

### SAMPLE FLOW CYTOMETRY REPORT

#### INTERPRETATION:

ABC Hospital (#B08-12345) (Collection Date: 09/08/08) (Collection Time: 12:15)  
Peripheral blood: Abnormal CD8+ T cell population identified with variable low-level CD52 expression by flow cytometry, consistent with recurrence/persistence of the patient's CD8+ T cell neoplasm (see Comment).

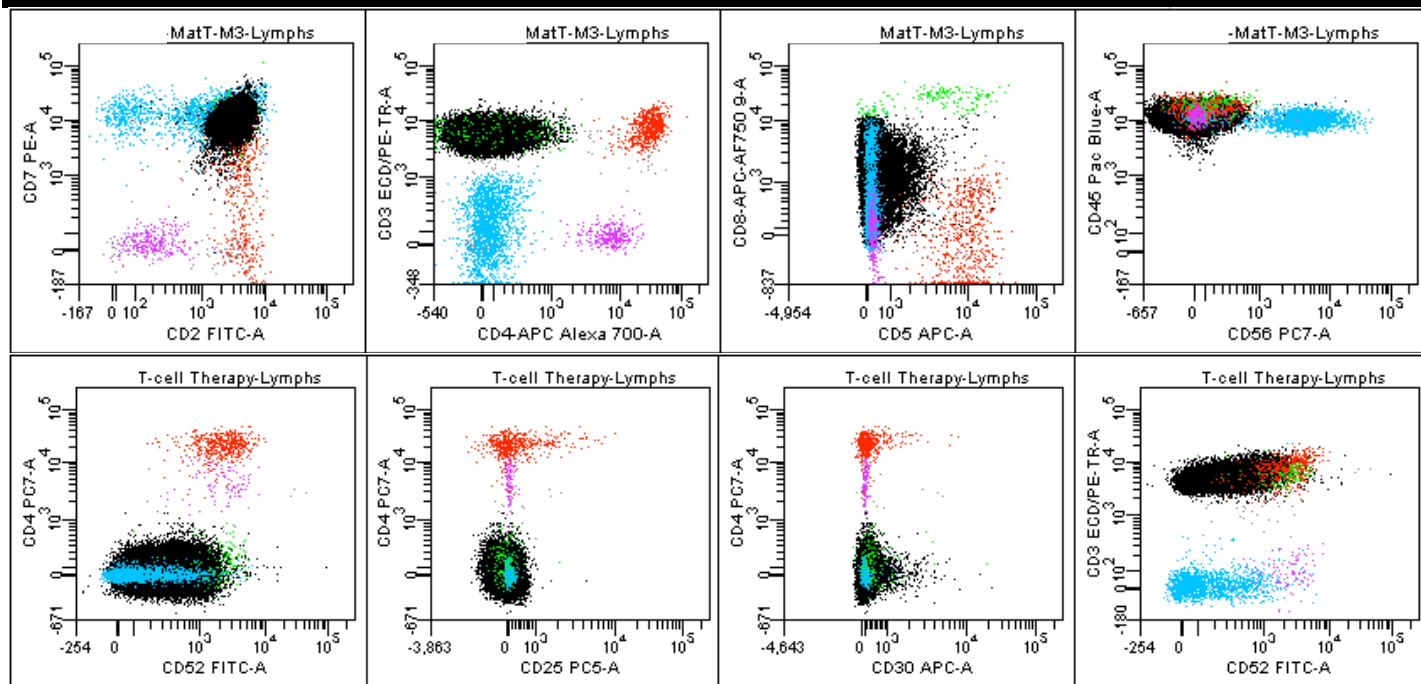
#### COMMENT:

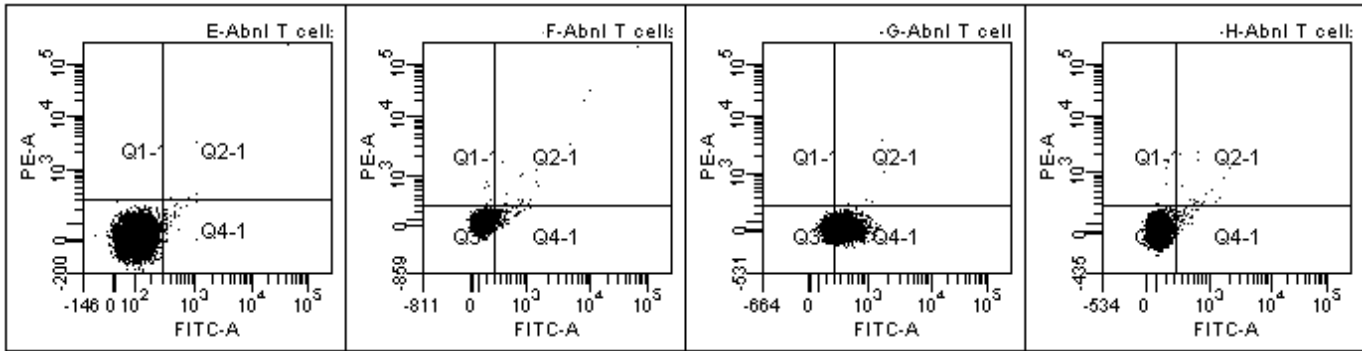
Flow cytometric immunophenotyping demonstrates about 55% abnormal T cells (colored black in the flow histograms below), with bright CD45 and CD7, intermediate CD2 and CD3, low CD8, restricted expression of the Vb14 isoform of TCR-beta, aberrant loss of CD5, and no CD34. In terms of potential therapeutic targets, the abnormal T cells express low CD52 (about 8- to 10-fold lower compared to the normal background CD4+ and CD8+ T cells), and no significant CD25 or CD30. These findings are consistent with recurrence/persistence of the patient's previously identified CD8+ T cell neoplasm (PP2008-XXXX), but note that the specimen has been forwarded for TCR-gamma gene PCR studies to formally confirm clonal identity between the previous and current specimens.

#### CLIENT REQUEST / CLINICAL HISTORY

Flow cytometry. Run CD52 and therapy-related T cell markers.

#### RESULTS





Immunophenotyping by flow cytometry after lysis of the erythroid cells reveals that the viable leukocytes consist of 58% lymphocytes, 10% monocytes, 31% granulocytes, and <0.1% CD34+ blasts. The lymphocytes include 96% T cells (CD3+) and 3.0% NK cells (CD3-, CD7+). The non-neoplastic T cells show a CD4:CD8 ratio of about 4:1.

**Antibodies used:** ( Vb11-Vb22-Vb14 ): ( Vb13.1-Vb13.6-Vb8 ): ( Vb13.2-Vb4-Vb7.2 ): ( Vb18-Vb5.1-Vb20 ): ( Vb23-Vb-Vb21.3 ): ( Vb5.2-Vb2-Vb1.2 ): ( Vb5.3-Vb7.1-Vb3 ): ( Vb9-VB17-VB16 ): CD2: CD25: CD3: CD30: CD34: CD4: CD45: CD5: CD52: CD56: CD7: CD8 (20)

• **Electronically signed 09/08/2008: Steven J. Kussick, M.D., Ph.D., Pathologist**

*Per CMS regulations, the pathologist's signature above indicates that this case has been reviewed and the diagnosis made or confirmed by said pathologist.*

*NOTE: Some of the tests reported here may have been developed and performance characteristics determined by PhenoPath Laboratories. They have not been cleared or approved by the U.S. Food and Drug Administration (FDA). However, the FDA has determined that such clearance or approval is not necessary. Pursuant to the requirements of CLIA, this laboratory has established and verified the accuracy and precision of all tests, and additional information about these tests is available upon request. PhenoPath Laboratories is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical laboratory testing.*