Haematology Minimum Retesting Intervals[i]

Table of Contents

These recommendations should not be used in paediatric/neonatal patients unless specifically stated.

1. Haematology general

Clinical Situation	Recommendation
1.1. Full blood count (FBC)	Full blood count refers to the measurement of Haemoglobin, White cell count and Platelet count unless otherwise stated
Normal follow up	A repeat would be indicated on clinical grounds if there were a significant change in that patient's condition
Inpatient monitoring of a stable patient	An inpatient with a normal admission FBC should not have a repeat within the average length of stay of 4 days
Inpatient monitoring of an unstable patient who is not actively bleeding or a patient receiving cytotoxic drugs	Not usually required more than once daily
Patients with major bleeding	Repeat interval should be determined by the clinical situation. Should be repeated at least every hour in massive haemorrhage
Pregnant on haematinic supplements (iron, folate, B12)	Repeat after at least 14 days
Routine pregnancy monitoring	At booking, 28 weeks and postpartum
Immune thrombocytopenia in pregnancy	Every 4 weeks and then every 2 weeks after 28 weeks
Hypertensive disorders of pregnancy* *FBC in combination with renal and liver function	Once only if moderate antenatal gestational hypertension (<160/110) without proteinuria. Weekly if severe gestational hypertension. Twice weekly if mild antenatal hypertension with pre-eclampsia, three times weekly if moderate to severe. As clinically indicated in peripartum period (may require multiple repeats over 24 hours) and then repeat 48 hours after delivery/step down from critical care and stop monitoring if normal values
Inpatients with suspected platelet alloantibodies or receiving HLA matched platelets	A repeat 1 hour after completion of platelet transfusion
Patients with anaemia of chronic kidney disease	Every 2–4 weeks in the induction phase of ESA therapy and every 1–3 months in the maintenance phase of ESA therapy
1.2. Erythrocyte sedimentation rate (ESR)	
Temporal arteritis/ polymyalgia rheumatica	Every 3 months following first month of treatment
Rheumatoid arthritis	Every month until treatment has controlled the disease (NICE CG79 recommends use of CRP)

2. Haematology clotting

Clinical Situation	Recommendation
2.1. Clotting Screen	Basic clotting screen refers to the combined measurement of PT and APTT unless otherwise stated.
Patients with major bleeding	Repeat interval should be determined by the clinical situation. Should be repeated at least every hour in massive haemorrhage
Patients with acute coagulopathy	Usually no more than daily if not receiving coagulation factors and no active bleeding
2.2. Prothombin time (PT) expressed as time in seconds	
Patients with chronic liver disease	Every 3 months if otherwise stable
2.3. International normalised ratio (INR)	
Patients being initiated on vitamin K antagonist (VKA)	No more than once daily
Unstable inpatient on VKA	No more than once daily
Stable outpatient on VKA	Usually no more than once weekly and up to 12 weeks when very stable
Patient requiring urgent reversal of VKA (or to treat any acquired deficiency of vitamin K dependent coagulation factors) with vitamin K	Repeat only after at least 6 hours following IV dose and the following day after an oral dose
Patient requiring urgent reversal of VKA with a 4 factor PCC	Repeat within an hour of administration
2.4. Activated partial thromboplastin time (APTT)	
Patient receiving intravenous infusion of unfractionated heparin	Repeat 6 hours after dose adjustment (2 hours if previous APTT ratio >5.0) and daily when APTT in the target range
Patients receiving intravenous infusion of a parenteral direct thrombin inhibitor (Bivalirudin, Argatroban)	Repeat 2 hours after each dose adjustment then daily when in the target range
2.5. Fibrinogen	
Patients with acute coagulopathy	Usually no more than daily if not receiving coagulation factors and no active bleeding
Patients with major bleeding	Repeat interval should be determined by the clinical situation. Should be repeated at least every hour in massive haemorrhage
2.6. Anti-Xa assay	
Patient on therapeutic dose of LMWH with significant renal impairment, extreme weight, pregnancy or other indication for measurement	At least 3 days after initiation or dose adjustment then no more than once weekly if the dose is unchanged
2.7. Lupus anticoagulant screen	
Investigation of suspected antiphospholipid syndrome	Repeat after 12 weeks if abnormal
Investigation for antiphospholipid syndrome after completion of anticoagulation	At least 7 days after stopping anticoagulation
2.8. Coagulation factor assay	Refers to the measurement of antigen and/or activity of a coagulation factor (procoagulant or anticoagulant)
A patient under investigation for suspected coagulation factor deficiency	An abnormal result can be repeated for confirmation at a clinically appropriate interval
A patient receiving coagulation factor replacement therapy	An assay immediately before and up to 60 minutes after administration and then as clinically indicated, usually no more than once daily (either trough, peak or both)
2.9. Coagulation factor inhibitor testing	
Surveillance in patients with severe haemophilia A or B	After every 3rd factor exposure day (ED) or every 3 months (whichever is sooner) until 20 ED then every 3–6 months until 150 ED (then 1–2 times per year in severe haemophilia A only)

Clinical Situation	Recommendation
Surveillance after change of factor concentrate in severe haemophilia A	Before the change and then twice in the first 6 months after the change
Surveillance in patients with moderate or mild haemophilia A	Annually if exposed to factor concentrate or after intensive exposure (>5ED) or surgery
Monitoring of immune tolerance therapy (ITT) during treatment	Monthly
After completion of successful ITT	Monthly for 6 months then every 2 months for up to a year
Monitoring patients with newly diagnosed acquired coagulation factor inhibitor	Monthly until 6 months after remission

[i] Source: Royal College of Pathologists *National minimum retesting intervals in pathology.* London: Royal College of Pathologists, 2015