



Monthly Update

OSF
SYSTEM LABORATORY

October
2016



Find us on
Facebook



OSF System Laboratory is now on Facebook

Our group on Facebook for OSF System Laboratory continues to grow! The group is private and is available (once you are accepted) for all clients and client submitters. It was created to give everyone an opportunity to connect, share thoughts and ideas, and to establish an additional means of communication. It is moderated by Outreach staff here in the lab, who will also use it as a means of creating awareness and providing education on various topics. For those of you that utilize social media, we hope you find this new feature useful. To request membership and to be added to the group, [click here](#).

Epic users: Iron w/ TIBC vs. Iron, Transferrin & Calc. TIBC

Our analyzers here at the OSF System Laboratory perform a calculated TIBC instead of a directly measured one. We still get the wrong test ordered in Epic (Iron w/ TIBC) on occasion. The replacement panel to order is FEPNL (LAB3221). It includes the Iron, calculated TIBC, Transferrin and % saturation. The Ferritin, as before, still needs to be ordered separately. If you have a preference list in Epic, please replace the "Iron w/ TIBC" (now performed at Saint Anthony ONLY) with FEPNL.

Atlas users: URIN has been discontinued

Effective Sept 13th, 2016, order code URIN, Urinalysis (LAB1694) was turned off in Atlas and is no longer orderable. Please order UA, Urinalysis with Micro If Indicated (LAB2344), as the replacement. You will be required to answer 3 questions on the "Questions" tab when placing and order. Select the specimen source/site (cath, clean catch or random) from the drop down list of choices. Select "Yes" or "No" answers to the questions "Culture if Indicated?" and "Microscopic Required?" from the drop down list of choices. If the microscopic required is answered "Yes", a microscopic exam will be done regardless of the macroscopic results. The replacement test UA, Urinalysis with Micro If Indicated (LAB2344), will automatically reflex to a microscopic exam if there is a positive leukocyte esterase, positive blood, positive nitrite and/or protein 1+ or greater. It will also automatically reflex to add a culture if the "culture if indicated" question is answered "Yes" and the leukocyte esterase macroscopic result is positive and/or greater than 5 white blood cells are seen on the microscopic exam.

New tests or test changes

On 9/21, Mayo test EVROL, Everolimus, blood, was made orderable (LAB4651).

On 9/26, Mayo obsoleted test PLAB, Indirect Platelet Antibody, serum (LAB1930) and replaced it with PLABN, Platelet Antibody Screen, serum (LAB4639).

On 9/26, Mayo obsoleted test CBPA, Platelet Antibody, direct, serum (LAB1957) and replaced it with CBPAN, Cell-Bound Platelet Autoantibody Screen, blood (LAB4640).

** REMINDER **

Sending samples uncentrifuged is a risky process because couriers often have multiple stops in addition to the time it takes for the sample to be received in the OSF processing department and ultimately centrifuged. **As a corrective action to ensure test results of the highest integrity and to avoid sample rejections and impact to the patient, please make every attempt to centrifuge every gold and mint green tube samples prior to courier shipment.** [Click here](#) to read the entire memo.

Did you know?

There are 2.5 trillion (give or take) red blood cells in your body at any moment. To maintain this number, about 2.5 million new ones need to be produced every second by your bone marrow. That's the population of Chicago every second. Once produced, a red blood cell can circumnavigate your body in under 20 seconds. They travel about 60,000 miles per day, and on average live for about 120 days.

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:

Sara Meyer (309) 624-9100

Deanna Hibbert (309) 624-9138

OSF System Lab EPIC CT:

June Bembek (309) 624-9209

Marketing Support:

Gregg Simpson (309) 624-3927

Sales and Marketing Supervisor:

Gordon Koerner (309) 624-9287

Manager, Outreach Services:

Kristi Williams (309) 624-9042

The OSF System Laboratory Microbiology Department goes live with MALDI-TOF Mass Spectrometry System

The Microbiology Department at OSF System Laboratory is now featuring state of the art MALDI-TOF technology. The Vitek MS, made by bioMérieux, boasts quicker and more accurate microbial identification than previously seen before. The OSF System Laboratory is one of few laboratories in the state with the capabilities to perform the innovative mass spectrometry technology known as Matrix Assisted Laser Desorption Ionization Time-of-Flight, or MALDI-TOF.

MALDI-TOF works by preparing a target slide with an organism and a matrix solution. The slide is then introduced to a high vacuum environment where a laser ionizes the sample and a “cloud” of ribosomal proteins is released. An electric charge then accelerates these proteins up a long flight tube and the protein’s time of flight is recorded once they pass through the ring electrode. This is an actual measurement of the weight of the proteins. A sensor is then used to create a spectrum that is representative of the protein makeup of each sample. The sample’s spectrum is then compared with other known spectra of bacteria and fungi located in a large database. This comparison allows for identification of the sample to be made that includes the family, genus and species levels.

MALDI-TOF allows for microbial identification to be completed in about 10-15 minutes on organisms that would have previously taken 12 hours or longer to identify. Not only does MALDI-TOF cut down time for microbe identification, but it also uses very minimal amounts of specimen. In fact, only 1-3 pure isolated colonies are needed to perform an identification and these colonies can be obtained from an organism that is up to 72 hours old. Previously, organisms could only be around 18-24 hours old in order to be used for identification.

Currently, microbe identification is validated and being performed on anaerobes, yeast, and coagulase negative Staphylococcus. Validation studies for additional aerobic bacteria are underway, with future sights set on validating Mycobacteria, Nocardia and fungus.

Nothing will change with the current way of ordering cultures. Identification will automatically be reflexed using MALDI-TOF technology for all aforementioned validated microbe and fungal identification that cannot be identified through rapid identification methods. For example, when an Anaerobic Culture (CULANA, LAB898) is ordered on a specimen obtained from a deep abscess, the specimen will first be set on all appropriate growth plates. If any organisms grow, an isolated pure colony that is at least 18 hours old will be used for identification. If the culture cannot be identified using rapid identification methods, 1-3 colonies of the culture will be used for identification using MALDI-TOF technology. The complete identification will only take 10-15 minutes, shaving off hours that it would have taken for the same identification to be complete using prior methodologies.

With such quick turnaround times, patient diagnoses will be expedited. This will lead to faster determinations for proper course of treatment, decrease hospitalization lengths, and ultimately take patient care to the next level.

Mayo test QUAD and MAFP now have required order questions in Epic and Atlas

Effective October 11th, 2016, OSF System Laboratory Clients are required to answer patient information, clinical information and clinical history questions on the Mayo Second Trimester Maternal Screening Alpha Fetoprotein (AFP) and Quad Screening Patient Information form when placing orders for Mayo test codes **MAFP/LAB3001** and **QUAD/LAB2050**. Epic and Atlas Clients must submit the answers to the required questions, electronically. Clients who *interface with Atlas* can order the test through their EMR, but will have to access their web-based account to answer all of the required questions, otherwise the order will not transmit to the OSF System Laboratory. Outreach Clients using paper requisitions must still complete the Mayo paper form and send it with the requisition and specimen for testing. The information listed on the form is required for the calculation of test results. By obtaining the required information and submitting the completed form along with the specimens for testing, test turnaround times will be reduced. Calls to your office for missing information and transcription errors will also be minimized. Ensuring that we have the all of the information required by Mayo upon test submission will also provide greater testing accuracy and efficiency.

OSF System Laboratory In-House Blood Bank

Congratulations to the OSF System Laboratory Blood Bank. They recently passed their FDA inspection with flying colors, proving that patient quality and safety is the number one priority. Being a Level 1 trauma center, our blood bank department can get extremely busy in a moment’s notice. In 2015, they cross-matched 22,793 units of blood, while keeping their goal of having a one hour turnaround time 99% of the time, and continue to do so in 2016. Significant improvements in regards to blood utilization and blood waste continue to be made as well. This was accomplished by physician education with the help of our Blood Bank Medical Director, Dr. Fitzgerald.

A project they are currently working on is called the Massive Transfusion Protocol (MTP). Vast improvements continue to be made on their current MTP protocol, which should lessen confusion and add additional clarity in the ordering process, while reducing the number of times orders have to be entered. All documentation will then be readily available for the nursing staff. OSF patients are in great hands when it comes to Blood Bank needs!

The Correct Way to Spell Potato

If GH can stand for P as in 'hiccough,'

If OUGH can stand for O as in 'dough,'

If PHTH can stand for T as in 'phthisis,'

If EIGH can stand for A as in 'neighbour,'

If TTE can stand for T as in 'gazette,'

If EAU can stand for O as in 'plateau,'

Then the correct way to spell potato would be

GHOUGHPTHTEIGHTTEAU.

Keep in mind...

“It’s not whether you get knocked down; it’s whether you get back up.” - *Vince Lombardi*