

Updated 2/15/2022

Subject: DRAFT Pre-Procedural Management of Anticoagulation and Antiplatelet Agents

Purpose:

To standardize the process for anticoagulation and antiplatelet management recommendations prior to the following procedures: Breast Biopsy, Thyroid Biopsy, Lymph node biopsy, Myelogram/Lumbar puncture, Arthrograms, Joint Aspirations and or Injections as per current SIR guidelines.

Policy:

It is the policy of AMI to utilize a standardized protocol for managing anticoagulant and antiplatelet agents prior to general radiology and women's imaging procedures as deemed necessary to safely perform procedures and reduce the likelihood of a thromboembolic event in the patient. The designated procedures include:

- Breast biopsy and aspiration (to include MRI, US and Mammo/Stereo Biopsy)
- Thyroid Biopsy & Lymph node Biopsy
- Myelograms/Lumbar Punctures
- Arthrograms
- Joint Aspirations and or Injections

Nursing staff, patient navigators and/or specific designated staffing will manage the patient's appointment in coordination with the recommended and approved anticoagulant or antiplatelet changes.

Patient will be provided post procedural instructions upon completion of examination to include reinitiating any medications held.

Procedure:

- If a procedure is scheduled by the central scheduling department, the patient will be asked if they are taking any blood thinning medication.
- If the patient answers 'yes' to this screening question, the system will trigger a TASK within the program.
- The TASK will notify nursing staff and those managing clearances that the patient needs to be contacted for a complete review of blood thinning medications and managed according to recommendations in the table listed below.
- Nurses and navigators scheduling procedures in the office will handle tasking and obtaining clearance internally following the same guidelines as outlined below.

Warfarin (Coumadin)

- If the patient is taking Warfarin (Coumadin) and the procedure requires holding, clearance to hold the medication will need to be obtained by the patient's prescribing provider.
- Clearance should include how many days to hold the medication prior to the procedure and any bridging instructions deemed necessary by the provider.
- Patients will be required to have a STAT INR completed 1 day prior to procedure or the morning of the procedure to achieve an INR level within the recommended range as listed above.

- The patient will be provided a prescription for the INR level from the radiologist on site.
- The prescription should include an appropriate fax number for the result to be sent to.

Following current SIR guidelines, the procedures have been categorized below into low, moderate, and high risk to differentiate the appropriate recommendations for holding or continuing anticoagulants & antiplatelets for designated procedures. (*) indicates bleeding risk elevated from SIR classification at the discretion of AMI radiologists.

Procedure	Risk of bleeding	Aspirin Hold	Other Antiplatelet Hold	Other Anticoagulation Hold	INR (procedure done at or below this level)	Coumadin Hold	Reinitiating
Breast or Lymph Node- Core Biopsy	Moderate*	Yes	Yes	Yes	<2	Yes	Same day/next dose
Breast or Lymph Node- FNAs	Low	No	No	No	<2-3	Yes	Same day/next day
Thyroid Biopsy-FNA or Core	Moderate*	No	No	No	<2-3	Yes	Same day/next dose
Myelogram/Lumbar puncture	High*	Yes	Yes	Yes	1.5-1.8	Yes	Next day
Arthrogram	Low	No	No	No	N/A	No	N/A
Joint Aspiration/ injection	Low	No	No	No	<2-3	Yes	Same day/next dose
PRP injection	Moderate	Yes	Yes	Yes	<2	Yes	Same day/next day

- ***In the event that a patient's prescribing provider deems it unsafe for the patient to hold an anticoagulant/antiplatelet agent, the radiologist scheduled to perform the procedure should be contacted and made aware of the circumstances to determine if the patient can have the procedure completed safely.***
- ***Multiple medications of these types may indicate the patient is at a high risk for thromboembolic events. Consultation with the provider managing the patient's cardiovascular care may be warranted***

Medication	Low Risk Procedure	Moderate-High Risk Procedure	Reinitiation	Considerations
Warfarin (Coumadin)	5 days	5 days	Same day	*May consider bridging for pts w/ high risk of thrombosis/ shared

				decision making may be necessary
Anticoagulants				
Enoxaparin (Lovenox)	1 day prior (PM dose if BID)	-PM dose the day prior if prophylactic, - 1 day prior if therapeutic	12 hours after procedure	
Fondaparinux (Arixtra)	Do not hold	Hold 3 days	Low risk-Same Day High risk-Next Day	
Direct Oral Anticoagulants				
Apixaban (Eliquis)	Do not hold	2 days (3 days if GFR<50)	Low risk-Same Day High risk-Next Day	
*Dabigatran (Pradaxa)	Do not hold	2 days (3 days if GFR<50)	The following day	
Edoxaban (Savaysa)	Do not hold	2 days	The following day	
Rivaroxaban (Xarelto)	Do not hold	2 days (Hold 3 doses if GFR 15-30ml/min)	The following day	
Betrixaban (Bevyxxa)	Do not hold	3 doses (Hold 3 doses if GFR 15-30ml/min)	24 hours after the procedure	
Antiplatelets				
Clopidogrel (Plavix)	Do not hold	5 days	Same day	
Cilostazol (Pletal)	Do not hold	Do not hold		
*Ticagrelor (Brilinta)	Do not hold	5 days	The following day	
Prasugrel (Effient)	Do not hold	7 days	The following day	
*Aspirin/ Dipyridamole (Aggrenox)	Do not hold	3-5 days prior to procedure	The following day	
Aspirin (prescribed)	Do not hold	5 days prior	The following day	
NSAIDS	Do not hold	Do not hold		

*These recommendations are not intended to supplant professional judgement, and a physician may deviate from these guidelines as necessitated by the individual patient, practice setting or available resources.

References:

<https://www.jvir.org/action/showPdf?pii=S1051-0443%2819%2930407-5>