OSF SYSTEM LABORATORY

Laboratory News

Spring 2018 1-800-533-6730

New tests or test changes

Effective 2/12/18, OSF is turning off test FSHDGS. The test is obsolete and there is no replacement at this time.

Effective 2/13/18, OSF is turning on Mayo test code FCLCU, Chlamydiae species culture (LAB4871) and turning off Mayo code FCTRC.
Also going live on 2/13 is Mayo UGTFG, UDP-Glucuronosyl Transferase 1A1 (UGT1A1), Full gene sequencing (LAB4872).

Effective 2/22/18, OSF turned off Mayo obsolete codes QUAD and MAFP and turned on the new Mayo test codes QUAD1 and MAFP1.

On 3/2, the following changes were made:
Result code changes were made to HBFA2, Hemoglobin Electrophoresis Fetal and A2, HBFA2. There was also a reflex added HGBCAP, Reflex Hemoglobin Identification by Capillarys 2.

Mayo test B2MU, Beta-2 Microglobulin (B-2-M), Urine, was turned on and Mayo FB2MU was turned off.
A result code change was made to Mayo MPSBS, Reflex, Mucopolysaccharidosis, BS.

Mayo code CD20B, CD20 on B Cells was turned on.

Mayo code PSPT, Phosphatidylserine/Prothrombin Antibody, IgG and IgM, Serum was turned on.

On 3/5, OSF reactivated LEAD6, Lead, Whole Blood and turned off Mayo test PBDV.
The new lead analyzer has been validated and lead testing will once again be done in-house.

MACRA is coming

The Medicare Access and CHIP Reauthorization Act of 2015 is bipartisan federal legislation signed into law in April of 2015. The law does many things, but most importantly it establishes new ways to pay physicians for providing care to Medicare patients. It is the largest reform of the American health system since the Affordable Care Act of 2010. The purpose is to fix the way Medicare doctors are reimbursed and it fills in a funding gap and extends a popular Children's Insurance Program (CHIP).

MACRA related regulations also address incentives for use of health IT by physicians and other care providers. Under MACRA, the Secretary of the Department of Health and Human Services (DHHS) is tasked with implementation of a Merit-based Incentive Program (MIP), which consolidates the three existing incentive programs into one for eligible physicians. One of the incentive programs is implementation of a nationwide electronic health record (EHR) system, with the goal being Dec 31, 2018. Eventually you will need to conform to this legislation in order to provide Medicare services and be reimbursed by Medicare, for those services.

If you are still submitting lab orders utilizing paper requisitions, eventually you will be required to transition to an electronic ordering venue. The OSF System Laboratory offers Atlas web-based ordering to help fulfill this requirement. We provide the software and a label printer (to print specimen labels), training and lab-based support. You need to furnish a computer and printer. Contact us for information or to arrange a brief tutorial on Atlas.

New Mayo QUAD/MAFP Form

Mayo has updated the QUAD/MAFP form that is to be filled out and submitted with the order. If you order electronically you do not need to fill the form out. The form is available on the OSF System Laboratory website.

Questions about your bill?

If you are an Outreach lab client and have a billing-related question, please follow the first step, which is to contact our Patient Accounts and Access Center billing department at **(309) 683-6750**. The PAAC billing agents will be happy to assist you with your inquiry.

Client Reps:
Sabrina Mullins (309) 624-9144
Raechel Pfahl (309) 624-9100

Sales and Marketing Supervisor:
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Clinical Testing Spotlight: Biotin Interference in the Laboratory Setting

By Raechel Pfahl, MLT (ASCP), MBA

Case Study:

A 43 year old female Multiple Sclerosis (MS) patient presents at her rural PCP's office for her annual check-up. Her physician orders some routine testing that was not performed at her last specialist's appointment and performs the testing in the small new office lab. The patient's TSH level comes back abnormally low, and the physician reorders the TSH as well as a FT4 and an Anti-Thyroid Peroxidase Antibody (THYRD). The PCP also requests that the patient be fasting for this redrawn testing. When the results come back, the testing is all abnormal; the TSH is decreased, and the FT4 and THYRD are elevated. The PCP calls the patient and refers her to an Endocrinologist for further thyroid testing. The Endocrinologist meets with the patient and reviews her medical history. He is suspicious of a medication interference and asks the patient to go have the same labs drawn again, but at the central hospital lab, which is a few blocks away from the Endocrinology office. The patient agrees and goes for the testing, even though she is no longer fasting. Upon receipt of the patient's newest lab results, the Endocrinologist's suspicions were confirmed. All of the patient's results are normal and well within the reference ranges of the ordered tests.

Q&A:

What kind of medication interference could cause such rapid fluctuation in a patient's thyroid testing?

Answer: In this case, the key is that the patient is an MS patient. There are several studies being performed around the globe in which patients are consuming mega-doses of Biotin (also called Vitamin H or Vitamin B7, or as part of the B Complex Vitamin) as part of a treatment plan for Multiple Sclerosis, metabolic diseases, and other auto-immune conditions. Biotin, as a natural part of one's daily dietary intake through foods, and other dietary supplements, is proving to be much less harmful to patients then currently available pharmaceutical treatments. However, the daily recommended dose of biotin intake is around 30ug per day. In addition to these Biotin trial treatments, Biotin has become a popular dietary supplement touted to boost hair, nail, and skin improvement as well as a booster of fatty acid metabolism. The problem with these additional Biotin supplements is that the doses are containing anywhere from 300ug to upwards of 10,000ug of Biotin per dose. These high-dose supplements are what is causing the interference in patient immunoassay testing because most analyzer manufacturers utilize a streptavidin-biotin reaction for the analysis of patient results. Hence the abnormal results; with the excess biotin consumed in the treatment plan or dietary supplements, the biotin that is introduced in the analyzation of the specimen has no streptavidin receptors to bind to.

What are some signs for providers to watch for in this kind of medication interference? Would this kind of medication cause interference in other Laboratory testing?

Answer: Providers can watch for new patient results that don't match previous results or fit the patient's clinical presentation. Providers can also verify any dietary supplements or new treatments that the patient may be taking to ensure that they are getting the most accurate vision of a patient's health. Biotin interference affects immunoassay testing that utilizes the streptavidin-biotin enzymatic reaction. The most likely immunoassay testing to be affected includes cardiac assay testing, hormone testing, and some iron studies.

Additional Discussion:

The good thing about biotin utilization is that the extended half-life of biotin in a patient's system is markedly short. For example, if a patient is on a biotin regimen and needs blood work done for immunoassay testing, the patient would just have to refrain from taking their dose for 24-36 hours before the specimens are collected.

It is important to note that, although many automated analyzers utilize the biotin-streptavidin enzymatic reaction to test immunoassays, OSF Healthcare Saint Francis Medical Center System Laboratory's Abbott Automated track system does not utilize this methodology. Meaning that, if a patient is taking biotin and either doesn't know it or doesn't mention it to their physician(s), their immunoassay testing will not be affected by the interference, and will receive unaffected results.

When hand writing specimen labels…

Please PRINT the names and DOB when handwriting specimen labels. Cursive handwriting can sometimes be difficult to read and we ask that you legibly PRINT the names and DOB on the handwritten specimen labels.

New Humana Genetic Testing Guidelines Available Online

The new Humana genetic procedure guidelines for 2018 have been released and can be viewed at www.humana.com

Keep in mind…

"We can't help everyone, but everyone can help someone." — *Ronald Reagan*