



# Laboratory News

Saint Francis Medical Center

April 2019

## Total IgE Reference Range Update

Effective April 16th, 2019, OSF HealthCare Saint Francis Medical Center Laboratory will be implementing updated reference ranges for Total Immunoglobulin E (IgE) that are age-specific. Currently, patient IgE test results have a comment appended to them based upon the patient's age.

Our Laboratory staff have researched, benchmarked, and validated this study to provide our providers with more precise information so that OSF and our providers can serve patients with the greatest care and love. The age-specific ranges are as follows:

### Results reported in kU/L:

Age Range:	Reference Interval:
0 up to 6 months:	< or = to 13 kU/L
6 months to 1 year:	< or = to 34 kU/L
1 year to 3 years:	< or = to 97 kU/L
3 years to 4 years:	< or = to 199 kU/L
4 years to 7 years:	< or = to 307 kU/L
7 years to 9 years:	< or = to 403 kU/L
9 years to 13 years:	< or = to 696 kU/L
13 years to 16 years:	< or = to 629 kU/L
16 years to 18 years:	< or = to 537 kU/L
18 years and up:	< or = to 214 kU/L

## Atlas Test Changes

The below tests will be active in Atlas on the mentioned dates.

### Effective on 4/11/2019.

- ⇒ OSF System Laboratory is turning on new Mayo test code FCYTG.
- ⇒ OSF System Laboratory is turning on new Mayo test code TBIDS.

### Effective on 4/12/2019.

- ⇒ OSF System Laboratory is updating result components (adding 1 result component) for Mayo test code HIVI.

## Mayo Clinic Laboratories Test Updates

Due to some unforeseen reagent issues, several tests have been made un-orderable at Mayo Clinic Laboratories. The first test is the C5 Functional Complement (Mayo Code: C5FX), test performed on serum, and will not be available until Mayo notifies OSF HealthCare that their reagent issue is resolved. The second test is the Total Complement (Mayo Code: COM) test, performed on serum. Mayo is offering an alternative test option for Total Complement testing; the alternate test requires 1 mL of serum from a red top (preferred) or a gold top tube (acceptable). The specimen needs to be transported and stored frozen (once the specimen has been centrifuged and the serum removed from the cells). The alternate testing will be sent out by Mayo until they notify OSF HealthCare that they have resumed their Complement testing.

**\*If you have questions, please contact OSF HealthCare Laboratories Customer Support team.**

OSF HealthCare will be rolling out some new Mayo tests on Tuesday, April 16th; both are tests that will be performed at Mayo Clinic Laboratories. The first is the Nonalcoholic Steatohepatitis (NASH)-Fibro Test (Mayo Code: NSFIB). The NASH test requires both a gold top serum tube **and** a gray top plasma tube for testing. The second new test is the Clobazam and Metabolite test (Mayo Code: CLOBZ). This test is replacing the Clobazam test that Mayo sent out to MedTox (Code: FCLBZ).

### Effective on 4/11/2019:

- ⇒ Mayo test C5FX is unavailable until further notice due to unforeseen reagent issues.

### Effective on 4/12/2019:

- ⇒ Mayo test COM is unavailable until further notice due to unforeseen reagent issues.

### Effective on 4/16/2019:

- ⇒ New Mayo test NSFIB will be rolled out at OSF HealthCare Laboratories.
- ⇒ New Mayo test CLOBZ will be rolled out at OSF HealthCare Laboratories.
- ⇒ Mayo test FCLBZ was made obsolete in March 2019 and is no longer be orderable.

*"There is no life without change...  
The real tragedy is that we are always  
fearful of change and resist it  
vehemently."*

- Debashish Mridha



POINTS OF LIGHT  
**NATIONAL  
VOLUNTEER  
WEEK**  
APRIL 7-13

## Thank your Laboratory Professionals and Volunteers this Month!

Make sure you thank all of your facility Volunteers and Laboratory Professionals in April!

**Thank you for all that you do!!**



**SUIT UP** for  
**LAB WEEK**

April 21-27, 2019



## Questions??

If you are an OSF Laboratory Outreach client and you have a billing-related question, please contact OSF's Patient Accounts and Access Center billing department at (309) 683-6750. The PAAC billing agents will be happy to assist you with your inquiry.

If you have other questions, please contact OSF's Laboratory Customer Support department at (800) 533-6730 and they will direct you to the appropriate Laboratory Mission Partner.

# OSF HealthCare & Mayo Clinic Laboratories Partnership Spotlight on Lyme Disease

An in-depth focus on the disease itself, diagnostic clues to watch for & testing for the disease...

OSF HEALTHCARE SAINT FRANCIS MEDICAL CENTER SYSTEM LABORATORY & MAYO CLINIC LABORATORIES

By: Raechel Pfahl, MLT (ASCP), BBA, MBA

## Lyme Disease and the Expanding Geographic Range of Ticks...

According to new research, the Midwest is seeing its highest number of Lyme Disease-carrying ticks. Experts speculate that this is due, in part, to the growing population of white-tailed deer in the Midwest; which is the ticks' natural host, and they carry the infected ticks to otherwise inaccessible areas to the ticks as the deer roam. Scientists also speculate that while the deer's ever-growing population is part of the increase in regards to disease-carrying ticks, there are other identified factors relating to the growth of the disease; these include greater awareness of tick-borne diseases, reforestation of parts of the Midwest, and lack of federal funding for tick-borne disease research.

 TickEncounter Resource Center *Ixodes scapularis* (Blacklegged ticks or Deer ticks)



## Lyme Disease Quick Facts...

⇒Transmission requires a minimum of 36 hours (or more) of tick attachment to the victim.

⇒Has an incubation period of 4-10 days.

⇒Has 3 stages:

→**Stage 1—Early (Localized):** Erythema migrans (EM) only occurs in around 70% of cases and may lack characteristic "bullseye" appearance.

**\*\*This stage occurs 7-14 days post-bite.**

→**Stage 2—Early (Disseminated):** Non-specific symptoms start to present in Stage 2 (malaise, fatigue, headache, fever, etc.). 10-15% of undiagnosed patients tend to develop neurological abnormalities and around 5% develop cardiac abnormalities.

**\*\*This stage occurs days to weeks post-EM.**

→**Stage 3—Late Lyme Disease:** Recurrent arthritic symptoms (in the US) tend to develop if undiagnosed after months post onset. In Europe and Asia, persistent neurologic complications and acrodermatitis chronica atrophicans tends to be more prevalent in late-diagnosed Lyme Disease.

⇒Some common misdiagnoses for Lyme Disease include:

→Chronic Fatigue Syndrome, Colitis, Crohn's Disease, Early-onset ALS, Early-onset Alzheimer's Disease, Encephalitis, Fibromyalgia, Irritable Bowel Syndrome, Lupus, Multiple Sclerosis, Osteoarthritis and other forms of Arthritis (i.e.- Juvenile, Psoriatic, Rheumatoid, etc.), Raynaud's Syndrome, Thyroid disorders, and some sleep disorders.

**If you have further questions about Mayo testing or about any of the information in this educational spotlight, please contact your OSF Laboratory Clinical Representative today!**

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

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

## Lyme Disease Overview...

Lyme Disease is the most common of the tick-borne diseases on the North American continent and is primarily caused by the bacterium *Borrelia burgdorferi*. If patients are treated with the appropriate antibiotics in the early stages of the disease, they are likely to have a complete recovery—highlighting the need for a swift and accurate diagnosis.

According to Mayo's research, in recent years, a second species known to cause Lyme Disease was identified in the upper mid-western United States; this species is *Borrelia mayonii*.

### ⇒**Source of Infection:**

Species: *Ixodes* ticks

### ⇒**Geographic Prevalence:**

Lyme Disease is prevalent in Canada and the United States—endemic regions include the Northeast, Mid-Atlantic, North-Central and Pacific coast states. Lyme Disease is also prevalent in certain regions of Europe and Asia.

### ⇒**Symptoms:**

Fever, headache, fatigue, and characteristic "bull's-eye" skin rash (e.g. erythema migrans—this rash presents in 70% or less in Lyme cases).

## Lyme Disease Testing at OSF and Mayo...

With OSF HealthCare's partnership with Mayo Clinic Laboratories, we can provide the patients with the serologic testing recommended (and preferred) by the CDC and IDSA guidelines. The CDC also recommends a two-tiered testing algorithm for patients that have been exposed to the disease.

OSF HealthCare Laboratory performs the initial Lyme Antibody serological screening test on gold top serum on site (LAB1264, LYME). If the screening test at OSF is positive, it is sent to Mayo for confirmation via Western Blot (LAB1964, LYWB) on the same gold top specimen.

If further confirmation is necessary, Mayo offers several other confirmatory Lyme tests including Lyme Disease, Molecular Detection by PCR (LAB2032, PBORR); Lyme CNS Infection IgG w/AI Reflex (LAB4865, LNBAB); and the Reflex, Lyme CNS Infection IgG Antibody Index (LAB4864, LNBAI).

