

Assay	Units	Lower Limit (all ≤)		Upper Limit (all ≥)	
		Always ¹	IP- Always OP/GP-Next Day ¹	Always ¹	IP- Always OP/GP- Next Day ¹
Sodium	mmol/L	120 (130 if <16 yrs)		160	
Potassium	mmol/L	2.5 ²		6.5 ²	
Urea	mmol/L			30 ³ (≥10 if <16 yrs) 25 if ≥70 yrs (GP only)	
Creatinine	umol/L			354 ³ (≥200 if <15 yrs)	
AKI stage 3				New stage 3 AKI ³	
AKI stage 2					New stage 2 AKI
AKI stage 1					New & K ⁺ > 6
Glucose	mmol/L	2.5		25 (≥15 if <16 yrs) ⁴	
Calcium – Adj/non-adj ⁵	mmol/L		1.8		3.5
Magnesium	mmol/L		0.4		
Phosphate	mmol/L		0.3 ²		
Bicarbonate	mmol/L	10			
ALT	U/L			600	
AST	U/L			600	
Urate –Pregnancy	umol/L				340
Bile acids	umol/L				10 ⁶
Total Bilirubin – Paeds	umol/L				340
Conj. Bilirubin – Paeds	umol/L				25
Amylase	U/L			265	
CK	U/L			5000	
Ammonia	umol/L			100	
Digoxin	ug/L				2.5 ⁷
Lithium	mmol/L				1.5
Phenytoin	mg/L				25
Theophylline	mg/L				25
Iron - Paeds	umol/L			50	
Cortisol – Random	nmol/L	50 (not O/N DST)			
Cortisol 30 min SST	nmol/L	250			
TSH	mU/L				50
FT4	pmol/L		5.0		50
Troponin T	ng/L			14 (GP only) 52 (ED only)	
Paracetamol	mg/L			30	
Salicylate	mg/L			300	
Ethanol	mg/L			4000	
CRP	mg/L			250 ⁸ (GP>16y),100(all<16y)	
Gentamicin	mg/L			2.0	
Tacrolimus ⁹	ng/ml	3.0		15.0	
Bld. Lactates (QE only)	mmol/L			4.0	

- Where levels ≥ “Always” limits then phone within 2 hours of result available. Where results ≥ “IP - Always OP/GP – Next Day” limits phone within 2 hours for in-patients or next day for OP/GP locations. OP results should be phoned to hospital clinicians not GPs. Where next day is not a working day then phone GP results to OOH within 24 hours.
- Pre-dialysis:** No need to phone any results if post- sample received. If not phone potassium ≥7.0. **Post-dialysis:** No need to phone any low potassium or phosphate results.
- High creatinine & urea results or AKI stage 3** do not need phoning if already known and not significantly altered.
- Urea** phone ≥25 for GP patients ≥70 years old
- Non-adjusted calcium** (where albumin < 20 g/L or > 50 g/L) use clinical judgement
- Bile acids** If OOH phone to PAU (QE) or Delivery suite (CHS & STY)
- Digoxin** Phone immediately if potassium < 3.0 mmol/L or if clinical details state ?OD or suggest toxicity (nausea/headaches/confusion/blurred vision). Otherwise, result can be phoned next day.
- No requirement to phone for adult hospital patients (phone high CRP if GP or paed).
- Tacrolimus:** If SRH renal dept., then phone on call renal transplant consultant before 5pm or renal consultant after 5pm. For other locations, use standard phoning rules.