IMPACT OF EARLY PALLIATIVE CARE ON CLINICAL OUTCOMES IN CHRONIC MYELOID LEUKEMIA: A REAL-WORLD COHORT ANALYSIS

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Introduction

Palliative care remains underutilized in chronic myeloid leukemia (CML), a disease now commonly managed with tyrosine kinase inhibitors. However, data on the impact of palliative care on clinical outcomes in CML are limited. This study examines the impact of early palliative care on clinical outcomes in a large, real-world cohort of patients with CML.

Aim

To evaluate the impact of early palliative care on clinical outcomes in a large, real-world cohort of patients with CML.

Objectives

- To assess differences in mortality among palliative care recipients within 6 months of diagnosis and those without palliative care in 5 years
- To evaluate the differences in hospitalizations, ICU and ED visits
- To compare survival outcomes in both groups using Kaplan-Meier and hazard ratios.
- To examine the differences in hypertension, CAD, heart failure, and thromboembolic events rates between the two groups.
- To evaluate the rate of metabolic conditions such as diabetes, osteoporosis in both groups.

Methods

- We used the TriNetX US Collaborative Network to identify adults (≥18 years) with BCR/ABL-positive CML diagnosed between 2000–2022.
- Two cohorts were formed: those with palliative care within 6 months of CML diagnosis (n=4,139) and those without such care within five years (n=28,966).
- After 1:1 propensity score matching on demographics and comorbidities, 3,390 patients per cohort were included.
- The primary outcome was mortality.
- Secondary outcomes included hospitalizations, ICU/ED visits, cardiovascular events, thromboembolic events and metabolic conditions
- Risk ratios (RR) with 95% CI and Kaplan-Meier survival with hazard ratios (HR) were calculated.

Results

Figure 1: Kaplan Meier Survival analysis for palliative care use within 6 months of diagnosis vs no palliative care use after 5 years

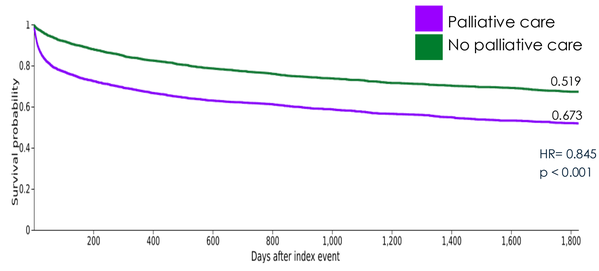
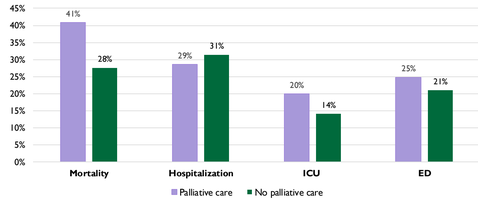


Figure 2: Clinical outcomes of early palliative care vs no palliative care



- Palliative care recipients had significantly higher 5-year mortality rates (40.8% vs.
- 27.6%, RR=1.48, 95% CI: 1.38–1.59; p < 0.001) and lower survival rates (51.9% vs. 67.3%, p < 0.001).
- ICU admissions were more common in the palliative group (19.9% vs.14.1%, RR=1.41, p < 0.001)
- ED visits were also more common in the palliative group (24.8% vs. 21.0%,
- RR=1.18, p=0.010).
- There was no statistically significant difference in hospitalization rates.
- Rates of CAD (9.5% vs. 11.6%, p=0.018), osteoporosis (4.0% vs. 5.1%, p=0.036), and diabetes 6.4% vs. 8.0%, p=0.040) were sightly lower in the palliative group
- No significant differences were observed in DVT or PE.

Conclusion

- In CML, early palliative care was linked to higher mortality and increased ICU admission rates, but fewer cardiovascular complications.
- These outcomes may reflect utilization of
- palliative care only in more advanced cases.

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