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## Factors Associated with Treatment Among Older Adults Diagnosed with Chronic Lymphocytic Leukemia: An Analysis Using Medicare Claims Data

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# Authors and Disclosures

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# Introduction

- Chronic lymphocytic leukemia (CLL) is the most common type of leukemia in adults in the US.<sup>1</sup> Sixty-seven percent of patients diagnosed with CLL are age 65 years or older.<sup>2</sup>
- Limited information exists on current prescribing patterns or the demographic and clinical characteristics of individuals receiving them.
- Our study objectives:
  - Characterize CLL treatment patterns and timing of treatment;
  - Identify factors associated with the receipt of CLL treatment in the US Medicare population

<sup>1</sup> American Cancer Society. “What Is Chronic Lymphocytic Leukemia?” Accessed November 14, 2021. <https://www.cancer.org/cancer/chronic-lymphocytic-leukemia/about/what-is-cll.html>.

<sup>2</sup> The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI). “Chronic Lymphocytic Leukemia - Cancer Stat Facts.” SEER. Accessed January 11, 2021. <https://seer.cancer.gov/statfacts/html/clyl.html>.



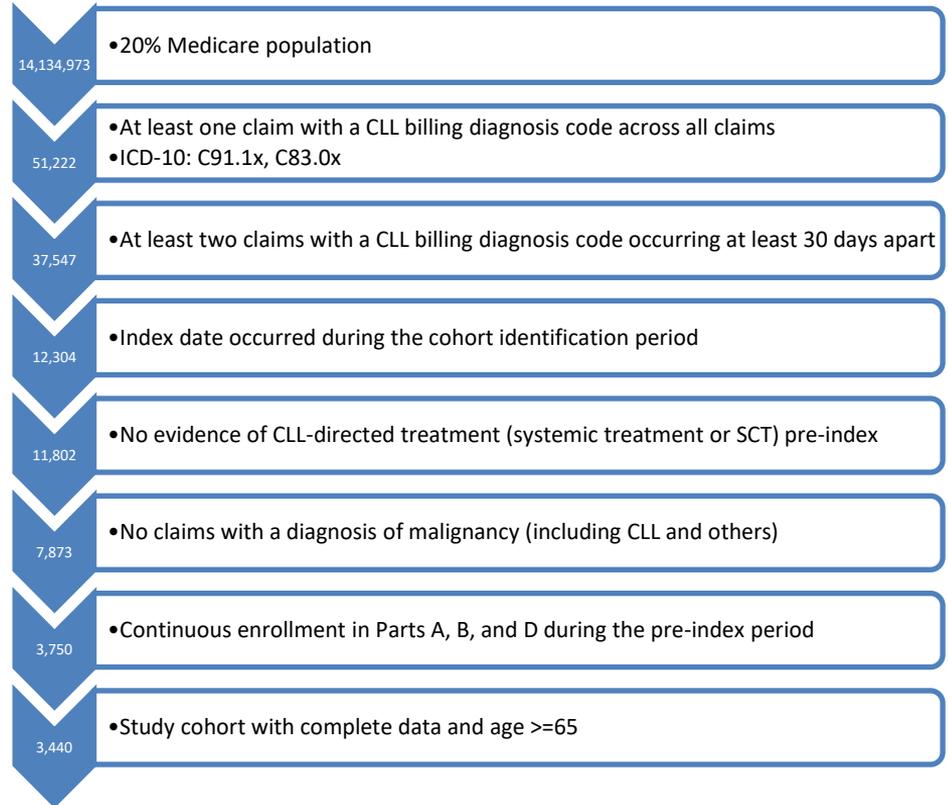
# Methods: Design and Data

- Design: retrospective cohort study design
- Data Source: Chronic Conditions Data Warehouse (CCW)
- Sample: Individuals with CLL-related healthcare utilization
- Cohort identification period: 7/1/2017 to 6/30/2019
- Index date: the date of the first claim with a CLL diagnosis code
- Pre-index : 180 days before index date
- Individuals were followed from the index date until loss of eligibility, death, or end of the study period on 12/31/2019



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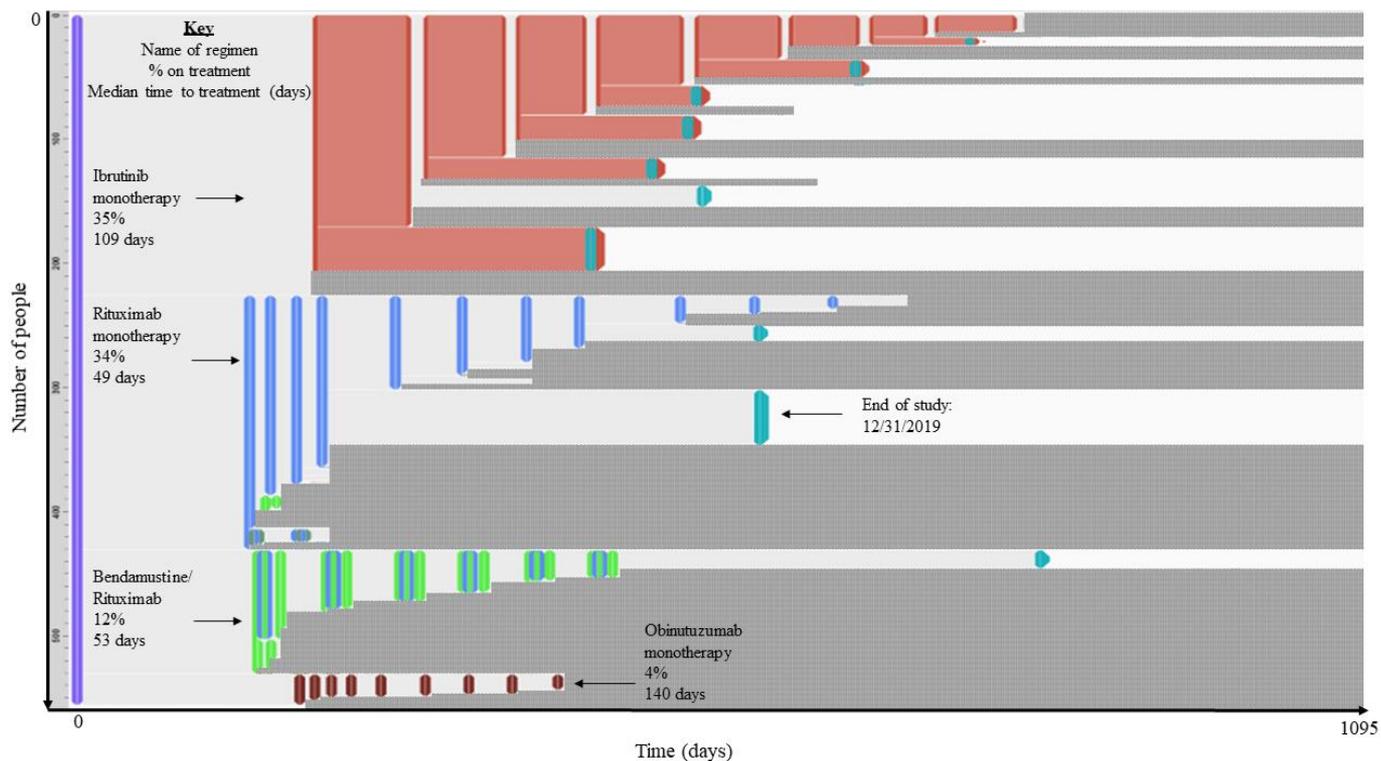


# Methods: Measures and Data Analysis

- Patient-level baseline measures
- The CLL treatments : rituximab monotherapy, ibrutinib monotherapy, bendamustine/rituximab (BR), obinutuzumab, etc.
- Time to initiation: the time (in days) from the index date until the first evidence of treatment receipt
- Treatment patterns:
  - Proportion of individuals who received the first course of treatment (COT),
  - Top-ranked regimens within the first COT
  - Median time to initiation
- Visual analytics (EventFlow) and statistical analyses using regression models



# Results: Sample characteristics and Treatment receipt



# Conclusion

- Among Medicare beneficiaries diagnosed with CLL, less than 2 out of 10 patients received CLL treatment
- The most common treatments administered during this time period were ibrutinib and rituximab with variation across groups in terms of the length of time on the first course of treatment
- Younger age and male gender were factors associated with higher odds of receiving treatment

