

Name: Paul M Morrison | DOB: 3/1/1978 | MRN: 00584833 | PCP: Christopher Ryan Anderson, MD | Legal Name: Paul M Morrison

Leukemia/Lymphoma Immunophenotyping by Flow Cytometry

Collected on October 23, 2024 8:18 AM

Lab tests - Blood

Results

LCMS Result

Value
Performed

Final Diagnosis

Value

SEE COMMENTS

Peripheral blood, flow cytometric immunophenotyping:

A lambda light chain-restricted B-cell population with immunophenotypic features of chronic lymphocytic leukemia/small lymphocytic lymphoma is identified. However, the size of this population does not meet quantitative criteria for chronic lymphocytic leukemia (5000 clonal B-cells per microL). This could represent monoclonal B-cell lymphocytosis, peripheral blood involvement by small lymphocytic lymphoma, or treated chronic lymphocytic leukemia/small lymphocytic lymphoma (Leuk Lymphoma, 2009; 50:493).

The previous histograms were reviewed for comparison. The immunophenotypic characteristics of this population are similar to those seen in a previous peripheral blood specimen (M170016778;8/6/2021).

Comment:

If clinically indicated, correlation of the flow cytometry results with possible bone marrow aspirate and biopsy findings, clinical history and other laboratory features is recommended for a definitive diagnosis. If desired, we can provide diagnostic services as part of a hematopathology consultation. Please contact the signing pathologist at 1-800-533-1710 if you have further questions regarding these analyses.

Reviewed by: Pedro Horna, M.D.

Special Studies

Value

SEE COMMENTS

WBC: $2.9 \times 10^9/L$

%Lymphs (CBC/automated differential): 42%

#Lymphs (CBC/automated differential): $1.2 \times 10^9/L$

Results:

Blasts: Not increased by CD45/side scatter and CD34.

B-cells: Monotypic lambda (dim)

Express: CD19, CD20 (dim), CD22 (dim), CD5, CD23, CD11c, CD200. Do not express: CD10, CD38, CD103. Estimated size:

56% gated lymphoid events; 15% total analyzed events

Absolute clonal B-cell count (calculated): $0.7 \times 10^9/L$

B-cell markers tested: Triage panel: CD10, CD19, CD45 and kappa and lambda immunoglobulin light chains. B-cell panel: CD5, CD11c, CD19, CD20, CD22, CD23, CD38, CD45, CD103, CD200 and kappa and lambda immunoglobulin light chains.

T-cells/NK-cells: No aberrant phenotype by CD3 and CD16.

Quality Assessment: Specimen received within validated guidelines.

Microscopic Description

Value

SEE COMMENTS

A Wright-Giemsa-stained slide prepared from the flow cytometry specimen is examined. No morphologic features of acute leukemia or lymphoma are identified.

-----ADDITIONAL INFORMATION-----

This test was developed using an analyte specific reagent. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Reason for Referral

Value

CLL

Specimen Source

Value

Peripheral blood

Test Performed by:

Mayo Clinic Laboratories - Rochester Main Campus

200 First Street SW, Rochester, MN 55905

Lab Director: Nikola A. Baumann Ph.D.; CLIA# 24D0404292

Ordering provider: Hani Alkhatib

Collection date: October 23, 2024 8:18 AM

Result date: October 25, 2024 4:55 PM

Result status: Final

Resulting lab:

MAYO CLINIC LABORATORIES

3050 Superior Drive NW

Rochester MN 55901

507-266-5700

Baumann, Nikola A. Ph.D (Lab director)

24D1040592 (CLIA #)

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Name: Paul M Morrison | DOB: 3/1/1978 | MRN: 00584833 | PCP: Christopher Ryan Anderson, MD | Legal Name: Paul M Morrison

Leukemia/Lymphoma Immunophenotyping by Flow Cytometry

Collected on August 6, 2021 9:22 AM

Lab tests - Blood (Blood, Venous)

Christopher Anderson 08/9/2021, 12:45 PM

Paul, your test results seem to describe you having a leukemia, type of blood cell cancer. This type described, chronic lymphocytic leukemia, is often a very stable and treatable cancer. I am going to place a referral for you to see an Oncologist, and they will be able to give you more information on these results.

- Dr. Anderson

Results

LCMS Result

Value
Performed

Final Diagnosis

Value
SEE COMMENTS

Peripheral blood, flow cytometric immunophenotyping:
Chronic lymphocytic leukemia, lambda light chain restricted.

Reviewed by: Dong Chen, M.D., Ph.D.

Special Studies

Value

SEE COMMENTS

WBC: $14.1 \times 10^9/L$

%Lymphs (CBC/automated differential): 70%

#Lymphs (CBC/automated differential): $9.9 \times 10^9/L$

Results:

Blasts: Not increased by CD45/side scatter and CD34.

B-cells: Monotypic lambda (dim)

Express: CD19, CD20 (dim), CD22, CD5, CD23, CD200.

Do not express: CD10, CD38, CD11c, CD103.

Estimated size: 70% gated lymphoid events; 35% total analyzed events

Absolute clonal B-cell count (calculated): $6.9 \times 10^9/L$

B-cell markers tested: Triage panel: CD10, CD19, CD45 and kappa and lambda surface light chains. B-cell panel: CD5, CD11c, CD19, CD20, CD22, CD23, CD38, CD45, CD103, CD200 and kappa and lambda surface light chains.

T-cells/NK-cells: No aberrant phenotype by CD3 and CD16.

Quality Assessment: Specimen received within validated guidelines.

Microscopic Description

Value

SEE COMMENTS

A Wright-Giemsa-stained slide prepared from the flow cytometry specimen is examined.

-----ADDITIONAL INFORMATION-----

This test was developed using an analyte specific reagent. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Test Performed by:

Mayo Clinic Laboratories - Rochester Main Campus

200 First Street SW, Rochester, MN 55905

Lab Director: William G. Morice M.D. Ph.D.; CLIA# 24D0404292

Ordering provider: Christopher Anderson

Collection date: August 6, 2021 9:22 AM

Result date: August 7, 2021 5:03 PM

Result status: Final

Resulting lab:

MAYO CLINIC LABORATORIES


3050 Superior Drive NW

ROCHESTER MN 55901

507-266-5700

24D1040592 (CLIA #)

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SEND TO: MAYO CLIN LABS 3050 SUPERIOR DR NW ATTN: REFERRALS ROCHESTER, MN 55901		 Quest Diagnostics Nichols Institute™		Quest Diagnostics, Incorporated 33608 Ortega Hwy., San Juan Capistrano, CA 92675 CLIENT SERVICES: (800) 553-5445 Director: Irma Maramba, M.D., Ph.D.			
PATIENT NAME: MORRISON, PAUL M			PATIENT ID NO: G711046931		DATE: 08/11/2021 TIME: 10:11		
ACCESSION NO: 27662038		AGE: 43	SEX: MALE	SAMPLE ID NO: 10239782631		OTHER ID NO: NG	
REMARKS:			REFERRING PHYSICIAN: ALKHATIB HANI		REPORTED: 08/17/2021 TIME: 16:24		STATUS: DUPLICATE

TEST: FISH, B Cell CLL Panel

RESULT: See Below

Order ID: 21-219405

Specimen Type: Blood

Clinical Indication: FISH STUDY FOR ONCOLOGY

RESULT:
 POSITIVE FISH RESULT for 13q14.3 DELETION ;
 NEGATIVE FISH RESULT for TRISOMY 12 and DELETIONS of 6q, ATM and TP53

INTERPRETATION:
 FISH analysis showed deletion of 13q14.3 in 78% of cells. The 13q14 deletion is a recurrent abnormality in chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), and also is seen in other hematologic neoplasms. In CLL/SLL, 13q14.3 as the sole abnormality has a favorable prognosis; however, metaphase chromosome analysis is required to classify this deletion as the sole cytogenetic abnormality.

Please expect the result of any other concurrent test in a separate report.

RECOMMENDATIONS:
 Correlation with a chromosome result as well as other clinical and laboratory findings is recommended. Periodic monitoring may be useful in assessing remission/relapse status.

NOMENCLATURE:
 nuc
 ish(SEC63, MYB)x2[100], (ATM)x2[100], (D12Z3)x2[100], (DLEUx1, LAMP1)x2[78/100], (TP53)x2[100]

ASSAY INFORMATION:
 Method: FISH (Digital Image Analysis: MetaSystems/Metafer)
 Cells Counted: 300

This test will not detect other cytogenetic abnormalities that may have clinical significance. Fluorescence in-situ hybridization (FISH) was performed using the probes specific for chromosome regions 6q21/6q23 (SEC63, MYB), 11q22.3 (ATM), 12 centromere (D12Z3), 13q14 (DLEU), 13q34 (LAMP1), and 17p13.1 (TP53; p53) [MetaSystems].

The cutoff values for peripheral blood and bone marrow are, respectively: 6q21- (4%), (6%), 6q23- (4%) (3%), 6q- (4%) (5%), 11q- (6%) (4%), +12 (4%) (5%), 13q- (4%) (4%), -13 (4%) (3%), 17p- (5%) (5%).

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano, CA. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Arturo Anguiano, MD, FFACMG (800) NICHOLS-4307

Electronic Signature: 8/17/2021 6:52 PM