

Antithrombotic Guidelines

These guidelines are not designed as a rigid automatic decision tool for nursing and administration staff. They are designed to assist medical practitioners in the Radiology department to guide peri-procedural decision making in the complex clinical context.

This may involve discussion with the patient and referring clinical team. Urgent or complex cases may require direct discussion between referring the clinician and the radiologist.

For urgent or complex procedures outside the scope of this chart including vacuum assisted biopsies, please confirm with the radiologist.

Interventional Radiology Procedures

Drug names

This is not an exhaustive list

			Group 1 Minimal Risk of Haemorrhage	Group 2 Intermediate Risk of Haemorrhage	Group 3 High Risk of Haemorrhage
Antiplatelet	Cyclooxygenase Inhibitor	acetylsalicylic acid, Aspirin, Aspro, Astrix, Cardiprin, Cartia, Disprin, Solprin	Do not withhold	Do not withhold	Withhold 5 days prior (Recommence - next day) * Do not withhold in patients with prior coronary stent
	NSAID	diclofenac, ibuprofen, ketoprofen	Do not withhold	Do not withhold	Withhold 24 hours prior
		celecoxib, diflunisal, naproxen, sulindac	Do not withhold	Do not withhold	Withhold 2-3 days prior
		meloxicam, nabumetone, piroxicam	Do not withhold	Do not withhold	Withhold 10 days prior
	Adenosine Reuptake Inhibitor	dipyrimadole, Persantin	Do not withhold	Withhold 5 days prior	Withhold 5 days prior
	Phosphodiesterase Inhibitor	cilostazol, Petal	Do not withhold	Withhold 5 days prior	Withhold 5 days prior
ADP Receptor Inhibitors	ticlopidine	Withhold 5 days prior	Withhold 7 days prior	Withhold 7 days prior	
	ticagrelor Brilinta , clopidogrel Iscover, Plavix *^	Withhold 5 days prior	Withhold 5 days prior	Withhold 5 days prior	
Anticoagulant	Vit K blocker	warfarin, Coumadin, Marevan *	Do not withhold unless potential bleeding cannot be controlled	Withhold approx. 5 days prior until INR ≤ 1.5	Withhold approx. 5 days prior until INR ≤ 1.5
	Anti thrombin III agonist	unfractionated heparin*# (therapeutic infusion)	Do not cease	Cease 1 hour prior to the procedure Do not withhold for Urokinase patients	Cease 6 hours prior
		unfractionated heparin*# (SC injection)	Do not withhold	Withhold 12 hours prior	Withhold 12 hours prior
	Low Molecular Weight Heparin	<u>Therapeutic</u> dalteparin, Fragmin * # enoxaparin, Clexane, Lovenox , nadroparin, Fraxiparin, Fraxodi	Withhold 12 hours prior	Withhold 12 hours prior	Withhold 24 hours prior
<u>Prophylactic</u> Pharmaceuticals listed above #		Do not withhold	Withhold 12 hours prior	Withhold 12 hours prior	
Direct Oral Anticoagulant (DOAC)	Thrombin (Factor IIa) Inhibitor	dabigatran ** # Pradaxa Half-Life: 12-17 hrs Excretion: Renal	Do not cease unless potential bleeding cannot be controlled, in which case discuss group 2 recommendation with the Clinician responsible for anticoagulation.	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 24hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 36hrs	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 48hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 72hrs
	Factor Xa Inhibitor	rivaroxaban ** # Xarelto Half-Life: 5- 9 hrs Excretion: 50% renal & 50% hepatic	Do not cease unless potential bleeding cannot be controlled, in which case discuss group 2 recommendation with the Clinician responsible for anticoagulation.	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 12-24hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 24-36hrs • 'INR on day of procedure **	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 24-36hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 36-48hrs • 'INR on day of procedure **
		apixaban ** # Eliquis Half-Life: 8-11 hrs Excretion: 75% hepatic & 25% renal	Do not cease unless potential bleeding cannot be controlled, in which case discuss group 2 recommendation with the Clinician responsible for anticoagulation.	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 12-24hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 24-36hrs • 'INR on day of procedure **	Renal function (eGFR ml/min/1.73m ²): • eGFR ≥ 30ml/min/1.73m ² : withhold 12-24hrs • eGFR < 30ml/min/1.73m ² or ≥75 yo : withhold 24-36hrs • 'INR on day of procedure ** • In patients with hepatic dysfunction a longer period of cessation may be required

* Should be discussed with the patients referring medical practitioner or managing clinical team

** Coagulation studies (INR/aPTT/PT/TT) can remain within normal range even if anticoagulation effect may still be present. Patients with renal function worse than stated will require a longer duration of cessation.

^ Cardiology should be contacted if ADP Receptor Inhibitors are to be withheld and a coronary stent has been performed within 12 months.

Ensure the antithrombotic agent is reinstated following the procedure. Communication with the patient's referring medical practitioner must occur.

Pathology Tests and Thresholds

	Group 1 Minimal Risk of Haemorrhage	Group 2 Intermediate Risk of Haemorrhage	Group 3 High Risk of Haemorrhage
INR International Normalised Ratio	<ul style="list-style-type: none"> 12 hours prior if on warfarin <u>or</u> medication listed above and has liver disease Correct INR to ≤2.0 	<ul style="list-style-type: none"> 12 hours prior to the procedure. Correct INR to ≤1.5 	<ul style="list-style-type: none"> 12 hours prior to the procedure. Correct INR to ≤1.5
aPTT activated Partial Thromboplastin Time	<ul style="list-style-type: none"> 12 hours prior if on warfarin <u>or</u> medication listed above and has liver disease 	<ul style="list-style-type: none"> 12 hours prior to the procedure. No consensus (trend toward correcting for values ≥ 1.5 x control, 73% consensus) 	<ul style="list-style-type: none"> 12 hours prior to the procedure. Correct so that values are ≤ 1.5 x control
FBC Full Blood Count	<ul style="list-style-type: none"> Not routinely recommended 	<ul style="list-style-type: none"> 12 hours prior to the procedure. Platelets ≤50,000/uL recommended transfusion (or ≥ 80,000 for spinal canal procedures). 	<ul style="list-style-type: none"> 12 hours prior to the procedure. Platelets ≤ 50,000/uL recommended transfusion.