Bezlotoxumab (Zinplava™)

IV Only **Use requires formal ID Consult**

Monoclonal antibody targeting *Clostridium difficile* toxin B. Adjunctive therapy for patients with *C. difficile* infection (CDI) on treatment and at high risk for recurrence.

Criteria for Use (must meet all of the following for eligibility):

- Receiving standard therapy for recurrent CDI: vancomycin PO or fidaxomicin
- Documented CDI with both diarrhea (at least 3 loose stools in a 24 hour period) in addition to a positive *C .difficile* toxin test in the past 7 days
- Recurrence of CDI with prior receipt ≥ 2 completed courses of oral vancomycin (including a tapered or pulse regimen) or fidaxomicin within the prior 6 months
- Currently hospitalized or eligible to receive in an ambulatory infusion clinic

Unacceptable Uses:

- Fulminant CDI (e.g. life-threatening CDI or toxic mega-colon)
- Known hypersensitivity to bezlotoxumab
- History of **congestive heart failure** unless the benefits outweigh the risks (increased mortality versus placebo group in a clinical trial)
- Active diarrheal illness such as, but not limited to, colitis or Crohn's disease

Dosing and administration in Adults:

- 10 mg/kg (based on actual body weight) in 250 ml NS or D5W as an intravenous infusion over 60 minutes (Note: volume can be decreased to 200 ml in patients where volume is a concern)
- Should be administered with a 0.22-5 micron in-line or add-in filter
- Can be given via peripheral or central venous catheter
- Do not administer other drugs simultaneously through the same infusion line

Monitoring:

- Adequate monitoring of infusion reactions must performed

Considerations for Use:

- Relapse data on fidaxomicin with bezlotoxumab is limited.
  - Phase 3 trials had fewer patients treated with fidaxomicin versus vancomycin
- Patients with chronic diarrheal illness, such as inflammatory bowel disease, were excluded from clinical trials. Benefit in this population is unknown.
- Patients should not donate blood within 6 months following infusion
- Antiperistaltic agents, such as diphenoxylate/atropine sulfate, at any time during the 14 days following the infusion should be avoided
- Based on clinical trial the following are considered high-risk for CDI recurrence:
  - Age ≥ 65 years
  - Antibiotics in the last 12 weeks
  - ≥ 1 CDI episode(s) in last six months
  - ≥ 2 CDI episodes ever
  - Immunocompromised
  - Severe CDI defined as a Zar score ≥ 2
  - Hypervirulent CDI strain

Zar Score:*

- 1 pt for: >60 years of age, temperature >100°F, albumin <2.5 g/dl, WBC >15 within 48 hrs
- 2 pts for: pseudomembranous colitis, ICU level of care

Zinplava (bezlotoxumab) [package insert]. Merck and Co., Inc; Whitehouse Station (NJ): 2016.
Wilcox MH, Gerding DN, Poxton IR, et al. N Engl J Med. 2017 Jan 26;376(4):305-317.