Silent Aggressors: High Prevalence of Unmutated IGHV in Early-Stage CLL/SLL Among African American Patients

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Introduction

- IGHV mutation status is a key prognostic marker in CLL.
- Unmutated IGHV (UM-IGHV) correlates with more aggressive disease and poorer survival.
- Staging systems like Rai and Binet may underestimate risk, especially in African-American.

Aim

To assess the distribution and impact of IGHV mutation status across clinical stages and cytogenetic risk categories in African-American CLL/SLL patients.

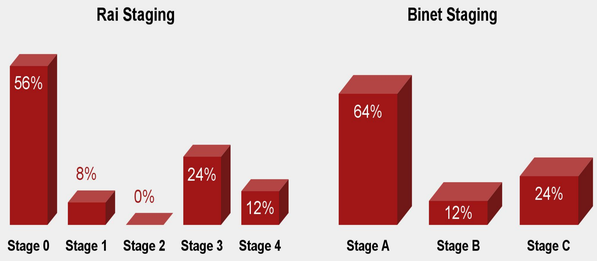
Methods

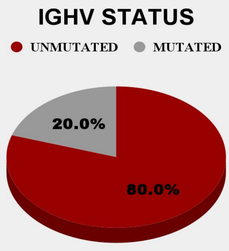
- **Design:** Retrospective cross-sectional study
- **Setting:** Brooklyn Cancer Care
- **Participants:** 25 African-American patients diagnosed with CLL/SLL (2014–2024)
- **Inclusion:** Complete staging, cytogenetics, and IGHV mutation data
- **Outcome:** Distribution of IGHV status across clinical and cytogenetic risk groups

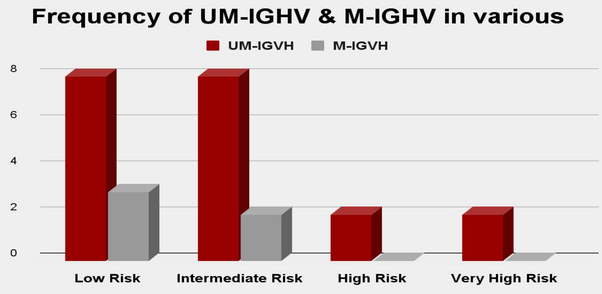
Results

- **Demographics:** 25 patients, mean age 70 (16M / 9F)
- **IGHV Status:** 80% Unmutated (20/25), 20% Mutated (5/25)
- **Risk Stratification in UM-IGHV group:**
  - Low Risk (LR): 40%
  - Intermediate Risk (IR): 40%
  - High Risk (HR): 10%
  - Very High Risk (VHR): 10%

- *All HR and VHR were UM-IGHV*
- Among early-stage patients, UM-IGHV was observed in 71.4% of Rai Stage 0 and 68.8% of Binet Stage A.







Discussion

- A majority of early-stage patients had UM-IGHV, indicating high biological risk despite low clinical staging.
- This discordance challenges the reliability of traditional staging systems.
- Suggests integrating IGHV status into routine risk stratification especially for African-American patients to guide prognosis and therapy.

References

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