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632.CHRONIC MYELOID LEUKEMIA: CLINICAL AND EPIDEMIOLOGICAL

Incidence-Based Mortality (IBM) and Survival for Chronic Myeloid Leukemia (CML) By Age Group: Is There Any Relationship between Age of Diagnosis, IBM and Survival?

Jerry Kenmoe[1], *Calvin Ghimire, MD*[2], *Narjis Batool*[2], *Arvind Kunadi, arvind.kunadi@mclaren.org*[2]

[1] McLaren Flint Hospital, Flint, MI
[2] McLaren Flint, Flint, MI

Incidence-Based Mortality (IBM) and Survival for Chronic Myeloid Leukemia (CML) by Age group: Is there any relationship between age of diagnosis, IBM and Survival?

Background:

CML is known to affect different age groups differently, with a predominance in adults. CML accounts for about 15% of all new cases of leukemia, with over 50% of the cases being diagnosed in individuals 65 or older.

Our study looked at the variation in 5 and 10 years survival, and probability of death from CML based on different age groups in the US adult populations from 2000-2019 via SEER.gov database.

Methods:

We used Incidence -Based Mortality SEER Research Data, 17 Registries, Nov 2021 Sub (2000-2019), which provides the broadest geographic coverage for incidence-based mortality rates and is roughly 26.5% of the US population (based on the 2020 Census) for the calculation of Incidence-Based Mortality and Survival rates of CML. SEER*Stat 8.4.1 was used to obtain cause-specific survival, with Death due to cancer. We used Join-point software, version 5.0.2. by the National Cancer Institute, annually to create log-linear time trends.

Results:

Fig 1: CML 10-Year Survival rates per 100,000 and age-adjusted to the 2000 US standard population by age groups (50-79)

Our results revealed a significant change in the probability of dying from CML for age groups 60-64 and 70-74.

The Average Annual percent Change (AAPC) for incidence Based Mortality by age groups were 3.71%*(95% CI 1.55 to 6.42), 2.87%*(95% CI 0.74 to 5.56), 6.09%*(95% CI 2.97 to 9.03), 2.33%*(95% CI 0.38 to 5.84), 4.86%*(95% CI 2.74 to 7.18), 3.38%* (95% CI 2.08 to 4.97) for age groups 50-54, 55-59,60-64,65-69,70-74, and 75-79 respectively.

The trend for 10 year survival shows increasing survival across all age groups.

The AAPC for 10 year survival were 1.74%*(95% CI 0.08 to 4.04), 4.08%*(95% CI 2.25 to 7.33), 2.52% (95% CI -0.22 to 6.21), 5.29%* (95% CI 3.34 to 7.70), 5.42%* (95% CI 2.13 to 9.71), 2.29% (95% CI 1.88 to 6.92).

Conclusion:

Our Study shows a significant difference in the survival rates at 10 years based on age groups, with a pattern of lower survival rates and higher probability of death from CML with increased age at diagnosis.

Disclosures No relevant conflicts of interest to declare.

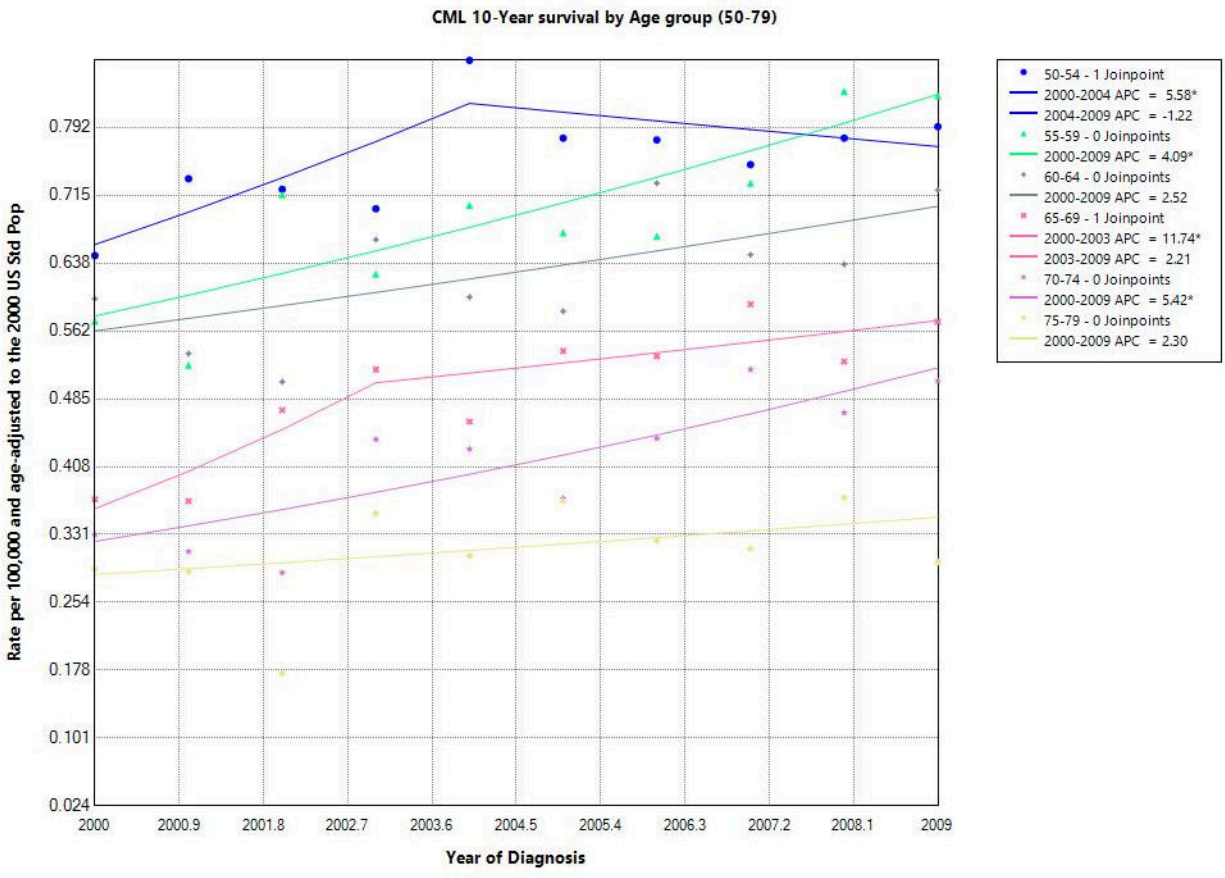

Figure 1

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