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LabUpdate is a publication of the Clinical Laboratories 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.

SPECIMEN COLLECTION

Transition from Large Speckled Top Serum to Smaller Gold Top Serum

In an effort to reduce blood draw volumes on patients, the laboratory, will be discontinue the use of the large 8.5ml “tiger top” serum separator tubes to a comparable tube that is a smaller volume. All tests requiring serum collection will be converted to the gold top 5ml serum tubes. We will continue to accept the large SST until the warehouse has depleted its supply, but all restocking will be with the smaller gold tubes.

If you have any questions or concerns regarding this change, please contact Lab Customer Service at 585-LABS.



Gold



Tiger Top

MICROBIOLOGY

Change in Antibiotic Reporting

On January 3, 2013, there will be two changes in how the UC Health Microbiology Laboratory reports antibiotic susceptibilities and multi-drug resistant organisms.

On January 3, the UC Health Formulary will change from moxifloxacin to levofloxacin as the second quinolone on formulary. To coincide with that change, UC Health Microbiology will discontinue routine antimicrobial susceptibility testing for moxifloxacin; levofloxacin will be routinely reported for *Streptococcus pneumoniae*, *Streptococcus agalactiae*, and *Acinetobacter*. To obtain results for levofloxacin vs. other microorganisms, please call Microbiology at 584-3913 to request those results.

In conjunction with the changes in antibiotic reporting, the Microbiology Laboratory will also begin employing slightly different definitions for multi-drug resistant organisms (MDROs). These definitions were developed by Infection Prevention with input from Infectious Diseases Division and Microbiology. *Enterobacteriaceae* and *Pseudomonas* resistant to a carbapenem or cefepime or organisms resistant to piperacillin-tazobactam and an aminoglycoside will be called MDROs. *Enterobacteriaceae* producing an ESBL or a carbapenemase will also be called MDROs. All *Stenotrophomonas maltophilia*, *Burkholderia cepacia*, and *Ralstonia pickettii* will be called MDRO. Finally, any *Acinetobacter* testing non-susceptible to 3 of 6 antibiotic classes (beta-lactams/BL inhibitors, aminoglycosides, carbapenems, fluoroquinolones, cephalosporins, or sulbactam) will be called an MDRO.

For more detailed information about either of these issues, please contact Microbiology at 584-3913 or Dr. Rhodes at 584-3923.

EPIC

Timed Priority for Lab Tests

Timed priority has been added into EPIC as a choice when ordering laboratory testing. This priority functions the same as it previously worked in LastWord. When a test is ordered as timed and as set as a Lab Collect, the label will print approximately 2 hours before it is due. Nurse Collect specimens will function in the same process as current in EPIC.

Cancelled Tests in EPIC

If you find that a test was cancelled in EPIC, you can find the reason for the cancellation on the Lab Tab or Report Viewer in EPIC. Double click on the cancelled test and in the center of the test requisition is a comment in red indicating “This test has been cancelled”. To the right of this comment is the origination of the cancellation.

- If the test was cancelled in the lab, it will note “Lab in Hlseven Interface” and it will also list the reason for the cancellation.
- If the test was cancelled by an EPIC provider, the name of the person cancelling the test will be indicated. However, the reason for the cancellation will not be listed.

If you have any questions or concerns regarding a cancelled test, please contact the Lab Customer Service department at 585-LABS

Blood Product Order Set Changes

Significant changes in the order sets used to order blood product preparation and transfusion were made in December, 2012.

Previous to this change, there was one blood product order set used to prepare and transfuse blood products. However, we have had a series of non-serious but concerning errors. Therefore, the Physicians Advisory Council (PAC) and Laboratory leadership reviewed and decided upon three separate order sets.

The three blood product order sets PAC recommended are as follows:

- **Prepare only** (type and cross). This is used when the doctor is pretty sure a transfusion will be needed but isn't ready to do it yet – before surgery for instance. This is not the same as type and screen – there is a separate single order for that. Only prepare blood if you're pretty sure you're going to need it.

- **Transfuse** (assumes that products were prepared earlier). This is used later after the earlier prepare order when the patient actually needs the blood.
- **Prepare and Transfuse**. This is used when a transfusion is needed now and blood has not already been prepared.

CHEMISTRY

Beta(β)-hydroxybutyrate

Ketosis is a common feature in acutely ill patients. In subjects suffering from starvation, acute alcohol abuse, or diabetes mellitus, ketosis can result in severe life-threatening metabolic acidosis. The presence and degree of ketosis can be determined by measuring blood levels of beta (β)-hydroxybutyrate (also known as 3-hydroxybutyric acid or 3-hydroxybutyrate). Ordinarily, β-hydroxybutyrate is the ketoacid present in the greatest amount in serum. It accounts for approximately 75% of the ketone bodies which also include acetoacetate and acetone. During periods of ketosis, β-hydroxybutyrate increases even more than the other two ketoacids (acetoacetate and acetone), and has been shown to be a good index of ketoacidosis, including the detection of subclinical ketosis. In diabetics, the measurement of β-hydroxybutyrate as well as blood glucose can help to assess the severity of diabetic coma and help exclude hyperosmolar non-ketotic diabetic coma. The β-hydroxybutyrate assay is specific for β-hydroxybutyrate and shows no cross-reactivity with acetoacetate or acetone.

This test replaces the former Acetest test. Please eliminate any reference to this test on your preference list as Acetest is no longer available.

Specimen collection:

Serum (Gold)

-or-

Heparinized plasma (Light Green)

Ordering:

EPIC test code: LAB4911