

**Pre-Operative Assessment Clinic guidance for the referral of abnormal blood tests**

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**Key Amendment**

<b>Date</b>	<b>Amendment</b>	<b>Approved by</b>
21 <sup>st</sup> January 2019	Inclusion of advice for edoxaban. Additional information for the management of medicines for diabetes	Medicines Safety Committee
25 <sup>th</sup> June 2020	Document extended for 6 months during COVID-19 period.	QGC
4 <sup>th</sup> January 2021	Pre-operative assessment Key Documents approved for 3 years	Pre-op Directorate Governance Meeting
27 <sup>th</sup> December 2023	Extended document for 6 months whilst under review. Updated owner details.	Dr Harsha Mistry
12 <sup>th</sup> November 2024	Document extended for 12 months whilst awaiting National Guidelines to inform if changes are required	Dr Harsha Mistry

**Introduction**

Pre-operative tests may be performed as part of the pre-operative assessment process as per the National Institute for Healthcare and Clinical Excellence guidance (National Institute for Health and Care Excellence, 2003)

Staff undertaking clinical preoperative assessments should discuss with patients which tests are recommended (or required), what they involve and why they are being carried out. Doctors or nurses carrying out or ordering tests should write in the patient's notes that they have discussed the recommended tests and their implications with the patient. Patients should be informed of the results of tests and about the implications for treatment, and any longer term implications for their health, if the results are abnormal (National Institute for Health and Care Excellence, 2003).

The POA Registered Nurse is responsible for reviewing the results of the blood tests that have been requested. The patient's General Practitioners (GP) will be informed of abnormal blood results by the RN, particularly in the event of a new finding. The patient must be clinically managed by the Registered Nurse (RN) to ensure appropriate safety netting of the patient.

This guidance documents the reference ranges for pre-operative routine blood test results that require referral to the Consultant POA Anaesthetist and Surgeon

Full Blood Count (FBC)
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Hb	<100 g/L	>170 g/L
Platelets	<100 <sup>9</sup> /L	>600 <sup>9</sup> /L
WBC	<3 <sup>9</sup> /L	>15 <sup>9</sup> /L
Neutrophils	<1 <sup>9</sup> /L	

Pre-operative anaemia is a risk factor for a poorer clinical outcome (Spahn and Zacharowski, 2015) and therefore the GP should be informed on any new finding of anaemia. In the event that the proposed surgery may result in significant blood loss, then that RN should further notify the Anaesthetist and Surgeon.

Urea, Electrolytes and Creatinine		
Urea		>10 mmol/L
Creatinine		>140 umol/L
Sodium	<130 mmol/L	>150 mmol/L
Potassium	<3.5 mmol/L	>5.5 mmol/L

**Elevated Potassium**

- 5.5 mmol/L-5.9 mmol/L and not a chronic problem then repeat the blood test in a timely manner
- >6 mmol/L urgent repeat the sample, and seek urgent opinion in the management of the patient

Liver Function Tests (LFTs)		
Albumin	<30 g/L	
Asparate Transaminase	N/A	>40 IU/L
Gamma Glutamyl Transferase	N/A	>55 IU/L
Alk Phos	N/A	>200 IU/L
Bilirubin	N/A	>20 umol/L

Clotting Studies		
APTT ratio		>1.3

Glucose		
HbA1c	>69mmol/mol refer to GP and follow 'Guideline for the perioperative management of diabetes for Adult patients undergoing Elective surgery'.	

### Thyroid Function Test (TFT)

Any abnormal TSH results require referral to the GP

Perform TFT blood test in the following instances:

- Perform if the patient's Thyroxine dose has been altered within the past 3/12
- Perform if no TFT in the past 6/12
- Perform if clinically indicated

<u>Hyperthyroidism</u>	<u>Hypothyroidism</u>
Common clinical features	
Anxiety	Fatigue
Irritability	Cold intolerance
Heat intolerance	Weight gain
fatigue	Constipation
Weight loss	Voice changes
Increased appetite	Dryness of skin
Tremor	Loss of hair
Tachycardia/atrial fibrillation	Bradycardia
Increased sweating	Anaemia
Goitre	

(Ramachandran, Kennedy and Haque, 2015)