

# MAYO UNIVERSITY HOSPITAL PATHOLOGY LABORATORY BIOCHEMISTRY DEPARTMENT

**Document Identification** B/LI/001 **Edition** 11 **Effective Date** 25<sup>th</sup> September 2024

### **Test Values Currently Phoned to Wards/Clinicians**

#### **POINTS TO NOTE:**

- Results falling outside these defined limits AND where the patient has no previous history/ relevant clinical details OR when there is a significant change to previous results, will be telephoned to the requesting clinician/location;
- This list IS NOT exhaustive phoning of a result not on this list is at the discretion of the Scientist;
- All phoned results must be recorded as such in the patient notes or in the 'Telephone' function on APEX ensuring a record is made of the receiving person's name (as per B/LP/003).

ANALYTE	AGE RANGE	INTERNAL (ED/INTERNAL WARDS)	EXTERNAL (GP/OPD/NURSING HOMES/DISTRICT HOSP)
Albumin (g/L)	All	-	≤20 - ≥60
ALP (IU/L)	Up to 15yrs	-	≥600
	>15yrs - Adults	-	≥600
ALT (IU/L)	All	-	≥300
Ammonia (mmol/L)	Up to 4 weeks	≥130	N/A
	>4 wks - Adult	≥100 <sup>1</sup>	N/A
Amylase (IU/L)	All	≥300	≥200
AST (IU/L)	All	-	≥150
βHCG (urine)	All	Positive on pre-op or trauma patients	
Bicarbonate <sup>1</sup>	All	<10	<10
Blood Gases (Arterial)	All	PH<7.1	N/A
	Up to 6 days	≥250	≥250
Bilirubin (mmol/L)	>6 days - 10yrs	-	≥50
	>10yrs - Adult	-	≥100
Calcium (mmol/L) / Adjusted Calcium	All	≤1.90 - ≥2.90	≤1.90 - ≥2.90
CK (IU/L)	All	-	≥1000
Creatinine (µmol/L)	Up to 10yrs	≥150	≥150
(Only new significant increases in non-dialysis patients)	>10yrs - Adult	≥450	≥450
CRP (pg/ml)	Up to 6 days	≥5	≥5
	>6 days - 10yrs	≥30	≥30
	>10yrs - Adult	≥300¹	≥100
Ferritin (ng/ml)	All	-	>1000
FT4 (pmol/l)	All	-	≥50
Gentamicin (mg/L)*	All	-	>1.0
GGT (IU/L)	All	-	≥750



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ANALYTE	AGE RANGE	INTERNAL (ED/INTERNAL WARDS)	EXTERNAL (GP/OPD/NURSING HOMES/DISTRICT HOSP)	
Glucose (mmol/L)	Up to 10 yrs	≤1.8 - ≥15	≤2.0 - ≥15	
	>10yr –adult (random)	≤2.5 - ≥25 <sup>1</sup>	≤2.5 - ≥20	
	>10yr - Adult (fasting)	≤2.5 - ≥25 <sup>1</sup>	≤2.5 - ≥20	
	CSF (AII)	≤1.5	N/A	
Iron (umol/l)	All	≥55 <sup>4</sup>	≥55 <sup>4</sup>	
Lactate (mmol/L)	All	≥3.5	N/A	
Lithium (mmol/l)	All	≥1.5 <sup>1</sup>	≥1.5 <sup>1,2</sup>	
Magnesium (mmol/l)	All	≤0.4 <sup>1</sup> - ≥2.0	≤0.4 - ≥2.0	
Phosphate (mmol/l)	All	<0.3 <sup>1</sup> - >2.6	<0.39 - >2.6	
Paracetamol (mmol/l)	All (up to 12 hrs post ingestion)	≥0.25	N/A	
Potassium (mmol/L)	All	≤2.5 - ≥6.5 <sup>1</sup>	$\leq$ 2.5 - $\geq$ 6.5 <sup>1</sup> (Samples < 4 hrs or spun)	
Procalcitonin (ng/ml)*	All	-	>2.0	
Salicylate (mmol/l)	All	≥2.0	N/A	
C = 4! / 1/1)	Up to 16yrs	≤130 - ≥160¹	≤130 - ≥155 <sup>2</sup>	
Sodium (mmol/L)	16yrs - Adult	≤120 - ≥160¹	≤120 - ≥155 <sup>2</sup>	
Sweat Cl (mmol/L)	All	≥60	N/A	
Total Protein (g/L)	All	ı	≤30 - ≥95	
Total DCA (ug/L)	<69 yrs	ı	≥15	
Total PSA (μg/L)	≥70yrs	-	≥20	
TSH (mIU/L)	All	-	≥80	
Triglyceride (mmol/L) <sup>2</sup>	All	>20	>20	
Troponin I (ng/L)	All	≥20 <sup>3</sup>	≥20 <sup>3</sup>	
Urate (mmol/L)	Adult	-	≥750	
Urea (mmol/L)	Up to 10yrs	≥10	≥10	
	10yrs - Adult	≥30 <sup>1,2</sup>	≥30²	
Vancomycin (mg/L) *	All	-	>15	
Vitamin B12 (pg/ml)	All	<70.0	-	
MISCELLANEOUS				
HAEMOLYSED SAMPLES		A/E; Oncology; Urgent bloods	-	
REJECTED SAMPLES		ALL INTERNAL	ALL EXTERNAL	

Unsuitable samples, unexpected results or suspicion of sample mislabelling or WBIT are all brought to the attention of the Ward or the Medical Team.

<sup>\*</sup>Critical results for antibiotics and PCT to be phoned to Microbiologist during routine hours and to requesting doctor out of hours.



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#### OTHER URGENT RESULTS

Action for urgent results received from external Laboratories (e.g. GUH, Eurofins Biomnis etc.) for relay to requesting location/clinician:

- Upon receipt of an urgent result(s) from external laboratory by phone, attempt to phone to requesting location / clinician in as timely a fashion as possible. Document actions in note pad of relevant patient record, if available on APEX.
- If no patient record available on APEX for this result, 'Order Enter' a new request (USE CODE 'EXT' FOR TEST ORDER) using the patient details received, to provide a place to record the phone call details in specimen note pad (F9), telephone log or specimen free text comment.

#### When the location/clinician is NOT CONTACTABLE, relay result in the following manner:

Results requested by OPD/Clinic that's ended	Phone to a member of the team of the relevant	
Results requested by Gray Cliffic that's ended	consultant or Medical/Surgical Reg on-call	
Results requested by GP when GP clinic is closed	Action order:	
	Phone to doctor stated as on-duty for the	
	closed GP;	
	• If no on-duty GP stated, phone to requesting	
	GP's mobile number on IT/MF/003 if supplied;	
	• If not supplied, phone to Westdoc.	
<u>PLEASE NOTE:</u> When recording these phone calls on Apex, only record the actions of this laboratory.		

Record the details of the communication or phoning of results as described in the procedure 'Procedure for the Review and Release of Reports to Users' B/LP/003

	Dan.	
Authorised by: _		Date: 25/09/2024

Dr Verena Gounden, Chemical Pathologist

### References:

- 1. The Royal College of Pathologists *The communication of critical and unexpected pathology results* October 2017;
- 2. HSE Communication of Critical Results to the Community:

https://www.hse.ie/eng/about/who/cspd/ncps/pathology/resources/communication-of-critical-results-for-patients-in-the-community.pdf

3. **Beckman Coulter -Reagent Insert for Trop I –** Upper limit result for combined overall male and female ranges at 95% C.I.