

## Test Changes and New Tests

On May 15th, OSF turned on test code HBCT (LAB4784). The code is for the Hepatitis B Core Total Antibody test that is being moved in-house and is replacing HBC (LAB1918) which was sent to Mayo.

On May 30th, OSF turned on test code CMVRT, CMV Quant Real Time PCR, (LAB4710) which will be performed in-house and turned off code CMVQU (LAB3104) which was sent to Mayo.

Also on May 30th, OSF turned on the new test CHAG, Trypanosoma cruzi Antibody, IgG, Serum, Mayo CHAG (LAB4913).

On June 1st, OSF turned on test code QFTP, QuantiFERON-TB PLUS, QFT-Plus, QFTP (LAB4907) and turned off QFTB (LAB1777). Also, Mayo test code UREDF, Reducing substance, Feces, (LAB4895) was turned on and RSFEC was turned off.

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## Change to reference range for Urinalysis Microscopic RBC

As of **June 5<sup>th</sup>, 2018**; the Urinalysis Microscopic RBC reference range was changed to reflect new guidelines from the American Urological Association. Initial testing for red blood cells in patient specimens include dipstick examination for hemoglobin and if positive, microscopic confirmation is performed. Assays performed at OSF Saint Francis Laboratories quantifies red blood cells in high power fields, and was reported as:

### **(OLD) Urinalysis Microscopic RBC Reference Range:**

Negative, 0-5, 6-10, 11-20, 21-50, 51-150, or packed RBC/hpf

Many abnormalities in the kidney and urinary tract present with red blood cells in the urine. About 25% of patients with gross hematuria have urologic cancers and another 35% have significant urinary tract pathology. Micro-hematuria is defined as an average of 3 or more red cells per high power field in a properly collected and non-contaminated specimen. In the absence of an obviously benign cause, the condition is defined as asymptomatic micro-hematuria (AMH). The prevalence of AMH in healthy population range from 2 to 31% with the highest rates in men over 60 years of age.

Nephropathies, nephritis, benign prostatic enlargement, infection and urinary calculi are the most common causes, and about 1-10% of patients will have urinary tract cancer. A guideline from the American Urological Association supports the diagnostic criteria for AMH.

If the initial clinical and laboratory studies, including nephrologic testing, failed to identify an etiology, additional investigations including cystoscopic and radiologic procedures may be indicated. To identify patients with minimal urinary red blood cell loss that may require further urologic/nephrologic evaluation, the reportable range has been updated to:

### **(NEW) Urinalysis Microscopic RBC Reference Range:**

0-2, 3-5, 6-10, 11-20, 21-50, 51-150 or packed RBC/hpf

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## Tube change for Mayo tests TGRP and TTST

Effective June 28th, Mayo is requiring a red top tube for TGRP, Testosterone, Total and Free and TTST, Testosterone, Total Serum, Pediatric. They will no longer accept serum gel tubes for these tests as validation studies have shown gel tubes have an increased amount of analytic variability. Minimum volume is still 1ml, with 2.5ml preferred for TGRP and 1ml preferred with .215ml minimum volume for TTST. Patient's age and sex are still required information for both.

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## Prothrombin time requirements

Prothrombin time (PT) requires a full light-blue top tube and must be shipped at room temperature. The tube must be filled completely in order to have the proper sodium citrate to blood ratio. Specimen is stable at room temp for 24 hrs. Storage at refrigerated temps (2-8 degrees) is not recommended as it may result in cold activation of Factor VII (7) and therefore alter PT results (i.e. false low results).

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## Questions about your bill?

Please 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.

### **Clinical Reps:**

Raechel Pfahl (309) 624-9100  
Sabrina Mullins (309) 624-9144

### **Sales and Marketing Supervisor:**

Gregg Simpson (309) 624-3927

### **Outreach Manager:**

Michael Cohlman (309) 624-9042

# **TEST SPOTLIGHT: CNS – Inflammatory Demyelinating Diseases**

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER SYSTEM LABORATORY

*Information Gathered By: Raechel Pfahl, MLT (ASCP), BBA, MBA*

## **Distinguishing Inflammatory Demyelinating Diseases from Multiple Sclerosis...**

Central Nervous System Inflammatory Demyelinating Disease testing is performed by Mayo Medical Laboratories for OSF HealthCare Saint Francis Medical Center System Laboratory. Mayo Clinic developed the only currently available fluorescence - activated cell sorting (FACS) methodology in the United States. The FACS methodology shows an increased specificity and sensitivity for aquaporin 4 (AQP4) and myelin oligodendrocyte glycoprotein (MOG-IgG1) when compared to the Indirect Immunofluorescence and ELISA methodologies. Some of the most common inflammatory demyelinating diseases include:

- *Multiple Sclerosis (MS)*
- *Neuromyelitis Optica (NMO)*
- *Optic Neuritis*
- *Transverse Myelitis*
- *Acute Disseminated Encephalomyelitis (ADEM)*
- *Posterior Reversible Encephalopathy Syndrome (PRES)*

 MAYO CLINIC Mayo Medical Laboratories	Specificity	Sensitivity
<b>Indirect Immunofluorescence</b>	>99%	50-55%
<b>ELISA</b>	99%	60-65%
<b>FACS (Mayo)</b>	>99%	>80%

## **Why test for AQP4 and MOG...?**

### **\*To Distinguish NMOSD and MOG-Opathies from MS...**

*Although Neuromyelitis Optica Spectrum Disorders (NMOSD) and MOG-opathies can have very similar characteristics to MS, the diseases are treated very differently.*

### **\*Early diagnosis and treatment may prevent future NMOSD attacks...**

*NMOSD is different from MS in that, with NMOSD (and MOG-opathies), the neurological disability is differentiated from MS by the number of attacks; whereas, with MS, it is measured by the progressive phase of the illness.*

**\*Per Mayo's research, treating NMOSD and MOG-opathy patients with MS treatments has shown to significantly worsen the patient's symptoms and frequency of attacks.**

## **Instances in which to Suspect CNS Demyelinating Disease...**

- **Nerve or Spinal Cord Involvement**
  - *Multiple episodes of Optic Neuritis*
  - *Long Spinal Cord Lesion(s)*
- **Symptoms Outside of Optic Nerve or Spinal Cord**
  - *Single episode of Optic Neuritis*
  - *Short Spinal Cord Lesion*

## **Testing Available at OSF HealthCare Saint Francis Medical Center Reference Laboratory via Mayo Medical Laboratories...**

- CNS Demyelinating Disease Evaluation, Serum (Mayo ID: CDS1)
- Neuromyelitis Optica (NMO)/Aquaporin-4-IgG FACS Assay, Serum (Mayo ID: NMOFS)
- Myelin Oligodendrocyte Glycoprotein (MOG-IgG1) FACS Assay, Serum (Mayo ID: MOGFS)

**For more information regarding these tests, please contact your Clinical Representative today!!**

Sabrina Mullins ..... 309-624-9144

Raechel Pfahl ..... 309-624-9100

## **Keep in mind...**

“We see our customers as invited guests to a party, and we are the hosts. It’s our job every day to make every important aspect of the customer experience a little bit better.” *-Jeff Bezos, CEO Amazon*