

Safety and Efficacy of Rituximab Infusions in the Home Setting and Pharmacy Infusion Suite

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Background

The ability to receive care in the outpatient setting has long been established as more convenient and cost effective for the patient.¹ Home infusion therapy is no exception, and never more imperative than during the COVID-19 pandemic. In addition to convenience and cost savings, limiting the patient's exposure to COVID-19 was crucial. The ability to administer therapy in the outpatient setting during a pandemic can also alleviate strain on hospital systems by freeing up valuable bed space and preserving personal protective equipment. During the COVID-19 pandemic, this organization received an increased number of referrals for rituximab therapy, including first doses, to be administered in the home setting and ambulatory infusion suite (AIS). Concerns regarding the severity of acute drug reactions (ADR's) associated with the initial doses of rituximab have historically limited its administration to a more controlled site of care until patient tolerance was established.

Purpose

This project seeks to establish that patients receiving rituximab, including first doses, can safely be infused in the home or AIS. Demonstrating a low incidence of ADR's within this population, including patients naïve to therapy, will support the concept that this medication can safely be administered in this environment.

Methods

A retrospective analysis was performed on all patients within this organization dispensed rituximab between January 01, 2020-December 31, 2020. A total of 78 patients were identified, however five patients were excluded due to therapy administration taking place in a hospital or physician's office. The analysis included infusion setting, first-dose administrations, premedication orders, the incidence and severity of ADR's, and infusion completion to establish effective management of ADR's. All infusions were reviewed for ADR's, however if a patient received more than one infusion in 2020, the patient was only counted

once. ADR's were classified as mild, moderate, or severe based on the World Allergy Organization's guidelines for the assessment and management of anaphylaxis.²

Results

This study demonstrated that rituximab infusions can safely be administered in the home or AIS as 73 patients safely received one or more infusions in this environment in 2020. Of the 73 patients, seven were naïve to therapy (9.6%) and six patients were 18 years of age or younger (8.2%). Of the seven patients receiving a first-dose of rituximab, only one patient had a documented ADR which was classified as mild. There were two additional mild ADR's in the not naïve to therapy population, and all three infusions were able to be completed.

Discussion

These findings support the need for additional longitudinal studies of rituximab administration in the outpatient setting to establish safety over a longer period of time, and to allow for an increased sample size. Additional studies validating the safety of rituximab administration in this environment could prompt payers to advocate for this setting in the future for cost-savings purposes.

Conclusion

Rituximab infusions, including first-dose administration, can safely be given in the outpatient setting with established safety protocols in place. Protocols should include the administration of appropriate premedications to decrease or prevent untoward side effects, as well as a plan for managing infusion related reactions.

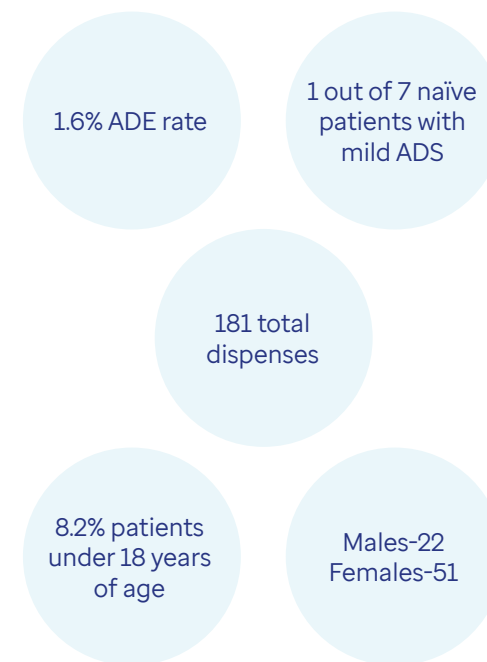
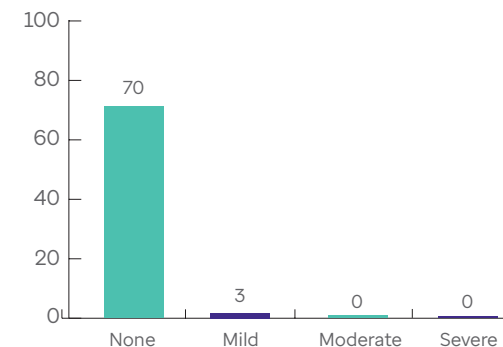


Table 1. Adverse drug events



References:

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