Patient Age/Gender: 20 years Male Printed: 28-Jun-19 10:38:43

ProcedureResultUnitsRef IntervalAccessionCollected ReceivedReportedLeuk/Lymph Phenotype, ImpressionSee Note fSee Note f19-168-90012117-Jun-1917-Jun-1917-Jun-1917-Jun-1917-Jun-1917-Jun-1912:53:0012:53:0012:53:0012:53:0012:53:00
17-Jun-19 12:51:00 Leuk/Lymph Phenotype, Impression: SAMPLE: PERIPHERAL BLOOD
IMPRESSION: CD5 positive B-cell lymphoproliferative disorder. See comment.
COMMENT: Differential diagnostic considerations include chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) or mantle cell lymphoma. However, since CD200 is positive, a diagnosis of mantle cell lymphoma is much less likely. In addition, a diagnosis of mantle cell lymphoma requires direct or indirect demonstration of an 11;14 translocation. Please correlate the results from this study morphologically, clinically, and with appropriate molecular and/or ancillary studies for a definitive diagnosis.
Differential: 63% lymphocytes 5% monocytes 32% myeloid cells
Lymphocytes: 22% T-cells 7% NK-cells 71% B-cells T-cells: Heterogeneous with normal CD4:CD8 ratio of 1.73 B-cells: Positive: monotypic dim lambda light chains, CD5, CD19, dim CD20, CD23, CD200, 11.3% of the CD5 positive B-cells express CD38 Negative: CD10
Myeloid cells: normal CD34 positive myeloblasts: 0.20% Viability: 81% Disclaimers: none
Markers run: CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD16, CD19, CD20, CD23, CD13, CD34, CD38, CD45, CD56, CD57, CD200, surface Kappa, surface Lambda, CD11b, CD14, CD33, CD117, HLA-DR
These results have been reviewed and approved by Rodney Miles, MD, PhD. 06/17/2019 12:57

<u>Procedure</u> Leuk/Lymph Phenotype, Source	Result Blood	Units	<u>Ref Interval</u>	Accession Collected Received Reported/ 19-168-900121 17-Jun-19 17-Jun-19 17-Jun-19 12:51:00 12:55:09 12:55:09
Number Of Markers	23	markers		19-168-900121 17-Jun-19 17-Jun-19 17-Jun-19 12:51:00 12:53:00 12:58:09

17-Jun-19 12:51:00 Leuk/Lymph Phenotype, Impression: INTERPRETIVE INFORMATION: Leuk/Lymph Phenotyping, Flow Cytometry

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement A: aruplab.com/CS

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