

**SJH CENTRE FOR LABORATORY MEDICINE & MOLECULAR PATHOLOGY**

<b>Edition No.:</b>	07	<b>Biochemistry</b>	<b>Doc No:</b> WI-BIO-0227
<b>Authorised By</b>	Collette Collison	<b>Date:</b> 28.09.22	<b>Date of Issue:</b> 28.09.22

## Serum Indices

Analyte	Direction			Interference		
	Conj. Bili. Interference	Haemolysis interference	Lipaemic Interference	Icteric Index as conj Bilirubin (SI units)	Haemolytic Index as Hb (SI units)	Lipaemic Index as Intralipid (without units)
ACTH	n/a	n/a	n/a	μmol/l	μmol/l	Turbidity
Albumin	↔	↔	↓	428	250	1500
Alkaline phosphatase	↓	↓	↔	1026	124	2000
ALT	↓	↓↑	↔	1026	56	150
AFP	n/a	n/a	n/a	1112	1400	1500
Amikacin	↔	↔	↔	855	621	2000
Amylase	↔	↔	↔	1026	310	1500
AMH	n/a	n/a	n/a	1129	621	1000
AST	↔	↑	↔	1026	26	150
Bicarbonate	↔	↓	↔	1026	373	1800
Calcitonin	n/a	n/a	n/a	1128	124	2000
Calcium	↔	↔	↔	1026	621	1000
Carbamazepine	↔	↔	↔	855	621	2000
Ca 125	n/a	n/a	n/a	1129	2000	2000
CA 15-3	n/a	n/a	n/a	1112	1900	1500
CA 19.9	n/a	n/a	n/a	1129	1400	1500
CEA	n/a	n/a	n/a	1129	1400	1500
Chloride	↔	↔	↔	1026	621	2000
Cholesterol	↓	↑	↔	274	435	2000
Cholinesterase	↔	↑	↔	1026	435	1000
Conjugated Bilirubin	n/a	↓	↔	NA	16	750
Coritsol	n/a	n/a	n/a	428	311	1500
C-PEP	n/a	n/a	n/a	855	186	2000
Creatine kinase	↔	↑	↔	1026	62	1000
Creatinine (Enzymatic)	↓	↔	↔	342	497	2000
Crosslap	n/a	n/a	n/a	1112	300	1500
CRP	↔	↓	↔	1026	622	1000
Digoxin	↔	↔	↔	1129	621	1500
E2	n/a	n/a	n/a	1129	621	1000
Ethanol	↓	↔	↓	1026	124	500
FT4	n/a	n/a	n/a	701	621	2000
FPSA	n/a	n/a	n/a	1112	621	1500
FSH	n/a	n/a	n/a	1094	621	1900
Cedia Gentamicin	↔	↔	↓	512	373	1000
GGT (conj/unconj)	↔	↓	↔	855	124	700
Glucose	↔	↔	↔	1026	621	1000
HCG	n/a	n/a	n/a	410	621	1400
HDLC	↑	↔	↔	1026	745	1200
INS	n/a	n/a	n/a	1539	15*	1800
Iron	↔	↑	↔	1026	125	1500
Lactate dehydrogenase	↔	↑	↓	1026	10*	900
LH	n/a	n/a	n/a	1129	621	1900
Lithium	↑	↑	↔	633	621	2000
Magnesium	↔	↑	↔	1026	496	2000
Osteocalcin	n/a	n/a	n/a	1112	15	1500
P1NP	n/a	n/a	n/a	1112	62	2000
Paracetamol	**	**	**	427	93	1200
Phenytoin	↔	↔	↓	855	621	800
Phosphate	↑	↑	↑	684	186	800
Potassium	↔	↑	↔	1026	54*	2000
Pro BNP	n/a	n/a	n/a	428	621	1500
Prolactin	n/a	n/a	n/a	513	932	1500
Progesterone	n/a	n/a	n/a	923	621	200
Procalcitonin	n/a	n/a	n/a	625	559	1500
PTH	n/a	n/a	n/a	1129	93	1500
SACE	n/a	n/a	n/a	600	77	125
Salicylate	↔	↔	↓	393	497	200
Sodium	↔	↔	↔	1026	621	2000
T3	n/a	n/a	n/a	599	1200	1800
Theophylline	↔	↔	↓	855	621	300
Troponin T (HS)	n/a	↓	n/a	428	62*	1500

↑ Over-recovery
↓ Under-recovery
↓↑ Variable recovery
↔ recovery within 10% of initial conc.
* Results may be available at lower levels of haemolysis.
** Difficult to determine exact extent of inference. Could lead to overestimation or underestimation

SJH CENTRE FOR LABORATORY MEDICINE & MOLECULAR PATHOLOGY						
<b>Edition No.:</b>	07	<b>Biochemistry</b>			<b>Doc No:</b>	WI-BIO-0227
<b>Authorised By</b>	Collette Collison	<b>Date:</b> 28.09.22			<b>Date of Issue:</b> 28.09.22	

## Serum Indices

Total bilirubin	n/a	↓	↓	NA	497	1000
Total protein	↓	↔	↔	342	311	2000
Triglyceride	↓	↑	n/a	171	434	NA
TSH	n/a	n/a	n/a	701	621	1500
TPSA	n/a	n/a	n/a	1112	1400	1500
TT4	n/a	n/a	n/a	633	1400	2500
UIBC	↓	↑	↔	1026	25	300
Urate	↓	↔	↔	684	621	1500
Urea	↔	↔	↔	1026	621	1000
Valproate	↔	↔	↓	513	311	500
Vancomycin	↔	↔	↔	1026	622	1000
Vit D	n/a	n/a	n/a	1129	373	300

### Mild Haemolysis

If the tests requested are affected by haemolysis levels  $\geq 10$  but  $\leq 49$  then the sample is considered to have Mild haemolysis. All results will be available but it is advisable to interpret AST, LDH, UIBC and DBIL with caution.

### Moderate Haemolysis

If the tests requested are affected by haemolysis levels  $\geq 50$  but  $\leq 99$  then the sample is considered to have Moderate haemolysis. Results will not be available for AST, LDH, UIBC or DBIL. Results for Potassium, Troponin T (HS) and CK can also be affected by this level of haemolysis but WILL BE reported.

### Severe Haemolysis

If the tests requested are affected by haemolysis levels  $\geq 100$  then the sample is considered to have Severe haemolysis. All tests will be NA'ed at their appropriate level, as per table above.

#### \*Paracetamol

Haemolysis has a variable impact on Paracetamol levels that could lead to an overestimation or underestimation of specific laboratory results. It is difficult to determine the exact extend of interference. Paracetamol will therefore be reported at three different levels only. It is important to emphasise that these values are a rough guideline only and a repeat sample for paracetamol is strongly advised.

Paracetamol Result:	Reported as:
<5 mg/L	<5 mg/L
5-29 mg/L	<30 mg/L
$\geq 30$ mg/L	>29 mg/L

#### \*\* Potassium

Haemolysis can cause a positive interference in the analysis of serum potassium (K), thus causing a potential overestimation of the result. Please note that in moderately haemolysed samples Potassium above the ref range will only be reported as  $>5.3$ mmol/ L. Similarly, Potassium results in haemolysed samples below the reference range will be reported only as either  $<3.5$ mmol/L or  $<3.0$ mmol/L, as appropriate.

#### \*\*\*Troponin T (HS)

Haemolysis can produce a negative interference in the analysis of plasma Troponin T (HS) thus causing a potential underestimation of the actual result. Therefore please note that while a result for Troponin T (HS) will be reported in a moderately haemolysed sample, this may not represent the true value for that sample and the taking of a repeat sample for plasma Troponin T (HS) is strongly advised. Any Troponin T(HS) result  $\leq 14$ ng/L in a moderately haemolysed sample WILL NOT be reported due to the risk of underestimation.