

Evaluation of Bezlotoxumab for the Prevention of Recurrent *Clostridioides difficile* Infection in Patients Living With Cancer at a Large Comprehensive Cancer Center

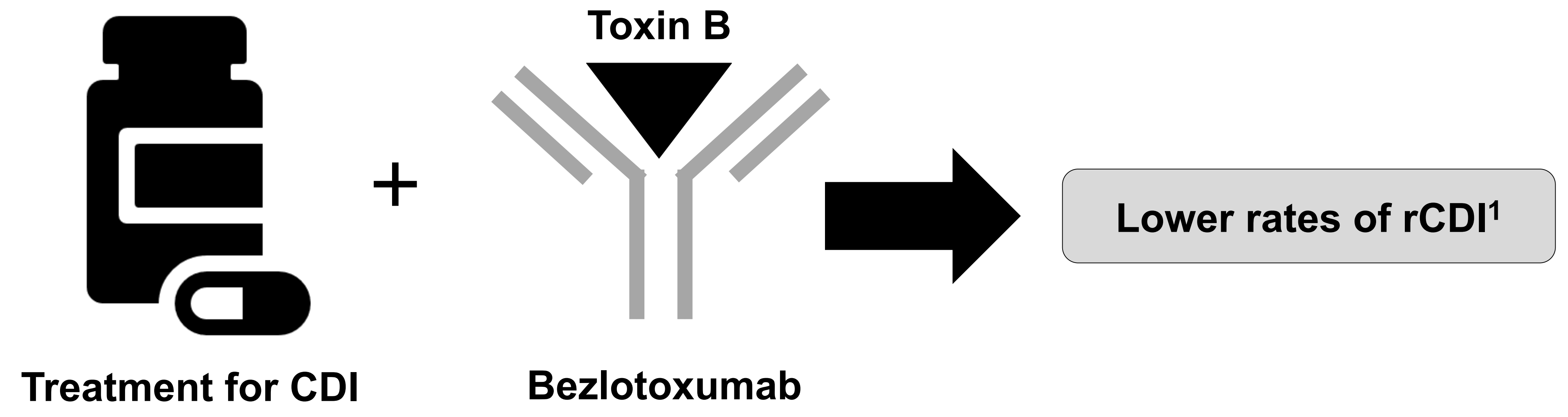
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Background



Study Aim:
To determine the real-world incidence of rCDI in patients with cancer within 12 weeks after receiving bezlotoxumab

- Bezlotoxumab, a human monoclonal antibody, binds and neutralizes *Clostridioides difficile* toxin B
- Administration of bezlotoxumab along with treatment for CDI is associated with lower rates of rCDI
- Clinical trials evaluating bezlotoxumab in patients with cancer are limited

Methods

- Retrospective, single-center, descriptive study
- January 2018 through October 2021
- Inclusion:
 - Adults diagnosed with CDI
 - Received treatment for CDI
 - Received bezlotoxumab
- rCDI definition:
 - Positive *C. difficile* by stool nucleic acid amplification test and treated for CDI

Results

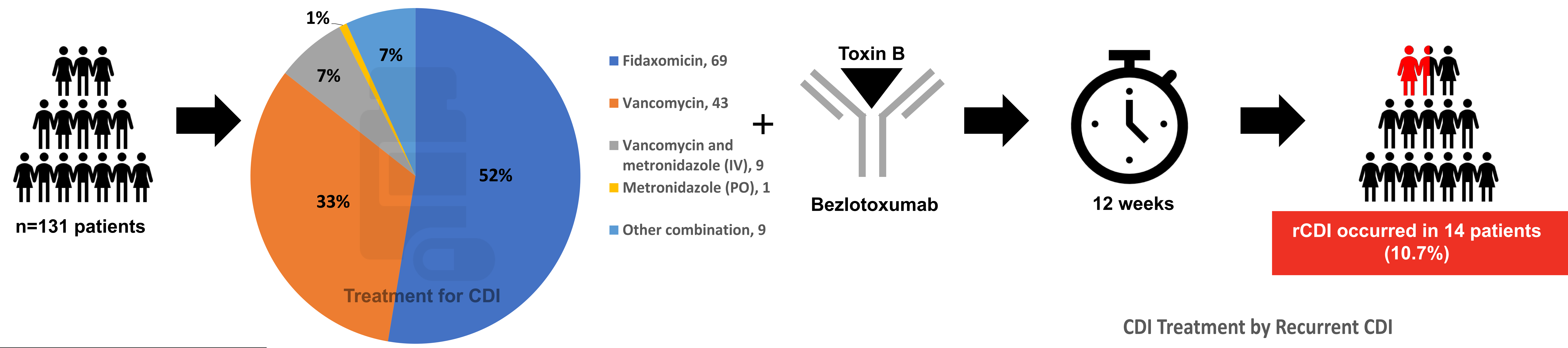
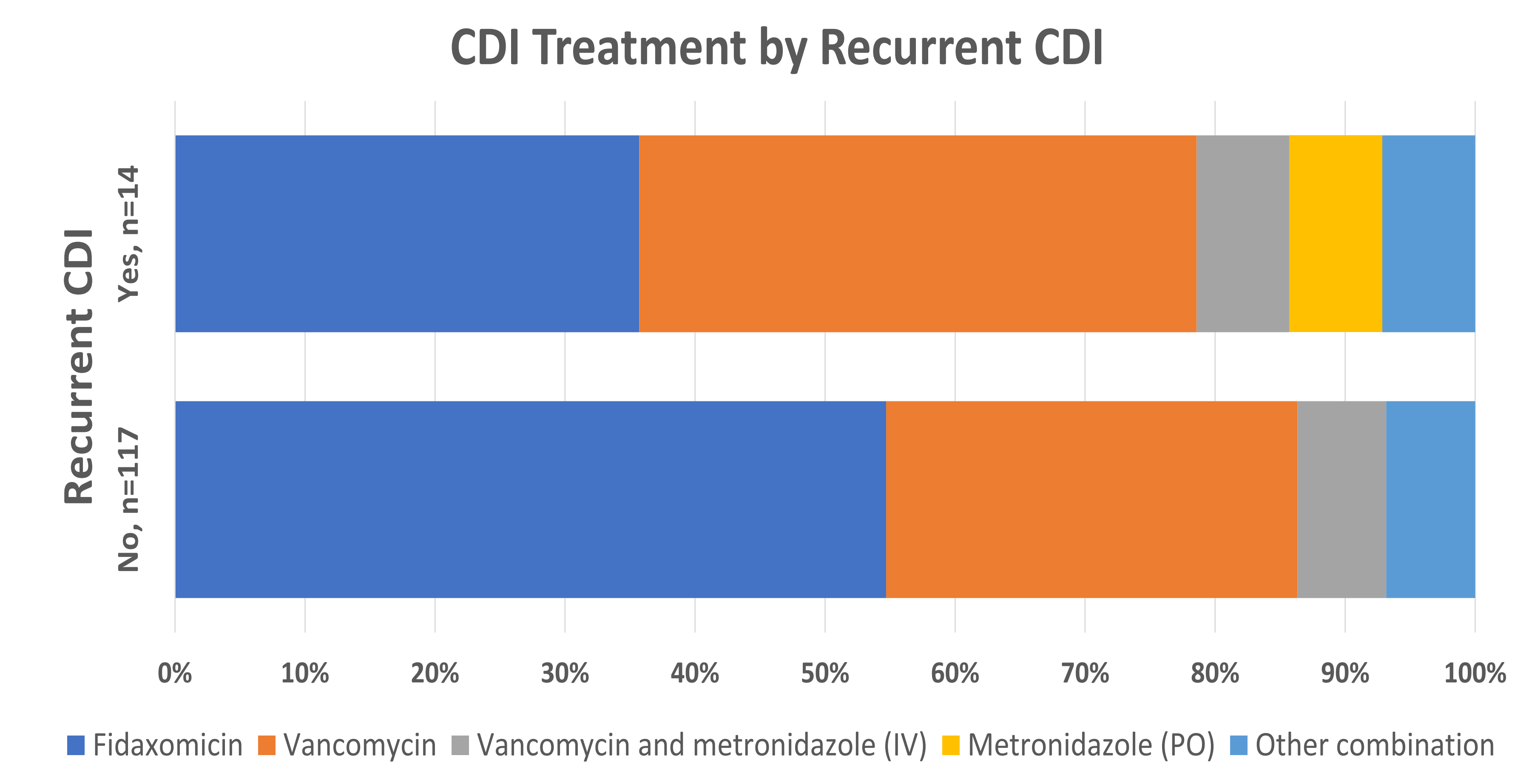


Table 1. Baseline Characteristics, n=131

Characteristic	n (%)
Age	
Median (Range)	66 (18, 87)
Sex, n (%)	
Male	62 (47%)
Race, n (%)	
Asian	3 (2%)
Black or African American	8 (6%)
White or Caucasian	101 (77%)
Other	19 (15%)
Primary Cancer Diagnosis, n (%)	
Leukemia	47 (36%)
Lymphoma	27 (21%)
Myeloma	11 (8%)
Solid tumor	46 (35%)

- 131 patients included
- Most common primary cancer types: leukemia (36%) followed by a solid organ tumor (35%), lymphoma (21%), and myeloma (8%)
- Cytotoxic chemotherapy/ICIs were administered within 6 months in 78% of cases
- Fidaxomicin was the most common CDI treatment (52%), followed by oral vancomycin (33%)
- Recurrent CDI occurred in 14 patients (10.7%)
- Levofloxacin was the most prescribed antibiotic in those with rCDI (86% versus 47%; OR 6.76, 95% CI 1.45 to 31.56, p=0.009)



Conclusion and Discussion

- In this real-world study, recurrence was low and consistent with previous studies
- Patients with rCDI were more likely to have received levofloxacin following the first episode
- A comparative analysis on the rate of rCDI in those not receiving bezlotoxumab at our institution is ongoing

Abbreviations

rCDI: CDI recurrence; CDI: *Clostridioides difficile* infection; ICI: Immune checkpoint inhibitors

References

1. Wilcox MH, et al. Bezlotoxumab for Prevention of Recurrent *Clostridium difficile* Infection. *N Engl J Med.* 2017 Jan 26;376(4):305-317.
2. Zimplyva™ package insert. In. Whitehouse Station, NJ: Merck.

