

Dabigatran (Pradaxa)



Dabigatran

- MOA: direct thrombin inhibitor which inhibits:
 - Both free and fibrin-bound thrombin
 - Cleavage of fibrinogen to fibrin
 - Thrombin-induced platelet aggregation



Dabigatran

- Monitoring
 - PPT
- Onset: 1 hour, delayed by food
- Antidote: None
- ADRs
 - Bleeding (8% to 33%; major \leq 6%)
 - Dyspepsia (11%)



Dabigatran

- Drug interactions
 - **Category X: P-Gp inducers**
 - **Category D:** Amiodarone, **P-Gp inhibitors**, quinidine, St. john's Wort, verapamil



Common side effect

- The most of dabigatran is gastrointestinal upset.
- When compared with people anticoagulated with warfarin, patients taking dabigatran had fewer life-threatening bleeds, fewer minor and major bleeds, including intracranial bleeds, but the rate of gastrointestinal bleeding was significantly higher.
- Dabigatran capsules contain tartaric acid, which lowers the gastric pH and is required for adequate absorption. The lower pH has previously been associated with dyspepsia; some hypothesize that this plays a role in the increased risk of gastrointestinal bleeding.

• If a small amount of GI bleeding is diagnosed, the clinicians may consider



Contraindication

1. active pathological bleeding

2. The use of dabigatran should also be avoided in patients with mechanical prosthetic heart valves due to the increased risk of thromboembolic events (e.g. valve thrombosis, stroke, and myocardial infarction) and major bleeding when compared with warfarin.

Current FDA guidelines states that patients with mechanical heart valves should not be using dabigatran.



Factor Xa inhibitor (rivaroxaban, apixaban)

- Dosing recommendations do not recommend administering rivaroxaban with drugs known to be strong combined CYP3A4/P-glycoprotein inhibitors because this results in significantly higher plasma concentrations of rivaroxaban.
- Spinal anesthesia or puncture, people who are being treated with anti-thrombotic agents are at higher risk for developing a hematoma, long-term or permanent paralysis
- Antidote Andexanet

