



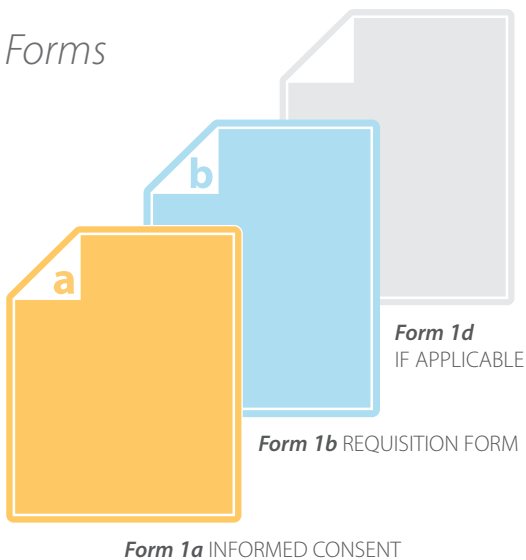
impact genetics

HHT

Hereditary Hemorrhagic Telangiectasia

Genetic Test Submission Guide

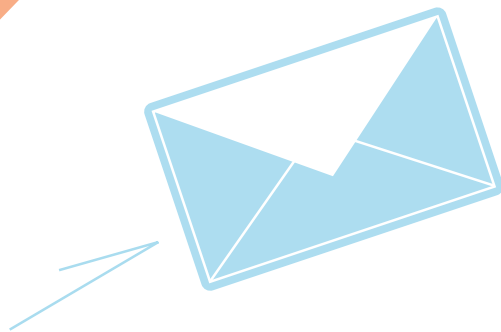
1 Forms



2 Samples



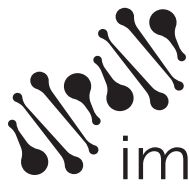
3 Ship



Impact Genetics
1100 Bennett Road - Unit 4
Bowmanville, ON LIC 3K5
1-877-624-9769

Results





impact genetics

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: _____

**LAB USE ONLY** DO NOT FILL OUT

Date received: Y _____ M _____ D _____

Specimen type: _____

Condition: _____

MRN: _____ Tech: _____

Form 1b: HHT Genetic Test Requisition**Patient**

Last name: _____

First name: _____

Date of birth: Y _____ M _____ D _____

Gender: Male FemalePregnant: 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 historyFamily previously tested: Yes NoMutation 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**Referring Specialist**

Name: _____

Specialty: _____

Contact: _____

Telephone: _____ Fax: _____

Email: _____

Signature: _____

Institution: _____

Address: _____

City: _____ Prov/State: _____

Postal code: _____ Country: _____

Additional copies to: _____

Email: _____ Fax: _____

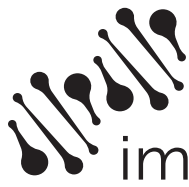
Pedigree*Please complete the following page for detailed family history information if available.***Billing** a) InstitutionProvide details: _____

_____ b) Patient Pay*Complete Form 1d: Credit Card Authorization for Non-Covered Services*

1100 Bennett Road - Unit 4, Bowmanville, ON L1C 3K5

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 _____

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PAVM

CAVM

Rare nose bleeds

Frequent nose bleeds

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Liver shunts

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Other (list below):

Name: _____

Relationship: _____

Date of birth: Y _____ M _____ D _____

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CAVM

Rare nose bleeds

Frequent nose bleeds

GI bleeding

Telangiacteses

Liver shunts

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Carries HHT mutation?

Yes No Unknown

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Other (list below):

Name: _____

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Date of birth: Y _____ M _____ D _____

Carries HHT mutation?

Yes No Unknown

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Date of birth: Y _____ M _____ D _____

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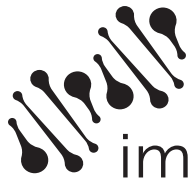
Other (list below):

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.



impact genetics

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

HHT Genetic Test

Uveal Melanoma Prognostic Genetic Test

Uveal Melanoma 5 Gene Panel (*SF3B1, EIF1AX, GNAQ, GNA11, BAP1*)

BAP1-TPDS (*BAP1 Tumor Predisposition Syndrome*) 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: _____

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
1100 Bennett Road - Unit 4
Bowmanville, ON L1C 3K5

tel: 1-877-624-9769

fax: 905-697-9786