Impact of early versus delayed antiretroviral therapy on mortality in HIV-positive patients with multiple myeloma: a real-world cohort analysis

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Introduction

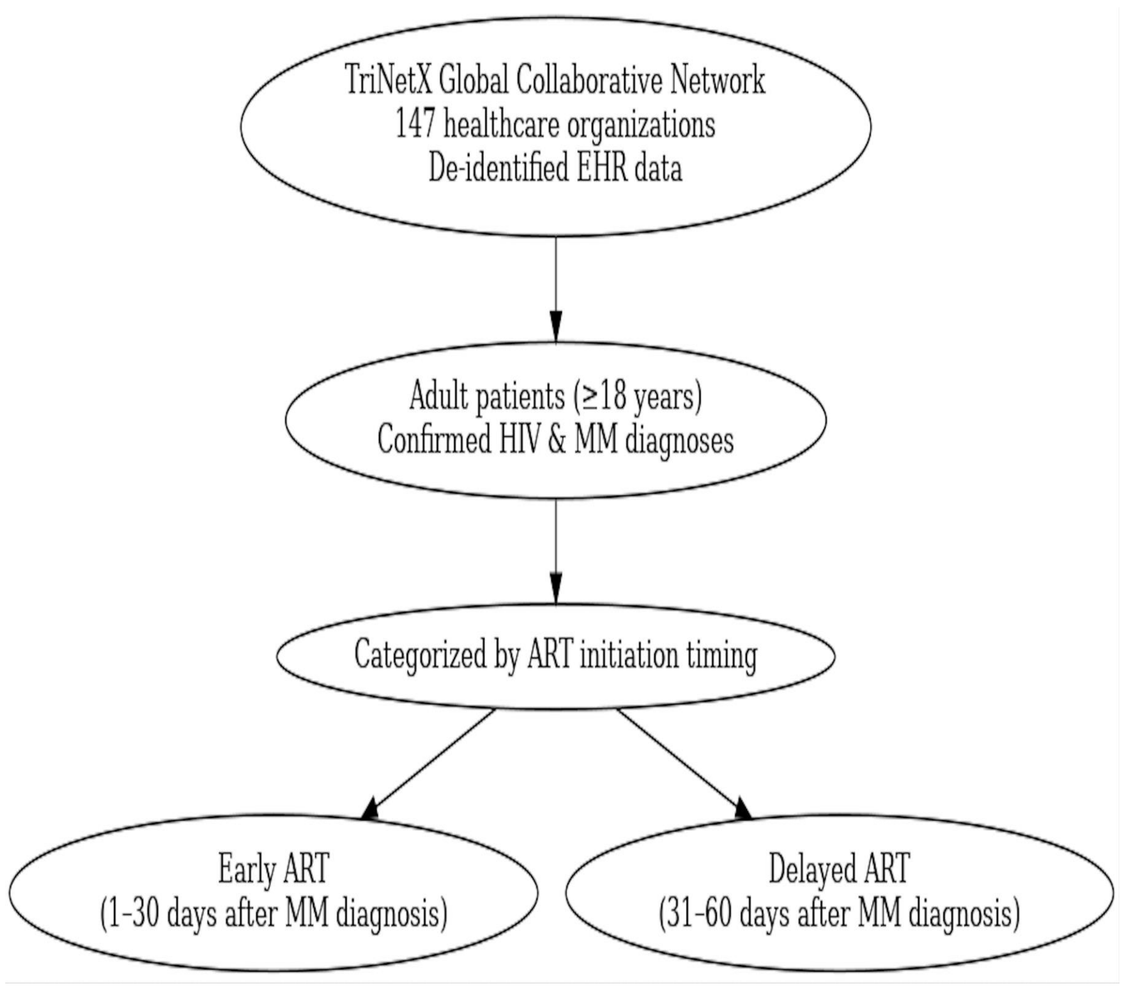
- HIV-positive individuals are at increased risk for hematologic malignancies, including multiple myeloma (MM)
- The National Comprehensive Cancer Network (NCCN) recommends prompt initiation of antiretroviral therapy (ART) in patients with HIV; however, there is limited evidence on the optimal timing of these medications.

Objectives

To evaluate whether the timing of ART initiation following MM diagnosis influences all-cause mortality in HIV-positive individuals.

Methods

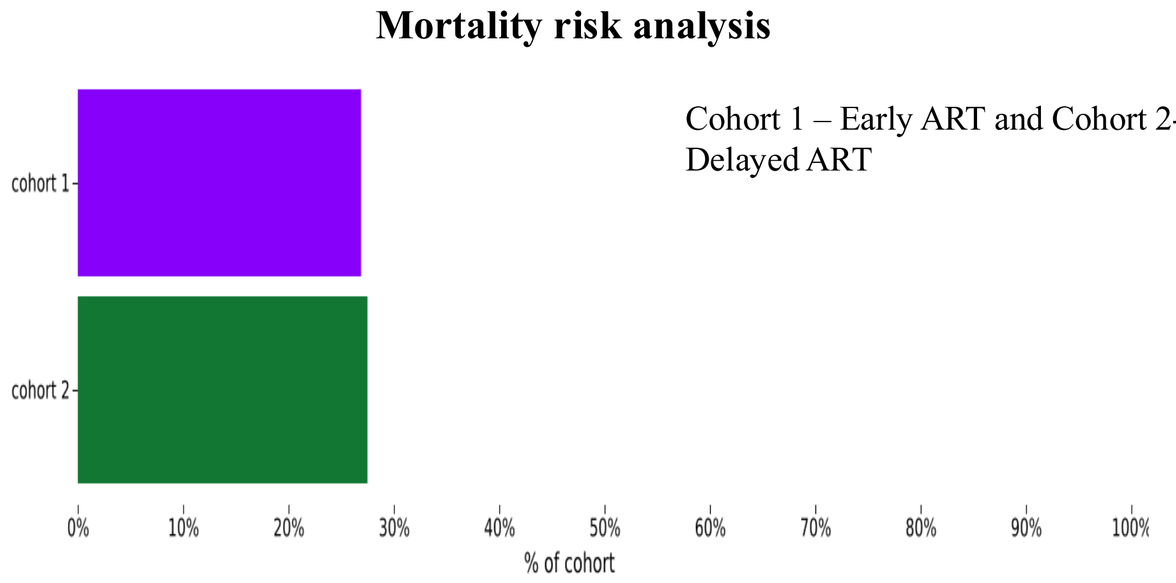
- The index event was the date of MM diagnosis, and patients were followed for up to 10 years to evaluate all-cause mortality, the primary outcome.



- Propensity score matching (1:1) was employed to balance covariates.
- Statistical analyses included Kaplan-Meier survival estimates, log-rank tests, and calculation of risk difference, risk ratio, odds ratio, and hazard ratio with 95% confidence intervals.

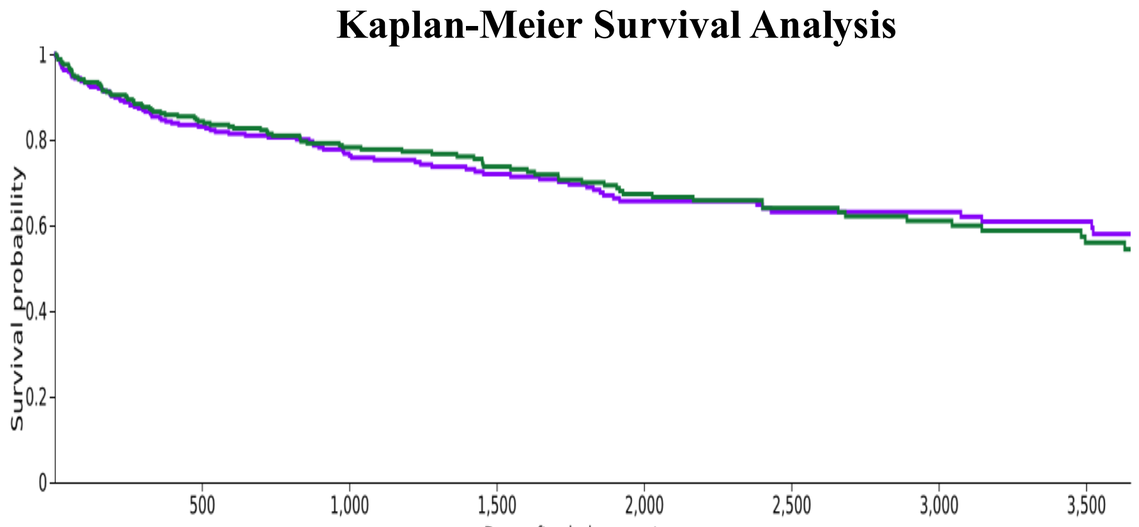
Results

Mortality risk analysis



Cohort 1 – Early ART and Cohort 2- Delayed ART

Kaplan-Meier Survival Analysis



- Mortality was similar between groups: 26.9% in the early ART group versus 27.5% in the delayed group.
- Ten-year survival probabilities were 57.99% for early ART and 54.41% for delayed ART.

Summary

- Initiation of ART within 30 days versus 31–60 days following MM diagnosis was not associated with a significant difference in all-cause mortality.

Discussion

- These findings highlight the importance of personalized treatment approaches and the need for prospective studies to refine ART initiation strategies.
- Limitations of this include- Factors such as HIV viral load, CD4 count, MM staging, and adherence to ART were not reported and may influence outcomes.
- Small sample size after matching

References

1.Kumar V, Sharma A, Singh J, Singh H. A randomized prospective study to compare early versus delayed access to antiretroviral therapy over clinical and immunological sequel in HIV-positive adults. *J Family Med Prim Care*. 2022;11(11):6959-6969. doi:10.4103/jfmpc.jfmpc_493_22