

UCDMC Guidelines for Reversal of Anticoagulation during Cardiac Ablation

During cardiac ablation procedures, patients may be concurrently receiving some form of anticoagulation. The following guideline outlines approaches to reverse the effects of selected anticoagulants in the presence of a life threatening bleeding event:

Anticoagulant	Reversal agent	Dosing	Comments
Unfractionated Heparin	Protamine	Follow UCDMC Infusion guidelines	
Warfarin	Vitamin K FFP rFVIIa	See guidelines for the reversal of warfarin by vitamin K. rFVIIa: 1mg IV for life threatening bleeding events and INR above 1.3. Repeat INR 10-15 minutes post dose. If still elevated above 1.3 and life threatening bleeding is still occurring, a repeat dose can be administered.	Follow UCDMC guidelines for the infusion of vitamin K. Doses of rFVIIa above 1mg require approval by the clinical pharmacology consult service (CPCS) or anticoagulation service.
LMWH	Protamine, FEIBA®*	Degree of reversal and ability to reduce bleeding is unclear.	
Fondaparinux	FEIBA®*	Degree of reversal and ability to reduce bleeding is unclear.	One assessment showed a greater impact with an activated PCC (FEIBA 25 units/kg) then rFVIIa
Dabigatran	FEIBA®, KCentra®	FEIBA®: Life threatening bleed, 25 units/kg x1 Evaluate bleeding. KCentra®: 25-50 units/kg, and arrange hemodialysis	One small assessment noted no effect by rFVIIa in reversing the effects of dabigatran.
Rivaroxaban or Apixaban	FEIBA®*, KCentra®	FEIBA®** is preferred for major or life threatening bleeding with doses ranging 8-25 units/kg. KCentra®: 25-50 units/kg Evaluate response.	Call the anticoagulation service, CPCS pharmacist, or ED pharmacist.

FEIBA® is current formulary activated prothrombin complex concentrate (aPCC) product.

KCentra® is current formulary prothrombin complex concentrate (PCC) product.

Kcentra™ contains clotting factors II, VII, IX and X. It contains heparin and use should be avoided in patients where heparin is contraindicated.

FFP : Fresh Frozen Plasma

rFVIIa: Activated recombinant factor seven

FEIBA® is the preferred agent for the new oral anticoagulants (NOAC).

*No data supporting improved outcomes. An FEIBA dose of 25 units/kg may be considered. Please call Anticoagulation Service for assistance: 816-2658 (CLOT)

** Call Anticoagulation Service for assistance: 816-2568 (CLOT)