613. Acute Myeloid Leukemia: Clinical Studies: Novel Therapies for AML and APL

637

Preliminary Results of a Phase 1 Study of Flotetuzumab, a CD123 x CD3 Bispecific Dart® Protein, in Patients with Relapsed/Refractory Acute Myeloid Leukemia and Myelodysplastic Syndrome

Geoffrey L. Uy, MD[1], **John Godwin, MD**[2], Michael P Rettig, PhD[3], Norbert Vey[4], et al.

The authors of the study conclude that:

Flotetuzumab in R/R AML and MDS demonstrated evidence of anti-leukemic activity (ORR 43%) with a manageable safety profile. This program advances an immune-activating agent in treating AML and continues to enroll patients in cohort expansion (24 AML and 24 MDS patients at the MTDS) in the US and Europe. clinicaltrials.gov NCT02152956.

638

Enasidenib Monotherapy Is Effective and Well-Tolerated in Patients with Previously Untreated Mutant-*IDH2* (m*IDH2*) Acute Myeloid Leukemia (AML)

Daniel A. Pollyea, MD[1,2], Martin S. Tallman, MD[3,4], Stephane De Botton[5,6*], Courtney D. DiNardo, MD, MSc[7], et al.

The authors of the study conclude that:

Enasidenib induced hematologic responses in these older patients with previously untreated mIDH2 AML who were not candidates for standard treatment. Approximately 1 in 5 of these patients attained CR and 1 in 3 patients had a response with enasidenib monotherapy. Responses were durable: at a median of 7.9 months of follow-up, median CR duration was not reached and median duration of any response was > 1 year. Median

OS and EFS were also promising (10.4 months and 11.3 months, respectively). Rates of treatment-related TEAEs were low and only 1 patient discontinued treatment due to a TEAE. These results suggest enasidenib may benefit older adults with mIDH2 AML who are not fit to receive cytotoxic chemotherapy. These encouraging findings have prompted follow-up studies of enasidenib in older patients with previously untreated mIDH2 AML, such as the Beat AML Master Trial (NCT03013998).

639

Mutant Isocitrate Dehydrogenase (mIDH) Inhibitors, Enasidenib or Ivosidenib, in Combination with Azacitidine (AZA): Preliminary Results of a Phase 1b/2 Study in Patients with Newly Diagnosed Acute Myeloid Leukemia (AML)

Courtney D. DiNardo, MD, MSc[1], Anthony S. Stein, MD[2], Amir T. Fathi, MD, MD, BS[3,4], Pau Montesinos, MD, PhD[5*], et al.

The authors of the study conclude that:

Enasidenib or ivosidenib + AZA combination regimens were generally well tolerated in pts with ND-AML, with 10 of the initial 13 pts remaining on-study at data cutoff, and only 2 discontinuations due to PD. The most common TEAEs with all regimens were grade 1 and 2 GI events and indirect bilirubin increases (likely due to off-target inhibition of UGT1A1 enzyme). Preliminary efficacy results with these combination regimens are encouraging, with 5 CRs and 1 PR on-study. Based on clinical activity and tolerability, the 100 mg enasidenib dose and 500 mg ivosidenib dose will move forward for further study in combination regimens. Evaluation of mIDH inhibitors + AZA continues in 2 currently enrolling randomized studies, including the expansion phase of the current study and the phase 3 AGILE study of ivosidenib + AZA (NCT03173248), to further assess the safety and clinical efficacy of these regimens.

640

A Phase 1/2 Study of the Oral Novel JAK1 Inhibitor INCB052793 As Monotherapy and in Combination with Standard Therapies in Patients with Advanced Hematologic Malignancies

Amer M. Zeidan, MD[1], Rachel J. Cook, MD[2], Rodolfo Bordoni, MD[3*], Ekaterine Asatiani, MD[4],et al.

The authors of the study conclude that:

Preliminary findings from this phase 1/2 trial indicate that INCB052793 has encouraging clinical activity, especially in combination with AZA, in patients with advanced myeloid malignancies, including those who previously failed HMAs. These data indicate that INCB052793 might (re)-sensitize HMA-refractory or relapsed patients to the effects of HMAs. Preliminary safety and efficacy data support further evaluation of INCB052793 in this setting. Enrolment is ongoing in phase 2 and expanded data, including PK/PD, will be presented.

641

Oral Arsenic Plus Retinoic Acid Versus Intravenous Arsenic Plus Retinoic Acid for Non-High Risk Acute Promyelocytic Leukemia: A Multicenter Randomized Controlled Trials

Honghu Zhu[1*], Depei Wu, MD [2], Xi Zhang, MD, PhD[3*], Lin LIU[4*], et al.

The authors of the study conclude that:

RIF plus ATRA is not inferior to ATO plus ATRA in the treatment of patients with non high-risk APL (Chinese Clinical Trial Registry number, ChiCTR-TRC-13004054).

642

Tamibarotene As Maintenance Therapy for Acute Promyelocytic Leukemia Improved Long Term Relapse-Free Survival: 7-Year Results from a Randomized Controlled Trial, JALSG-APL204

Akihiro Takeshita, MD, PhD[1], Norio Asou, MD[2], Masamitsu Yanada, MD, PhD[3*], Toru Sakura, PhD, MD[4*], et al.

The authors of the study conclude that:

Maintenance therapy with tamibarotene was effective at decreasing the relapse rate in APL patients by comparison to ATRA at the 7-year observation point. In particular, tamibarotene was significantly more effective than ATRA for high risk patients with leukocytes ≧10,000/μl. These results could lead to a new strategy for the treatment of high risk patients, which is one of the recent priority issues in the treatment of APL.