Abstract 519

Ivosidenib in Chinese patients (pts) with relapsed/refractory acute myeloid leukemia (R/R AML) with an IDH1 mutation: results from a bridging registrational study

Type: Abstract

Category: Haematological malignancies

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Background

Mutations in *IDH1* occur in 6–10% of pts with AML and are associated with a poor prognosis. Ivosidenib is a first-in-class, potent, oral, targeted, small-molecule inhibitor of mutant IDH1 (mIDH1), which has been approved by the US FDA to treat mIDH1 R/R AML based on the clinical efficacy results from the global pivotal AG120-C-001 study. In China, however, there is still no standard of care therapy for this rare pt population. Here we report for the first time the clinical data from the bridging registrational study of ivosidenib in Chinese pts with mIDH1 R/R AML.

Methods

Adult R/R AML pts with a central lab–confirmed *IDH1* R132 mutation were eligible. Ivosidenib was dosed orally at 500 mg once daily in 28-day cycles. The primary endpoint was pharmacokinetics (PK). Key secondary endpoints included safety and efficacy, with a primary efficacy endpoint of complete remission (CR) + CR with partial hematologic recovery (CRh) rate.

Results

As of 18 Jan 2021, 30 pts were treated, with 17 remaining on treatment. In the prespecified 9 PK-evaluable pts, the C_{max} (4730 ng/mL) was reached 3.98 h after single-dose administration and AUC_{0-24} was 62100 ng*h/mL. Systemic exposure parameters demonstrated moderate to high variability. The CR+CRh rate was 30.0% (9/30; 95% CI: 14.7–49.4%), with all 9 pts achieving CR. Median duration of CR+CRh was not reached (range: 0.03–10.09mos) and median time to CR+CRh was 2.79 mos (range: 1.0–6.5). Objective response rate was 36.7% (11/30; 95% CI: 19.9–56.1%). One (3.3%) pt received hematopoietic stem cell transplantation after achieving CR. Transfusion independence was achieved in 7/18 pts (38.9%) and maintained in 8/12 pts (66.7%). All pts reported treatment-emergent adverse events (TEAEs). Grade ≥3 TEAEs occurred in 26 (86.7%) pts, most commonly platelet count decreased (36.7%), neutrophil count decreased (33.3%) and anemia (33.3%). Two fatal TEAEs occurred in 2 (6.7%) pts, with neither related to ivosidenib. Serious AEs were reported in 18 (60.0%) pts.

Conclusions

Ivosidenib was well tolerated and induced durable remissions with clinical benefits in Chinese pts with mIDH1 R/R AML, potentially fulfilling an unmet medical need for this rare pt population in China.

Clinical trial identification

NCT04176393

Editorial acknowledgement

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