Conclusion: Review of CDI via TriHealth statistics revealed an overall reduction of hospital-acquired CDI since the implementation of prophylactic oral Vancomycin therapy. The next step will be to determine the duration of low dose vancomycin therapy for the prevention of future CDI as some patients did develop CDI within 90 days of discharge.

Image 2: C. diff infection rate throughout TriHealth facilities (Post Vancomycin prophylaxis)

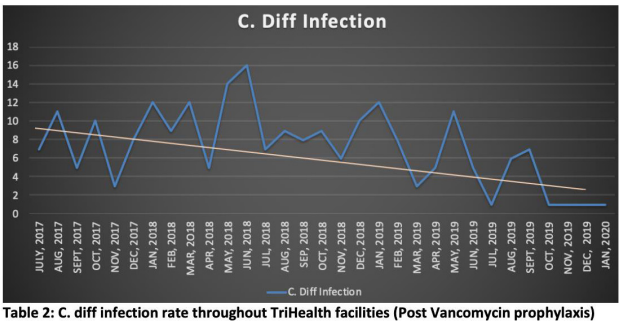

Table 2: C. diff infection rate throughout TriHealth facilities (Post Vancomycin prophylaxis)

Disclosures: **All Authors**: No reported disclosures

729. Real World Efficacy of Bezlotoxumab for Prevention of *Clostridioides Difficile* Recurrence in Immunosuppressed Patients

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Session: P-29. Enteric Infection

Background: Bezlotoxumab has been shown to prevent recurrent episodes of *C. difficile* infection (CDI) in high risk patients. Current studies define therapeutic efficacy within the first 12 weeks when the risk of recurrence is greatest. However, the risk of recurrent CDI can occur beyond the 12-week window in the immunosuppressed population. Given that bezlotoxumab has detectable serum levels for up to 24 weeks after infusion, the primary endpoint is to determine overall efficacy in immunosuppressed patients with recurrent CDI at 4 weeks, 12 weeks, and 24 weeks after initial infusion. Secondary endpoints consist of risk factors for recurrent CDI, treatment of CDI, and antibiotics usage before and after bezlotoxumab.

Methods: This analysis included immunosuppressed patients at high risk for CDI recurrence who received bezlotoxumab from February 2017 to December 2019. Patients were excluded if they were not immunosuppressed, had no follow-up appointments, and/or without a *C. difficile* positive test. High risk antibiotics included fluoroquinolones, beta lactamase inhibitors, third generation cephalosporins, or carbapenems.

Results: Twenty-seven bezlotoxumab doses were given to 26 patients. Baseline characteristics for CDIs prior to bezlotoxumab is reported in Table 1. The overall CDI recurrence rate at all intervals after bezolotoxumab was 4 (15%), one recurrent CDIs occurred at < 4 weeks, two recurrent CDIs occurred at 5-12 weeks, and one recurrent CDI at 13-24 weeks. High risk antibiotics were given in 2/4 (50%) of CDIs recurrences and 22/75 (29%) in the non-recurrence group. Of the four CDI recurrences, all were mild to moderate in disease severity given no evidence of colitis was seen on CT scan and a median Zar score of 1 (range 0-1) due to age > 60 years.

Table 1: Baseline Characteristics

Primary Diagnosis, n (%)	**26 patients (%)**
Hematologic malignancy	17 (65)
Solid malignancy	4 (15)
Status post kidney transplant	4 (15)
Rheumatoid arthritis	1 (5)
Stem Cell Transplantation, n (%)	**13 (50)**
Allogeneic	7
Autologous	6
Immunosuppression, n (%)	**12 (46)**
Calcineurin inhibitor	10
Prednisone	10
Mycophenolate mofetil	2
Ruxolitinib	2
Azathioprine	1
Infliximab	1
Methotrexate	1
C. Difficile prior to Bezlotoxumab per dose	**27 doses (%)***
One episode	15 (55)
Two episodes	10 (37)
Three episodes	2 (8)
Total number of C. Difficile episodes	**41 episodes (%)**
Receiving prophylactic/treatment antibiotics	17 (41)
High risk antibiotics	13 (32)
Received acid suppression^	19 (46)
PPI	15 (36)
H2	6 (15)
Evidence of colitis on CT scan	7 (17)
Median Zar score, (range)	1 (0-3)
Treatment of C. Difficile episodes	
Vancomycin oral	31 (76)
Vancomycin + Metronidazole	4 (10)
Vancomycin + Nitazoxanide	2 (5)
Vancomycin + Fidaxomicin	2 (5)
Metronidazole	1 (2)
Vancomycin + Metronidazole+ Fidaxomicin + Fecal transplant	1 (2)
Received additional vancomycin taper	15 (36)

*1 patient had two doses of bezlotoxomab that was given 2 years apart
^Some patients received both type of acid suppression

Conclusion: In immunosuppressed patients with CDI, bezlotoxumab is effective at reducing CDI episodes up to 24 weeks. Additionally, this highly antibiotic exposed population continued to receive benefit up to 24 weeks after bezlotoxumab.

Disclosures: **All Authors**: No reported disclosures

730. Severity Of *Clostridioides difficile* Infection Based On Toxin Analysis, Acid Suppressant Medications and Antibiotics

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Session: P-29. Enteric Infection

Background: *Clostridioides difficile* (C *difficile*) infection (CDI) is a major health problem in the United States and despite updated guidelines, the laboratory diagnosis remains vexed. A multistep algorithm is recommended to diagnose CDI that includes antigen, toxin and toxin gene Nucleic Acid Amplification (NAAT) assays. This study was done to assess severity of CDI based on toxin B and NAAT statuses. The other