

# IR PROCEDURE BLEEDING RISK GUIDANCE

## PRE-ASSESSMENT SCREENING

All patients, not on anti-thrombotic therapy, can be initially assessed using the HEMSTOP questionnaire below (each question scores 1 for yes):

- Have you ever consulted a doctor or received treatment for prolonged or unusual bleeding (such as nosebleeds, minor wounds)?
- Do you experience bruises/haematomas larger than 2 cm without trauma or severe bruising after minor trauma?
- After a tooth extraction, have you ever experienced prolonged bleeding requiring medical/dental consultation?
- Have you experienced excessive bleeding during or after surgery?
- Is there anyone in your family who suffers from a bleeding disorder (such as haemophilia or von Willebrand disease)?
- Have you ever consulted a doctor or received treatment for heavy or prolonged menstrual periods (contraceptive pill, iron etc.)? (females only)
- Did you experience prolonged or excessive bleeding after delivery? (females only)

If < 2 positive responses:

**LOW RISK PROCEDURES:** No coagulation screen or FBC required

**MODERATE/HIGH RISK PROCEDURES:** No coagulation screening required; FBC only

If ≥ 2 positive responses:

Perform coagulation screen (FBC, PT, APTT, Clauss fibrinogen assay) and discuss with haematologist prior to procedure

## BLEEDING RISK STRATIFICATION FOR COMMON IR PROCEDURES

### LOW RISK INTERVENTIONS

Basic venous interventions  
(IVC filter insert/removal)  
Superficial interventions/  
biopsies (excluding liver/renal)  
GI tract stenting  
MSK interventions  
US guided drainages  
Catheter exchange/removal

### MODERATE RISK INTERVENTIONS

Arterial interventions (<6F)  
Embolisation (TACE/UAE/PAE)  
Venous/dialysis access interventions

### HIGH RISK INTERVENTIONS

Arterial interventions (>7F)  
Aortic stent grafting  
Tumour ablation  
PCNL/renal biopsy/nephrostomy  
TIPSS/TJ liver biopsy  
Liver biopsy/biliary intervention

## PRE-PROCEDURAL BLOOD PARAMETERS REQUIREMENTS

### LOW RISK INTERVENTIONS

No procedure specific  
laboratory tests

### MODERATE RISK INTERVENTIONS

Hb: > 70 g/L  
Plts: > 50 x 10<sup>9</sup>/L  
If on vit K antagonist INR: < 2.0

### HIGH RISK INTERVENTIONS

Hb: > 70 g/L  
Plts: > 50 x 10<sup>9</sup>/L  
If on vit K antagonist INR: < 1.5

## LIVER DISEASE\*

Consider correction if: Fibrinogen: < 1.2 g/L Plts: < 50 x 10<sup>9</sup>/L Haematocrit < 25%

\* Neither PT nor INR correlate well with bleeding risk in patients with liver disease

## PRE-PROCEDURAL ANTI-THROMBOTIC MEDICATION INSTRUCTIONS\*

- \*CONSIDERATIONS:**
- Cardiac stents and stroke or thrombosis within 3 months: consult appropriate clinical team
  - Follow local Trust policy for referral to bridging clinic
  - Bleeding and thrombosis risks should be discussed as part of the consent process

### HEPARINS: Low Risk Procedures

	Hold duration prior to procedure	Suggest restart time following procedure
Unfractionated Heparin	2-4 h	6 h
LMWH (prophylactic)	12 h	6-12 h
LMWH (therapeutic)	1 day	6-12 h

### HEPARINS: Moderate/High Risk Procedures

	Hold duration prior to procedure	Suggest restart time following procedure
Unfractionated Heparin	4 h	12-48 h
LMWH (prophylactic)	12 h	1 day
LMWH (therapeutic)	1 day	1-3 days

### Vitamin K Antagonists: Low Risk Procedures | INR < 2.0 on day of procedure

	Hold duration prior to procedure	Suggest restart time following procedure
Warfarin/Acenocoumarol	2-3 days	Evening

### Vitamin K Antagonists: Moderate/High Risk Procedures | INR < 1.5 on day of procedure

	Hold duration prior to procedure	Suggest restart time following procedure
Warfarin/Acenocoumarol	5 days	12-24 h

### Thrombin Inhibitors: Low Risk Procedures (as per PAUSE protocol)

	Hold duration prior to procedure	Suggest restart time following procedure
Dabigatran	1 day if eGFR > 50 2 days if eGFR < 50	1 day
Argatroban	2-4 h	6 h

### Thrombin Inhibitors: Moderate/High Risk Procedures (as per PAUSE protocol)

	Hold duration prior to procedure	Suggest restart time following procedure
Dabigatran	2 days if eGFR > 50 4 days if eGFR < 50	2-3 days
Argatroban	4 h	6 h

### Factor Xa Inhibitors: Low Risk Procedures (as per PAUSE protocol)

	Hold duration prior to procedure	Suggest restart time following procedure
Apixaban/Rivaroxaban/Endoxaban	Omit 1 day prior	Restart after 1 day
Fondaparinux (prophylactic)	1 day	6 h
Fondaparinux (therapeutic)	2 days	6 h

### Factor Xa Inhibitors: Moderate/High Risk Procedures (as per PAUSE protocol)

	Hold duration prior to procedure	Suggest restart time following procedure
Apixaban/Rivaroxaban/Endoxaban	Omit 2 days prior	Restart after 2-3 days
Fondaparinux (prophylactic)	1 day	12-24 h
Fondaparinux (therapeutic)	2 days	12-24 h

### Aspirin & ADP Receptor Inhibitors: Low Risk Procedures

	Hold duration prior to procedure	Suggest restart time following procedure
Aspirin/ Clopidogrel/Ticagrelor/Prasugrel	Does not need to be stopped	N/A

### Aspirin & ADP Receptor Inhibitors: Moderate/High Risk Procedures

	Hold duration prior to procedure	Suggest restart time following procedure
Aspirin (low dose monotherapy)	Does not need to be stopped	N/A
Clopidogrel/Ticagrelor/Prasugrel	7 days	1 day