



# Treatment of Acute Myelogenous Leukemia

## With Outpatient Azacitidine

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### Background

Patients older than 55 years of age with acute myelogenous leukemia (AML) are less likely to achieve complete remission and more likely to experience toxicity with conventional induction chemotherapy than younger patients. Azacitidine administered in the outpatient setting is well tolerated and can induce complete hematological remission in patients with myelodysplastic syndromes (MDS). At higher doses, azacitidine has activity in AML.

### Methods

Twenty patients were retrospectively identified who had been treated with

azacitidine with bone marrow blast counts between 21 and 38%. Patients with blast counts up to 29% were initially treated as MDS, but by WHO now meet criteria for AML. Patients with blast counts over 29% were treated with azacitidine after being deemed poor candidates for induction chemotherapy. Azacitidine 75 mg/m<sup>2</sup>/day was administered subcutaneously for 7 days every 4 weeks, which was defined as 1 cycle.

### Results

The overall response rate was 60% (12/20): complete response (CR; n = 4; 20%); partial response (PR; n = 5; 25%); hematologic improvement (HI; n = 3; 15%). The median

survival of responders was 15 months compared with 2.5 months for nonresponders (P = .009). During therapy, responders had an Eastern Cooperative Oncology Group (ECOG) performance status of 1 or 0. The most common toxic event was infection (n = 8). Four patients were hospitalized during the first cycle of treatment.

### Conclusions

Azacitidine administered in the outpatient setting can induce remission in AML. The therapy is well tolerated and might be an alternative for patients unlikely to tolerate standard induction chemotherapy. **OA**