# **Praxbind** (idarucizumab)



#### New Product Slideshow



# Introduction

- Brand name: Praxbind
- Generic name: Idarucizumab
- Pharmacological class: Humanized monoclonal antibody fragment
- Strength and Formulation: 2.5g/50mL; solution for IV infusion; preservative-free; contains sorbitol
- Manufacturer: Boehringer Ingelheim
- How supplied: Single-use vials—2
  Legal Classification: Rx

#### Indications

 Reversal of dabigatran in emergency surgery/urgent procedures and in lifethreatening or uncontrolled bleeding

# **Dosage & Administration**

#### For IV use only

- Administer 5g (2 vials) as 2 consecutive infusions or as bolus injection of both vials consecutively via syringe
- If reappearance of bleeding with elevated coagulation parameters after initial 5g dose or for those requiring a second emergency surgery/urgent procedure and have elevated coagulation parameters: may consider additional 5g dose

# **Considerations for Special Populations**

- Pregnancy: Give only if clearly needed
- Nursing mothers: Exercise caution
- Pediatric: Not established
- Geriatric: No overall differences

# Warnings/Precautions

- Risk of thromboembolic events; consider resuming anticoagulant therapy as soon as medically appropriate; can initiate dabigatran 24hrs after administration of Praxbind
- Discontinue immediately if an anaphylactic reaction or other serious allergic reaction occurs; treat appropriately
- Hereditary fructose intolerance

#### **Adverse Reactions**

- Headache
- Hypokalemia
- Delirium
- Constipation
- Pyrexia
- Pneumonia
- Elevated aPTT, ECT

## **Mechanism of Action**

- Idarucizumab is a specific reversal agent for dabigatran
- It is a humanized monoclonal antibody fragment (Fab) that binds to dabigatran and its acylglucuronide metabolites with higher affinity than the binding affinity of dabigatran to thrombin, neutralizing their anticoagulant effect

The safety and efficacy of Praxbind was investigated in pharmacokinetic/ pharmacodynamic trials with healthy volunteers and in an ongoing single cohort case series trial with dabigatrantreated patients who have lifethreatening or uncontrolled bleeding, or who require emergency surgery or urgent procedure (RE-VERSE AD)

- Three randomized, placebo-controlled trials in a total of 283 subjects evaluated the safety, dose-response, and effect of idarucizumab on reducing unbound dabigatran and coagulation parameters
- Of the 283 subjects, 224 received at least one dose of idarucizumab

- Data from 14 dabigatran-exposed subjects treated with idarucizumab 5g in one of the healthy volunteer trials showed the following changes in coagulation parameters pre-infusion and at the end of infusion:
  - diluted thrombin time (dTT): 66.6s vs. 32.1s;
  - activated partial thromboplastin time (**aPTT**): 67.8s vs. 29.2s;
  - ecarin clotting time (ECT): 122s vs. 34.7s;
  - thrombin time (**TT**):127s vs. 12.5s;
  - activated clotting time (ACT):236s vs.116s, respectively

- Also, data from 14 dabigatran-exposed subjects treated with placebo showed the following changes in coagulation parameters pre-infusion and at the end of infusion:
  - **dTT**: 64.7s vs. 65.3s;
  - **aPTT**: 65.2s vs. 66.5s;
  - ECT: 117s vs. 122s;
  - **TT**: 132s vs. 147s;
  - ACT: 219s vs. 216s, respectively

- In the ongoing RE-VERSE AD case series trial, idarucizumab 5g was given to patients treated with dabigatran who presented with dabigatranrelated life-threatening or uncontrolled bleeding (Group A) or who required emergency surgery or urgent procedures (Group B)
- The primary endpoint was maximum percentage reversal of the pharmacodynamic anticoagulant effect of dabigatran within 4 hours after the administration of idarucizumab, based on central laboratory determination of dTT or ECT

- Among a subset of 90 patients (n=51 [Group A], n=39 [Group B]) with available data, the median maximum reversal of the pharmacodynamic anticoagulant effect of dabigatran as measured by dTT or ECT in the first 4 hours after administration of idarucizumab 5g was 100%, with >89% of most patients achieving complete reversal
- Results for Groups A and B were similar
- For more clinical trial data, see full labeling

# New Product Monograph

 For more information view the complete product monograph available at:

http://www.empr.com/praxbind/drugproduct/413/