

Anticoagulants: reversal agents:

Anticoag Agent	Elimination	Labs to consider	Reversal agent	Comment
Apixaban (Eliquis)	Hepatic/renal 9-14 hours	Anti fx Xa, INR	KCentra, FEIBA	aPCC – contains F II, VII, IX, X. KCentra contains Heparin
Argatroban	Hepatic 60-90 min	aPTT, ACT	none	No effective reversal agent available
Bivalirudin	Enzymatic 25-45 min	aPTT, ACT	rFVIIa partially dialyzed	FVIIa able to reduce surgical bleeding
Dabigatran (Pradaxa)	Renal 14-17 hours	Chromogenic ECT, aPTT, INR, TT	Idarucizumab, FEIBA, KCentra, hemodialysis	Idarucizumab will directly neutralize dabigatran, Onset of hemostasis may take hours. The addition of FEIBA at doses ranging from 8-25 units/kg or Tranexamic Acid can be considered.
Fondaparinux	Renal 7-21 hours	None recommended	FEIBA	Degree of reversal unclear
LMWH	Renal 2-8 hours	Anti Fx Xa in selected cases	Protamine, FEIBA	Partial reversal only and unclear
Unfractionated heparin	Hepatic 1-2 hours	aPTT, ACT	Protamine	Holding may be all needed. Protamine for urgent situations
Rivaroxaban (Xarelto)	Hepatic/renal 5-9 hours (longer in elderly)	Chromogenic anti Fx Xa, INR	KCentra, FEIBA	Minor bleeding – monitor Major bleeding – low dose FEIBA Life threatening – FEIBA 25 u/kg (1 st) or KCentra 25-50 u/kg (2 nd)
Warfarin	Hepatic 36-48 hours, 3-7 days for normal INR	INR	Vit K, KCentra, rFVVIIa, FFP	Vit K – 12-48 hours for full effect KCentra: INR 1.3-4 25 u/Kg INR 4.1-6 35 u/kg INR >6 50 u/kg FVIIa not to use with KCentra