# HSNgenomics Test Order Form (Neoplastic) (current as of January 1, 2016)

Please refer to www.HSNgenomics.org for ordering instructions and test information

Name (last, first)	Sex	М	F	DOB	Case#	Sample Date	
		Indication			Or	Ordering Physician	
Sticker may be placed here	Sample	Туре			Block#	Sample already at HSNgenomics:	
	Send r	eport	to (	secure fax	or postal)		
Stabilize sample for potential future DNA/RNA testing				IGH, somatic hypern	IGH, somatic hypermutation, RNA, qualitative (L)		
Stabilize sample for potential future G-band/FISH testing			Immunoglobulin gen	Immunoglobulin gene rearrangement, DNA, qualitative (L)			
ALK rearrangement, FISH (L= low complexity fee)			<i>JAK</i> 2, V617F, DNA, c	JAK2, V617F, DNA, qualitative (L)			
ALL panel, comprehensive, DNA & RNA, qualitative (M = medium complexity fee)			,	JAK2, focused variants, DNA, qualitative (L)			
AML panel, comprehensive, DNA & RNA, qualitative (M)			Karyotype, G-bandin	Karyotype, G-banding (M)			
AML panel, small variants, DNA, qualitative (L)				<i>KIT</i> , D816V, DNA, qu	KIT, D816V, DNA, qualitative (L)		
BCL2 rearrangement, IGH/BCL2, FISH (L)				KIT variants, all exor	KIT variants, all exons, DNA, qualitative (L)		
BCL6 rearrangement, FISH (L)			KRAS, focused varia	KRAS, focused variants, DNA, qualitative (L)			
B-cell neoplasm (low-grade) panel, comprehensive, DNA & RNA, qualitative (M)				Lung carcinoma panel, comprehensive, DNA & RNA, qualitative (M)			
B-cell neoplasm (low-grade) panel, small variants, DNA, qualitative (L)			MDS panel, small variants, DNA, qu	MDS panel, small variants, DNA, qualitative (L)			
B-cell neoplasm (high-grade) panel, comprehensive, DNA & RNA, qualitative (M)			Melanoma panel, Small variants, DNA, qu	Melanoma panel, Small variants, DNA, qualitative (L)			
BCR/ABL1, diagnostic, p210 & p190, RNA, qualitative (L)			MPN panel, comprehensive, DNA &	MPN panel, comprehensive, DNA & RNA, qualitative (M)			
BCR/ABL1, monitoring, p210, RNA, quantitative (L)			MPN panel, small variants, DNA, qu	MPN panel, small variants, DNA, qualitative (L)			
BCR/ABL1, monitoring, p190, RNA, quantitative (L)			MYC rearrangement,	MYC rearrangement, FISH (L)			
BIRC3/MALT1, FISH (L)			MYD88, focused vari	MYD88, focused variants, DNA,qualitative (L)			
BRAF, focused variants, DNA, qualitative (L)				Myeloma prognostic panel, comprehensive, DNA, qualitative (L)			
CCND1 rearrangement, IGH/CCND1, FISH (L)			NPM1, focused varia	NPM1, focused variants, DNA, qualitative (L)			
CEBPA variants, all exons, DNA, qualitative (L)			NRAS, focused varia	NRAS, focused variants, DNA, qualitative (L)			
CLL prognostic panel, DNA & RNA, qualitative (M)			PGFRA variants, all	PGFRA variants, all exons, DNA, qualitative (L)			
Colon carcinoma panel, small variants, DNA, qualitative (L)			PML/RARA, diagnos	PML/RARA, diagnostic, RNA, qualitative (L)			
EGFR, focused variants, DNA, qualit	ative (L)				PML/RARA, monitor	PML/RARA, monitoring, RNA, quantitative (L)	
ERBB2 amplification, FISH (L)			Sarcoma panel, translocations, RNA, qu	Sarcoma panel, translocations, RNA, qualitative (M)			
EWSR1 rearrangement, FISH (L)					SS18 rearrangement	SS18 rearrangement, FISH (L)	
FLT3, focused variants, DNA, qualita	FLT3, focused variants, DNA, qualitative (L)			T-cell panel, compre	T-cell panel, comprehensive, DNA & RNA, qualitative (M)		
FOXL2, focused variants, DNA, quali	tative (L)				T-cell receptor gene	T-cell receptor gene rearrangement, DNA, qualitative (L)	
GIST panel, small variants, DNA, qualitative (L)					Thyroid carcinoma panel, small variants, DNA, qualitative (L)		
Glioma panel, DNA, qualitative (L)					TP53 variants, all exons, DNA, qualitative (L)		

# **HSNgenomics Description of Targets Evaluated in Panel Tests**

(This is the information that is contained within the drop-down menus on the order form)

# AML panel, small variants, DNA, qualitative:

ASXL1, BRINP3, CEBPA, DNMT3A, EZH2, FLT3, GATA1, GATA2, HNRNPK, IDH1, IDH2, KIT, KRAS, KMT2A, NPM1, NRAS, PHF6, PTPN11, RAD21, RUNX1, SMC1A, SMC3, STAG2, TET2, TP53, U2AF1, WT1

## B-cell neoplasm (low-grade) panel, small variants, DNA, qualitative:

ATM, BIRC3, BRAF, CXCR4, KMT2A, MAP2K1, MYD88, NOTCH1, NOTCH2, SAMHD1, SF3B1, TP53, TRAF2

# CLL prognostic panel, DNA & RNA, qualitative:

IGHV somatic hypermutation analysis

Chr 17p *TP53* locus deletion, *TP53* small variants, *BIRC3* small variants, *SF3B1* small variants, *NOTCH1* small variants, Chr11q *ATM* locus deletion, *ATM* small variants, Trisomy 12, Chr 13q14.3 deletion

# GIST panel, small variants, DNA, qualitative:

KIT (all exons), PDGFRA (all exons)

## Lung carcinoma panel, comprehensive, DNA & RNA, qualitative:

ALK (immunostain), ALK FISH (if immunostain equivocal)

The following, if ALK is negative: EGFR, BRAF

# MPN panel, comprehensive, DNA & RNA, qualitative:

BCR/ABL1 mRNA p190, BCR/ABL1 mRNA p210, BCR/ABL1 mRNA p230 CALR, JAK2, MPL

# MPN panel, small variants, DNA, qualitative:

CALR, JAK2, MPL

#### Myeloma prognostic panel, comprehensive, DNA, qualitative:

IGH/CCND1, IGH/CCND3, IGH/FGFR3, IGH/MAF, IGH/MAFB, 17p TP53 locus deletion

# **HSNgenomics Ordering Instructions**

#### Please send:

- 1) Completed order form (works best if downloaded and saved, is filled out electronically and then printed off)
- 2) Specimen(s) appropriate for the requested testing, clearly labeled with patient identifiers (if the specimen is already stabilized and being held at HSN, please specify this by checking the box in the top section of the order form)
- 3) Copy of associated sample paperwork

(e.g. blood or bone marrow draw slips, copy of most current pathology report - does not need to be a finalized report)

#### Blood or liquid bone marrow aspirate (ship ambient\*)

#### EDTA tube - required for all tests listed as DNA &/or RNA

- optimally 5ml blood and at least 1.5 ml bone marrow
- less will be accepted, but may not provide results

#### Sodium heparin - required for karyotype and FISH testing (additional EDTA tube is also requested if possible)

- optimally 5ml blood and at least 1.5 ml bone marrow
- less will be accepted, but may not provide results

## Paraffin-embedded material (ship ambient\*)

Ship appropriate block(s)

H&E slide corresponding to block(s) shipped are requested (if not sent, an H&E will be made at HSN and slow testing)

\*\* blocks and sent H&E sections will be sent back promptly upon completion of testing\*\*

#### Unstained slides from block most appropriate for testing will be accepted if no block can be sent

- 10 sections cut at ~7um mounted on charged slides
- 1 section cut at 4um (and labeled as such) for H&E

#### Fresh solid tissue (ship ambient\*)

Ship in saline or tissue culture medium such as RPMI

# Fresh frozen solid tissue (ship on dry ice) Flash freeze in RPMI using liquid nitrogen

#### Body fluids (ship ambient\* in collection tube)

#### Additional notes:

\* To avoid sways in sample temperature during shipping, it is recommended that samples shipped ambient are sent in a Styrofoam cooler with a wet ice pack.

The following sample types are not amenable to DNA and RNA-based testing and should not be sent:

- 1) acid decalcified, paraffin-embedded bone marrow biopsy samples (bone marrow aspirate clot samples in FFPE are suitable)
- 2) tissue subjected to B5 fixation

RNA and DNA can degrade rapidly in fresh samples. Testing should be performed as soon as possible after acquisition. Sample for RNA-based tests  $\leq 3$  days old will be tested routinely.

Samples for RNA-based tests 4-7 days old will be tested, but the sensitivity of negative results will be evaluated carefully.

Samples for DNA or RNA tests >7 days old will be tested at the discretion of the signing pathologist.

Send samples to: Genomics Laboratory Lab Contact: Phone: 705-523-7100 ext 1577

Department of Pathology Fax: 705-675-4728

Ramsey Lake Health Centre E-mail: contactus@HSNgenomics.org

41 Ramsey Lake Road Sudbury, Ontario, Canada

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