REAL-WORLD OUTCOMES OF AZACITIDINE AND VENETOCLAX IN NEWLY DIAGNOSED AML AND RELATED HIGH-RISK MYELOID NEOPLASMS AT A COMMUNITY HOSPITAL

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CONTEXT & OBJECTIVES

- Azacitidine plus venetoclax is a standard lower-intensity regimen for acute myeloid leukemia (AML) in patients unfit for intensive induction, but real-world data from community hospitals remain limited.
- We evaluated outcomes, toxicity, and trans fusion needs in patients with newly diagnosed AML and related high-risk myeloid neoplasms treated with this regimen and explored the impact of antifungal prophylaxis and time from diagnosis to treatment initiation on outcomes.

DESIGN, SETTING, & POPULATION

- This single center retrospective cohort study included 18 adults diagnosed at a community hospital in Park Ridge, Illinois between January 1-December 31, 2025, with follow-up through March 15, 2026.
- All were newly diagnosed and unfit for intensive induction.
- Diagnoses included:
  - AML (n=14)
  - Therapy-related myeloid neoplasm (n=2)
  - High-risk myelodysplastic neoplasm (n=2)
- Patients were aged 56-86 years, with 7 males and 11 females.
- Survival was estimated by Kaplan-Meier analysis.

INTERVENTIONS & OUTCOME MEASURES

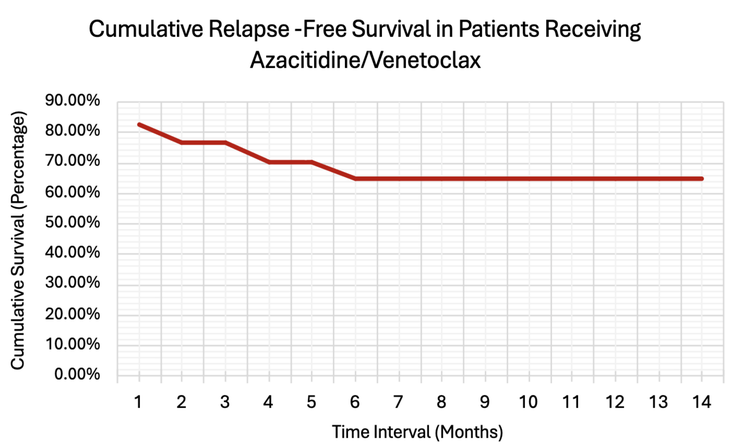
- Azacitidine plus venetoclax were administered per institutional practice.
- Antifungal prophylaxis included azoles (voriconazole, isavuconzonium, posaconazole) and micafungin.
  - Several patients required switches for QTc prolongation, cost, or drug interactions.
- Venetoclax dose adjustments were standardized.
- Outcomes included overall survival (OS), relapse-free survival (RFS), complete remission (CR) after cycle 1, time to count recovery, time from diagnosis to treatment initiation, mean combined transfusion burden, and treatment-related complications.

CONCLUSIONS & KEY TAKEAWAYS

- In this small community-based cohort, azacitidine plus venetoclax produced CR in most patients after cycle 1, with meaningful early survival but substantial toxicity.
- These findings are hypothesis-generating and support larger studies evaluating antifungal prophylaxis and treatment timing.

RESULTS

- At 30 days, 3 months, and 6 months/1 year, RFS among responding patients was 82.35%, 76.86%, and 65.04% respectively. OS was 83.33%, 77.78%, and 66.67% at the same timepoints.
- Mean time from diagnosis to treatment initiation was 5.89 days.
- Among surviving patients, mean time to count recovery was 39 days.
- After cycle 1, 11/18 patients (61.11%) achieved CR, 5/18 (27.78%) had persistent disease, and 2/18 (11.11%) passed away.
- Infections occurred in 13/18 patients, cardiac complications in 7/18, clinically significant bleeding or thrombosis in 5/18, and leukapheresis was required in 4/18.
- Mean combined transfusion burden was 6.3 units among surviving versus 16.5 among deceased patients.
- Deaths occurred across all antifungal strategies. Subgroup comparisons by antifungal were limited by small numbers and agent switching.



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