. must also include U.S. Insurance Information (**Form 1c**) if required and not provided previously.
- Complete appropriate Air Waybill. If you cannot use FedEx or Purolator, please contact us.
- Place Air Waybill in the document pouch.
- For samples from outside of Canada, complete and sign appropriate customs forms (provided and available on our website; phone us if help is required). Place the customs forms in the document pouch.
- Within Canada, use **Purolator Express** (next-day) or **FedEx Priority** service (next-day). Outside of Canada use **FedEx Priority** service (next-day) and **use a FedEx "Clinical Pak"**. If you cannot use Purolator or FedEx, please contact us.
- Provide us with the parcel tracking number soon after courier pick-up: **647-478-4902, info@impactgenetics.com**.
- For emailed PDF FedEx waybills and customs forms, please contact us directly.

#### *Send to Impact Genetics*

**mail:** Impact Genetics  
115 Midair Court  
Brampton, ON L6T 5M3  
**tel:** 1-877-624-9769  
**fax:** 905-697-9786