UHN Laboratory Medicine

## Genome Diagnostics – Hereditary Cancer

**Toronto General Hospital**
Eaton Wing 11-444, 200 Elizabeth Street
Toronto, Ontario M5G 2C4
Phone: (416) 340-4800 x5739/7624
Fax: (416) 340-4473
Hours of Operation (Mon-Fri) 8:30AM-4:30PM
CAP#: 7175217 CLIA#:99D1106115
IQMH# 4204-site 0141

**Patient Information or Hospital Stamp Here**
Last Name:

First Name:

Date of Birth (DD/MMM/YYYY):

Sex assigned at birth:

Health Card #:

Hospital #:

## Instructions:

1.Complete all information as requested
2.Send requisition with specimen to address above
**DO NOT COME TO TORONTO GENERAL FOR BLOOD DRAW**
1.Keep specimen at room temperature unless frozen
2.If shipping, send same day or next day delivery
3.Specimen labelling: **Name, DOB, MRN#**

**Referring Physician Signature**:_____

## Information for Reporting:

Full Name of Referring physician:
Hospital/Address:

Phone:
Fax:
Copy Report To:_____

## Specimen Requirements

- ❑ **Peripheral blood** (5 mL in **EDTA**)
- ❑ **Extracted DNA from BLOOD only** [**only be accepted from an appropriately accredited laboratory (i.e. ACDx or equivalent; not accepted for specific MLPA-based tests)]**

Source _____Conc. _____ Vol._____

**Date collected:**_____

- ❑ **Non-tumour tissue (tissue block)***
- ❑ **Affected tissue (tissue block)***

Tissue source_____

***ensure pathology report is included with the sample, to indicate corresponding tissue block**

## Test Indication

Please provide any available clinical information and/or complete the Clinical Data Information Sheet.

- ❑ **Diagnosis** - symptoms/features of condition in THIS individual; please provide clinical details
- ❑ **Known Familial Variant Analysis -** Please provide variant details on Pg. 2 of this requisition

****If no family member has been tested at UHN a positive genetic test report of a family member is required.**

- ❑ **Other** – Please provide details/justification below

## Clinical/Family History Information

**<u>*TESTING MAY BE PUT ON HOLD IF INSUFFICIENT CLINICAL DETAILS PROVIDED*</u>**

**Ethnicity**_____

Please ensure you are using an updated version of this requisition, available at
https://www.uhn.ca/Labs/services_clinicians#Requisitions

UHN Laboratory Medicine

**Genome Diagnostics – Hereditary Cancer**
**Toronto General Hospital**
Eaton Wing 11-444, 200 Elizabeth Street
Toronto, Ontario M5G 2C4
Phone: (416) 340-4800 x5739/7624
Fax: (416) 340-4473

## Patient Information or Hospital Stamp Here

Last Name:
First Name:
Date of Birth (DD/MMM/YYYY):
Sex assigned at birth:
Health Card #:
Hospital #:

## Hereditary Cancer Panel Testing

(See page 3 for panel gene content)

- ❑ Hereditary Cancer Core Panel
- ❑ Hereditary Breast/Ovarian/Prostate Cancer
- ❑ Hereditary Central Nervous System Tumours
- ❑ Hereditary Colorectal & Polyposis Panel
- ❑ Hereditary Gastric Cancer
- ❑ Hereditary GI Cancer (Lynch syndrome, Colorectal, Endometrial, Gastric, Pancreas, Polyposis)
- ❑ Hereditary Gastrointestinal Stromal Tumour
- ❑ Hereditary Melanoma
- ❑ Hereditary Pancreatic Cancer
- ❑ Hereditary Pheochromocytoma-Paraganglioma
- ❑ Hereditary Renal Cancer
- ❑ Hereditary Sarcoma
- ❑ Ashkenazi Jewish Panel
- ❑ Comprehensive Cancer Panel

❑ MLH1 Germline Methylation
*MMR IHC results (if completed):*
_____

## Familial Variant Analysis

Gene/Variant: _____

Proband Name/UHN MRN_____
**(If proband or other relatives with a positive result was not tested at UHN, please include copy of report)**

Relationship of this individual to proband:

## Comments/Special Instructions

## Single Gene/Small Panel Testing

(See page 4 for panel gene content)

- ❑ AXIN2-related Attenuated Familial Adenomatous Polyposis
- ❑ BAP1 Tumour Predisposition/Mesothelioma
- ❑ Birt-Hogg-Dubé syndrome
- ❑ Carney Complex
- ❑ DICER-associated syndrome
- ❑ Dysplastic Nevus syndrome
- ❑ Familial Adenomatous Polyposis
  - ❑ *APC only*
  - ❑ *APC + MUTYH*
- ❑ Familial Isolated Pituitary Adenoma
- ❑ Hereditary Leiomyomatosis and Renal Cell Carcinoma
- ❑ Hereditary Lung Cancer
- ❑ Hereditary Multiple Osteochondromas
- ❑ Hereditary Parathyroid Neoplasia
- ❑ Li-Fraumeni syndrome
- ❑ MBD4 Tumour Predisposition syndrome
- ❑ Multiple Endocrine Neoplasia, Type 1
- ❑ Multiple Endocrine Neoplasia, Type 2
- ❑ Neurofibromatosis, Type I
- ❑ Nevoid Basal Cell Carcinoma/Gorlin syndrome
- ❑ Nijmegen Breakage syndrome
- ❑ Peutz Jeghers syndrome
- ❑ *PTEN* Hamartoma Tumour syndrome
- ❑ Rare Polyposis Genes
- ❑ Retinoblastoma
- ❑ Rhabdoid Predisposition syndrome
- ❑ Schwannomatosis
- ❑ Sessile Serrated Polyposis Cancer syndrome
- ❑ Small Cell Carcinoma of the Ovary, Hypercalcemic type
- ❑ Tuberous Sclerosis
- ❑ Von Hippel-Lindau syndrome

## Pharmacogenomic Testing:

- ❑ *DPYD**2A, *DPYD**9B, *DPYD**13, HapB3 prior to fluoropyrimidine treatment

Please ensure you are using an updated version of this requisition, available at
https://www.uhn.ca/Labs/services_clinicians#Requisitions



**Version 1.0 July 2026**

**Genome Diagnostics – Hereditary Cancer**
**Toronto General Hospital**
Eaton Wing 11-444, 200 Elizabeth Street
Toronto, Ontario M5G 2C4
Phone: (416) 340-4800 x5739/7624
Fax: (416) 340-4473

# Hereditary Cancer Panel Testing - Sequencing + CNV+ analysis (*CNV only)

**+copy number variant analysis may result in identification and reporting of copy number variants that involve additional OMIM morbid genes not listed below**

**Hereditary Cancer Core Panel (40 genes):** *APC, ATM, AXIN2, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDK4, CDKN2A, CHEK2, CTNNA1, EPCAM, GALNT12, GREM1, HOXB13, MBD4, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, NTHL1, PALB2, PMS2, POLD1, POLE, PTEN, RAD51C, RAD51D, RNF43, RPS20, SDHB, SDHD, SMAD4, STK11, TP53*

**Hereditary Breast/Ovarian/Prostate Cancer (19 genes):** *ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM*, HOXB13, MLH1, MSH2, MSH6, PALB2, PMS2, PTEN, RAD51C, RAD51D, STK11, TP53*

**Hereditary Central Nervous System Tumours (20 genes):** *APC, EPCAM*, LZTR1, MLH1, MSH2, MSH6, NF1, NF2, PMS2, POLE, POT1, PTCH1, PTEN, SMARCB1, SMARCE1, SUFU, TP53, TSC1, TSC2, VHL*

**Hereditary Colorectal Cancer and Polyposis: (23 genes)** *APC, AXIN2, BMPR1A, EPCAM*, GALNT12, GREM1*, MBD4, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, NTHL1, PMS2, POLD1, POLE, PTEN, RNF43, RPS20, SMAD4, STK11, TP53*

**Hereditary Gastric Cancer (18 genes):** *APC, ATM, BMPR1A, BRCA1, BRCA2, CDH1, CTNNA1, EPCAM*, MLH1, MSH2, MSH6, PALB2, PMS2, SDHB, SDHD, SMAD4, STK11, TP53*

**Hereditary Gastrointestinal Cancer (Lynch syndrome, Colorectal, Endometrial, Gastric, Pancreas, Polyposis) (34 genes):** *APC, ATM, AXIN2, BMPR1A, BRCA1, BRCA2, CDH1, CDK4, CDKN2A, CHEK2, CTNNA1, EPCAM*, GALNT12, GREM1*, MBD4, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, NTHL1, PALB2, PMS2, POLD1, POLE, PTEN, RNF43, RPS20, SDHB, SDHD, SMAD4, STK11, TP53*

**Hereditary Gastrointestinal Stromal Tumour (8 genes):** *KIT, NF1, PDGFRA, SDHA, SDHAF2, SDHB, SDHC, SDHD*

**Hereditary Melanoma (8 genes):** *BAP1, BRCA2, CDK4, CDKN2A, MBD4, MITF, POT1, PTEN*

**Hereditary Pancreatic Cancer (14 genes):** *APC, ATM, BRCA1, BRCA2, CDK4, CDKN2A, EPCAM*, MLH1, MSH2, MSH6, PALB2, PMS2, STK11, TP53*

**Hereditary Pheochromocytoma-Paraganglioma syndrome (12 genes):** *FH, MAX, MEN1, NF1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, TMEM127, VHL*

**Hereditary Renal Cancer (15 genes):** *BAP1, FH, FLCN, MET, MITF , PTEN, SDHA, SDHAF2, SDHB, SDHC, SDHD, TP53, TSC1, TSC2, VHL*

**Hereditary Sarcoma (14 genes):** *APC, ATM, BRCA1, BRCA2, CHEK2, DICER1, EPCAM*, MLH1, MSH2, MSH6, NF1, PMS2, RB1, TP53*

**Ashkenazi Jewish Panel (9 variants):** *APC* [p.Ile1307Lys], *BRCA1* [c.185delAG/187delAG; c.5382insC/5385insC], *BRCA2* [c.617delT], *CHEK2* [c.1283C>T], *GREM1* [40 kb dup], *MSH2* [p.Ala636Pro], *MSH6* [c.3984_3987dupGTCA; c.3959_3962delCAAG]

**Comprehensive Cancer Panel (73 genes):** *AIP, APC, ATM, AXIN2, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDC73, CDH1, CDK4, CDKN1B, CDKN2A, CHEK2, CTNNA1, DICER1, EGFR [exons 21 & 22], EPCAM*, FH, FLCN, GALNT12, GREM1*, HOXB13, KIT, LZTR1, MAX, MBD4, MEN1, MET, MITF, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NF2, NTHL1, PALB2, PDGFRA, PMS2, POLD1, POLE, POT1, PRKAR1A, PTCH1, PTEN, RAD51C, RAD51D, RB1, RET, RNF43, RPS20, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL*

**Genome Diagnostics – Hereditary Cancer**
**Toronto General Hospital**
Eaton Wing 11-444, 200 Elizabeth Street
Toronto, Ontario M5G 2C4
Phone: (416) 340-4800 x5739/7624
Fax: (416) 340-4473

## Single Gene/Small Panel Testing - Sequencing + CNV+ Analysis

**+copy number variant analysis may result in identification and reporting of copy number variants that involve additional OMIM morbid genes not listed below**

**AXIN2-related Attenuated Familial Adenomatous Polyposis:** *AXIN2*

**BAP1 Tumour Predisposition/Mesothelioma:** *BAP1*

**Birt-Hogg-Dubé syndrome:** *FLCN*

**Carney Complex:** *PRKAR1A*

**DICER-associated syndrome:** *DICER1*

**Dysplastic Nevus syndrome:** *CKD4, CDKN2A*

**Familial Adenomatous Polyposis (FAP):** *APC only, APC+MUTYH*

**Familial Isolated Pituitary Adenoma:** *AIP*

**Hereditary Leiomyomatosis and Renal Cell Carcinoma (HLRCC):** *FH*

**Hereditary Lung Cancer:** *ATM, BRCA2, EGFR, TP53*

**Hereditary Multiple Osteochondromas:** *EXT1, EXT2*

**Hereditary Parathyroid Neoplasia:** *CDC73, MEN1*

**Li-Fraumeni syndrome:** *TP53*

**MBD4 Tumour Predisposition syndrome:** *MBD4*

**Multiple Endocrine Neoplasia, Type 1:** *MEN1, CDKN1B*

**Multiple Endocrine Neoplasia, Type 2:** *RET*

**Neurofibromatosis, Type I:** *NF1*

**Nevoid Basal Cell Carcinoma/Gorlin syndrome:** *PTCH1, SUFU*

**Nijmegen Breakage syndrome:** *NBN*

**Peutz Jeghers syndrome:** *STK11*

***PTEN* Hamartoma Tumour syndrome:** *PTEN*

**Rare Polyposis Genes:** *GALNT12, RPS20*

**Retinoblastoma:** *RB1*

**Rhabdoid Predisposition syndrome:** *SMARCA4, SMARCB1*

**Schwannomatosis:** *NF2, LZTR1, SMARCB1*

**Sessile Serrated Polyposis Cancer syndrome:** *RNF43*

**Small Cell Carcinoma of the Ovary, Hypercalcemic type (SCCOHT):** *SMARCA4*

**Tuberous Sclerosis:** *TSC1, TSC2*

**Von Hippel-Lindau syndrome:** *VHL*

# FOR ALL HEREDITARY CANCER TESTS PLEASE ENSURE CLINICAL INFORMATION IS PROVIDED ON PAGE 1

## For eligibility criteria please see OH Genetics Guidance

Please ensure you are using an updated version of this requisition, available at
https://www.uhn.ca/Labs/services_clinicians#Requisitions



**Version 1.0 July 2026**