“Minimally-invasive biomarkers to monitor treatment response in AML”

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Acute myeloid leukemia (AML) is an aggressive and frequently fatal blood cancer, with frequent relapse and late detection leading to poor survival. There is currently no biomarker to prospectively track minimal residual disease (MRD), compromising timely detection and therapeutic intervention. Disease surveillance relies on decreased peripheral blood counts (late, poor sensitivity, non-specific) or interval bone marrow exams (invasive, infrequent). We propose an innovative way to track MRD in AML patients. Based on preliminary data, we hypothesize that a unique combination of specific polynucleotides can serve as an AML biomarker to non-invasively measure residual disease and identify at-risk patients in need of a bone marrow examination.