







## Clinical Chemistry

Test	Ref Range	Sample Requirements
Sodium	137-145 mmol/L	4ml SST tube (gold top)   Gold  Fasting sample
Potassium	3.6-5.0 mmol/L	
Urea	M 3.2-7.1 mmol/L F 2.5-6.1 mmol/L	
Creatinine	M 71-133umol/L F 62-106 umol/L	
Tot. Protein	63-82 g/L	
Albumin	39-50 g/L	
Bilirubin	2-23 umol/L	
Calcium	2.10-2.55 mmol/L	
Cholesterol	<5.2 mmol/L	
AST	M 14-50 IU/L F 8-39 IU/L	
ALP	38-126 IU/L	
ALT	M 10-40 U/l F 7-35 U/l	
Amylase	30 -110 IU/L	
Osmolality	Urine 50-1200 mOsm/kg Serum 275-295 mOsm/kg	White urine pots for urine
Magnesium	0.66-1.07 mmol/l	
CK	M 55-170 IU/L F 30-135 IU/L	
Other tests:  CKMB (>4 hours post suspected MI), Paracetamol (4 hours post Ingestion), Salicylate, CRP, Troponin I (>6 hours post suspected MI), Phosphate.		
Glucose	M 4.2-6.1 mmol/L F 3.6-5.8 mmol/L	Fluoride Oxalate   Gray
Ionised Calcium	1.12-1.32 mmol/L	Lithium Heparin   Green

## Haematology/Transfusion Science

Test	Ref Range	Sample Requirements
WBC	4.0-11 x10 <sup>9</sup> /L	<div>4ml EDTA tube</div> <div>Lavender</div> <div>Must be analysed within 6 hours. Stored at 4°C if unavoidably delayed. Gently mix sample to prevent clotting.</div>
RBC	M 4.-5.5 x10 <sup>12</sup> /L F 3.5-5.2 x10 <sup>12</sup> /L	
HB	M 13.5-17.5 g/L F 11.5-15.5 g/L	
HCT	M 39-49% F 35-45%	
MCV	80.0-95.0 fL	
MCH	27.0-34.0 pg	
MCHC	20-35 g/dL	
Platelets	150-400 x10 <sup>9</sup> /L	
Differential White Cell Count	Neutrophils 2.5-7.5x10 <sup>9</sup> /L Lymphocytes1.5-3x10 <sup>9</sup> /L Monocytes0.2-0.8x10 <sup>9</sup> /L Eosinophils 0.04-0.44x10 <sup>9</sup> /L	
Other tests:  Blood film, Monospot, Sickledex Malrial parasites, DAT.		
ESR	M <10 mm/hr F <12 mm/hr	Sodium Citrate (black top)
D-Dimer	8-135ng/ml	<div>Sodium Citrate</div> <div>Light Blue</div>
PT	11-15 Sec	
APTT	<38 Sec	
Other tests: Firbrinogen, INR, Coag factors		
Routine blood group, antibody screen and crossmatch	Use a FMED12A <b>Note</b> a Cross Match takes up to 35minutes	<div>Large 7 ml EDTA (legally requires minimum 3 point identification)</div> <div>Pink</div>

## Microbiology

Routine identification of pathogens by microscopy, culture and appropriate sensitivity testing of the following samples:

Examination	Sample requirements
Urine MSU/CSU	Sterile Universal. Do not dipstick prior to laboratory analysis. Stored at 4°C overnight.
Faeces (routine)	- Stored at 4°C overnight
<u>Swabs:</u> Eye Ear Nasal Throat Urethral Vaginal Wound/Pus/Skin	Blue Transport swab May be stored overnight at room temp.
<u>Fluid Aspirates:</u> Knee/joint fluid Pleural fluid CSF	Sterile Universal For CSF, transport to Laboratory immediately for analysis
Pregnancy testing	Ideally EMU. Store at 4°C
Faecal occult blood	Stool sample (Store at 4°C)
HIV 1/2	SST sample (gold topped bottle)
Pregnancy test	EMU sample
Blood culture	Hemoline System (place directly in incubator – out of hours)
Virology/Serology	Referral service- green transport swab / SST sample per request

## Histology

Samples must be in buffered formalin. Store at room temperature prior to dispatch.



**UK MED GROUP**

## *Summary of Laboratory Services Available*

July 09