

CPAL and GenPath Flow Cytometry Specimen Handling

	Lmphocyte Subset Analysis	Peripheral Blood	Bone Marrow Aspirates	Surgical Biopsies	Fine Needle Aspirate Biopsies	Fluids	Cerebral Spinal Fluid	Bronchial lavage/wash/ scrapings
Request	CD4C, TCC, BCC, TLC, TBCC	Myeloid (MDS/MPN)/Lymphoid and Acute Leukemia Analysis -- Plasma Cell Analysis -- Lymphoproliferative Disorders Analysis -- ZAP-70 Panel -- Residual CLL/SLL Analysis (MRD) -- TCR V-beta -- PNH with FLAER Panel					ALL, AML, MDS, NHL, PCD, CYTOPENIA	PCD (eff)
Preferred Submission	2 mL whole blood in EDTA (L)	5 mL in EDTA (L) and 5 mL Sodium Heparin (Gn) top tube. Exception: PNH EDTA only must be received by reference lab within 24 hours of collection.	2 mL in EDTA (L) and 2 mL Sodium Heparin (Gn) top tube	1-5 tissue chunks with size approximating 0.5 cm² submitted in 10x volume of RPMI	Suspend tissue in 1-5 mL of RPMI	Pleural, Peritoneal, Pericardial fluid in a sterile container	Sterile container	
Temperature Requirements	Store and ship at ambient temperature			Store and ship at 2-8° C. Do not freeze.				
Specimen Age	Specimen must be tested within 24 hours of collection	Receipt at reference lab within 24 hours of collection is requested.					Specimens older than 24 hours post collection <u>will not</u> be processed.	
Minimal Acceptable Volume	1 mL	1 mL	1 mL			10 mL, volume is dependent upon cellularity.	2 mL, volume is dependent upon cellularity.	
Reference Range	See Interpretive report -- available in 1 to 2 business days.							
Outpatient Request	Submit a signed order, including the diagnosis under consideration.							
Inpatient Request	Submit Universal Requisition along with a copy of the physician's chart order, include diagnosis under consideration.							

Flow Cytometry

Evaluation of lymphomas and leukemia. It is considered second to morphology for a diagnosis of hematolymphoid neoplasms. Reports are issued upon completion, typically 1 to 2 business days. **See page 1** for Specimen Collection, Storage, Transport Requirements and TAT. Contact the Laboratory with any questions at 717-738-6415.

Lab Order Mnemonic CPAL	Lab Order Mnemonic GenPath	Order Name	Also Known As	Diagnosis Under Consideration
IBLASTS	GP 5515-2	Myeloid (MDS/MPN)/Lymphoid and Acute Leukemia Analysis	Acute Leukemia Myeloid/Lymphoid Panel	Primary myeloid disorders, Leukemia, Lymphoma
ICYTOPENIA	N/A	Cytopenia		
IPCD-NEW or IPCD-RD	GP 5573-1	Plasma Cell Analysis	Plasma Panel	Plasma Cell Myeloma
INHL-NEW or INHL-STG	GP 5535-0	Lymphoproliferative Disorders Analysis	Chronic Flow Panel	Lymphoma, CLL
N/A	GP 5409-8	ZAP-70 Panel	CLL ZAP 70 Panel	CLL
IPNH	GP 5564-0	PNH with FLAER Panel <u>PERFORMED ON PERIPHERAL BLOOD ONLY</u>	Paroxysmal Nocturnal Hemoglobinuria (PNH) with Fluorescent Aerolsin (FLAER) w/interpretation	Paroxysmal Nocturnal Hemoglobinuria (PNH)
ICLL-RD	GP 5155-7	Residual CLL/SLL Analysis (MRD)	MRD Panel	Residual CLL/SLL analysis (MRD)
N/A	GP 5241-5	TCR V-beta	TCR V β Repertoire with Interpretation	T-Cell lymphoma

CPAL Flow Cytometry Subset Panels

See page 1 for Specimen Collection, Storage, Transport Requirements and TAT.

Contact the Laboratory with any questions at 717-738-6415.

LAB ORDER MNEMONIC	ORDER NAME	TEST PROCEDURE
LAB TLC	TOTAL LYMPH COUNT	Lymphocyte Counts – Submit WBC count and Lymph% with order. Test includes CD3/CD4/CD8/CD19/CD16/56 Counts and % along with CD4/8 ratio. CPT Code: 86359,86360, 86355, 86357
LAB BCC	B-CELL, TOTAL COUNT	B-Cell Total Count -- Submit WBC count and Lymph% with order. Group includes CD19 count and %. CPT Code: 86355
LAB TCC	T-CELL, CD4/8 PLUS RATIO	T-Cells, CD4/CD8 With Ratio – Submit WBC count and Lymph% with order. Group includes CD3, CD4 and CD8 Counts and % and CD4/8 ratio. CPT Code: 86359,86360
LAB TBCC	T AND B CELL PANEL	T and B Cell Panel – Submit WBC count and Lymph% with order. Group includes CD3, CD4, CD8, CD19 % and counts along with the CD4/8 ratio. CPT Code: 86359,86360,86355
LAB CD4C	T-CELLS, ABSOLUTE CD4 COUNT	T-Cells, Absolute CD4 Count – Submit WBC count and Lymph% with order . Group included CD3, CD4 counts and %. CPT Code: 86359,86361

QUEST Flow Cytometry Subset Panels

Collection Monday through Friday to be received in the Laboratory before 1500

LAB ORDER MNEMONIC	ORDER NAME	TEST PROCEDURE	SPECIMEN REQUIREMENTS
LAB B CELLS (CD20) QUEST 20731	B CELLS (CD20)	B CELLS (CD20) CPT Code: 86356	<u>Preferred specimen:</u> Minimum 10 mL whole blood (Gn) and 5 mL (L) EDTA. Room Temperature.
LAB LYMPH SUB QUEST 36420X	LEUKOCYTE MARKERS/FCM LYMPHOCYTE SUBSET PANEL	Use only to evaluate Immunodeficient patients. Use LM LYM BL (Leukocyte Markers Lymphocytic Leukemia/Lymphoma Panel) to evaluate patient's for lymphoma/leukemia. B(CD19) Pan-T (CD3) T Helper/Inducer (CD4) T Suppressor/cytotoxic (CD8) CD4/CD8 ratio For suspected HIV-1 infections, refer also to HIV Serology. CPT Code: 86355, 86359, 86360	<u>Preferred specimen:</u> 5 mL Whole Blood (L) EDTA. Keep at Room Temperature. Minimum volume: 1 mL <u>Specimen stability:</u> Room Temperature – 3 days.
LAB LYMPH SUB 4 QUEST 79248	LYMPHOCYTE SUBSET PANEL 4	Lymphocyte absolute, CD4 absolute, CD4 %, CD8 absolute, CD8%, CD4/CD8 ratio. CPT Code: 86360	<u>Preferred specimen:</u> 5 mL Whole Blood (L) EDTA. Keep at Room Temperature. Minimum volume: 1 mL <u>Specimen stability:</u> Room Temperature – 3 days.
LAB LYMPH SUB BW QUEST 207661	LYMPHOCYTE SUBSET PANEL BW (FOR BRONCHIAL WASHINGS)	Includes: B (CD19), Pan-T (CD3), T Helper/Inducer (CD4), T Cytotoxic (CD8), CD4/CD8 Ratio. CPT Codes: 86355,86359,86360	<u>Preferred specimen:</u> Body fluid (Bronchial Wash): Send as collected <u>Specimen container:</u> Maintain sample(s) at room temperature. Do not refrigerate. Needs received at Quest lab site within 24 hours of collection. Avoid transport just before or during the weekend which can result in a preassay delay.
LAB CD4 QUEST 206831	LEUKOCYTE MARKERS T CELLS; HELPER/INDUCER CD4	CD4 (T HELPER) CPT Code: 86361	<u>Preferred specimen:</u> Tissue maintained at room temperature. Do not refrigerate. <u>Specimen container:</u> Immunology Transport Medium. Avoid transport just before or during the weekend which can result in a preassay delay.

LAB CD4 QUEST 206887	LEUKOCYTE MARKERS T CELLS; HELPER/INDUCER CD4	CD4 (T HELPER) CPT Code: 86361	<u>Preferred specimen:</u> Bone Marrow, room temperature, do not refrigerate. <u>Specimen container:</u> Immunology Transport Medium. Avoid transport just before or during the weekend which can result in a preassay delay.
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