Rituximab Use in Elderly Patients Newly Diagnosed with Primary Immune Thrombocytopenia

Shuling Li, PhD,1 Julia T. Molony, MS,1 Anne Dexter, MPh,1 Karynsa Cetin, MPh,2 Ivy Altomare, MPh,3 Jeffrey Wasser, MD4
1Chronic Disease Research Group, Minneapolis, MN, USA; 2Center for Observational Research, Amgen Inc., Thousand Oaks, CA, USA; 3Duke University; 4University of Connecticut

Introduction

Immune thrombocytopenia (ITP) is a rare autoimmune hematologic disorder characterized by a low platelet count, which leads to increased risk of bleeding. Although it is well recognized that rituximab, a monoclonal anti-CD20 antibody, can be used off-label for treatment of ITP,1-4 detailed data on its use in large real-world ITP patient populations are lacking. We described incidence, patient characteristics, and treatment patterns of rituximab use in a population-based cohort elderly patients with newly diagnosed ITP.

Methods


Inclusion criteria: Patients newly diagnosed with primary ITP at age ≥67 years in 2010-2016 who were continuously enrolled in Medicare Parts A and B (FFS) for 24 months before diagnosis.

ITP diagnosis: a) at least two outpatients claims at least 30 days apart within 365 days carrying an IC 9-CM code for primary ITP (287.31).

ITP data on: date of ITP initiation, age at ITP onset, sex, race, number of administrations, treatment were characterized.

Exclusion criteria: Patients with secondary causes of thrombocytopenia or prior exposure to rituximab in the 12 months before the date of ITP onset.

Baseline period: 12 months before ITP onset.

Follow-up period: from the date of ITP onset until the last record available.

Baseline characteristics at ITP onset were 10.9 years old, 8.6% were male, 9.1% were African American, 4,016(24) were White patients and those without select comorbid conditions were more likely to receive rituximab than those with (Table 3).

Results

Table 1. Baseline characteristics, overall and by rituximab initiation after ITP onset

Table 2. Cumulative probability of rituximab initiation after ITP onset (%)

Table 3. History of bleeding and use of specific ITP therapies among rituximab users (%)

Table 4. Rituximab use in the first course of treatment

Summary

We identified 17,117 elderly patients with newly diagnosed ITP in 2010-2014; of these, 1,562 (9%) received rituximab with a median of treatment duration (1-8) months.

Conclusion

About one in ten elderly patients with newly diagnosed ITP received rituximab. White patients and those without select comorbid conditions were more likely to receive rituximab than those with (Table 3).

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Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

Other

Intracranial hemorrhage

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Intracranial hemorrhage

Other