

Laboratory Lines

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

LABORATORY TURNAROUND TIMES FOR TRANSPLANT IMMUNOSUPPRESSANT DRUGS

In response to a recommendation from the Pharmacy & Therapeutics Committee, testing turnaround times for Transplant Immunosuppressant Drug Testing are listed below.

All testing is done at FH Orlando

Cut-off time for same day results is receipt in Lab by 1500

Tacrolimus	Monday through Saturday, 0700-1500
Rapamycin	Monday, Wednesday, and Friday, 0700-1500
Cyclosporin	Monday through Saturday, 0700-1500

Therapeutic Drugs Sent-out for Testing:

Due to very few orders requested for Quinidine, Procainamide, and Lidocaine these tests are sent out.

Cut-off time is receipt in Lab by 1200. Specimens are picked up every day at 1400, excluding major holidays.

Lidocaine and Procainamide are resultated within 24 hours of receipt. Quinidine is resultated within 1-2 days of receipt.

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

VITAMIN D TESTING

The assay for Vitamin D 25-OH is now being performed at Florida Hospital Orlando. The method is Diasorin Liaison chemiluminescence which is the same method that our reference lab, ARUP, uses. Our assay measures Total 25-OH Vitamin D which includes the D2 obtained from vegetable sources and supplements and D3 which is derived from sun exposure and oily fish. Total Vitamin D is the appropriate indicator of vitamin D body stores. A level of >32 ng/mL is considered sufficient for bone health. In addition to osteoporosis Vitamin D has recently been associated with heart disease, cancer, and diabetes. Vitamin 1,25 D levels are still being sent out. This test is

mainly useful for patients with disorders of calcium metabolism and parathyroid disease and, in general, it should be ordered only for those specific conditions.

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

NEW FECAL LACTOFERRIN WBC ORDER

In August, the lab expects to add a new screen for fecal WBC tests using fecal lactoferrin for detection of intestinal inflammation. Lactoferrin is a chemical that is released from granulocytes that will be present in the GI tract during inflammation. In our study comparing lactoferrin detection against WBC smear, we found that the lactoferrin **increased test sensitivity by 21%**. In addition, this method has the benefit of longer sample stability, no technical subjectivity, and no adverse affects from sample toxicity. The test will be orderable as **White Blood Cell Screen, Feces (Lactoferrin)** on a fresh stool sample and performed 24/7 at all Florida Hospital campuses. This test should not be performed on stool from breast fed infants or to detect monocytes or lymphocytes (present in some cancers). Eosinophils, present in cases of allergic diarrhea, will give a positive fecal lactoferrin result but cell type is not distinguished.

If you have any questions please contact Julie Hess, Serology Manager at 407-303-5600 x1104965.

FLORIDA INFANT SCREENING TESTING

Beginning August 3, 2009, results of the Florida Infant Screen testing performed by the State of Florida Laboratory will be scanned into the i-Extend system when the results are received. The results will be available on the Notes/Documents tab, in the Florida Infant Screen Testing folder under the Laboratory/Microbiology folder.

CYSTIC FIBROSIS RESPIRATORY CULTURES

The Microbiology Department has instituted three new orders for respiratory cultures on cystic fibrosis patients:

- cystic fibrosis culture sputum
- cystic fibrosis culture bronchial washing
- cystic fibrosis culture throat.

These cultures should be ordered on respiratory sources from cystic fibrosis patients instead of routine sputum, bronchial washing, or throat cultures. The new orders will include additional media for the isolation of *Burkholderia cepacia*, an important pathogen for cystic fibrosis patients.

These cultures will be held for five days before being finalized in order to allow sufficient time for the isolation of *Burkholderia cepacia*. If an isolate is identified as a presumptive *Burkholderia species*, it will be referred to a reference laboratory for confirmation.

For further information, contact Sandy Hernandez, Microbiology manager at ext. 407-303-5600 ext. 1104343.

TOTAL BILIRUBIN TEST INTERFERENCE

Beckman-Coulter has alerted its customers that the Total Bilirubin test method has been shown to produce spuriously high results, as a result of interference by a metabolite of Naproxen, *O*-desmethylnaproxen. Spuriously high results may be seen with normal liver enzyme (AST, ALT, GGT) results, normal direct bilirubin, and no clinical history or symptoms of liver disease. In the patient referenced in literature, results returned to normal within 72 hours after stopping naproxen.

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

Nafila, A.R., et al, "Spurious hyperbilirubinemia caused by naproxen", *Clinical Biochemistry* 42 (2009) pages 129-131.

APPROVED REFERENCE LABORATORIES

The following is a list of the 2009 Florida Hospital Medical Executive Committee (MEC) approved reference laboratories:

Associated Regional and University Pathologists (ARUP)
 Athena Diagnostics Inc.
 Baylor College of Medicine, Medical Genetics Laboratory
 BloodNetUSA, Inc.
 Caris MPI, Inc.
 Esoterix Inc.- Aurora, CO
 Esoterix, Inc.- Calabasas Hills, CA
 Florida's Blood Centers
 Florida Blood Services
 Focus Diagnostics

Genomic Health
 Genzyme Genetics
 Mayo Clinic/Rochester
 National Jewish Medical & Research Center
 Nephropathology Associates
 Quest Diagnostics Nichols Institute
 Orlando Regional Medical Center
 Pediatrix Screening, Inc.
 Prometheus Laboratories
 Quest Diagnostics
 Red Path Integrated Pathology
 Shands Medical Laboratories
 Specialty Laboratories
 State of Florida, Department of Health Bureau of Laboratories
 University of Texas Health Center Mycobacteria/
 Nocardia Lab
 Viomed Laboratories

NOTE: These approved laboratories meet the applicable federal and state regulations for clinical laboratories and are licensed by the STATE OF FLORIDA. In order for the Florida Hospital Laboratory to send a specimen to a reference laboratory, the reference laboratory must hold a current STATE OF FLORIDA LABORATORY LICENSE.

If you or a patient wants to send a blood specimen to a reference laboratory not listed above, please contact the main Florida Hospital Laboratory at 407-303-1925, option # 6. For surgical specimens to be sent to a reference laboratory not listed above, please contact 407-303-1932, option # 3 at least one week prior to scheduled surgery. This allows the Florida Hospital Laboratory to confirm that the reference laboratory has the required licensure and time to obtain any necessary patient consents

For ANY 'add-on" surgical reference laboratory tests, please FAX your orders to 407-303-3215.

CHOLESTEROL AND LDL NORMALS UPDATED FOR PEDIATRIC PATIENTS:

The National Cholesterol Education Program recommends the following ranges for 0-18 years of age:
 Lipid Panels as follows:

<u>Total Cholesterol:</u>	<u>LDL :</u>
Acceptable <170 mg/dl	Acceptable <110
Borderline 170-199 mg/dl	Borderline 110-129 mg/dl
High ≥ 200 mg/dl	High ≥ 130 mg/dl