



## BACKGROUND<sup>1-3</sup>

- Eravacycline is a synthetic tetracycline with broad *in-vitro* activity
- Eravacycline has been associated with common adverse reactions including nausea, vomiting, and infusion related reactions
- Tigecycline, a similar broad spectrum synthetic tetracycline, has been found to have an association with hypofibrinogenemia (<200 mg/dl)
- Hypofibrinogenemia may also be associated with eravacycline

## PURPOSE

- Describe two cases of hypofibrinogenemia associated with eravacycline encountered in clinical management of transplant patients being treated for *Mycobacterium abscessus* infections
- Explore if additional monitoring of fibrinogen levels may be needed during treatment courses involving eravacycline

## PATIENT PRESENTATION

- Patient 1
  - Deceased Donor Kidney Transplant in 2010
  - Admitted for hypoxic respiratory failure from COVID-19 (resolved)
  - Routine infectious workup found disseminated *M. abscessus* infection (blood stream and respiratory)
  - Empiric therapy with azithromycin, imipenem, teizolid, and eravacycline
  - Fibrinogen at baseline: 448 mg/dl
- Patient 2
  - Bilateral Orthotopic Lung Transplant in 2019
  - Admitted for management of *M. abscessus* skin and soft tissue infection
  - Empiric therapy with tigecycline, linezolid, imipenem, and azithromycin
  - Concern for tigecycline-induced hypofibrinogenemia led to eravacycline switch
  - Fibrinogen at time of change: 167 mg/dl

**References:**  
 1. Teichgraber (Eravacycline). Watertown, MA: Teichgraber Pharmaceuticals Inc.; 2018  
 2. Guo M, Liang J, Li D, et al. Coagulation dysfunction events associated with tigecycline: a real-world study from FDA adverse event reporting system (FAERS) database. *Thromb J.* 2022;20:12  
 3. Cui N, Cai H, Li Z, et al. Tigecycline-induced coagulopathy: a literature review. *Int J Clin Pharm.* 2019;41:1408-1413.

**Disclosures:**  
 Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of the presentation. Nothing to disclose

## OUTCOMES

Figure 1: Fibrinogen Trends Over Time

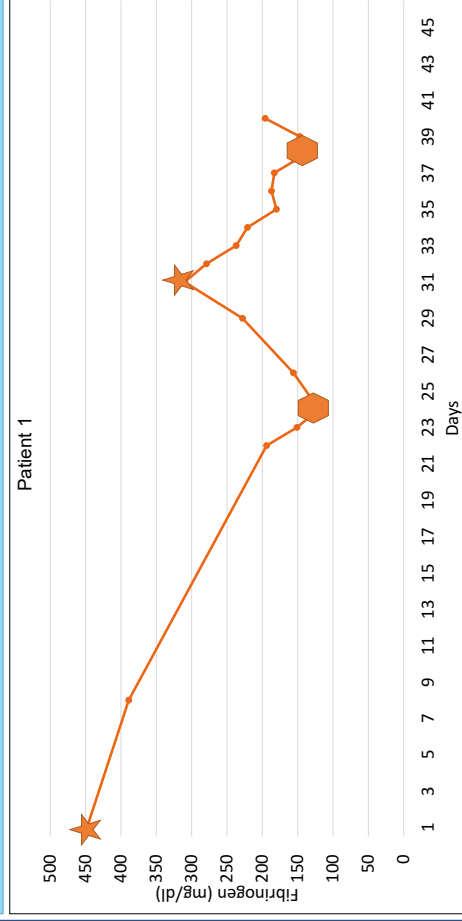


Figure 1: Legend

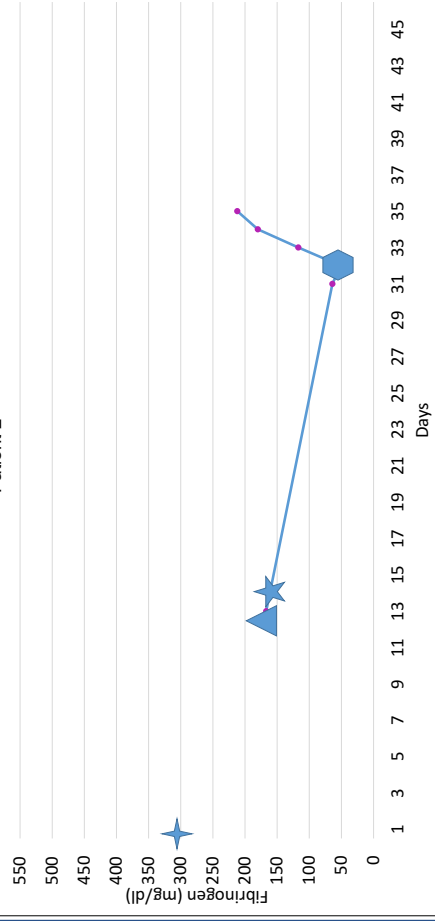
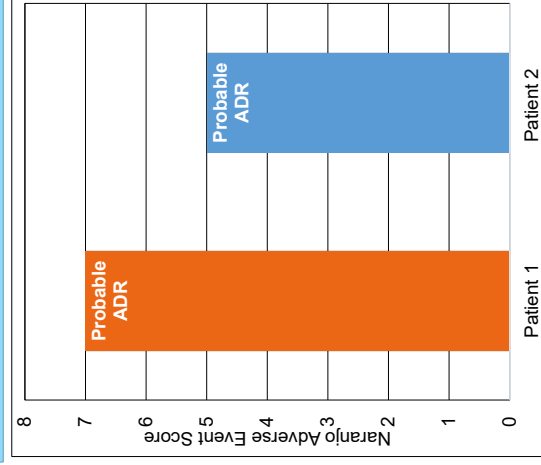


Figure 2: Naranjo Adverse Drug Event Score



## Bleeding Events

- Patient one developed a minor bleeding event requiring packed red blood cell transfusion

## CONCLUSIONS

- Our data are limited to immunocompromised and critically ill patients with other risk factors for coagulopathies not controlled for
- Time to resolution, onset, and magnitude of decrease observed with eravacycline is comparable to reports of tigecycline associated hypofibrinogenemia
- Similar to tigecycline, **eravacycline is associated with hypofibrinogenemia**
- Additional monitoring of fibrinogen, other coagulation factors, and bleeding should be considered with eravacycline use

Tigecycline Start: ★ Tigecycline Stop: ▲ Eravacycline Start: ★ Eravacycline Stop: ●