

## Acute Myeloid Leukemia: Clinical Studies: Minimal Residual Disease and Genetic Characterization

[433 Role of Measurable Residual Disease \(MRD\) in Redefining Complete Response \(CR\) in Elderly Patients with Acute Myeloid Leukemia \(AML\): Results from the Pethema-Flugaza Phase III Clinical Trial](#)

*Bruno Paiva, et al.*

**The Abstract concludes:** *This study reveals that sensitive MFC-MRD assessment supersedes CR and is an independent prognostic factor in older patients with AML, treated with semi-intensive chemotherapy or HMA. Nevertheless, the risk of relapse among the few patients with no MRD (5%) remains high after stopping treatment, and warrants innovative approaches aimed at maintaining an MRD-negative CR status.*

[434 Clinical Impact of an Accurate Genetic Characterization of Older Acute Myeloid Leukemia Patients: A Report from the Northern Italy Leukemia Group \(NILG\) Randomized Trial 02/06](#)

*Chiara Caprioli, et al.*

**The Abstract concludes:** *Older AML patients with favorable risk features according to ELN benefit from standard chemotherapy. The definition of an adverse genetic risk profile and particularly of a MDS/MPN signature is crucial to identify patients who have a very dismal outcome. These patients should be considered for alternative, innovative treatment options. In high-risk,  $\geq 60$  years old AML patients with a good performance status, alloHSCT significantly improves both OS and DFS and should always be considered as the most effective post consolidation treatment.*

[435 Prognostic Impact of Insertion Site in Acute Myeloid Leukemia \(AML\) with FLT3 Internal Tandem Duplication: Results from the Ratify Study \(Alliance 10603\)](#)

*Frank G. Rücker, et al.*

**The Abstract concludes:** *In this large cohort of 452 FLT3-ITD mutated AML treated within the RATIFY trial the negative prognostic impact of beta1-sheet insertion site of FLT3-ITD could be confirmed. Further analyses to investigate potential predictive effects of midostaurin treatment are ongoing.*

[436 Molecular Residual Disease Monitoring Provides Insufficient Lead-Time to Prevent Morphologic Relapse in the Majority of Patients with Core-Binding Factor AML](#)

*Robert Puckrin, et al.*

**The Abstract concludes:** *Current guidelines recommend molecular RD monitoring every 3 months for CBF-AML. However, in the majority of patients who relapsed at our institution, RD monitoring every 3 months provided insufficient lead-time to identify molecular relapses prior to morphologic relapse. Further research is warranted to identify the patients with CBF at the highest risk of relapse and the best strategies to monitor these patients over time.*

[437 Minimal Residual Disease \(MRD\) at Time of Complete Remission Is Commonly Detected in Acute Myeloid Leukemia \(AML\) Patients Age  \$\geq 60\$  Years and Significantly Impacts Outcome Based on Post-Remission Treatment Strategies: Prospective Analysis of ECOG-ACRIN \(E-A\) E2906 Phase III Trial](#)

*James M. Foran, et al.*

**The Abstract concludes:** *MRD+  $\geq 0.1\%$  is common (60.5%) after induction therapy in older adults & is significantly associated with inferior OS and DFS in 1<sup>st</sup> CR/CRi. However we observed excellent outcomes for MRD- pts in first CR/CRi regardless of induction regimen or post-remission therapy used. MRD+ pts in CR/CRi who went on to receive CLO consolidation had significantly poorer outcomes than those who went on to receive intermediate dose Ara-C consolidation. This observation differs strikingly from younger AML, and suggests that intensified Ara-C may abrogate the adverse impact of MRD in older pts in CR. These results strongly support incorporation of centralized MRD at the time of remission into future studies to guide optimal post-remission strategies in older pts with AML.*

[438 Prospective Evaluation of Prognostic Relevance of \*KIT\* Mutations in Core-Binding Factor Acute Myeloid Leukemia: Results from the JALSG CBF-AML209-KIT Study](#)

*Naomi Kawashima, et al.*

**The Abstract concludes:** *This large-scale prospective study demonstrated that *KIT* mutation has an adverse effect for OS and RFS only on AML with *RUNX1-RUNX1T1* but not on AML with *CBFB-MYH11*. Notably, we demonstrated that only mutations in the exon 17 of *KIT* gene had an adverse effect both on the RFS and OS of the patients with *RUNX1-RUNX1T1*, and the presence of MRD was a poor factor for RFS in AML with *CBFB-MYH11*.*

