

## **Client Services**

Shelton, CT: (800) 447-5816 Fax: (212) 698-9532

## **HEMATOPATHOLOGY**

oncology.labcorp.com

			(2.2) 0,0 7002			Highlighted fields ar	e required
CLIENT INFORMATION				MORPHOLOGIC	C EVALUATION		
ORDERING PHYSICIAN		NPI #			hology (with IHC/special stains)	Peripheral Blood Morpholo	gy
TREATING PHYSICIAN NPI #			☐ Hematopathology (	Consultation	Other:		
PHYSICIAN/AUTHORIZED SIGNATURE				(with IHC/special st	ains) Consultation as above with	☐ IHC/Special Stains with Interpretation (specify):	
				Diagnostic tests pe	r IO reflex criteria (see reverse)	miorprotation (opeony).	
				Second Opinion Co (stained slides with			
Client#				`	IRY (see reverse for antibo	ody list)	
Client Name					leoplasia Assessment (HNA)	☐ BAL CD4:CD8 Assessment	
				Add diagnostic		☐ ZAP70/CD38 Assessment	
Address					iteria (see reverse)	□ PNH♦	
				Add prognostic t	tests teria (see reverse)	☐ Stem Cell Enumeration <sup>1</sup> ☐ CLL MRD	
				☐ DNA Ploidy/S-Phase	e Assessment	☐ ALL MRD (meets COG requ	irements)
					n Deficiency Assessment ◆1	<sup>1</sup> Send to TN	
					CYTOMETRY (Technical		on reverse)
Phone Number		Fax Number		☐ Hematolymphoid/P	lasma Cell Neoplasia (Blood, Bor	ne Marrow, or tissue samples)	
PATIENT INFORMATION				CYTOGENETICS		_	
Name (LAST, FIRST, MI):				☐ Cancer Cytogenetic		Constitutional Cytogenetic	S <sup>‡</sup>
Date of Birth:		Sex:	□ Male □ Female	•	ase state profile OR indi		
Address:				Disease State Profiles  ALL (Adult)	(see reverse for panel compon  ALL (Pediatric)	ents)	□ CLL
City, State, Zip:				☐ Multiple Myeloma	☐ MPN/CML	☐ MPN w/ Eosinophilia	☐ MDS
Phone Number:				☐ Aggressive B-Cell Ly		,,	
Med. Rec. # / Patient #:				Pediatric (COG)	☐ ALL (Std Risk) ☐ ALL	(High Risk) AML	
BILLING INFORMATION (d	ttach face sheet a	and conv of incurar	nce card – hoth eides)	COG Single Probes	☐ ABL1 ☐ ABL		
Bill:   My Account  Insurance				'	a complete list of probes visit of	•	
Patient Hospital Status:   In-Pa			Non-Patient		BCL6 □ BC flex to JAK2 V617F Qual, if JAK2 r	•	
Insurance Information:   See	attached Auth	norization #			CCND1/IGH, t(11;14)	_	(8·14)
PRIMARY BILLING PA	\RTY		NDARY BILLING PARTY	` ′		T2A (MLL) RUNX1/RU	` '
INSURANCE CARRIER		INSURANCE CARRIER			] TP53 (17p-)		
ID #		ID #		Other FISH, specify:			
GROUP #		GROUP #		MOLECULAR® IntelliGEN® NGS A	ASSQV (see reverse for gene I	ist; bone marrow or peripheral blood)	
INSURANCE ADDRESS		INSURANCE ADDRESS		☐ IntelliGEN® Myeloid t	, ,		
NAME OF INSURED PERSON		NAME OF INSURED P	ERSON	Indication:			
RELATIONSHIP TO PATIENT		RELATIONSHIP TO PATI	ENT	Reveal® SNP Microarray* If suspect balanced trai		, •	s and/or FISH
EMPLOYER NAME		EMPLOYER NAME		SNP Microarray for a Indication:	ALL, AML, CLL, MDS and other Her	natologic Malignancies	
*IF MEDICAID STATE PHYSICIAN'S PROVID	ER #	I	WORKERS ☐ Yes ☐ No		ray for Multiple Myeloma	SNP Microarray for Multiple Mye	eloma
SPECIMEN INFORMATIO	N		COMP — 100 — 110	_ I	s ordered, probes t(4; 14), t(11; 1		
Collection Date:	Time:		□ AM □ PM	Acute Leukemia	Lymphoid Neoplasms	MPN/CML/Mastocytosis	
Specimen ID #(s):				☐ FLT3 Mutation	B-cell Rearrangement IgH	☐ BCR/ABL1 Quantitative	
Body Site/ Descriptor:				☐ IDH 1/2 Mutation☐ CEBPA Mutation	<ul><li>☐ T-cell Rearrangement TRG</li><li>☐ B-cell Rearrangement IgK</li></ul>	☐ ABL Kinase Domain Mutation (BCR/ABL will be	run)
Fixative: 10% Neutral Buffered	l Formalin 🔲	Other:	Hours Fixed:	□ NPM1 Mutation	☐ T-cell Rearrangement TRB	☐ JAK2 V617F Mutation, €	
Specimen Type:   BM Aspirate	☐ Fluid:		Smears:  ☐ Peripheral Blood #	☐ PML/RARA	BCL1 Rearrangement	if negative reflex to:	
☐ BM Clot	☐ FNA:		☐ BM Touch Preps #	(Quantitative)  CKIT Mutation	<ul> <li>□ BCL2 Rearrangement</li> <li>□ IaVH Mutation</li> </ul>	☐ CALR ☐ JAK2 Exon 12-15	
	□ CSF		☐ BM Aspirate #	LeukoStrat® CDx	p53 (CLL/B-cell ONLY)	_ □ MPL 515	
☐ Dry Tap	☐ Lymph Node:		☐ Effusion #/Source	FLT3 Mutation	<ul><li>□ BRAF Mutation</li><li>□ MYD88 Mutation</li></ul>	☐ JAK2 Exon 12-15 Mutat ☐ MPL 515 Mutation	ion
Peripheral Blood	☐ Slides #		☐ Fresh Tissue #/Site		LI WYDOO WUIUIUII	CALR Mutation	
If Slide Procurement required, indicat	e below:					☐ KIT D816V Mutation Dig	gital PCR
Facility Name: Address:				Other Molecular, sp	STRY (Serum ONLY)		
Phone Number:		Fax Number:		Multiple Myeloma Dia		*Meets I	MWG Guidelines
CLINICAL INDICATION F	OR STUDY (	attach clinical	history and pathology reports)	120256 Immunofix	cation (sIFE), Protein Electrophore yeloma Cascade, SPE Reflex to s	sis (SPE), Quant Free K/λ Light	Chains (sFLC)*
Narrative Diagnosis/Clinical Data (please	include Pathology re	port with diagnosis, in	ndication for study, and previous test results):	Multiple Myeloma Ma	onitoring:		
				☐ 001495 sIFE, SPE ☐ 123218 sIFE DARZ	001487 SP 🗖 ALEX® (daratumumab patients O		sIFE
				☐ 121137 sFLC, Qua	ntitativè Free Light K/እ Chains pl	us Ŕatio	
	•	ic patients ONLY:	☐ COG Study ☐ COG Post Treatment	□ 123062 SIFE SARC	LISA® (isatuximab patients ONLY	)	
All diagnoses should be provided by the obliganosis/Signs/Symptoms in ICD-CM for	raering physician o mat in effect at Dat	or an authorized des e of Service (Highes	signee. st Specificity Required)				
ICD-CM	ICD-CM		ICD-CM				
☐ Acute Lymphoblastic Leukemia	☐ Hodgkin Lymp		☐ Myelodysplastic Syndrome				
	<ul><li>□ Leukemia, Uns</li><li>□ Leukocytosis, I</li></ul>		☐ Myeloproliferative Neoplasm ☐ Non-Hodgkin Lymphoma				
☐ Acute Myeloid Leukemia	□ Leukopenia	•	☐ Polycythemia				
☐ Anemia	Lymphadenop	uniy	Suspected malignant neoplasm				

☐ Chronic Lymphocytic Leukemia ☐ Monoclonal Gammopathy ☐ Thrombocytopenia ☐ Wyelogenous Leukemia ☐ Myeloma, Plasma Cell ☐ Thrombocytosis

When ordering tests for which Medicare or Medicaid reimbursements will be sought, physicians should order only those tests that are medically necessary for the diagnosis or treatment of the patient.

Prognostic Test Reflex Criteria				
Disease Category	Timing	Findings (Morphology, Flow cytometry, FISH and/or karyotyping)	Tests to Perform	
ALL	Initial Diagnosis	ALL	Pediatric FISH Profile (<22 years) or Adult FISH Profile (>22 years); Reveal® SNP Array	
AML	Initial Diagnosis	AML or borderline AML	FISH probes for RUNX1T1/RUNX1 1(8;21), CBFB inv(16), or PML/RARA 1(15;17) or MLL respectively, as indicated; NGS myeloid panel + FLT3 testing for patients <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years	
AML	Relapse	Findings indicative of relapse	NGS myeloid panel <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years	
CLL (peripheral blood/bone marrow)	Initial Diagnosis	CD5+ neoplasm with classic or variant CLL features; >5K/uL circulating monoclonal B-cells or 10% or more marrow based monoclonal B-cells	CLL FISH profile or CLL SNP array with FISH probe for CCND1/IGH t(11;14), ZAP70/CD38 assay, and IgVH mutation analysis	
CLL (peripheral blood/bone marrow)	Follow-up*	Features of refractory disease or disease progression/transformation	FISH probe for TP53 (17p-) deletion, TP53 mutation analysis, and SNP array	
CML	Initial Diagnosis	Compatible or diagnostic findings for CML	Quantitative BCR/ABL1 assay and cytogenetics	
CML	Follow-up*	Prior diagnosis of CML	Quantitative BCR/ABL1 assay; if features of progression, discuss addition of NGS myeloid panel with client or place comment in report	
MPN	Initial Diagnosis	Morphologic features of MPN, but negative for JAK2 V617F, CALR, and MPL mutations	NGS myeloid panel for patients <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years	
MPN	Follow-up*	History of MPN, currently with features of progression (increased blasts or dysplastic features)	Discuss additon of NGS myeloid panel with client or place comment in report	
MDS	Initial Diagnosis	Morphologic diagnosis of MDS with normal cytogenetic karyotype	NGS myeloid panel for patients <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years	
Plasma cell neoplasia	Initial Diagnosis	5% or more neoplastic plasma cells by morphology or 1% or more by flow cytometry	Myeloma FISH profile	
Plasma cell neoplasia	Follow-up*	Features of disease progression	FISH probes for TP53 (17p-), CKS1B (1q21), Monosomy 13/13q-	
SLL	Initial Diagnosis	SLL identified in tissue sample by flow cytometry with 10% or more neoplastic cells	CLL FISH profile or CLL SNP array with FISH probe for CCND1/IGH t(11;14), IgVH mutation analysis	

<sup>\*</sup>recommendation for follow-up evaluation requires that prior material was evaluated in an IO facility

Disease Category	Timing	Findings	Tests to Perform
AML	Initial Diagnosis	Diagnostic or suspicious for AML with RUNX1T1/RUNX1 t(8;21), CBFB inv(16), or PML/RARA t(15;17), acute myelomonocytic, or acute monocytic/monoblastic leukemia	FISH probes for RUNX1T1/RUNX1 t(8;21), CBFB inv(16), or PML/RARA t(15;17) or MLL respectively, as indicated; NGS myeloid panel + FLT3 testing for patients <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years
B-cell lymphoma	Initial Diagnosis	Findings suspicious or diagnostic for B-cell lymphoma, but with equivocal findings with regard to subclassification (for tissue cases 5% or more abnormal B-cells by flow cytometry; for peripheral blood/bone marrow cases, 10% or more abnormal B-cells)	FISH probes from NHL FISH panel and molecular assays as indicated
Large B-cell lymphoma or Burkitt lymphoma	Initial Diagnosis	Abnormal B-cells diagnostic or suspicious for large B-cell lymphoma or Burkitt lymphoma	FISH probes for MYC, BCL6, and BCL2 translocations and cytogenetic karyotyping, as indicated; reflex to 11q FISH probe (BCL1 and ATM) for MYC, BCL6, BCL2 negative cases suspicious for Burkitt lymphoma, as indicated
Eosinophilia	Initial Diagnosis	Peripheral blood with 1.0K/uL or more eosinophils	FISH probes for PDGFRA, PDGFRB, and FGFR-1
Hairy Cell Leukemia (HCL)	Initial Diagnosis	CD103+ monoclonal B-cells (5% or more) inconclusive for HCL	BRAF mutation
Lymphoplasmacytic Lymphoma (LPL)	Initial Diagnosis	Monoclonal B-cells (10% or more) with features indicating LPL in differential diagnosis	MYD88 mutation
Mantle cell lymphoma (MCL)	Initial Diagnosis	Monotypic B-cells (5% or more) diagnostic or suspicious of MCL	FISH probe for CCND1/IGH t(11;14)
Mastocytosis	Initial Diagnosis	Atypical mast cells by flow cytometry	High-sensitivity KIT D816V mutation analysis for mast cell disease
CML	Initial Diagnosis	Flow cytometric findings suspicious for CML	FISH for BCR/ABL1
MDS/MPN	Initial Diagnosis	Findings suspicious for MDS/MPN (CMML, aCML, etc.)	NGS myeloid panel for patients <60 years; discuss necessity of testing with client or place comment in report for patients >= 60 years
T-cell lymphoma/leukemia	Initial Diagnosis	Atypical T-cells diagnostic or suspicious for T-cell lymphoma/leukemia	TCR gene rearrangement; ALK FISH probe for CD30+ cases, as indicated; cytogenetic karyotyping if material adequate

<sup>\*</sup>LeukoStrat® CDx FLT3 Mutation performed by The Laboratory for Personalized Molecular Medicine (LabPMM®)

<sup>&</sup>lt;sup>‡</sup>Informed consent is required for non-oncology genetics testing for New York state patients

Flow Cytometry*					
Peripheral blood/bone marrow panel (HNA)	Tissue/fluids panel (HNA)	PNH Evaluation			
24 * antibodies	19 * antibodies				
CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11b, CD13, CD14,		CD14, CD15, CD24, CD45, CD64, FLAER.			
CD16, CD19, CD20, CD23, CD57, CD33, CD34, CD38, CD45,	CD19, CD20, CD22, CD23, CD38, CD45, CD56, CD71, kappa light	CD59 and CD235a may be added at discretion of reviewing			
CD56, CD64, HLA-DR, kappa light chain, lambda light chain	chain, lambda light chain	pathologist			

<sup>\*</sup>Additional antibodies may be added if determined to be medically necessary to render a diagnosis in the opinion of the reviewing pathologist.

Markers performed determined by testing facility

## Technical Component Flow Cytometry Reflex Criteria

Labcorp Oncology uses a 24 antibody panel for peripheral blood/bone marrow and a 21 antibody panel for tissue/fluids. If necessary, additional antibodies will be added based on the following reflex criteria. Additional CPT codes and associated charges will apply if reflex testing is performed

- If submitted history of monoclonal gammopathy or if ≥0.5% plasma cells are detected cytoplasmic kappa and lambda light chains, and possibly CD138, will be added.
- If monoclonal/suspicious B-cells are present in blood or bone marrow samples, CD23, FMC-7, CD22, CD103, and CD11c will be added; if the atypical cells express CD103, CD25 will be added; if surface immunoglobulin light chains are absent, cKappa and cLambda may be added.
- If atypical lymphoblasts detected, CD1a, cCD3, CD22, CD25, cCD79a, cMPO, and/or cTdT may be added.
- If ≥10% blasts are present, CD15, CD11c, CD25, cMPO, cTdT, cCD79a, cCD3, CD61, CD41, CD235a, and CD71 may be added.
- If atypical B-lymphoblasts are detected, cTdT, cCD22, cCD79a, MPO, and cCD3 may be added.
- If atypical T-cells possibly representing T-cell lymphoma are detected, CD1a, CD11c, CD25, TCRAB, TRCGD, cTdT, CD30, CD52, cCD3, and CD103 may be added.

  If insufficient sample for a full study is received or atypical findings outside the above protocols.
- are detected, you will be contacted by an analyst in order to define a strategy for the case.

FISH (disease state profile OR individual probes)						
ALL (Adult) BCR/ABL1, t(9;22) KMT2A (MLL) MYC 6 21q	ALL (Pediatric/Std Risk) BCR/ABL1,†(9:22) 4 10 17 KMT2A (MLL) CDKN2A (p16) TCF3 (F2A)	AML PML/RARA, t(15;17) CBFB, inv(16) RUNX1T1/RUNX1, t(8;21) 5q 7q KMT2A (MLL)	CLL TP53 (17p-) ATM (11q-) CCND1/IGH, f(11;14) 13q14 (DLEU) 12	MPN/CML 20q 8 9 13q14 (DLEU) BCR/ABL1,†(9;22)	Multiple Myeloma Monosomy 13/13q- 1753 (17p-) 7 9 15 CCND1/IGH,†(11;14) CKS1B (1q21) FGFR3/IGH,‡(4;14)	NHL ALK BCL6 CCND1/IGH, †(11;14) IGH/BCL2, †(14;18) IGH/MYC, †(8;14) MALT1 TCRAVD
ETV6/R ALL (Higi the abov ABL1 ABL2	ETV6/RÙNX1, t(12;21)  ALL (High Risk) includes the above probes PLUS:  ABL1	Aggressive B-cell Lymphoma BCL2 BCL6 MYC	MDS 5q 7q 20q 8	MPN with Eosinophilia FGFR1 PDGFRA PDGFRB	IGH/MAF, I(14;16)	IONVE

## SERUM - Multiple Myeloma Cascade, Protein Electrophoresis (SPE) reflex to Immunofixation (sIFE) and Free Light Chain (sFLC) for interpretation, refer to www.Labcorp.com

 $\textbf{IntelliGEN}^{\circledR} \ (\text{for genes evaluated, refer to oncology.labcorp.com})$ 

Lab Locations				
Accupath Diag	Esoterix Genetic Laboratories, LLC			
201 Summit View Drive, Suite 100 Brentwood, TN 37027	5005 South 40th Street Phoenix, AZ 85040	3 Forest Parkway Shelton, CT 06484		

Patient, client, and billing information is requested for timely processing of this case. Medicare and other third party payors require that services be medically necessary for coverage, and generally do not cover routine screening tests.

When ordering tests that are subject to ABN guidelines, refer to the policies published by your Medicare Administrative Contractor (MAC), CMS, or www.LabCorp.com/MedicareMedicalNecessity.

Symbols Legend

@ = Subject to Medicare medical necessity guidelines

= Medicare deems investigational. Medicare does not pay for services it deems investigational.