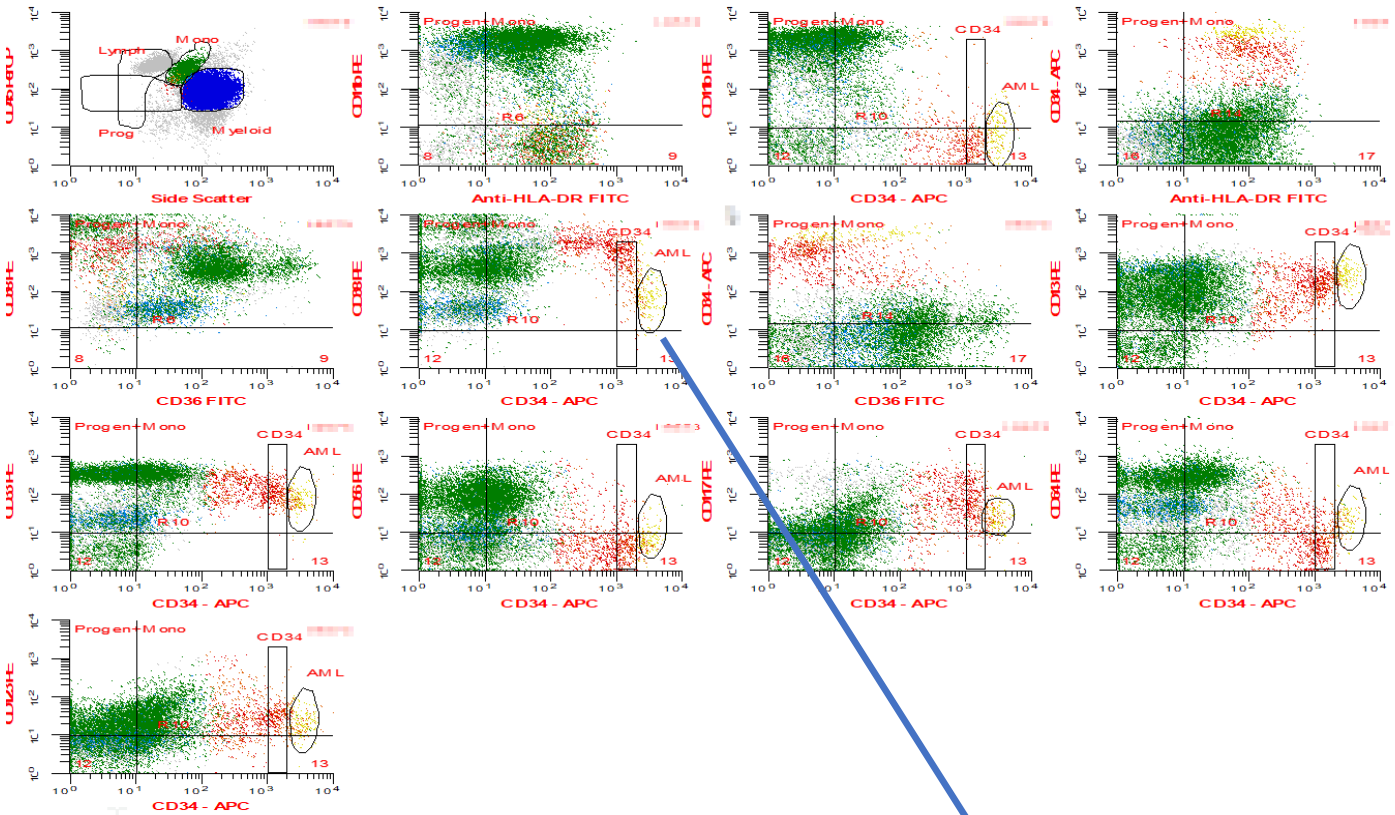


AML MRD Identified by ΔN^{TM} (Difference from Normal) Flow Cytometry at 0.04% confirmed by FACS-FISH

Clinical History/Indications: A patient with a clinical history of acute myeloid leukemia had a bone marrow aspirate submitted for Measurable Residual Disease(MRD) detection.



Analysis/Conclusions: The Δ^{TM} **Flow Cytometry** findings reveal: 7.4% lymphocytes, 6.1% monocytes, 81% myeloid forms (all stages of maturation), 0.05% lymphoblasts, and 0.04% abnormal myeloid progenitor cells consistent with residual AML. Cell enrichment, by **Fluorescent Activated Cell Sorting (FACS)**, of CD34 positive cells that included the abnormal cell population was followed by **FISH (FACS-FISH)**.

FACS-FISH

FISH (fluorescence in situ hybridization) Result: Abnormal Monosomy 7

Interphase FISH (fluorescence in situ hybridization) was performed using the D7S522/CEP 7 probe set to assess the CD34+ flow cytometric sorted cell population for the presence of monosomy 7. During the analysis of 200 interphase cells with the D7S522/CEP 7 probe set showed a 1R1G pattern (see image) in **25%** of the CD34+ cells examined, consistent with monosomy 7.

