Abstract: P589

Title: IMPLICATIONS OF REGISTRY DATA FOR ACUTE MYELOID LEUKEMIA (AML) TREATMENT AND CARE DURING THE COVID-19 PANDEMIC

Abstract Type: Poster Presentation

Session Title: Acute myeloid leukemia - Clinical

Background:

For patients (pts) with AML, timely treatment is critical. The COVID-19 pandemic broadly disrupted healthcare (eg, decreased blood donations), possibly causing delays in AML treatment and care.

Aims:

To determine the extent of the COVID-19 impact on AML, this analysis examines the effect of the pandemic on managing pts with AML in the Connect® Myeloid Registry (NCT01688011).

Methods:

The Registry is a large, US, multicenter, prospective, observational cohort study that includes newly diagnosed pts with AML aged ≥55 y. Pt characteristics (including assessment for transplant) were analyzed from December 2013 to February 2020 (from Registry opening to the start of the pandemic; Period 1), from March 2020 to May 2021 (during major healthcare disruptions; Period 2), and from June 2021 to January 2022 (resource stabilization and increased vaccine availability; Period 3); for the analysis of oral-containing medications, Period 1 began January 2019 to account for the FDA approval of venetoclax for AML in November 2018. Monthly COVID-19 incidence was calculated per weekly US government data (CDC COVID Data Tracker; 2023). Rates of visits (office, remote) and transfusions were calculated by monthly events/person-year to report event rates over time (sum of events of interest divided by the sum of follow-up for all pts within each month). Overall survival (OS) was estimated using the Kaplan-Meier method.

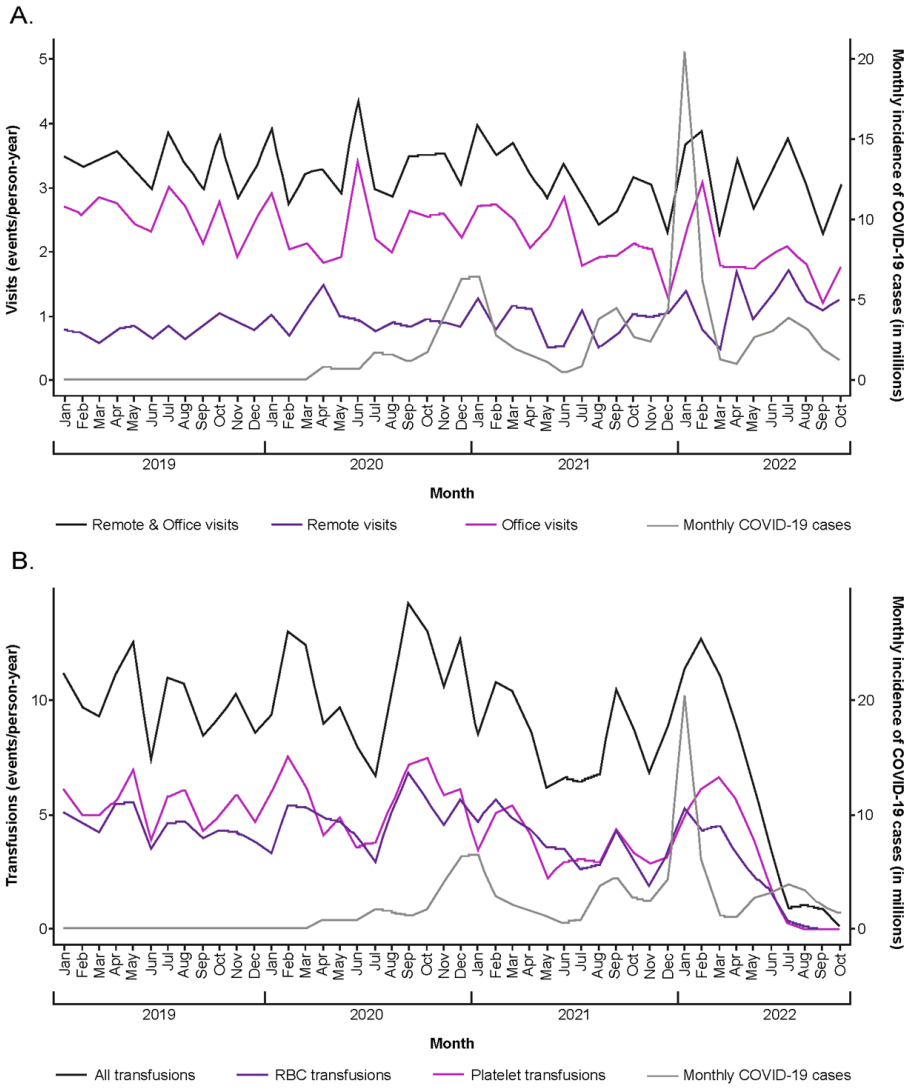
Results:

In this analysis, 650 pts were included in Period 1, 87 pts in Period 2, and 36 pts in Period 3; demographics and baseline characteristics were balanced across periods. Prior to the COVID-19 pandemic (Period 1), 25.1% of pts were not assessed for transplant; however, after the onset of the pandemic, this increased (45.5% and 44.4% in Periods 2 and 3, respectively). When monthly US COVID-19 cases increased, in-person visits and transfusion rates generally decreased in the Registry (Figure). The proportion of pts receiving oral-containing induction regimens was 49.4% (40/81) in Period 1 and 50.6% (44/87) in Period 2, with a slight increase to 63.9% (23/36) in Period 3. No significant differences in median OS by period were observed (Period 1 vs Period 2: 14.6 vs 13.7 mo, hazard ratio [HR] [95% CI], 0.90 [0.67-1.21], $P = 0.47$; Period 1 vs Period 3: 14.6 vs 17.6 mo, HR [95% CI], 0.74 [0.43-1.25], $P = 0.26$).

Summary/Conclusion:

In this analysis of pts with AML in the real-world setting, a pattern of increased COVID-19 cases in the US was accompanied by fewer transfusions, fewer in-person visits, and fewer assessments for stem cell transplantation; this pattern was particularly prominent in the initial months after onset of the pandemic without a significant impact on OS.

Figure. Rates of visits (A) and transfusions (B) in the Registry as well as monthly US COVID-19 cases per 2023 CDC COVID Data Tracker across Periods 1, 2, and 3.



Keywords: AML, Transfusion, COVID-19, Survival