

Volume #8

Issue # 1

March, 2010

Test # 2744 Testosterone, Free and Total – Adult Males

Effective March 1, 2010 Physicians Laboratory Services will perform total and free testosterone testing on males over 16 years old at our Omaha location. Total and free testosterone in females and prepubescent adolescent males will continue to be performed at ARUP Reference Laboratory.

The free testosterone in circulation is the fraction that is available to cells for such functions as libido and maintenance of secondary sexual characteristics (hair growth, etc). Free testosterone values are calculated from measuring the total testosterone, sex hormone binding globulin and albumin. Sex hormone binding globulin (SHBG) is the main protein responsible for transporting testosterone and estradiol in the circulation. Typically around 98% of these steroid hormones are bound to SHBG.

Test #2744 Testosterone, Free and Total (Adult Males)
Specimen: 1.0 mL Serum
Storage: Refrigerated 2 days; Frozen 1 month
Performed: Tues, Thurs and Sat;
Reported same day of testing.
CPT code: 84403, 84270
Cost: \$25.00

Questions: Jan Nelson
Omaha Chemistry Supervisor

Which Hepatitis C Test to Order?

Hepatitis C testing at Physicians Laboratory is performed in a two step fashion. An initial screen in serum for antibodies to Hepatitis C is performed with test #945. A negative result rules out Hepatitis C infection in the majority of cases. A few exceptions exist such as when a specimen is collected too soon after infection (antibody development occurs 1-6 months post infection) or in a small subset of the population which never develops antibodies at all. Positive results are consistent with either active infection, past infection with resolution, or false positive results.

A plethora of confirmatory tests are offered by many vendors and confusion arises concerning which is the best test to order. The best test would have good sensitivity (low cutoff) and dynamic range (high end) for monitoring therapy. Test #7650 Hepatitis C Viral Load by Real-Time PCR has low end sensitivity of approximately 50 viral copies and high end of around 8 million copies of virus. This test has equal or better sensitivity and range than bDNA, TMA or other HCV assays offered. The high end

range works for monitoring patients on antiviral therapy. The following test numbers are recommended when screening, confirming or monitoring patients. A diagnostic flow chart with a recommended testing algorithm is also available on our web site (www.physlab.com) and can be accessed by the link associated with the following tests listed below.

Test #945 Hepatitis C Antibody IgG (Screening)
Specimen: 1.0 mL serum
Storage: Refrigerated
Performed: Mon-Fri; Reported 2-3 days
CPT code: 86803

Test #7650 Hepatitis C Viral Load by Real-Time PCR (Confirming or Monitoring Treatment)
Specimen: 2.0 mL serum or EDTA plasma
Storage: Refrigerated 5days, Frozen 4 months
Performed: Mon – Sat.; Reported 3-5 days
CPT code: 87522

Submitted by: Gregory Post, Ph.D.
Director of Clinical Services

Peripheral Smear Pathologist Consultation New Test Number #3957

Peripheral Smear (Differential) Pathologist Consultation is now being reported in a "Pathology Consult" format. This new format will provide clinical findings in a way that will be easier to interpret.

Current test #696 is now discontinued.

Test #3957 Peripheral Smear Pathologist Consultation
Specimen: 2 Peripheral smears (stained or unstained), current CBC results, and completed "Peripheral Smear Pathologist Consultation Checklist"
Storage: Ambient .
Performed: Mon – Fri.; Reported 3 days
CPT code: 88321

Questions: Cassy Richards
Omaha Hematology Supervisor

Test #379 (Aerobic and Anaerobic Cultures) Discontinued

Aerobic and Anaerobic culture (test #379) will no longer be offered as a combined test. If both cultures are needed, each test should be ordered separately

(Culture, Aerobic #601 and Culture, Anaerobic #613). This change has been made to accommodate Electronic Medical Record (EMR) interface requirements for our clients. As a reminder, please submit an aerobic bacterial culture swab for test #601 and a (Port-a-cul) anaerobic transport swab for test #613.

Questions: Shari Talbert
Microbiology Supervisor

Hemoglobin A1C as a Diabetic Screening Tool

Per "Standards of Medical Care in Diabetes - 2010", which is issued by the American Diabetic Association (ADA), now recommends the use of Hemoglobin A1C as a screening test to help diagnose diabetes and pre-diabetic states. The advantage of using Hemoglobin A1C is that it does not require a fasting state. The ADA feels more people will be tested for Type 2 diabetes via this test and this will reduce the number of undiagnosed diabetics in the general population. Early detection of diabetes and subsequent intervention can make a significant impact in long term quality of life.

The report proposes a diagnosis of diabetes for Hemoglobin A1C levels $\geq 6.5\%$. Other criteria for diagnosis include a fasting plasma glucose level of ≥ 126 mg/dL, a 2-hour plasma glucose level ≥ 200 mg/dL during an oral glucose tolerance test, or a random plasma glucose level of ≥ 125 mg/dL in patients with symptoms of hyperglycemia or a hyperglycemic crisis. The new standards also advise monitoring individuals with pre-diabetes on a yearly basis to prevent progression to full-blown diabetes. Individuals with an increased risk for diabetes fall into a Hemoglobin A1C range of 5.7%–6.4%.

Submitted by: Gregory Post, Ph.D.
Director of Clinical Services.

MDL (Medical Diagnostic Laboratories) Price Reduction

Due to the working relationship that has developed with MDL, Physicians Laboratory has been able to decrease the client cost of the following Real-Time PCR tests from \$55.00 to \$45.00.

The change will become effective on March 1, 2010.

Test #	Test Name	CPT
7633	Atopobium vaginae	87798
7635	Candida albicans	87481
7636	Candida glabrata	87481
7637	Candida parapsilosis	87481
7638	Candida tropicalis	87481
7640	Gardnerella vaginalis	87511
7642	Trichomonas vaginalis	87798
7643	Vaginal Group B Strep (GBS)	87653
7644	Ureaplasma urealyticum	87798
7645	Mobiluncus mulieris & M. curtisii	87798
7646	Bacteroides fragilis	87798
7651	Bordetella pertussis	87798
7652	Mycoplasma pneumonia	87581

Expired Bacterial Culture Swabs

We have noticed an increase of cultures being submitted on expired swabs. The use of expired bacterial transport swabs can result in compromised test results, especially when culturing for fastidious types of bacteria. A "comment" will be included on the test report indicating that the specimen was submitted on an expired swab. Periodically, check your supply for outdated swabs to insure quality culture results. Discard expired swab and contact our Supply Department for replacement swabs.

Tracking Log for Anatomic/Cytology Specimens

Effective March 1, 2010, Physicians Laboratory has developed specimen tracking logs for clients who submit tissue (histology) and Pap smear specimens. This provides us the ability to confirm receipt of all anatomic samples sent to our facility. On the log, the client enters the patient name, number of samples, specimen type, and source. The log contains two pages (white and yellow). The white copy will be submitted with the specimens and the yellow copy will be retained by the client.

Questions: Kacey Moreland
Director of Marketing

Why Was The Test Cancelled?

Question: How do you determine when to cancel testing due to an insufficient sample (QNS)?

Answer: Testing is done by automation, and the quantity of specimen must be large enough for the instrument to detect and sample. For tests requiring serum, a minimum amount is given (See Physicians Laboratory Website or Service Guide); while the volume submitted may look like enough, it may be microliters off. Per our Standard Operating Procedures, if the result does not meet quality control/assurance criteria, the test must be repeated or verified in some other manner before reporting. In some instances, there was enough sample to test the first time, but not enough sample to run the second time for verification purposes. In addition, tests requiring anticoagulated whole blood specimens (e.g. CBC, Protime) require a full tube of blood because the ratio of blood to anticoagulant must be maintained for the accuracy of the test. If not enough blood is added to the fixed amount of anticoagulant in the test tube, the blood to anticoagulant ratio is compromised, and test results would be inaccurate.

Questions: Cassy Richards
Omaha Hematology Supervisor

ImmunoCap® and Blue Cross Blue Shield Reimbursement

Blue Cross Blue Shield of Nebraska has recently revised their policies and now reimburses for ImmunoCap® allergen testing (CPT 86003). Currently there are no restrictions based on diagnosis codes.