Acute Myeloid Leukemia: Clinical Studies: Maintenance after Allogeneic Stem Cell Transplant and Management of Refractory/Relapsed AML

661 Sorafenib As Maintenance Therapy Post Allogeneic Stem Cell Transplantation for FLT3-ITD Positive AML: Results from the Randomized, Double-Blind, Placebo-Controlled Multicentre Sormain Trial

Andreas Burchert, et al.

The Abstract concludes: Sorafenib maintenance therapy after allo-SCT is feasible and significantly reduces the risk of relapse or death in patients with FLT3-ITD positive AML. OS results will be presented at the meeting.

662 Radius: A Phase 2 Randomized Trial Investigating Standard of Care ± Midostaurin after Allogeneic Stem Cell Transplant in *FLT3*-ITD–Mutated AML

Richard Thomas T. Maziarz, et al.

The Abstract concludes: Adding midostaurin to SOC reduced the risk of relapse at 18 months post-alloSCT by 46% (vs SOC). The safety profile of single-agent midostaurin was consistent with previous reports; no major safety concerns were identified when adding midostaurin to SOC following alloSCT. These data suggest that midostaurin monotherapy can be safely administered for ≤ 1 year and may improve outcomes in patients who undergo alloSCT in CR1.

663 Outcomes with Subsequent FLT3-Inhibitor (FLT3i) Based Therapies in FLT3-Mutated (mu) Patients (pts) Refractory/Relapsed (R/R) to One or More Prior FLT3 Inhibitor Based Therapies: A Single Center Experience

Mansour Alfayez, et al.

The Abstract concludes: ORRs dropped from 49% to 27% to 17% with first, second, and third FLT3i-based therapies. Combining FLT3is with low or high intensity chemotherapy appeared superior to single agent in all exposure groups. LIT (HMA and LDAC)-based combinations had encouraging ORRs of 46% and 29% in the second and third FLT3i exposure, likely because many pts received CCT-based combinations as initial

therapy. Quizartinib and gilteritinib were effective with ORR of 35-40% even when used as a second FLT3i. This is a first attempt at identifying benchmark response rates for second and third FLT3i exposures, for developing novel FLT3i combinations and expectations with sequential FLT3i usage.

664 Outcomes of Relapsed/Refractory Patients with IDH1/2 Mutated AML Treated with Non-Targeted Therapy: Results from the NCRI AML Trials

Robert K. Hills, et al.

The Abstract concludes: These results give context to the recent findings in single arm studies of ivosidenib for relapsed/refractory IDH1 mutated patients, and enasidenib for patients harbouring an IDH2 mutation. In the two studies reported, median survival was respectively 8.8 and 9.3 months, compared to 4.4 and 6.6 months in a younger group of patients identified from the UK NCRI AML trials treated with a variety of therapies. In both monotherapy trials the median survival was extended: however, reported one-year survival was not greatly improved (enasidenib 1 year survival 39% vs 34% for the NCRI cohort; ivosidenib, approximately 35% vs 32%). The difference in survival for IDH2 mutated patients in the NCRI cohort, by age and route to eligibility indicates that the interpretation of the results of single arm studies, in a heterogeneous condition such as AML, is fraught with difficulties. Ideally the magnitude of benefit should be assessed using randomised data from large scale collaborations and platform trials.

665 Comparison of Induction Strategies and Responses for Acute Myeloid Leukemia Patients after Resistance to Hypomethylating Agents for Antecedent Myeloid Malignancy

Chetasi Talati, et al.

The Abstract concludes: We demonstrate that cladribine-based induction regimens and CPX-351 yield higher CR/CRi rates compared to 7+3 in pts with sAML after HMA failure. Prolonged duration of HMA exposure may lower response potential with CPX-351 upon AML transformation. Median OS remains poor and did not differ among the 3 groups illustrating the unmet need for therapy for sAML pts after HMA failure.

666 Management of Relapse in Acute Promyelocytic Leukemia Treated with Upfront Arsenic Trioxide Based Regimens

Fouzia N., et al.

The Abstract concludes: Remission induction with ATO based regimens followed by an autologous SCT in patients with relapsed APL who were treated with frontline ATO based regimens is associated with excellent long term survival and should be considered the standard of care even in this setting.