4CytePathology

Critical And Significant Risk Result Notification

Critical Results are those results determined by our pathologists to be indicative of a life-threatening medical condition and will be immediately notified to the managing/referring practitioner at any time of the day. These results, which are outside the Critical Result limits (listed below), will be faxed and phoned to the numbers supplied on the request form by a pathologist or scientist. A text will be sent if the referring doctor's mobile number is held on file.

If the result is obtained out of hours, and the phone numbers supplied on the request form are unanswered, we have a cascade process and will phone the number provided by the practice/doctor for out-of-hours contact. If a cascade number has not been provided or cannot be contacted, we will contact the patient and send them to the local emergency department. If the patient is uncontactable, we will phone the local police department for critical life-threatening results (this will only be done at the instruction of the pathologist).

If the patient is in a nursing home, the result will also be phoned/faxed to the nursing home.

Significant Results are those results determined by our pathologists to be significantly abnormal but non-life threatening or are results that are similar with the previous presentation of a Critical Result. These Significant Results will be notified as soon as possible during practice opening hours. These results, outside the Significant Result limits (listed below), will be faxed and phoned to the doctor and/or practice by a pathologist or scientist during the normal operating hours of the medical practice, and will also be texted to the referring doctor if a mobile number is held on file.

CHEMISTRY		SIGNIFICANT RESULT LIMITS	CRITICAL RESULT LIMITS
AST		>1000 U/L	
ALT		>1000 U/L	
Albumin		<20 g/L	
Ammonia		>100 µmol/L	
Bicarbonate		<12 or >45 mmol/L	
Bilirubin (neonate)		>250 µmol/L	
Calcium (corre	ected)	<1.7 or >3.0 mmol/L	
СК		>10000 U/L	
Cortisol		<100 nmol/L	
Creatinine		${>}400\ \mu mol/L$ (when first abnormal result in the last 6 months)	
CRP		>300 mg/L	
Glucose	(Adult – diabetic)	<2.5 or >20 mmol/L	>30 mmol/L
	(Adult – random)	<2.5 or >20 mmol/L	>30 mmol/L
	(Adult – fasting)	<2.5 or >15 mmol/L	>30 mmol/L
	(Child – random)	<2.5 or >15 mmol/L	>30 mmol/L
	(Child – fasting)	<2.5 or >11mmol/L	>30 mmol/L
Lipase		>500 U/L	
Magnesium		<0.4 or >2.0 mmol/L	
Potassium		<2.5 or >6.5 mmol/L	
Sodium		<120 or >155 mmol/L	
Troponin			>47 ng/L
Thyroid		TSH $<$ 0.01 mU/L with FT4 $>$ 30 pmol/L TSH $>$ 50mU/L with FT4 $<$ 5 pmol/L	
Triglyceride		>20 mmol/L	
Uric acid (in pr	regnancy)	>0.50 mmol/L	

Effective from: 1 July 2023

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THERAPEUTIC DRUGS	SIGNIFICANT RESULT LIMITS
Carbamazepine	>15 mg/L
Digoxin	>3.0 µg/L
Lithium	>1.6 mmol/L
Phenytoin	>30 mg/L
Valproate	>150 mg/L

HAEMATOLOGY	SIGNIFICANT RESULT LIMITS	CRITICAL RESULT LIMITS
Fibrinogen	<0.5 g/L	Pathologist determined
Haemoglobin	<60 g/L	Pathologist determined
INR	>4.9	Pathologist determined
Leukaemia	New (acute) New (chronic) with significantly elevated white cell count	Pathologist determined Pathologist determined
Malarial parasites	positive	Pathologist determined
Neutrophils	<0.5 x10 ⁹ /L	Pathologist determined
Platelets	<20 x10 ⁹ /L	Pathologist determined

MICROBIOLOGY	SIGNIFICANT RESULT LIMITS	CRITICAL RESULT LIMITS
Acid fast bacilli	Positive microscopy/culture	
Blood culture		Initial/final positive microscopy and culture
Bordetella pertussis PCR	Detected	
Brucella spp. agglutination	Positive	
CMV IgM in pregnancy	Detected	
Dengue NS1 Antigen or IgM		Detected
Group A streptococcus from ?fasciitis		Detected
Hepatitis A IgM	Detected	
Herpes simplex I/II and VZV PCR, eye specimens	Detected	
Herpes simplex I/II PCR in baby <6 mths old or pregnant women at term	Detected	
HIV	Detected	
<i>Legionella spp /</i> Legionella urinary antigen		Detected
Measles/mumps/rubella serology	Consistent with acute infection	
Mycobacterium tuberculosis	Positive PCR or culture	
Paediatric urine (<1 year old)	Microscopy and culture consistent with UTI	
Sterile body specimen		Initial/final positive microscopy for organism & culture
Treponema pallidum PCR	Detected	

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