

**PreProcedural Management of Coagulation Status for Percutaneous Procedures**

<b>Category 1: Low risk of bleeding, easily detected and controllable</b>	<b>Category 2: Procedures with moderate risk of bleeding</b>	<b>Category 3: Procedures with significant bleeding risk, difficult to detect or control</b>
<i>Procedures</i>	<i>Procedures</i>	<i>Procedures</i>
<i>Vascular</i>	<i>Vascular</i>	<i>Vascular</i>
Dialysis fistulogram w/wo Intervention	Angiography, arterial intervention with access size up to 7 F	TIPS
Venography	Venous interventions - non dialysis	
Central Line Removal - nontunelled	Chemoembolization	<i>Non Vascular</i>
IVC filter placement	Uterine Fibroid Embolization	Renal biopsy
PICC or nontunelled central line	Tunneled central venous catheter placement or removal	Biliary interventions (new tract)
<i>Non Vascular</i>	Subcutaneous port placement or removal	Transabdominal liver biopsy (core needle)
Catheter and tube exchange (gastrostomy, gastrojejunostomy, jejunostomy, biliary, nephrostomy, joint injections, arthrograms		Percutaneous cholecystostomy
Paracentesis	<i>Non Vascular</i>	Nephrostomy tube placement
Superficial abscess drainage	Chest tube, abscess drainage (non-superficial) or deep soft tissue biopsy	Cryoablation
Superficial aspiration and biopsy: thyroid, superficial node	Lung biopsy	Radiofrequency ablation
Transjugular liver biopsy	Gastrostomy and Gastrojejunostomy tube: initial placement	
Thoracentesis	Spine procedures (vertebroplasty, kyphoplasty, lumbar puncture, epidural injection, facet block, myelogram)	
<b>Pre procedure lab testing</b>	<b>Pre procedure lab testing</b>	<b>Pre procedure lab testing</b>
INR: thoracentesis and patients on warfarin or known or suspected liver disease. Other procedures no INR	INR	INR
aPTT: thoracentesis and patients on IV heparin or known or suspected liver disease. Other procedures no PTT. INR/PTT for 1st paracentesis then q 90 days and for first thoracentesis then q 30 days	aPTT	aPTT
Platelet/HCT: not routinely recommended	Platelet count	Platelet count
		Hematocrit
<b>Management</b>	<b>Management</b>	<b>Management</b>
INR < 2.0 (for those who get labs)	INR: correct to < 1.5 except NIR cases	INR: correct to < 1.5
aPTT: < 2 X control (for those who get labs)	aPTT: stop or revert heparin for values . 1.5 X control	aPTT: stop or revert heparin for values . 1.5 X control
Platelets: do not check	Platelets: transfusion recommended for counts <50,000/ $\mu$ L	Platelets: transfuse for counts <50,000/ $\mu$ L
Clopidogrel: do not withhold	Clopidogrel: withhold for 5 days prior to procedure except NIR	Clopidogrel: withhold for 5 days prior to procedure
ASA: do not withhold	ASA withhold for 5 days except NIR cases	ASA withhold for 5 days
LMWH (therapeutic dose): withhold one dose before	LMWH (therapeutic dose): withhold one dose before	LMWH (therapeutic dose): withhold for 24 hours or up to two doses