ASANTE®
LABORATORY

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SCOPE: This procedure is applicable to the following laboratory sites:

- ☒ Asante Rogue Regional Medical Center
- ☒ Asante Three Rivers Medical Center
- ☒ Asante Ashland Community Hospital
- ☒ Asante Heimann Cancer Treatment Center
- ☒ Asante Spears Cancer Treatment Center

Asante health system adopts the following policy for all laboratory personnel and healthcare providers for all Asante ambulatory clinics and hospitals, including hospital-based outpatient departments (e.g., Heimann and Spears Cancer Centers, Immediate Care, etc.), and any outpatient clinic/provider submitting specimens to Asante Laboratories for testing.

PURPOSE

To ensure prompt communication of laboratory critical values to the appropriate healthcare providers, to enable the provision of timely medical intervention and patient safety. Critical values are defined as laboratory results that indicate a life-threatening or otherwise significantly abnormal condition requiring immediate medical attention. These values are established by the Asante Laboratories Medical Director in collaboration with the clinical staff served and are subject to approval by the Medical Executive Committee at each hospital location. Notification of critical values must be conducted through direct communication with the responsible provider or designated clinical personnel to ensure appropriate and immediate clinical response.

This policy defines the parameters for identifying, verifying, reporting, and documenting laboratory critical values.

POLICY

A. Laboratory Evaluation/Notification of Critical Test Values:

1. Upon recognition of a critical value, lab testing personnel evaluate and verify the result.
    a. Evaluation and/or verification may include retesting of the specimen, evaluation of the delta checks, and investigation of specimen's integrity. The action of result evaluation and verification will be based on the best judgment of testing personnel.
2. The laboratory technologist or testing personnel may authorize specimen redraw if specimen integrity is in question.

    The following examples would be indicative of specimen integrity issues and would warrant additional evaluation and/or investigation, and specimen redraw authorization:
    a. Dilution effect resulting from improper collection giving some or all results that are so low that they are incompatible with life (e.g., extremely low electrolytes, total protein suppressed and out of instrument's AMR, etc.).
    b. Samples contaminated with potassium EDTA. This could be obvious with potassium extremely high values and calcium out instrument low

AMR, or it could be subtle with a critically high potassium and critically low calcium.
    c. Samples contaminated with glucose that are out of high AMR.
3. Concerns about inpatient sample integrity should be treated as critical and communicated to the ordering provider and/or designee immediately. Such communication must be documented in Comm Log EMR.
4. All laboratory critical values/results must be reported immediately to the primary care nurse (may be an LPN or RN), ordering provider, or provider designee* as appropriate.
    a. Critical values/results may not be left on an answering machine. If a provider cannot be reached to report a critical value/result, refer to the Escalation Policy section below.
    b. **NOTE*: The provider's designee is the ED unit secretary/monitor tech, provider's assistant, or provider on call. In the outpatient setting, this includes an office nurse, home health nurse, medical assistant, or office assistant.
5. Point of Care and Blood Gas Critical Results will be reported promptly to the licensed responsible caregiver (RN or provider) within 15 minutes of resulting and documented as outlined in each specific test procedure.

B. Laboratory Documentation of Critical Call Notification

1. All critical values or results communicated by the laboratory must be documented in the patient's electronic medical record (EMR), including the date/time of communication, and the name of the individual who received the information.
    a. Unique identifiers traceable to that person must be obtained and documented (a first name alone is inadequate).
2. Laboratory personnel communicating results must request a read back of the results from the individual who is receiving the information.
3. This documentation must be completed using the Comm Log within Epic/Beaker, in accordance with Laboratory Procedure GEN 3 – *Laboratory Callback Procedures*.
4. Any problem encountered in accomplishing the reporting of a critical results will be reported in MIDAS Event Reporting (RER) for investigation and to prevent reoccurrence.

C. Escalation Procedure:

It is the responsibility of the **ordering provider** to be available to receive critical laboratory results ordered at Asante Laboratories. Asante laboratories require after-hours/on-call contacts for all clients.

1. Clinical Laboratory Responsibility **(inpatient)**
    a. The medical laboratory scientist/technician will attempt to contact the nursing station three (3) times at 15-minute intervals. If a provider, nurse, or designee is reached, the critical value is reported as per normal policy with appropriate documentation in the communication log (LIS-Beaker/Epic).
    b. If the provider, nurse, or designee cannot be reached, the medical laboratory scientist/technician will follow the Chain of Command Deteriorating Patient Condition policy (400-PCS-NURS 0203) to communicate the critical value either to the Charge Nurse or House Supervisor.
2. Clinical Laboratory Responsibility (outpatient/after-hours):

a. When after-hours critical values occur, the medical laboratory scientist/technician will make **a minimum of three (3) contact attempts at 15-minute intervals** to **directly notify the ordering provider**, or the **ordering provider's designated on-call coverage**, using **all available contact methods** (e.g., office phone, on-call phone, answering service, Halo, pager), as applicable.
b. **Critical values/results may not be left on voicemail or answering machines.** Notification must occur through **direct verbal communication** with the ordering provider or their designated on-call provider.
c. Upon successful contact, the critical value/result must be **verbally communicated and read back by the receiving provider** to confirm accuracy, in accordance with this policy.
d. If the on-call provider cannot be reached after at least three (3) attempts, the on-call pathologist will be contacted, and the result will be verified in the EMR. **All** efforts to contact the on-call clinical provider MUST be documented by the medical laboratory scientist/technician in the Epic communication log. A statement documenting several attempts to reach the clinical provider will be reported in the EMR with the critical laboratory value, as will the handoff to the on-call pathologist. The medical laboratory scientist/technician will send an email to AsanteLabManagement@asante.org with the same information for lab outreach follow up on the next business day.
e. On the next business day, the Clinical Laboratory Outreach Manager will contact the ordering clinic during regular business hours to follow up on the after-hours critical result. During this communication, the manager will reinforce Asante's requirement that an ordering provider or designated on-call provider be reachable at all times for critical result notification and will obtain and/or update accurate after-hours provider contact information to ensure compliance with this policy.

D. Pathologist Responsibility:

1. The on-call pathologist will handle the critical value call using his/her best clinical judgment.
2. The pathologist will document his/her actions in the electronic medical record using a clinic note. Work-related to after-hours critical value reporting should be tracked using Part A time AND the appropriate CPT code(s) (80503, 80504, 80505, 80506). An Epic smart phrase may be used for documentation. The smart phrase will indicate the laboratory will contact the clinic the next business day.
3. The on-call pathologist will notify the medical director of the respective clinical laboratory with the patient's name and medical record number.
4. The following template represents an example and is not meant to encompass all situations. The on-call pathologist can modify this template to fit the needs of the situation.
    a. **Epic Smart Phrase Template [Epic smart phrase shortcut: CriticalValueDoc]:**

“This patient had an after-hours critical laboratory result. Multiple attempts to contact [Dr./P.A./FNP/NP] were not successful. By Asante Laboratories’ escalation policy, I reviewed the patient’s medical record, and laboratory studies and took the following action […]. The clinical laboratory will contact the submitting clinic the next business day.”

Laboratory Critical Values – Asante Laboratories		
BLOOD BANK		
Suspected hemolytic transfusion reaction	Unit to call the lab	
Suspected TRALI	Pathologist to call provider	
HEMATOLOGY		
	LESS THAN	**GREATER THAN**
WBC	2000 /µL	50,000 /µL
HGB	7 g/dL	20 g/dL
HGB (0-30 days old or NICU)	8.5 g/dL	22g/dL
HCT	21%	60%
HCT (0-30 days old or NICU)		65%
Platelets	20,000 /µL	1,000,000 /µL
Differential Morphology on blood and fluid smears	• Call blasts with first smear on admission	
	• Call blasts with first outpatient smear within the last 7 days	
	• Blood parasites on the first smear within 30 days	
COAGULATION		
	LESS THAN	**GREATER THAN**
PT-INR		5
PT-INR (0-30 days old or NICU)		1.5
PTT		100 sec
FIB	100 mg/dL	
CHEMISTRY		
	LESS THAN	**GREATER THAN**
Bilirubin, Total (0-30 days old or NICU)		**17 mg/dL**
Calcium (Total)	6.5 mg/dL	13.0 mg/dL
Calcium, Ionized	0.8 mmol/L	1.6 mmol/L
Glucose	50 mg/dL	500 mg/dL
Glucose (0-30 days old or NICU)	**40 mg/dL**	**250 mg/dL**
Lactate		4 mmol/L
Magnesium	1.4 mg/dL	5.0 mg/dL
Methotrexate (24 hours post transfusion)		5.0 µmmol/L
Methotrexate (48 hours post transfusion)		0.5 µmmol/L
Methotrexate (72 hours post transfusion)		0.05 µmmol/L
Phosphorous	1.0 mg/dL	8.9 mg/dL
Phosphorous (0-30 days old or NICU)	3.0mg/dL	8.9 mg/dL
Potassium (K)	3.0 mmol/L	6.0 mmol/L

Potassium (K) (0-30 days old or NICU)	**3.0 mmol/L**	**6.9 mmol/L**
Sodium (Na)	120 mmol/L	160 mmol/L
Sodium (Na) (0-30 days old or NICU)	**126 mmol/L**	**160 mmol/L**
TCO_2	10 mmol/L	40 mmol/L
CHEMISTRY		
	LESS THAN	**GREATER THAN**
Troponin-I		100 ng/L In addition, a courtesy call is made for ≥20 ng/L increase between 0-2hr draw (2-hour protoc. only)
*Note: *Adult* inpatients with a critical troponin value do not need a call if there is a prior critical troponin that has been called and documented in the Beaker comm log. The prior called result must have occurred within the past 7 days.		
THERAPEUTIC DRUGS		
	LESS THAN	**GREATER THAN**
Acetaminophen		50 µg/mL
Carbamazepine		15 µg/mL
Digoxin		2.5 ng/mL
Gentamicin (Peak)		12.0 µg/mL
Gentamicin (Trough)		2.0 µg/mL
Tobramycin (Peak)		12.0 µg/mL
Tobramycin (Trough)		2.0 µg/mL
Lithium (Trough)		1.5 mmol/L
Phenobarbital		60 µg/mL
Phenytoin (Dilantin)		30 µg/mL
Salicylate		30 mg/dL
Valproic Acid		150 µg/mL
Vancomycin (Trough)		25 µg/mL
Vancomycin (Random)		50 µg/mL
MICROBIOLOGY		
Blood Cultures		Positive direct smears or cultures
CSF/Sterile Body Fluids/Tissue		Organisms present on Gram stain smear OR culture growth if smear negative
Cryptococcal Antigen		All positive results
Meningitis/Encephalitis Panels		All positive results

Bioterrorism Agents/Diseases: Arenaviruses. Bacillus anthracis (anthrax). Brucella species (brucellosis). Burkholderia mallei (glanders). Burkholderia pseudomallei (melioidosis), Chlamydia psittaci (psittacosis), Clostridium botulinum toxin (botulism), Clostridium perfringens (Epsilon toxin), Coxiella burnetii (Q fever), Emerging infectious diseases such as Nipah virus and hantavirus, Francisella tularensis (tularemia), Ricin toxin from Ricinus communis (castor beans), Rickettsia prowazekii (typhus fever), Smallpox (variola major), Staphylococcal enterotoxin B, Vibrio cholerae (cholera), Viral encephalitis (alphaviruses [e.g., Venezuelan equine encephalitis, eastern equine encephalitis, western equine encephalitis]), Viral hemorrhagic fevers (filoviruses [e.g., Ebola, Marburg] and arenaviruses [e.g., Lassa, Machupo]), Yersinia pestis (plague)	Presumptive and/or definitive identification of

BLOOD GAS		
	LESS THAN	**GREATER THAN**
pH (Arterial, Venous, Capillary)	7.2	7.6
pH (Cord - Arterial & Venous)	7.16	
pCO2 (Arterial, Venous, Capillary)	20 mmHg	70 mmHg
pO2 (Arterial)	50 mmHg	
pO2 (Mixed Venous)	29 mmHg	
pO2 (Capillary)	39 mmHg	
HCO3 (Arterial, Venous, Capillary)	9.1 mmol/L	39.9 mmol/L
Base Excess (Cord - Arterial & Venous)	-12.1	
O2HB (Arterial)	82.1 %	
SO2 (Arterial)	82.1 %	

BLOOD GAS		
	LESS THAN	**GREATER THAN**
O2HB (Venous & Mixed Venous)	49.1 %	
SO2 (Venous & Mixed Venous)	49.1 %	
COHB (Arterial, Venous, Mixed Venous, Capillary)		19.9 %
METHB (Arterial, Venous, Mixed Venous, Capillary)		1.9 %

PATHOLOGY

1. Unexpected malignancy, including malignancy in an uncommon location or specimen.
2. Acute leukemia
3. Significant disagreement between an intraoperative diagnosis and final diagnosis; between an initial diagnosis and subsequent outside consultation or internal review; between an immediate assessment and final assessment on a clinician-collected FNA
4. Very unusual neoplasms with which the referring clinician may not be familiar
5. Adipose tissue in an endometrial biopsy or curettage
6. Positive AFB stain
7. Pneumocystis, pathologic fungal organisms, or viral cytopathic changes on BAL, bronchial washing, or bronchial brushing
8. Bacteria, fungal elements, or first finding of malignant cells in CSF
9. Any invasive organism in a surgical specimen
10. Any case that requires urgent intervention by the clinician
11. Significant unexpected findings at autopsy.

CYTOLOGY
1. Unexpected malignancy, including malignancy in an uncommon location or specimen. 2. Acute leukemia 3. Significant disagreement between an initial diagnosis and subsequent outside consultation or internal review; between an immediate assessment and final assessment on a clinician-collected FNA 4. Very unusual neoplasms with which the referring clinician may not be familiar 5. Positive AFB stain 6. Pneumocystis, pathologic fungal organisms, or viral cytopathic changes on BAL, bronchial washing, or bronchial brushing 7. Bacteria, fungal elements, or first finding of malignant cells in CSF 8. Any case that requires urgent intervention by the clinician

Approvals:
AACH MEC on 12/10/2025
ARRMC MEC on 11/25/2025
ATRMC MEC on 12/9/2025