003_b

Laboratory Results

White Blood Cell Count (WBC)	6,000 - 10,000 cells/μL	4,500 - 10,000 cells/μL
Neutrophils	55%	40% - 60%
Lymphocytes	35%	20% - 40%
Monocytes	5%	2% - 8%
Eosinophils	3%	1% - 4%
Basophils	2%	0% - 1%
Hemoglobin (Hgb)	12.0 - 14.5 g/dL	11.5 - 15.5 g/dL
Hematocrit (Hct)	36% - 44%	35% - 45%
Platelet Count	150,000 - 450,000 cells/μL	150,000 - 450,000 cells/μL

Pathology Report 10/4/24

Date of Birth: 7/30/2017
Date of Procedure: 10/4/24
Referring Physician: Dr. Oncoso
Clinical History: B-cell precursor acute lymphoblastic leukemia (B-ALL), post-consolidation phase treatment.

Procedure: Bone Marrow Biopsy

Findings:

- **Bone Marrow Cellularity:** Hypercellular (approximately 90% cellularity).
- **Blast Cell Percentage:** Less than 5% blast cells, consistent with clinical remission.

Flow Cytometry Results:

- **Minimal Residual Disease (MRD) Status:** Positive for minimal residual disease (MRD+).

- **Leukemic Cell Percentage:** 0.05% leukemic cells detected.

Interpretation:
The findings indicate the patient is in clinical remission following consolidation treatment; however, the presence of minimal residual disease suggests residual leukemic activity. Continuous monitoring and further therapeutic intervention may be warranted.

Pathology Report 3/29/24

Date of Birth: 7/30/2017
Date of Procedure: 03/29/2024
Referring Physician: Dr. Oncoso
Clinical History: Patient presented with fatigue and recurrent infections. Bone marrow biopsy performed to evaluate for acute lymphoblastic leukemia.

Procedure: Bone Marrow Biopsy

Specimen Received: Bone marrow aspirate and core biopsy.

Findings:

- **Bone Marrow Cellularity:** Hypercellular (approximately 90% cellularity).
- **Blast Cell Percentage:** 85% lymphoblasts present in the marrow, confirming the diagnosis of B-cell precursor acute lymphoblastic leukemia (B-ALL).
- **Differential Cell Count:**
    - Lymphoblasts: 85%
    - Myeloid series: 5%
    - Erythroid series: 5%
    - Other cell types: 5%

Cytogenetic Analysis:

- **Cytogenetic Findings:** Philadelphia chromosome-positive (Ph+), confirming the presence of the BCR-ABL fusion gene..

Interpretation:
The findings confirm a diagnosis of B-cell precursor acute lymphoblastic leukemia (B-ALL) characterized by hypercellularity and a high percentage of lymphoblasts. The presence of the Philadelphia chromosome indicates a higher risk profile and may necessitate more intensive treatment. Further clinical management, including targeted therapy with tyrosine kinase inhibitors and monitoring for minimal residual disease, is recommended.