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HLID#: E-0871    PATIENT NAME:  
PATIENT ID                                  DOB :  
UPIN:    ORDERING PHYSICIAN:  
SPECIMEN TYPE: Bone Marrow Aspirate  
COLLECTION DATE: 3/29/2004 07:30 Am    RECEIPT DATE: 3/29/2004 12:50 Pm  
REPORT DATE: 4/1/2004                          ICD-9: 205.00    UNITS:  
CLINIC ID#:  
ACCOUNT:

**Specimen:** Bone marrow aspirate

**Clinical History/Indications:** A 36 year old male with a clinical history of bone marrow destruction and acute myeloid leukemia with monosomy 7 and tr(11, 17). Previous marrow aspirates had leukemic myeloblasts (E-0332, E-0688).

**Flow Cytometric SSC/CD45 Differential:** 54% lymphocytes, 2.0% monocytes, 35% myeloid cells, and 4.0% blasts.

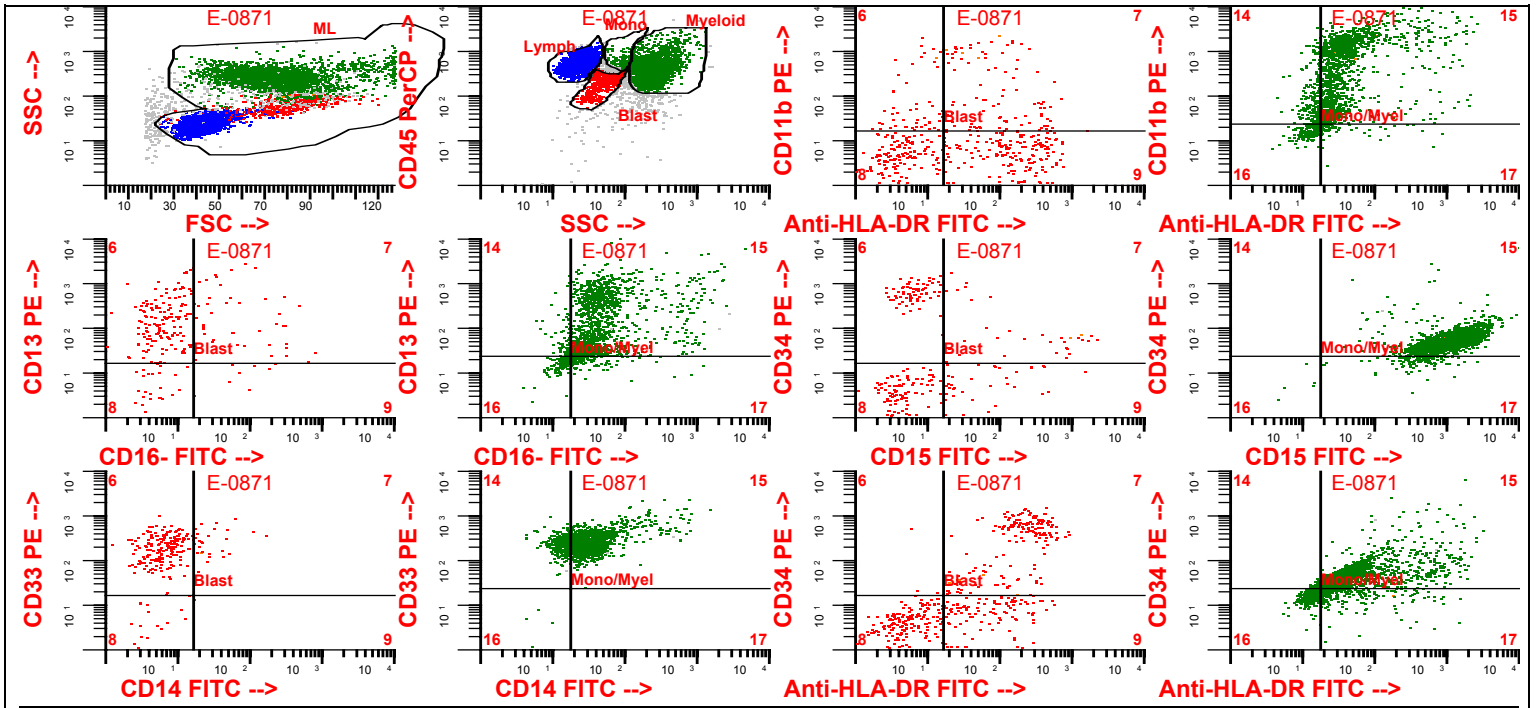
**Immunophenotypic Findings:** Independent immunophenotypic analysis of the blast population reveals a myeloid origin with cell surface antigen expression of heterogeneous HLA-DR, CD38, CD13, CD33, and heterogeneous CD15, and lacking CD11b, CD14, CD16, and all lymphoid markers tested. CD34 is expressed on a 2.1% of non-erythroid cells. The maturing myeloid cells appear abnormal with high autofluorescence and a total of 13% promyelocytes.

**Analysis/Conclusions:** The above findings reveal an aberrant myeloblast population involving the bone marrow aspirate at 4% with an immunophenotype similar to those observed previously and abnormal maturing myeloid cells (See comment). Clinical, cytogenetic, and morphologic evaluation is required for comprehensive evaluation.

**Comment:** The maturing myeloid cells appear to be part of the neoplastic process with 4% phenotypic blasts and 13% phenotypic promyelocytes.

**FISH Studies** performed by Diagnostic Cytogenetics shows 66% of interphase cells in this specimen to be monosomy 7, consistent with the flow cytometry results of abnormal maturing myeloid cells.

DW/MRL



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