EVALUATION OF THE EFFECTIVENESS OF BEZLOTOXUMAB ON PREVENTION OF RECURRENT CLOSTRIDIUM DIFFICILE INFECTION

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Background and importance

*Clostridium difficile* is the most common cause of infectious diarrhea in hospitalized patients. Immunocompromised patients usually present recurrences after antibiotic therapy. Bezlotoxumab is a human monoclonal antibody that binds *C. difficile* toxin B, approved for prevention of recurrent *Clostridium difficile* Infection (CDI) in high risk patients (older than 65, history of recurrences the last 6 months, infection by a hypervirulent strain).

Aim and objective

To assess the effectiveness of bezlotoxumab in patients from a third level hospital with CDI.

Material and methods

Observational retrospective study from October 2018 to April 2021 was developed. Patients with CDI that were treated with bezlotoxumab were selected. Farmatools application, Farmis-Oncofarm and digital clinical history were used to record variables: age, gender, previous episodes of recurrence on the last 6 months and treatments, immune status, *Clostridium difficile* strain, initial and sustained cure rate.

Results

- **37 patients**
  - 16 women (43%)
  - 21 men (57%)
- Median age = **70 (16-85) years**
  - 22 older than 65 (59.5%)
- At least one previous episode of CDI: 12 patients (32.4%)
- Immunocompromised: 26 patients (70.3%)
- Hypervirulent *C. difficile* strain: 1 patient
- Previous treatment with Vancomycin and/or Metronidazole: 29 patients (78%)

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<tr>
<th>Initial clinical cure</th>
<th>Sustained clinical cure</th>
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<td>54%</td>
<td>81%</td>
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<td>80%</td>
<td>64%</td>
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Conclusions

The effectiveness obtained measured with **initial clinical cure** was lower than the results described by the pivotal trial and the **sustained clinical cure** was higher. These results showed that Bezlotoxumab appears to be an effective alternative to patients with high risk of recurrent CDI, although further studies including more patients would give more information about the use of this new drug.

References