



# Critical alert in laboratory

## Team member Group 1

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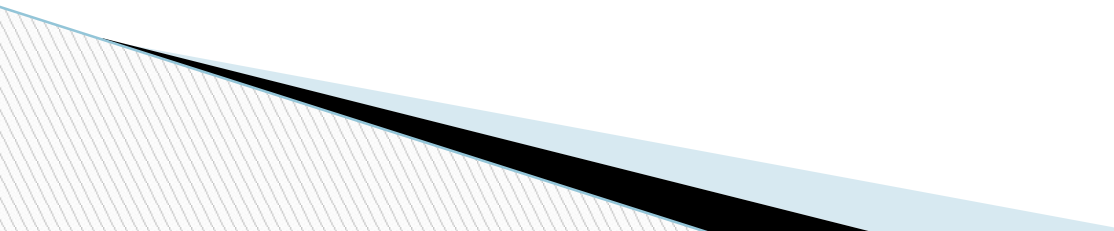
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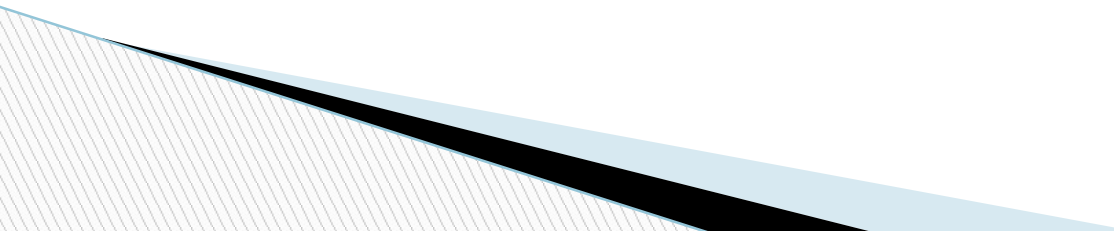
## Reviewed by

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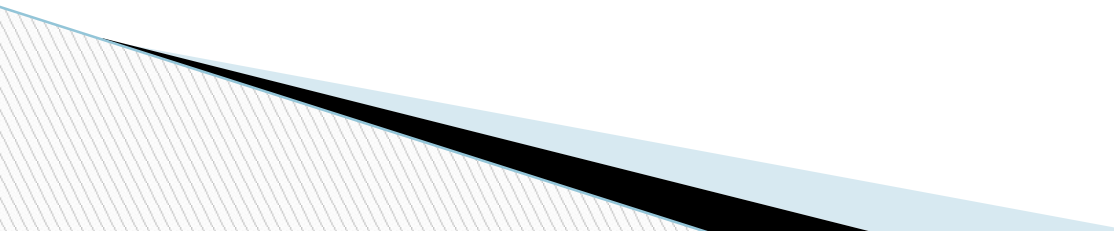
# DEFINITION

- ❖ Critical value and result are value that falls outside the critical limit and presence of any unexpected abnormal findings or organisms which require immediate medical attention.
  - ❖ Critical lab result is define as an eminent life threatening result requiring physician notification and action plan.
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# STANDARD AAC-5C

- ❖ Critical results are intimated immediately by concerned personal to treating doctor.
  - ❖ Intent:- to ensure that critical result necessitates immediate attention by the clinician.
  - ❖ The critical test and values should be defined and documented by the organization.
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# PROCESS

- ❖ There should be register maintained in the laboratory for the reporting of critical test and their values.
  - ❖ The register should consist of
    1. Date
    2. Name of the patient
    3. IP and UHID no.
    4. Test name/ result
    5. Ward
    6. Reporting time
    7. Informed to
    8. Informed by
    9. Follow up of action been taken by treating consultant/doctor who has been informed by following readback policy
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# EXAMPLE

Disease	Parameter	High	Low
Diabetes	Glucose	>200 mg/dl	<40 mg/dl
Renal diseases	Creatinine	>2 mg/dl	Na
	Sodium	>150meq/L	>125meq/l
	Uric acid	>12 mg/dl	Na
Hepatic	Ammonia	>100 mmol/l	Na
	Sgpt	>100 iu/l	Na
Muscle	Cpk	>1200 u/l	Na
Haematology	Hb	>20 gm/dl	<7gm/dl
	Platelet	Na	50000/ul
	Pt inr	>3	Na

# Contd..

Cardiac	Troponin t	>0.41	0
	Ckmb	<26	>192
Blood gas	Ph	<7.35	>7.45
	Co2	<35	>45
	Hco3	<22	>26

# Contd..

- ❖ Critical alert documentation and communication should apply for out sourced investigation too.

# TAT (TURN AROUND TIME)

- ❖ It is the time from sample collection to report ready to dispatching. Example

Investigation	Reporting time
Haematology	30 min. To 6hrs
Biochemistry	45 min. To 6 hrs
Microbiology	45 min. To 6 hrs
Profiles	45 min. To 6 hrs
Blood culture	At the end of 72 hrs