

## HIGH DOSE EQUALS IMPROVED RESPONSE

The current induction therapy for patients with acute myeloid leukemia (AML) is anthracycline plus cytarabine. Complete remission is achieved in 50–75% of patients and the addition of other drugs or dose intensification has not improved survival. Whether dose intensification for induction therapy in patients (<60 years of age) with AML might improve survival has not been addressed. In a randomized phase III trial by the Eastern Cooperative Group (ECOG), Fernandez and colleagues compared standard-dose and high-dose daunorubicin in young adults with AML.

The researchers randomly assigned 582 patients with AML, who had not been treated, to receive three once-daily doses of daunorubicin at the standard dose (45 mg/m<sup>2</sup>) or a higher dose (90 mg/m<sup>2</sup>), combined with cytarabine. Allogeneic hematopoietic stem-cell transplantation, with or without a single dose of gemtuzumab ozogamicin, was offered to patients who experienced complete remission. Overall survival was the primary end point of the study and the median follow-up time was 25.2 months.

Patients treated with high-dose daunorubicin had a significantly higher rate of complete remission (70.6% versus 57.3%) and improved median overall survival (23.7 months versus 15.7 months) compared with patients who received standard-dose daunorubicin. Moreover, serious adverse events were similar in both groups, indicating that administration of high-dose daunorubicin has a similar safety profile as the standard-dose.

The researchers conclude that intensifying induction therapy with high-dose daunorubicin in young patients with AML significantly improved the rate of complete remission and the duration of overall survival; therefore, this treatment strategy should be considered as a standard of care in these patients.

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