

Anticoagulant Management for Elective Invasive Procedures in Medical Imaging

LOW RISK				
All patients: Labs required according to exam and when on anticoagulants see adjacent chart----- >>>>>>>>>.	Anticoagulant / Antiplatelet MEDS	Discontinue Yes* / No	Stop Anticoagulant Recommended Hours / Days off Meds*	Resume MEDS Recommendation when to resume
Dialysis Access, IVC filters, Abscess Drains, Superficial Core Biopsy's, and Breast Biopsy/FNA: INR < 2.0 and Platelets > 50 results within 30 days outpatients / 72 hours for Inpatients.	<ul style="list-style-type: none"> Aspirin (ASA), any dose Aggrenox® 	No		
Thoracentesis: INR < 2.0 and Platelets > 50 at least every six months.	<ul style="list-style-type: none"> Clopidogrel (Plavix®) Dipyridamole (Persantine®) Prasugrel (Effient®) Ticagrelor (Brilinta®) Ticlopidine (Ticlid®) 	No		
Paracentesis : INR < 3.0 and Platelets > 50 at least every six months.	<ul style="list-style-type: none"> Warfarin (Coumadin®) ➔ RECOMMEND INR ≤ 2.0 (Paracentesis: INR ≤ 3.0) 	Yes	3 days *CHECK INR day of procedure.	Evening of procedure
FNA's, Joint Injection/Asp, Catheter Exchange or Removal: No labs required.	<ul style="list-style-type: none"> Subcutaneous Heparin Argatroban 	Yes Yes	Last dose given 4 hrs prior Last dose given 4 hrs prior	Evening of procedure Evening of procedure
VASCULAR <ul style="list-style-type: none"> Dialysis access interventions IVC filter placement/removal 	<ul style="list-style-type: none"> Low Molecular Weight Heparin (LMWH) Enoxaparin (Lovenox®) Dalteparin (Fragmin®) Tinzaparin (Innohep®) 	Yes	Last dose given 12 hrs prior	Evening of procedure
NON-VASCULAR <ul style="list-style-type: none"> Catheter exchange or removal(GU, biliary, abscess) Diagnostic or therapeutic thoracentesis or paracentesis Superficial abscess drainage Superficial core biopsy (breast-check INR) Joint injection or aspiration 	<ul style="list-style-type: none"> (IV) Unfractionated Heparin 	Yes	Infusion to stop 3-4 hrs prior	2 hrs after procedure
Superficial Aspiration / Biopsy (FNAB) <ul style="list-style-type: none"> Breast (check INR) Extremities Lymph nodes Thyroid 	<ul style="list-style-type: none"> Dabigatran (Pradaxa®) 	Yes	GFR > 50: 24 hours GFR ≤ 50: 48 hours	Day after procedure
	<ul style="list-style-type: none"> Rivaroxaban (Xarelto®) Apixaban (Eliquis®) 	Yes	Last dose given 24 hrs prior	Day after procedure
	<ul style="list-style-type: none"> Fondaparinux (Arixtra®) 	Yes	Prophylactic: 24 hrs Therapeutic: 48 hrs	Day after procedure
	<ul style="list-style-type: none"> Pletal (Cilostazol): Vasodilator 	Yes	3 days prior	Evening of procedure

***Ordering Provider must consent with medication hold recommendations.**
For additional questions, Ordering Providers can reach a Radiologist by calling the MRG Call Center at 541-618-5800.

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MODERATE RISK

<p>MODERATE RISK</p> <p>INR ≤ 1.5 Platelets > 50 x 10⁹/L Required labs: PT, PTT, INR, platelets Inpatients 72 hours Outpatients 30 days</p>	<p>Anticoagulant / Antiplatelet MEDS</p>	<p>Discontinue Yes* / No</p>	<p>Stop Anticoagulant Recommended Hours / Days off Meds*</p>	<p>Resume MEDS Recommendation when to resume</p>
<p>VASCULAR</p> <ul style="list-style-type: none"> • Angiography/Neuroangiography • Venous interventions (including central venous) • Chemoembolization • Uterine fibroid embolization • Transjugular liver biopsy • Tunneled CVC / Port / Hickman • Varicocele embolization <p>NON-VASCULAR</p> <p>Abdominal / Thoracic Procedures</p> <ul style="list-style-type: none"> • Intraabdominal, chest wall, pleural or retroperitoneal abscess drainage or core biopsy • Gastrostomy/gastrojejunostomy • Percutaneous cholecystostomy • Lung Biopsy • Uncomplicated thermal ablation – liver, kidney, MSK, lung • Transabdominal liver biopsy <p>MSK/Spine Procedures</p> <ul style="list-style-type: none"> • Lumbar puncture, epidural injection, facet block, nerve root block • Vertebroplasty/kyphoplasty • Spine biopsy, paraspinal injection • Extremity/MSK core biopsy 	<ul style="list-style-type: none"> • Aspirin (ASA), any dose • Aggrenox® 	<p>No</p>		
	<ul style="list-style-type: none"> • Clopidogrel (Plavix®) • Dipyridamole (Persantine®) • Prasugrel (Effient®) • Ticagrelor (Brilinta®) • Ticlopidine (Ticlid®) 	<p>Yes</p>	<p>5 days (MUST be approved by Cardiologist if medication specific to post cardiac stent placement)</p> <p>**LP ok to hold 3 days</p>	<p>Day after procedure</p>
	<ul style="list-style-type: none"> • Warfarin (Coumadin®) 	<p>Yes</p>	<p>5 days CHECK INR within 24 hrs.</p> <p>**LP ok to hold 3 days</p>	<p>Evening of procedure</p>
	<ul style="list-style-type: none"> • Subcutaneous Heparin • Argatroban 	<p>Yes Yes</p>	<p>Last dose given 6 hrs prior Last dose given 4 hrs prior</p>	<p>Evening of procedure Evening of procedure</p>
	<ul style="list-style-type: none"> • Low Molecular Weight Heparin (LMWH) • Enoxaparin (Lovenox®) • Dalteparin (Fragmin®) • Tinzaparin (Innohep®) 	<p>Yes</p>	<p>Prophylactic: 12 hrs prior Therapeutic: 24 hrs prior</p>	<p>Day after procedure</p>
	<ul style="list-style-type: none"> • (IV) Unfractionated Heparin ➔ REQUIRES PTT 	<p>Yes</p>	<p>Infusion to stop 4 hrs prior (goal: PTT ≤ 50 s)</p>	<p>6 hrs after procedure</p>
	<ul style="list-style-type: none"> • Dabigatran (Pradaxa®) 	<p>Yes</p>	<p>GFR > 50: 24 hours GFR ≤ 50: 48 hours</p>	<p>Day after procedure</p>
	<ul style="list-style-type: none"> • Rivaroxaban (Xarelto®) • Apixaban (Eliquis®) 	<p>Yes</p>	<p>Last dose given 24 hrs prior</p>	<p>Day after procedure</p>
	<ul style="list-style-type: none"> • Fondaparinux (Arixtra®) 	<p>Yes</p>	<p>Prophylactic: 24 hrs Therapeutic: 48 hrs</p>	<p>Day after procedure</p>
	<ul style="list-style-type: none"> • Pletal (Cilostazol): Vasodilator 	<p>Yes</p>	<p>3 days prior</p>	<p>Evening of Procedure</p>

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HIGH RISK				
HIGH RISK PROCEDURES INR ≤ 1.5 Platelets > 80 x 10 ⁹ /L Required labs: PT, PTT, INR, platelets Inpatients 72 hours Outpatients 14 days	Anticoagulant / Antiplatelet MEDS	Discontinue Yes* / No	Stop Anticoagulant Recommended Hours / Days off Meds*	Resume MEDS Recommendation when to resume
VASCULAR <ul style="list-style-type: none"> TIPS (Transjugular Intrahepatic Portosystemic Shunt) NON-VASCULAR Abdominal Procedures <ul style="list-style-type: none"> Renal core biopsy PCNL/Nephrostomy Biliary drainage (PTBD) 	<ul style="list-style-type: none"> Aspirin (ASA), low dose (81mg) Aggrenox® 	Yes	5 – 7 days	Day after procedure
	<ul style="list-style-type: none"> Clopidogrel (Plavix®) Dipyridamole (Persantine®) Prasugrel (Effient®) Ticagrelor (Brilinta®) Ticlopidine (Ticlid®) Aspirin, Non low dose 	Yes	7 days (MUST be approved by Cardiologist if medication specific to post cardiac stent placement)	Day after procedure
	<ul style="list-style-type: none"> NSAIDs 	Yes	3 days	Day after procedure
	<ul style="list-style-type: none"> Warfarin (Coumadin®) 	Yes	5 days CHECK INR within 24 hrs.	Day after procedure
	<ul style="list-style-type: none"> Subcutaneous Heparin Argatroban 	Yes Yes	Last dose 12 hrs prior Last dose given 4 hrs prior	Day after procedure Evening of procedure
	<ul style="list-style-type: none"> Low Molecular Weight Heparin (LMWH) Enoxaparin (Lovenox®) Dalteparin (Fragmin®) Tinzaparin (Innohep®) 	Yes	Prophylactic: 12 hrs prior Therapeutic: 24 hrs prior	Day after proc 2 nd day after proc
	<ul style="list-style-type: none"> (IV) Unfractionated Heparin ➔ REQUIRES PTT 	Yes	Infusion to stop 6 hrs prior (goal: PTT ≤ 43 s)	12 hrs after procedure
	<ul style="list-style-type: none"> Dabigatran (Pradaxa®) 	Yes	GFR > 50: 2 days GFR ≤ 50: 4 days	2 nd day after procedure
	<ul style="list-style-type: none"> Rivaroxaban (Xarelto®) Apixaban (Eliquis®) 	Yes	2 days	2 nd day after procedure
	<ul style="list-style-type: none"> Fondaparinux (Arixtra®) 	Yes	Prophylactic: 24 hrs prior Therapeutic: 48 hrs prior	2 nd day after Procedure
	<ul style="list-style-type: none"> Pletal (Cilostazol): Vasodilator 	Yes	3 days prior	Evening of procedure

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