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 (listed below) will be faxed or phoned as considered appropriate by the pathologist to the doctor and or practice during the normal operating hours of the medical practice, and will also be notified by SMS to the referring doctor if a mobile number for the referring doctor 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 >40 mmol/L	
Bilirubin (neonate)		>250 µmol/L	
Calcium (corrected)		<1.7 or >3.2 mmol/L	
СК		>10000 U/L	
Cortisol		<50 nmol/L	
Creatinine		$>400 \ \mu mol/L$ (if first abnormal result in past 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 >12 mmol/L	>30 mmol/L
	(Child – fasting)	<2.5 or >12 mmol/L	>30 mmol/L
FT4		<5.0 or >40 pmol/L	
Lipase		>500 U/L	
Magnesium		<0.4 or >2.0 mmol/L	
Phosphate		<0.35 mmol/L	
Potassium		<2.5 or >6.5 mmol/L	
Sodium		<125 or >155 mmol/L	
Troponin			>46 ng/L
Triglyceride		>20 mmol/L	
Uric acid (in pregnancy)		>0.50 mmol/L	
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	

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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
	New (acute)	Pathologist determined
Leukaemia	New (chronic) with significantly elevated white cell count	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	Detected & patient < 1y old
Bordetella pertussis serology	Both IgG and IgA detected	
Brucella spp. agglutination		Positive
CMV IgM	Detected in pregnancy	
Dengue NS1 Antigen or IgM		Detected
Group A streptococcus from necrotising fasciitis		Positive culture
Hepatitis A IgM	Detected	
Herpes simplex I/II PCR VZV PCR	Baby < 6mo old Pregnant woman (36-40w) or EDC unknown.	Detected from eye swabs
HIV	Detected	
Legionella spp.		Detected
Leptospira		Positive
Measles/Mumps/Rubella PCR	Detected	
Measles/Mumps/Rubella serology	IgM positive	
Mycobacterium tuberculosis	Positive PCR or culture	
Q Fever serology		Positive (consistent with infection)
"RACF residents: Influenza A/B, SARS-CoV-2, Respiratory, Gastrointestinal pathogens"		Detected
Salmonella Typhi	Presumptive / Preliminary identification	
STD test requested for $< 14y$ old	Detected/Not Detected	
Sterile body site specimens		Positive microscopy (for organism) and culture
Treponema pallidum PCR	Detected	
Treponema pallidum Serology	RPR reactive (First Detection)	
Urine Microscopy and Culture	UTI in < 1y old	