## AWANUI LABS CRITICAL ACTION LIMITS



Wellington | Hutt | Wairarapa

Content   Cont			EMAIL LIMITS		PHONE LIMITS		
Procession	TEST NAME	UNITS	LOWER	UPPER	LOWER	UPPER	COMMENTS
Pedadum	BIOCHEMISTRY						
Contentine	Sodium	mmol/L	<125		<120	>155	clinical information supporting these levels may be emailed instead
Companies	Potassium	mmol/L			<3.0	>6.0	collection and separation and patient with end stage renal failure on renal dialysis are taken into consideration when evaluating these results and may influence whether results are phoned or
Unite Acid   mmonth,	Creatinine	µmol/L		>300			At first presentation.
Majorated Calcium	CRP			>100		>200	For community patients only.
Adjusted Calcium nrmo/L community of Communi	Urea	mmol/L		>20			
Magnesium	Uric Acid	mmol/L		Preg >0.34		Preg >0.45	
Lipses ULL   September   Septe	Adjusted Calcium	mmol/L			<1.80	>3.00	clinical information supporting these levels may be emailed instead
Properties   Pro	Magnesium	mmol/L	<0.60		<0.50	>2.0	
Phosphate   minol/L   mino	Lipase	U/L				>200	On first presentation.
Total Bilirubin – adults	Pancreatic Amylase	IU/L		>60		>150	
Total Billrubin - paediatric patients   Jamolf,   All Paediatric results   As significant haemyles here a promoted   As sugnificant haemyles here promoted   All total parties have been strong by the promoted   All total parties   All total partie	Phosphate	mmol/L			<0.5	>3.0	separation are taken into consideration when evaluating these
AT Clumits apply to Community and Kenegurup patients    ALT Clumits apply to Community Keneguru, Walsofield, Screen,	Total Bilirubin – adults	μmol/L		>400			underestimation of bilirubin, results falling outside these limits may
ALT -1000 Emailed at first presentation.   ALT -3000 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300 and pwith Total Birrubh > 100 more).   ALT -300	Total Bilirubin – paediatric patients	μmol/L					
## ACT (Limits apply to Community and Kerrepuru patients)  ## ACT (Limits apply to Community and Kerrepuru patients)  ## ACT (Limits apply to Community and Kerrepuru patients)  ## ACT (Limits apply to Limits apply to Limi	ALT (Limits apply to Community and	IU/L	\ZZOO air		-200 are	·	
Kenepuru patienta)  Lithium mmol/L 10-12	Kenepuru patients)						
Carbamazepine   pmol/L   All results are emailed   Section   Secti		IU/L		>1000		>3000	AST >1000 Emailed at first presentation.
He Troponia (Limits apply to Community, Kenepuru, Wakefield, Scross, Bowen)  Glucose  mmol/L  immol/L	kenepuru patients)						
Community, Kenepuru, Wakefield, Scross, Bowend Scro	Carbamazepine	μmol/L				>50	
Section   Product   Pro	Community, Kenepuru, Wakefield,	ng/L	All results	are emailed		≥14	
Phenytoin         μmol/L         >80         >90           Valproate         μmol/L         >700          >800           Cortisol         nmol/L         <150         <30 if not on Dexamethasone         Cortisol emailed <150. Result is phoned through <30 Not known to be on Dexamethasone.           Paracetamol         μmol/L         <150         <30 if not on Dexamethasone.         All detectable on first presentation.           Salicylate         mmol/L         <10         Trough levels only (>8 hours post dose).           Vancomycin         <10         10         Trough levels only (>8 hours post dose).           Biod Gas         nmol/L         <10         pH ≤ 71 (hospital)         pH ≥ 7.5 (hospital)         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Ethanol         mmol/L         <10         >40         On first presentation (hospital).           FT4/TSH         pmol/L         <10         >40         With TSH <0.05 on first presentation.           Gentamicin         mg/L         <10         >20         With TSH >50 on first presentation.           Methotrexate         Email all community results         Email all community pregnant	Glucose	mmol/L		known to have diabetes) >30 (Patient known to have	≤2.5	known to have diabetes) >35 (Patient known to have	
Valproate         µmol/L         >700         >800           Cortisol         nmol/L         <150         <30 if not on Dexamethasone         Cortisol emailed <150. Result is phoned through <30 Not known to be on Dexamethasone.           Paracetamol         µmol/L         Image: Cortisol emailed <150. Result is phoned through <30 Not known to be on Dexamethasone.           Salicylate         nmol/L         Image: Cortisol emailed <150. Result is phoned through <30 Not known to be on Dexamethasone.           Salicylate         nmol/L         Image: Cortisol emailed <150. Result is phoned through <30 Not known to be on Dexamethasone.           All detectable on first presentation.         All detectable on first presentation.           Vaccompcin         10         10         Trough levels only (>8 hours post dose).           Vaccompcin         10         2.50         1	Lithium	mmol/L	1.0 - 1.2			>1.2	
Cortisol         nmol/L         <150         <30 if not on Dexamethasone         Cortisol emailed <150, Result is phoned through <30 Not known to be on Dexamethasone.           Paracetamol         μmol/L           All detectable on first presentation.           Salicylate         mmol/L          <10         >10         Trough levels only (>8 hours post dose).           Vancomycin          <10         >25            Digoxin         nmol/L         <10         PH ≤ 71         PH ≥ 7.55           Blood Gas         mmol/L         <10         PH ≤ 71         PH ≥ 7.15         Hospitally placents phoned if pH <7.1≥ 7.55 Lactate > 5.           Ethanol         mmol/L         <10         >40         On first presentation (hospital).           FT4         pmol/L         <10         >40         With TSH <0.05 on first presentation.           FT4/TSH         pmol/L         <10         <2.0         With TSH >50 on first presentation.           Gentamicin         mg/L         <10         >2.0         With TSH >50 on first presentation.           Methotrexate         Email all community results         <10         <10         <10           Urine Protein/Creatinine Ratio         Email all community pregnant         <10         <10         <10	Phenytoin	μmol/L	>80			>90	
Paracetamol         μmol/L         Dexamethasone         be on Dexamethasone.           Salicylate         mmol/L         All detectable on first presentation.           Tobramycin         10         Trough levels only (>8 hours post dose).           Vancomycin         22.0         Trough levels only (>8 hours post dose).           Blood Gas         nmol/L         10         PH ≤ 7.1 (hospital)         Hospital patients phoned if pH < 7.1 ≥ 7.55 Lactate > 5. (hospital)           Ethanol         mmol/L         10         PH ≤ 7.1 (hospital)         Hospital patients phoned if pH < 7.1 ≥ 7.55 Lactate > 5. (hospital)           FT4         pmol/L         10         10         With TSH < 0.05 on first presentation.	Valproate	μmol/L	>700			>800	
Salicylate         mmol/L         All detectable on first presentation.           Tobramycin         >10         Trough levels only (>8 hours post dose).           Vancomycin         >25         Trough levels only (>8 hours post dose).           Digoxin         nmol/L         ≥2.0         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Blood Gas         pH ≤ 7.1 (hospital)         pH ≥ 7.55 (hospital)         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Ethanol         mmol/L         >40         On first presentation (hospital).           FT4         pmol/L         >30         With TSH <0.05 on first presentation.	Cortisol	nmol/L	<150				
Tobramycin         >10         Trough levels only (>8 hours post dose).           Vancomycin         >25         Prough levels only (>8 hours post dose).           Digoxin         nmol/L         22.0         Ph ≥ 7.5 (hospital)         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Blood Gas         mmol/L         >40         On first presentation (hospital).           Ethanol         mmol/L         >40         On first presentation (hospital).           FT4         pmol/L         30         With TSH <0.05 on first presentation.           FT4/TSH         pmol/L         <5.0         With TSH >50 on first presentation.           Gentamicin         mg/L         >2.0            Ammonia         µmol/L         =mail all community results         Image: Protein/Creatinine Ratio         Email all community pregnant	Paracetamol	μmol/L					All detectable on first presentation.
Vancomycin         > 25           Digoxin         nmol/L         ≥ 2.0           Blood Gas         PH ≤ 7.1 (hospital)         pH ≤ 7.1 (hospital)         Hospital patients phoned if pH < 7.1 ≥ 7.55 Lactate > 5. (hospital)           Ethanol         mmol/L         > 40         On first presentation (hospital).           FT4         pmol/L         > 30         With TSH < 0.05 on first presentation.           FT4/TSH         pmol/L         < 5.0         With TSH > 50 on first presentation.           Gentamicin         mg/L         > 2.0           Ammonia         µmol/L         > 106           Methotrexate         Email all community results         Email all community pregnant	Salicylate	mmol/L					All detectable on first presentation.
Digoxin         nmol/L         ≥2.0         Elbod Gas         Lactate > 5 (hospital)         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Ethanol         mmol/L         >40         On first presentation (hospital).           FT4         pmol/L         >30         With TSH <0.05 on first presentation.	Tobramycin					>10	Trough levels only (>8 hours post dose).
Blood Gas         pH ≤ 7.1 (hospital)         pH ≤ 7.5 (hospital)         Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.           Ethanol         mmol/L         >40         On first presentation (hospital).           FT4         pmol/L         >30         With TSH <0.05 on first presentation.	Vancomycin					> 25	
Chospital   Chos	Digoxin	nmol/L				≥2.0	
Ethanol         mmol/L         >40         On first presentation (hospital).           FT4         pmol/L         >30         With TSH <0.05 on first presentation.           FT4/TSH         pmol/L         <5.0         With TSH >50 on first presentation.           Gentamicin         mg/L         >2.0           Ammonia         μmol/L         >106           Methotrexate         Email all community results           Urine Protein/Creatinine Ratio         Email all community pregnant	Blood Gas					(hospital) Lactate > 5	Hospital patients phoned if pH <7.1 ≥ 7.55 Lactate > 5.
FT4/TSH         pmol/L         <5.0         With TSH >50 on first presentation.           Gentamicin         mg/L         >2.0           Ammonia         μmol/L         >106           Methotrexate         Email all community results           Urine Protein/Creatinine Ratio         Email all community pregnant	Ethanol	mmol/L				-	On first presentation (hospital).
Gentamicin         mg/L         >2.0           Ammonia         µmol/L         >106           Methotrexate         Email all community results         Urine Protein/Creatinine Ratio           Urine Protein/Creatinine Ratio         Email all community pregnant	FT4	pmol/L				>30	With TSH <0.05 on first presentation.
Ammonia         μmol/L         >106           Methotrexate         Email all community results           Urine Protein/Creatinine Ratio         Email all community pregnant	FT4/TSH	pmol/L				<5.0	With TSH >50 on first presentation.
Methotrexate Email all community results Urine Protein/Creatinine Ratio Email all community pregnant	Gentamicin					>2.0	
Urine Protein/Creatinine Ratio Email all community pregnant	Ammonia	μmol/L				>106	
Urine Protein/Creatinine Ratio Email all community pregnant	Methotrexate		Email all com	munity results			
	Urine Protein/Creatinine Ratio		Email all comm	unity pregnant			





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	UNITS	EMAIL LIMITS		PHONE LIMITS				
TEST NAME		LOWER	UPPER	LOWER	UPPER	COMMENTS		
HAEMATOLOGY				1				
WBC	x 10^9/L			N/A	>30 (Community & Outpatients) >50 (Hospital)	Applies to all patients except Haematology / Medical Oncology patients.		
НВ	g/L			<80 or < 50 below reference range (0-3yrs) <70 (Hospital patients > 3yrs, Haematology or Medical Oncology patients) <80 (Community & Outpatients > 3yrs)	> 20 above reference range (0-3yrs) > 200 (>3yrs)	As a number of the Hb critical ranges are specific to individual age related ranges, please refer to CBC age related ranges in the WSCL Specimen Test Guide, for reference.  Note: The only result phoned for Haematology / Medical Oncology patients is Hb <70.		
PLT	x 10^9/L			< 80 (Pregnant patients) < 10 (Known ITP patients, Haematology or Medical Oncology patients) < 20 (All other patients)	> 1000 (NOT post-op patients within the last 14 days or known ET patients)	Note: The only result phoned for Haematology / Medical Oncology patients is Platelets <10.		
Neutrophils	x 10^9/L			< 0.5	> 20 (Community & Outpatients ONLY)	Applies to all patients except Haematology / Medical Oncology patients.		
INR	Ratio				> 5.0	Must be phoned regardless of the previous result.		
АРТТ	seconds	All <u>community</u> results are emailed			> 40 (if patient is not on anticoagulants)  >120 (if patient is on anticoagulants)			
FIB	g/L			< 1.0				
D Dimer	ng/mL				NOT Emergency Department  Up to 50 years old >500  51 and over = Patient age x10 (e.g. patient 55 years old >550)	Must be phoned regardless of the previous result.		
ESR	mm/hr			>100 (with clinical details suggesting possible temporal arteritis)				
MICROBIOLOGY / MOLECULAR								
Sample Type		Test			Critical Result Phone Action			
CSF positive Gram stain	Ce	Cell Count and Gram Stain						
Joint fluids positive Gram stain		Gram Stain		Result	Results that will be phoned through for <b>within 1hr</b> of the result becoming available.			
Meningococcal PCR positive		PCR Result						