

CANCER GENETICS AND GENOMICS LABORATORY MYELOID TESTING BC CAN CER BC CANCER DEPT. OF PATHOLOGY AND LABORATORY MEDICINE ROOM 3307 - 600 WEST 10TH AVENUE VANCOUVER BC V5Z-4E6 604-877-6000 EXT 67-2094 FAX: 604-877-6294 MON-FRI 8:30AM-4:30PM WWW.CANCERGENETICSLAB.CA CANCERGENETICSLAB@BCCANCER.BC.CA ADDRESSOGRAPH OR PATIENT LABEL											
PATIENT INFORMATION REQUESTING PHYSICIAN											
Last Name		First and Middle Names		Name		MSC					
Date of Birth (dd/mmm/yyyy)		Gender Male Female Non Binary/Other/not disclosed		Phone		Fax					
PHN		BC Cancer ID		Cerner MRN		Address					
SPECIMEN NOTE: PHYSICIAN SIGNATURE REQUIRED (BELOW)						COPY PHYSICIANS (ALL INFORMATION IS NECESSARY)					
Specimen Type PB BM Aspirate MAA (PB BM) Other _____		Originating Hospital		Collection Date dd/mmm/yyyy		Name		MSC			
		Referring Lab/Hospital Sample ID		Important: Myeloid Panel may detect variants associated with hereditary conditions		Address		Name		MSC	
REASON FOR TESTING / DIAGNOSIS / CLINICAL HISTORY (REQUIRED FOR TEST TO PROCEED)						Address		Name		MSC	
						Address		Name		MSC	
SEE PAGE 2 FOR ACCEPTED SAMPLE TYPES						CYTOGENETICS (FISH, KARYOTYPE)		MOLECULAR			
MYELOID	Acute Myeloid Leukemia		2 BM specimens required: Karyotype (BM in media)/ OGM (BM in EDTA) FISH (specify probes): _____		New Diagnosis		All 3 specimens required prior to initiation of therapy: Myeloid Panel / Rapid AML Mutation Panel (BM in EDTA for DNA) MRD Baseline (BM in EDTA for RNA) MRD Baseline (PB in EDTA for RNA)				
					MRD Monitoring		t(8;21) inv(16)/t(16;16) NPM1 **Restricted to patients being treated with intensive chemo and/or eligible for HSCT **				
					Relapsed / Refractory		FLT3 ITD & TKD				
	Acute Promyelocytic Leukemia		PML::RARA t(15;17) FISH 2 BM specimens required: Karyotype (BM in media)/ OGM (BM in EDTA)		PML::RARA		MRD Baseline MRD Monitor query APL				
	Chronic Myeloid Leukemia		BCR::ABL1 t(9;22) FISH 2 BM specimens required: Karyotype (BM in media)/ OGM (BM in EDTA)		BCR::ABL1		MRD Baseline MRD Monitor Kinase Domain Current therapy: _____				
	Mast cell disease				KIT D816V/F						
	Myelodysplastic Syndrome		2 BM specimens required: Karyotype (BM in media)/ OGM (BM in EDTA)		Myeloid Panel (BM only) See CGL website for eligibility criteria BM and cytogenetic report required to activate myeloid panel						
	Myeloproliferative Neoplasm		BCR::ABL1 t(9;22) FISH 2 BM specimens required: (MF, CMML only) Karyotype (BM in media)/ OGM (BM in EDTA)		Single-Gene		qry JAK2 V617F MPN				
				Myeloid panel (BM only) BM report required to activate myeloid panel		qry JAK2 V617F negative MPN qry JAK2 V617F positive MF (LEUK/BMT Physicians only)					
VEXAS Syndrome				UBA1 mutation screen (restricted to hematology)							
OTHER	Chimerism				Pre-transplant: Donor Recipient						
	Neoplasm with Eosinophilia		FISH Panel								
	Multiple Myeloma		FISH Panel (BM in media)								
PHYSICIAN SIGNATURE (REQUIRED)			DATE								
LAB USE ONLY		PB NaHEP		PB EDTA		BM EDTA		BM Media		Other	

ACCEPTED SAMPLE TYPES FOR EACH TEST REQUEST

- Additional information and shipping information found on the Cancer Genetics and Genomics Laboratory website: <https://cancergeneticslab.ca/guidelines/specimens/>
- Separate tubes are required for each test requested with different extraction methods (e.g. If FLT3 (DNA), MRD baseline (RNA) and cytogenetics are requested; three tubes of each sample should be collected

CYTOGENETICS (FISH, KARYOTYPE)			PB	BM		MAA
			NaHep	MEDIA TUBE	EDTA	PB / BM
MYELOID	Acute Myeloid Leukemia	FISH	6ml	2 x 1ml	1ml	✓
	Acute Promyelocytic Leukemia	Karyotype		2 x 1ml		✓
	Chronic Myelogenous Leukemia	OGM			1ml	
OTHER	Myeloproliferative Neoplasm					
	Myelodysplastic Syndrome					
	Neoplasm with Eosinophilia	FISH panel	6ml	2 x 1ml	1ml	✓
	Multiple Myeloma	FISH Panel		2 x 1ml		

MOLECULAR (DNA, RNA)				EXTRACTION	PB	BM	MAA
					EDTA	EDTA	PB / BM
MYELOID	Acute Myeloid Leukemia	New Diagnosis (all required)	Myeloid Panel AND Rapid Mutation Panel	DNA		0.5ml	✓
			MRD Baseline - BM	RNA		0.5ml	✓
			MRD Baseline - PB	RNA	20ml		✓
		MRD Monitoring	t(8;21) inv(16)/t(16;16) NPM1	RNA	20ml	0.5ml	✓
		Relapsed/Refractory	FLT3 ITD & TKD	DNA	6ml	0.5ml	
	Acute Promyelocytic Leukemia		MRD Baseline / Monitor	RNA	20ml	0.5ml	✓
	Chronic Myelogenous Leukemia		MRD Baseline / Monitor Kinase Domain	RNA	20ml	0.5ml	✓
	Mast Cell Disease		KIT D816V/F	DNA	6ml	0.5ml	✓
	Myelodysplastic Syndrome		Myeloid Panel	DNA		0.5ml	
	Myeloproliferative Neoplasm		Single-gene testing query JAK2 V617F MPN	DNA	6ml	0.5ml	✓
OTHER	VEXAS		UBA1 mutation screen	DNA	6ml	0.5ml	
	Chimerism	Pre-transplant assessment		DNA	6ml		
		Post-transplant assessment (sample processed at Stem Cell Lab)		DNA	20 mL NaHep @Stem Cell Lab		