



<u>Procedure</u>	<u>Result</u>	<u>Units</u>	<u>Ref Interval</u>	<u>Accession</u>	<u>Collected</u>	<u>Received</u>	<u>Reported/ Verified</u>
Blood Smear Interpretation	See Note f			19-256-900035	13-Sep-19	14-Sep-19	14-Sep-19
					09:09:00	11:52:00	11:55:14

13-Sep-19 09:09:00 Blood Smear Interpretation:

- PERIPHERAL BLOOD SMEAR DIAGNOSIS-
- MILD MACROCYTIC NORMOCHROMIC ANEMIA
  - MARKED LEUKOPENIA WITH - ABSOLUTE NEUTROPENIA
  - MODERATE THROMBOCYTOPENIA

COMMENTS:

The macrocytic anemia with increased anisopoikilocytosis raises the consideration of vitamin B12 and/or folate deficient (megaloblastic) anemia, but the MCV is very mildly increased so reticulocytosis, liver disease, hypothyroidism, alcohol use, drug effects, or possibly a myelodysplastic syndrome should be considered. There is an absolute neutropenia which can be seen associated with infection, secondary to medications or immune mediated. Thrombocytopenia can be secondary to decreased marrow production or increased peripheral destruction.

CLINICAL HISTORY:

The patient is a 61 year old male with a single lung transplant of 11 months for COPD. His course has been compromised for massive hemoptysis, massive pulmonary embolism, and reactivation of CMV. He is being treated with Valcyte. Worsening leukopenia has developed. The valcyte has been held to assess for count recovery in this peripheral blood smear.

CBC performed on 09/13/2019 revealed a WBC of 1.25 k/uL, RBC 3.39 M/uL, hemoglobin 11.3 g/dL, hematocrit 34.0 %, MCV 100.3 fL, MCH 33.3 pg, MCHC 33.2 g/dL, RDW 13.9 %, platelets 87 k/uL, and MPV 9.9 fL.

DIFFERENTIAL (100 Cells)

41% segmented neutrophils, 56% lymphocytes, 3% monocytes.

MORPHOLOGY:

ERYTHROCYTES -

Mildly decreased in number.  
 Macrocytic and normochromic.  
 No significant polychromasia.  
 Minimal anisopoikilocytosis.

WHITE BLOOD CELLS -

Markedly decreased in number.  
 There is no granulocytic left shift.  
 Neutrophils exhibit normal nuclear segmentation and normal granulation.  
 Lymphocytes include predominately small mature forms and few reactive forms.  
 Monocytes include occasional reactive appearing forms. Blasts are not identified.

PLATELETS -

Moderately decreased in number  
 Normal morphology

RESIDENT / FELLOW INVOLVED -

Jessica Corean, M.D.

Timothy Hanley, M.D., Ph.D.

I certify that I have personally conducted the diagnostic evaluation on the above specimen(s) and have rendered the above diagnosis(es):

9/13/2019

\* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab