Demographics, Management, And Outcomes Of Active Acute Myeloid Leukemia Patients Admitted For Acute Pulmonary Embolism: A Propensity Score-Matched Study From The United States

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Introduction

High risk of venous thromboembolism in acute myeloid leukemia (AML) patients; comparable to that in solid tumors.

Aim

To identify the differences in clinical management and outcomes of acute pulmonary embolism (APE) in AML patients compared with patients without a malignancy.

Methods

- **Data Source:** 2016–2022 National Inpatient Sample
- **Inclusion:** Patients with primary diagnosis of acute pulmonary embolism (APE)
- **Exclusion:** COVID-19 positive patients
- **Groups:** 1. Active AML patients
  2. Patients without any malignancy
- **Analysis:** 1:1 propensity-score matching, adjusted for demographics and comorbidities

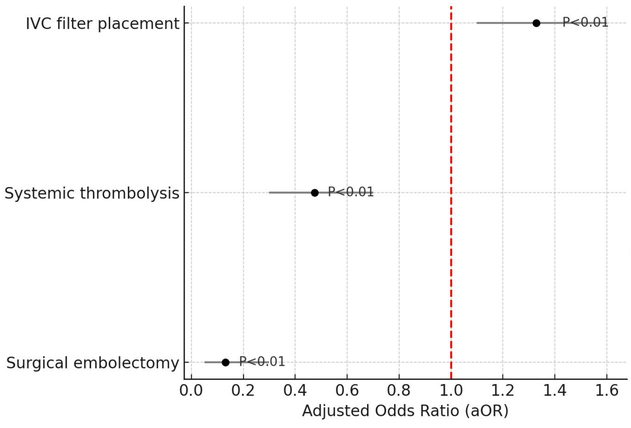
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Results

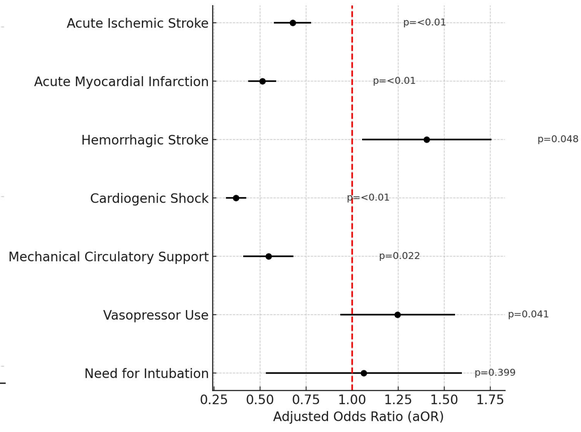
Baseline Characteristics (Pre - PSM)

Characteristic	Active AML n=4110	Non-malignancy patients n=1916589	p-value
Mean Age (years)	62.03	63.14	p < 0.01
Male %	53	49.3	p < 0.01

Differences in Choice of Treatment for APE in AML patients vs Non-malignancy patients



Risk of Complications in AML patients vs Non-Malignancy patients



Three times mortality risk in AML patients

Discussion

- Active AML patients received **fewer aggressive treatments**
- Complication rates varied between groups
- **Mortality risk was higher** in AML patients
- **Clinical implication:** Early screening for APE and tailored admission protocols are essential to improve short- and long-term outcomes

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