Instructions:
THIS REQ IS FOR SOMATIC TESTING ONLY – see link at bottom of page for HEREDITARY REQ

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

Information For Reporting:
Full Name of Referring Physician
Physician Billing #
Hospital/Address:

Phone:
Fax:
Physician Signature: ____________________________
Copy Report To: ________________________________

Specimen Requirements – Genome Diagnostics:

- Peripheral blood
  For leukemia/lymphoma - 20 mL in EDTA
  For circulating tumour (cell free DNA) - 18 mL in STRECK tubes
  For all other testing - 5 mL in EDTA

- Bone marrow aspirate
  1-2 mL in EDTA

- Extracted DNA or RNA (>1µg) (please circle nucleic acid)
  Tissue Source ____________________________
  Concentration: ____________ Volume: _______

Extracted nucleic acid will only be accepted from an appropriately qualified laboratory (ex. IQMH or equivalent)

Specimen Requirements - Cytogenetics:

- Bone marrow aspirate
  1.5-2 mL in sodium heparin

- Peripheral blood
  7 mL in sodium heparin

- Tissue biopsy (5-10 mm³ in sterile medium/saline)

- Paraffin Embedded Tissue (FISH)
  - Include circled H&E
  - 2 x 4 µm sections/probe on positively charged slides

- Cytology preparation (FISH)
  - Air-dried smear/touch prep (1-2 per test)
  - Cytospin slide (1-2 per test)

Please ensure that you are using an updated copy of this requisition available at:

Version 6.1 May 20 2020
Clinical Diagnosis/Reason for Referral:

- **Diagnosis:** ____________________________
- **Other:** _______________________________
- **Monitoring:** (for follow-up samples)
- **Treatment (specify type):** ________________
- **Date of last treatment:** ________________

Genome Diagnostics Tests - Hematological

**Leukemia: Single Gene testing**
- ^BCR/ABL1 t(9;22)
- ^ABL1 kinase domain mutation
- ^RUNX1/RUNX1T1 (AML/ETO) t(8;21)
- ^CBFB/MYH11 Inv(16) or t(16;16)
- ^PML/RARA t(15;17)
- FLT3/NPM1 (new AML diagnosis)
- ^CLL IGHV Somatic Hypermutation (for patients requiring treatment only)

**Malignant Hematology NGS panel - Acute Myeloid Leukemia (Funded by MOH for New Diagnosis only)**

- ^Comprehensive Sequencing (NGS), includes:
  - ASXL1
  - CUX1
  - GNAS
  - KRAS
  - PTPN11
  - TP53
  - BCR
  - DDX41
  - IDH1
  - MPL
  - RAD21
  - U2AF1
  - BCR/ABL1
  - DNTM3A
  - IDH2
  - MYD88
  - RUNX1
  - WT1
  - BRAF
  - ETV6
  - IKBK
  - FLCN
  - NOTCH1
  - SETBP1
  - ZRSR2
  - CALR
  - EZH2
  - JAK1
  - NRAS
  - SH2B3
  - CEBPA
  - FBXW7
  - JAK2
  - PAX5
  - SRSF2
  - CSF3R
  - FLT3
  - KIT
  - PHF6
  - STAG2
  - CTNNB1
  - GATA2
  - KMT2A
  - PPM1D
  - TET2

*Please provide a karyotype report if analysis was not done at UHN

**Lymphoma: please attach corresponding pathology report**
- ^B-cell Clonality
- ^T-cell Clonality
- ^MYD88

**Bone marrow/Stem cell transplant monitoring:**
- ^15 STRs and amelogenin XY loci

Please specify:
- Donor
- Recipient Pre-SCT
- Recipient Post-SCT (Split Chimerism)

**Other:**
- ^BRAF (p.V600E/K only) (Hairy cell leukemia, Langerhans cell histiocytosis, Erdheim-Chester)
- ^KIT (Mastocytosis - BM or involved tissue preferred)
- ^JAK2 (Exon 12 + Exon 14 p.V617F) / CALR (MPD)

**Identity Testing (15 STRs and amelogenin XY loci):**
- ^Specimen matching (Please provide control specimen, specimen in question and details)

**Virus Detection (Nasopharyngeal Carcinoma):**
- ^Quantitative EBV from blood plasma

^Indicates a test that will be billed to the referring hospital, laboratory, physician or medical group.
Adenocarcinoma of the Lung

- EGFR -- Exons 18,19,20,21 (clinically relevant variants only)
- EGFR – p.T790M mutation only (solid tumour/cell block)
- *EGFR – p. T790M mutation only (Circulating tumour DNA in blood) *peripheral blood in STRECK tube required (see pg. 1 for specimen requirements)

Please indicate primary EGFR mutation:
- Exon 19 deletion
- Exon 21 L858R
- Other

Colorectal Adenocarcinoma

- Comprehensive Sequencing (NGS) (BRAF, KRAS, NRAS, PIK3CA)
- MLH1 Methylation (Please include IHC MMR results if completed)
- ^MSI - Only performed for cases with equivocal IHC MMR results -requires normal reference (normal tissue or peripheral blood)

Endometrial Carcinoma

- MLH1 Methylation (Please include IHC MMR results if completed)
- ^MSI – Only performed for cases with equivocal IHC MMR results
- requires normal reference (normal tissue or peripheral blood)

Gastrointestinal Stromal Tumour

- ^Comprehensive Sequencing (NGS) (KIT, PDGFRA)

Glioma

- ^MGMT methylation
- ^IDH1/IDH2 Sequencing

Melanoma (Somatic)

- BRAF (p.V600E/K only)
- Comprehensive Sequencing (NGS) (BAP1, CDK6, GNA11, KIT, CDKN2A, GNAQ, NRAS, CDK4, EIF1AX, HRAS, SF3B1)

Papillary Thyroid Carcinoma

- ^BRAF (p.V600E/K only)

^Indicates a test that will be billed to the referring hospital, laboratory, physician or medical group.

Note: Please send requisitions to specimen holding facility to ensure that block/slides accompany requisitions when sent to testing lab.
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Genome Diagnostics Tests – Solid Tumour

Polymorphous Low Grade Adenocarcinoma (PLGA) Salivary gland

- ^PRKD1 Sequencing

Serous Carcinoma – High Grade (Ovarian/Tubal/Peritoneal)

- Comprehensive Sequencing (NGS) (BRCA1, BRCA2)

  Tumour Cellularity within circled area_________%

  EXTERNAL pathology review required prior to sending material.

  For Solid Tumour: Circled HE required prior to sending block. Tumour cellularity must be a minimum of 20% tumour within circled area. Please circle a ~3mm area to be cored from block. If a block cannot be sent, please send sections (see page 1).

  For Cytology Specimens: Tumour cellularity must be a minimum of 10% tumour. Please see page 1 for specimen requirements.

Urothelial Carcinoma

- Comprehensive Sequencing (NGS) (FGFR1, FGFR2, FGFR3, FGFR4)

  Tumour Cellularity within circled area_________%

  EXTERNAL pathology review required prior to sending material.

  Circled HE required prior to sending block. Tumour cellularity must be a minimum of 20% tumour within circled area. Please circle a ~3mm area to be cored from block. If a block cannot be sent, please send sections (see page 1).

Virus Detection

- ^HPV (DNA tissue testing-37 genotypes)

^Indicates a test that will be billed to the referring hospital, laboratory, physician or medical group.
A Pathology / Hematology report must accompany or be sent (fax/email) for all bone marrow samples and solid tumour testing. Samples will be banked and testing delayed until this information is received.

Clinical Diagnosis/Reason for Referral:

- **Diagnosis:**
- **Monitoring:** (follow-up sample) ___________________________
- **Treatment (specify type)** ___________________________
- **(date of last treatment)** ___________________________
- **Other:** ___________________________

*proper interpretation of post-transplant karyotyping requires information about transplant type
- **Pre-transplant monitoring**
- **Post-transplant monitoring**
  - **Type of transplant** □ auto □ allo □ sex-mismatch
  - **Date of transplant (mm/yy):** ___________________________

Conventional Cytogenetics

- □ G-banded karyotyping on bone marrow
- □ G-banded Karyotyping on peripheral blood
  (Only to confirm a constitutional abnormality detected on bone marrow karyotype)

**FISH for Hematologic Disorders**

**Chronic Lymphocytic Leukemia**
- □ CLL FISH Panel (11q del, trisomy 12, 13q del, 17p del)
  - □ diagnostic
  - □ follow-up (justify): ___________________________

**Chronic Myelogenous Leukemia**
- □ BCR/ABL1 (only for molecular negative)

**Plasma Cell Neoplasms with CD138 Cell Enrichment**
(Magnetic separation requires ≥ 1mL marrow aspirate. If other tests are requested, e.g. karyotype, please submit an additional 1.5-2mL of aspirate in a separate tube.)
- □ Multiple Myeloma Panel
- □ Amyloidosis Panel

**Eosinophilia FISH Panel**
- □ PDGFRA / PDGFRB / FGFR1

**MDS/AML Panel**
(ordered automatically for failed karyotypes)
- □ Del(5q)/-5 and Del(7q)/-7
- □ KMT2A Break-apart
- □ MECOM 3q26 rearrangement

**Lymphoid Disorders:**

**Large B-Cell Lymphoma Panel**
- □ Reflex Panel (BCL2 and BCL6 only when MYC Positive)

**Burkitt Lymphoma**
- □ MYC ONLY

**Follicular lymphoma / Diffuse Large B-Cell Lymphoma**
- □ IGH/BCL2 t(14;18)(q32;q21)
- □ BCL6

**Anaplastic large cell lymphoma**
- □ ALK

**MALT lymphoma**
- □ MALT1

**Mantle cell lymphoma**
- □ CCND1/IGH t(11;14)(q13;q32)

**Solid Tumour *:**

**Breast cancer**
- □ HER2 Amplification

**Brain Cancer: Gliomas**
- □ 1p/19q Co-deletion FISH

**Lung Adenocarcinoma**
- □ ALK
- □ ROS1

**Sarcoma and Carcinoma FISH**
- □ EWSR1 - EWS-Family Tumours
- □ FUS – Low Grade Fibromyxoid Sarcoma
- □ SS18 – Synovial Sarcoma
- □ MAML2 – Mucoepidermoid Carcinoma
- □ ETV6 – Secretory Carcinoma
- □ CDKN2A (p16) – Malignant Mesothelioma

*tests are performed on FFPE tissue only, see specimen requirements. For cytology specimens please contact the lab to inquire if test is validated.