## Pradaxa Now has an Antidote, Praxbind

Pradaxa (dabigatran) as well as other newer oral anticoagulants have surged in popularity over warfarin due to not having to get frequent blood draws and no restrictions to regulate how much green leafy vegetables you consume. However, these newer oral anticoagulants that are non-vitamin K antagonists, as warfarin is, do have a major down side. There are no ways to reverse their effects. This can pose serious medical hazards especially in emergency situations. However, in October 2015, the FDA approved a monoclonal antibody, idarucizumab, as an antidote to Pradaxa. Thus far, Pradaxa continues to be the only oral anticoagulant other than warfarin to have an FDA approved reversal agent.

Perhaps to make it easier to remember and pronounce, Boehringer Ingelheim, the German based pharmaceutical company which is the maker of both Pradaxa and Praxbind, gave idarucizumab the brand name of Praxbind. In studies, idarucizumab has been shown to reverse Pradaxa's anticoagulant effects in minutes. Not only does Praxbind have a short onset of action, but it also has been shown to have nearly complete reversal of Pradaxa making it ideal for its indication for emergency situations including surgeries that cannot wait or cases of uncontrolled bleeding. Along with the United States, Praxbind has also been approved in other countries such as the European Union, Australia, and Canada. However, as with most brand named medications, Praxbind is expensive. Most patients will need approximately five grams of Praxbind to reverse Pradaxa's effects. In the United States, five grams will cost over \$4,000 per patient. Additionally, even though Praxbind does seem to be safe and tolerable, it does come with some adverse effects such as constipation, pneumonia, and delirium among others. Nonetheless, Pradaxa's popularity is sure to increase with its antidote, Praxbind, available for emergencies.

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