(PS1590) VENETOCLAX-AZACITIDINE IN COMBINATION WITH CHIDAMIDE AND CAG VERSUS "3+7" REGIMEN IN FIT OLDER PATIENTS WITH NEWLY DIAGNOSED ACUTE MYELOID LEUKEMIA A MULTICENTER, RANDOMIZED, PHASE 3 TRIAL

Topic: 04. Acute myeloid leukemia - Clinical

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Background

No standard treatment has been established for elderly patients with acute myeloid leukemia (AML). Intensive chemotherapy serves as an important therapeutic option for fit elderly patients.

Aims

This phase 3 trial aimed to evaluate the outcomes of a novel combined venetoclax-based (venetoclax-azacitidine combined with chidamide) and anthracyclines-based (aclarubicin and cytarabine) induction regimen (CACAG+VEN) versus "3+7" regimen in fit older patients aged 60-75 years with newly diagnosed AML.

Methods

In this multicenter, randomized, phase 3 trial, newly diagnosed AML patients aged 60-75 years eligible for intensive chemotherapy, were randomly assigned (1:1) to receive either CACAG+VEN or the "3+7" regimen regimen. CACAG+VEN group: Aclarubicin at a dose of 10 mg/m² per day on days 1, 3, and 5; azacitidine at 75 mg/m² per day on days 1–7; cytarabine at 75 mg/m² per dose, twice daily on days 1–5; chidamide at 30 mg per dose, twice a week for 2 weeks (4 doses in total); venetoclax at 100 mg per day in combination with azole antifungal agents; additionally, granulocyte colony - stimulating factor (G - CSF) was administered at a dose of 5 μg/kg per day.
3+7 group: Patients received induction therapy with an anthracycline combined with cytarabine. All patients who achieved complete remission (CR) received consolidation therapy with the same induction regimen. The primary endpoint was the CR rate after one cycle of induction therapy.

Results

Of 130 screened patients, 106 were enrolled and randomized, with 53 patients in each
group. Intention-to-treat analysis showed a significantly higher complete remission rate with CACAG+VEN (89% [47/53]) compared to the "3+7" group (51% [27/53]; $P < 0.01$).
The rate of minimal residual disease (MRD) negativity was 41% in the experimental group compared with 33% in the "3+7" group ($P = 0.02$). The incidence of grade ≥ 3 infections was significantly lower in the experimental group (31% vs. 53%, $P = 0.02$). The duration of severe thrombocytopenia was shorter in the experimental group (15 days vs. 19 days, $P = 0.03$). At a median follow-up of 12 months, the overall survival rate was 75% in the experimental group and 67% in the "3+7" group, with no statistically significant difference.

Summary/Conclusion

In conclusion, the venetoclax - combined CACAG regimen exhibits favorable efficacy and safety in fit elderly patients with newly diagnosed AML.