



Lab Update



LABORATORY PHONE 585-LABS

July 2016

Vol. 8 No. 5

In this issue:**Critical Values**

- Changes to Critical Values July 25, 2016

EPIC

- Lab Test Panel Component Link in EPIC

Microbiology/Molecular Diagnostics

- Changes in reporting values for BK Virus PCR assay
- Urine Culture Screen

LabUpdate is a periodic publication of the Clinical Laboratory of UC Health. By way of this publication, lab users are provided: 1) updated operational information relevant to the practice of laboratory medicine within UC Health facilities, and 2) didactic material generally applicable to laboratory medicine.

Critical Values**Changes to Critical Value List: Effective July 25, 2016**

Effective **July 25th, 2016** there will be changes to certain laboratory critical values. All changes were approved by the Medical Executive Committees at each of the three facilities in June. These changes modify some of our current critical values as well as remove a number of current critical values.

The list of changes is attached. Those changes highlighted in **yellow** are analytes that will be deleted from the list of critical values and will no longer be called to the unit.

Analyte	Current	Revised
KB Stain	Not indicated	Positive
Antibody Titer (Prenatal)	Not indicated	1) ≥ 32 2) First instance 3) Business hours
Cryptococcal Antigen	First positive on admission	Inpatient: first positive on admission Outpatient: fax to physician office
Histoplasma, Blastomyces, Coccidioides, Nocardia	From any site	First isolate on admission from any site
Stool Culture	Outpatient: earliest AM	1) Change name to Stool Pathogens 2) Outpatient: Fax to physician office
Varicella Zoster Culture	Positive finding	Delete
Ova and Parasite	Not indicated	1) Inpatients 2) Outpatients: Fax to physician office
WBC [u/L]	Less than 2,000 Greater than 50,000	Less than 1,000 Delete high
Ammonia [$\mu\text{g/dL}$]	Greater than 125	Greater than 180
Gentamicin, trough [$\mu\text{g/mL}$]	Greater than 2.5	Delete
Tobramycin, trough [$\mu\text{g/mL}$]	Greater than 2.5	Delete
Vancomycin, trough [$\mu\text{g/mL}$]	Greater than 25	Delete
Lithium	≥ 1.9	≥ 1.5
CO2 [mmol/L]	Less than 10 Greater than 40	Delete both low and high
Glucose, serum or plasma [mg/dL]	Greater than 500 (patient older than 30 days)	Greater than 600 (patient older than 30 days)
Glucose, blood gas [mg/dL]	Greater than 500 (patient older than 30 days)	Greater than 600 (patient older than 30 days)
pH arterial/venous	Less than 7.20 Greater than 7.60	Delete (except ED Blood Gas)
pCO2 arterial [mmHG]	Less than 16 Greater than 70	Delete (except ED Blood Gas)
pO2 arterial [mmHG]	Less than 40	Delete (except ED Blood Gas)
TCO2 [mmol/L]	Less than 10 Greater than 40	Delete (except ED Blood Gas)

EPIC

Update Lab Panel Components link within EPIC

The lab orders composer in EPIC has been updated to include a link to a document which will list all component tests included in the profile. This has been updated to recently to ensure all new tests are listed. If you have any questions regarding lab testing, please contact Lab Customer Service at 585-LABS.

Microbiology / Molecular Diagnostics

Change in reporting values for BK Virus PCR assay

Effective July 13, 2016 the standard used to calibrate the quantitative BK standard assay at CCHMC will be changed. Due to the discontinuation of the standard material that the lab has been using for the BK Virus assay, a new standard was obtained. The samples analyzed using the curve made with the new standard yields values are lower than what we have previously seen. Patients being monitored currently who are known to have BK viremia/viruria will see a shift in their values at the time of the conversion. Results with the new standard will be approximately 1-log lower than previously reported.

The following table shows examples of results using the current standard as compared with the new standard material:

Current Result (Copies/mL)	New Result (Copies/mL)
50974	3490
150610	10090
3290200	230200
10622500	761020
18328155	1313300

The low limit of detection for the assay will not change and will remain 50 Copies/mL

Urine Culture Screen

UC Health Laboratory in coordination with Infection Control is introducing a new multi-reflex Urine Culture Screening test code. The screen will automatically generate a reflex to a microscopic review and/or culture depending on specific criteria within the urinalysis results as indicated in article. The specimen requirements are a red/yellow urine swirl top tube **and** a grey urine culture tube.

EPIC Test Code:

LAB2131- Urine Culture with Urinalysis Screen

Standalone urine cultures will still be available for specific patient populations:

- 1) **Urine Culture, Transplant Patient**
EPIC Code: LAB2132 (Lab Code: UCT)
- 2) **Urine Culture, Neutropenic**
EPIC Code: LAB2133 (Lab Code: UCN)
- 3) **Urine Culture, Urology Patient**
EPIC Code: LAB2134 (Lab Code: UCU)

Criteria for performing "Microscopic if indicated":

Any

Color: Red, Pink, Blue
Nitrite: Positive
Leukocyte Esterase: trace or greater
Protein: trace or greater
Blood: trace or greater

Criteria for performing "Culture if indicated":

Any

Dipstick **Microscopic**
Nitrite: Positive **WBC:** >5
Leukocyte: Positive **Bacteria:** Few or more

To prevent duplicate orders, when a urinalysis is ordered in combination with a reflexive test code, a BPA (Best Practice Advisory) will generate in EPIC, notifying the provider that duplicate testing orders have been placed.

- The BPA will fire if any of the combinations are ordered and there is an active order within 24 hours.
- The BPA will fire if a single order from one of the combinations is placed and there is an active order within 24 hours.
- This works for both Inpatient and Outpatient.
- The warning reads:

