



ROI IR Anticoagulation Recommendations - Updated 7/2021

Low Risk	High Risk
<p>(PT/INR, platelets, hemoglobin not routinely recommended. INR less than equal to 2-3. Platelets transfuse if less than 20)</p> <ul style="list-style-type: none"> • Catheter/drain exchange • Diagnostic venogram and select venous interventions • Dialysis access intervention • IVC filter placement and removal • Non-tunneled venous catheter placement/removal • Tunneled venous catheter placement and removal • PICC placement • Paracentesis • Thoracentesis • Superficial drainage or biopsy (palpable lesion, lymph node, soft tissue, breast, thyroid, superficial bone, bone marrow) • Transjugular liver biopsy • Bone marrow biopsy • Facet joint injections and medial branch nerve blocks (thoracic and lumbar) • Peripheral nerve blocks • Joint/MSK injections • Sacroiliac joint injection • Sacral lateral branch blocks • Trigger point injections • Chest tube placement 	<p>(PT/INR, platelets, hemoglobin routinely recommended. INR corrected to range of equal to less than 1.5-1.8. transfuse platelets if less than 50)</p> <ul style="list-style-type: none"> • Ablation (solid organs, bone, soft tissue, lung) • Biliary intervention (e.g. new biliary tube placement, cholecystostomy tube placement) • Catheter directed thrombolysis • Deep abscess drainage (lung, parenchyma, abdominal, pelvic, retroperitoneal) • Deep non-organ and organ biopsy (spine, soft issue in intra abdominal, retroperitoneal, pelvic compartments, lung) • Diagnostic arteriography and peripheral arterial interventions (sheath less than 6 French) • Embolotherapy (uterine fibroid embolization/prostatic artery embolization, TACE, TARE) • Gastrostomy, gastrojejunostomy placement • IVC filter removal (complex) • Portal vein intervention • Solid organ biopsy • Suprapubic catheter placement • Transjugular Intrahepatic Portosystemic Shunt (TIPS) • Tunneled drainage catheter placement (e.g. pleurex) • Port Placement and removal • Urinary tract intervention (ureteral dilation, NPCN placement, stone removal) • Venous intervention (intrathoracic) • Fallopian tube recanalization • Spine procedures with risk of spinal or epidural hematoma (kyphoplasty, vertebroplasty, epidural injection, facet block cervical spine), • Disc aspiration

Anticoagulants		Recommendation			
		Low Risk		High risk	
		Hold for:	Can restart:	Hold for:	Can restart:
Warfarin		do not hold Target INR ≤ 3 . Bridge for high thrombosis risk cases	same day reinitiation for bridged patients	5 days until INR ≤ 1.8 . Consider bridging for high thrombosis risk cases	24 hrs. high risk thrombosis can be bridged with LMWH
Heparin	IV gtt	do not hold	N/A	4-6 hrs	6-8 hrs
	prophy UFH subQ	do not hold	N/A	6 hrs	6-8 hrs
	treatment LMWH (lovenox)	do not hold	N/A	2 dose or 24 hrs	12 hrs
	prophy LMWH (lovenox)	do not hold	N/A	1 dose	12 hrs
	Dalteparin (fragmin)	do not hold	N/A	1 dose	12 hrs
Aspirin	low dose (81 mg)	do not hold		5 days	24 hrs
	high dose/with dipyridamole	do not hold		5 days	24 hrs
Cilostazol (pletal)		do not hold		do not hold	

	Low Risk		High risk	
NSAIDs	Hold for:	Can restart:	Hold for:	Can restart:
Short acting (half life 2-6 hrs) -Ibuprofen, diclofenac, ketoprofen, indomethacin	do not hold		do not hold	N/A
Intermediate (half life 7-15 hrs) -naproxen, sulindac, diflunisal, celecoxib	do not hold		do not hold	N/A
Long acting (half life >20 hrs) - meloxicam, nabumetone, piroxicam	do not hold		do not hold	N/A
GIIb/IIIa inhibitors	Hold for:	Can restart:	Hold for:	Can restart:
Short acting (IV gtt) -Eptifibatide (integrilin), Tirofiban (aggrestat)	4-8 hrs	ASAP	4-8 hrs	ASAP
Long acting -abciximab (ReoPro)	24 hrs	ASAP	24 hrs	ASAP

	Low Risk		High risk	
Direct Thrombin Inhibitors	Hold for:	Can restart:	Hold for:	Can restart:
Argatroban (Acova)	do not hold	N/A	2-4 hours (check aPTT)	4-6 hrs
Bivalirudin (angiomax)	do not hold	N/A	2-4 hours (check aPTT)	4-6 hrs
Desirudin (Iprivask)	do not hold		4 hrs	ASAP
Dabigatran (pradaxa)	do not hold		4 doses (GFR \geq 50) 6-8 doses (GFR $<$ 50)	24hrs
Betrixaban (Bevyxxa)	do not hold		Withhold for 3 doses can reverse with andexanet alfa if emergent	24 hrs
Direct Factor Xa inhibitor	Hold for:	Can restart:	Hold for:	Can restart:
Rivaroxaban (Xarelto)	do not hold		2 doses (GFR \geq 30) 3 doses (GFR $<$ 30) can reverse with andexanet alfa if emergent	24 hrs
Apixaban (Eliquis)	do not hold	N/A	4 doses (GFR \geq 50) 6 doses (GFR $<$ 30-35) can reverse with andexanet alfa if emergent	24 hrs
Edoxaban (Savaysa)	do not hold		2 doses can reverse with andexanet alfa if emergent	24 hrs
Indirect Factor Xa inhibitor	Hold for:	Can restart:	Hold for:	Can restart:
Fondaparinux (Arixtra)	do not hold	N/A	2-3 days (eGFR $>$ 50) 3-5 days (eGFR $<$ 50)	24hrs

	Low Risk		High risk	
Thienopyridines	Hold for:	Can restart:	Hold for:	Can restart:
Clopidogrel (Plavix)	do not hold		5 days	6 hrs if 75mg 24 hrs if 300- 600mg
Prasugrel (Effient)	do not hold		7 days	24 hrs
Ticlopidine (Ticlid)	do not hold		7 days	24 hrs
Ticagrelor (Brilinta)	do not hold		5 days	24 hrs