(PF556) VENETOCLAX-AZACITIDINE-CHIDAMIDE PLUS CAG AS INDUCTION CHEMOTHERAPY FOR MYELODYSPLASIA-RELATED ACUTE MYELOID LEUKEMIA

Topic: 04. Acute myeloid leukemia - Clinical

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Background

Myelodysplasia-related acute myeloid leukemia (AML-MR) exhibits poor outcomes with intensive chemotherapy. This retrospective study was conducted to evaluate the clinical efficacy and safety of the venetoclax-azacitidine-chidamide plus CAG (CACAG-VEN) regimen in AML-MR patients.

Aims

This retrospective study was conducted to evaluate the clinical efficacy and safety of the venetoclax-azacitidine-chidamide plus CAG (CACAG-VEN) regimen in AML-MR patients.

Methods

We included 14–75-year-old AML-MR patients (n = 29) treated with CACAG-VEN (aclarubicin, azacitidine, cytarabine, chidamide, and venetoclax plus G-CSF) between December 1, 2022 and October 31, 2024 and compared this cohort with patients (n = 39) who received the standard "3+7" regimen (daunorubicin plus cytarabine) from January 1, 2011 to January 31, 2020. The primary endpoint was the overall response rate (ORR) after one cycle of induction.

Results

In this retrospective analysis of 29 patients treated with CACAG-VEN, the median age was 60 (range, 27–73) years. The CACAG-VEN achieved a high ORR (96.6%, 95% CI, 82.8%–99.8%) and composite complete response (CRc, 93.1% [95% CI, 78.0%–98.8%]). The 1-year overall survival and relapse incidences were 84.0% (95% CI: 62.6–93.7) and 25.6% (95% CI: 9.8–44.9), respectively. No significant differences in OS (1-year: 74.7% [non-HSCT] vs. 92.3% [HSCT]) or CIR (1-year: 44.6% [non-HSCT] vs. 8.3% [HSCT]) were observed, regardless of whether patients underwent HSCT. The most frequent grade 1–4 adverse events were febrile neutropenia (72.4%), sepsis (24.1%), and pneumonia (48.3%). The median time to recovery was 15 days for platelet counts ≥20,000/μL and 19 days for absolute neutrophil counts ≥1,000 cells/μL after induction therapy. The outcomes in the "3+7" group were inferior to those of patients who received the CACAG-VEN regimen (ORR: 71.8%, $p = 0.009$; CRc: 51.9%, $p < 0.001$; 1-year OS: 70.3%, $p = 0.049$).

Summary/Conclusion

The CACAG-VEN regimen is a potential frontline therapy for AML-MR, yielding superior response rates and longer survival durations than the standard "3+7" chemotherapy