

Laboratory Lines

News from Florida Hospital Clinical Laboratories and Florida Pathology Lab (FPL)

CMV SERONEGATIVE BLOOD PRODUCTS

It is the policy of the Transfusion Service to give leukocyte reduced cellular blood components which are equivalent to CMV seronegative blood products in terms of their risk for transmission of cytomegalovirus. The leukoreduced products are termed CMV safe or CMV reduced risk. CMV seronegative components may be specially ordered for patients who are at high risk for developing life-threatening CMV infections such as bone marrow transplant recipients.

American Association of Blood Banks (AABB) Association Bulletin # 97-2, "Leukocyte reduction, by any method capable of achieving a residual leukocyte count $< 5 \times 10^6$, allows for the reduction of transfusion transmitted-CMV to a level at least equivalent to the level occurring with the use of CMV seronegative components transfused to CMV-seronegative recipients." These two processing methods will be considered equivalent and will be interchanged depending on supply. All red blood cells and platelets used at Florida Hospital are prestorage leukoreduced.

Florida Hospital will provide CMV SAFE products by issuing leukoreduced when a physician orders CMV negative or CMV safe components for transfusion. For further information contact the Transfusion Service at 407-303-1522.

MRSA SCREEN CULTURES

Effective December 1, 2008 the Microbiology department changed the way methicillin-resistant *Staphylococcus aureus* (MRSA) screening cultures are processed:

1. A new chromogenic media, Spectra™ MRSA, which is approved only for the detection of nasal colonization of MRSA, is now being utilized. Therefore the only source that will be accepted for a MRSA screen order will be nares.
2. No susceptibilities are being provided for MRSA screen cultures as in the past. The new media permits the identification of MRSA using a novel

chromogen which detects an enzyme that is present in all MRSA; therefore, susceptibilities are not needed to determine that the isolate is MRSA.

3. If a MRSA culture is needed for any other source, then the appropriate culture for that source should be ordered (i.e., wound culture, sputum culture, etc.). Susceptibilities will continue to be performed on MRSA isolates from other sources.
4. MRSA screen cultures are being set up twice a day: 9:00 am and 9:00 pm. Physicians can expect results to be available 24 hours after the specimen has been **set up** in the microbiology laboratory.; i.e., at both 9:00 am and 9:00 pm.

For further information or questions, please contact Sandra Hernandez, Microbiology manager at ext. 407-303-5600, ext. 1104343.

PATIENT SERVICE CENTER (PSC)

The Patient Service Center (PSC) is conveniently located adjacent to Florida Hospital Orlando at 2855 North Orange Avenue and provides specimen collection services for all ages. The Center is open Monday through Friday from 7am to 4pm, closing for lunch from noon to 1pm. FPL accepts numerous insurance plans including Aetna, Beachstreet, United Healthcare, Medicare, and Florida Hospital Healthcare Systems (FHHS).

HIV-1 AND HCV VIRAL LOAD ASSAYS

Molecular Diagnostics Laboratory (MDL) will be changing methodology in February for the HIV-1 and HCV qualitative (by PCR with manual detection) and viral load assays (by branched DNA) to RealTime PCR. As a result of the change, the lab will be able to offer HBV detection and viral load assays by RealTime PCR as well.

The RealTime PCR methodology is an FDA-approved assay for HIV and HCV. The new dynamic range of these test delivers standard of care sensitivity (48 copies/mL for HIV-1 Group M and the rare non-B subtypes, 18 IU/mL for

HCV and 10 IU/mL for HBV) and quantitation (48 copies/mL to 10,000,000 copies/mL for HIV, 43 IU/mL to 69,000,000 IU/mL for HCV and 29 IU/mL to 110,000,000 IU/mL for HBV).

Additionally, for HIV patients previously tested by the bDNA methodology for viral load, there will be no need to re-baseline or recalibrate because we have demonstrated high correlation between the two methodologies. For HCV patients, the viral load will be, on average, about 9% higher compared to the bDNA methodology.

For more information please contact George Corpus, Molecular Diagnostics Laboratory Manager, at 407 303-2779 or 407 303-2800 Ext. 1104140.

NEWS FROM THE CHEMISTRY LABORATORY

In the next few months look for the following changes to occur in the Chemistry Laboratory:

Starting March 2, 2009 Infectious CRP testing will be reported in mg/L instead of mg/dl. This change in units is to conform to the standard across the United States that reports in the more common units of mg/L. To convert mg/L back to mg/dl simply divide by 10. There will be a comment attached to all results once the change goes into effect.

C-peptide, which is currently being sent out to a reference laboratory will soon be performed in the Chemistry Laboratory. This assay is used to test for pancreatic beta cell function in a variety of conditions including type 1 diabetes and to aid in the diagnosis of hypoglycemia. A low C-peptide level is expected if the insulin secretion is diminished as in type 1 diabetes and increased in hyperinsulinism and insulinomas.

If you have questions, please call Susan White, Chemistry Manager at 407-303-5600, ext 1104909.

CHEMISTRY PANELS OFFERED BY FLORIDA HOSPITAL

The laboratory offers the following CPT defined panels: comprehensive metabolic panel (CMETPN), basic metabolic panel (BMETPN), electrolyte panel (ELECT), hepatic function panel (HFUNPN), acute hepatitis panel (HEPPR), lipid panel (LIPPN) and obstetric panel (OBPAN). When ordering a panel of tests, please remember that each test contained in the panel must be medically necessary, and that some of the panels contain overlapping tests.

"Thyroid panel," "Vitamin D Panel," and "Iron Studies" are not valid panels, and we will need to call your office to verify your orders before proceeding with testing.

PANEL COMPONENTS

ELECTROLYTE PANEL (ELECT)

Sodium, potassium, chloride, CO₂

BASIC METABOLIC PANEL (BMETPN)

Sodium, potassium, chloride, CO₂, glucose, BUN, creatinine, total calcium

COMPREHENSIVE METABOLIC PANEL (CMETPN)

Sodium, potassium, chloride, CO₂, glucose, BUN, creatinine, total calcium, albumin, total bilirubin, alkaline phosphatase, AST, ALT, total protein

HEPATIC FUNCTION PANEL (HFUNPN)

Albumin, total bilirubin, direct bilirubin, alkaline phosphatase, AST, ALT, total protein

LIPID PROFILE (LIPPN)

Cholesterol, triglycerides, HDL

OBSTETRIC PANEL (OBPAN)

Hemogram with platelets and differential, hepatitis B surface antigen, rubella antibody, RPR, ABO, Rh, antibody screen

If you or your staff would like to have a listing of each test contained in the panels we offer, please contact Rosie Fussell, Laboratory Compliance Coordinator, 407-200-2553.

NOVOSEVEN® FACTOR CONCENTRATE

NovoSeven®, Recombinant Factor VIIa, now comes in 1.0, 2.0 and 5.0mg sizes.

For further information contact the Transfusion Service at 407-303-1522.

CHLAMYDIA AND GC DNA PROBE

When both the Chlamydia DNA Probe and GC DNA Probe orders are needed on the same specimen at the same time, please order the combination test "Chlamydia & GC DNA Probe" instead of the individual tests.