

TESTING MENU UPDATE

Our testing menu has changed as a result of our new technology as well as other improvements and innovations.

NEW TESTS

Apixaban, Anti-Xa, Plasma

Apixaban (Eliquis®) is an oral factor Xa inhibitor that inhibits thrombin generation critical for clot formation.

eGFR: Race-free approach

Effective 2/1/2022, Clinical lab adopted the eGFR 2021 CKD EPI creatinine equation that estimates kidney function without a race variable as recommended by the National Kidney Foundation and the American Society of Nephrology Task Force.

Fungitell STAT, 1-3 Beta-D-Glucan

Test results should be used as an aid in the diagnosis of invasive fungal infections.

Duffy Null Antigen

Benign Ethnic Neutropenia should be suspected in patients of African and Middle Eastern and West Indian descent.

**Total T3 • Total T4 • Anti-TPO • C3 • C4
IgA • IgG • IgM • Haptoglobin**

COMING IN 2022

The following tests, which are currently sent out for analysis, will be brought in house:

ANALYTE

DHEA-S

SHBG

BHB Beta Hydroxybutyrate

Beta 2 microglobulin

Ceruloplasmin

Anti-CCP

The Lab Insider

DEPARTMENT OF PATHOLOGY AND CLINICAL LABORATORY NEWSLETTER Winter 2022

DIVISION HIGHLIGHTS:

During this past year, we have celebrated many accomplishments in the department of Pathology and Clinical Laboratory. One of the accomplishments is the implementation of the Roche BenchMark ULTRA® system in the division of Pathology. The system is fully automated, provides prompt and precise immunohistochemical results, improves quality, and enhances workflow allowing pathologists and physicians to support patients in making confident treatment decisions. Processing up to 120 slides per day supports and average turn-around-time of two days for more than 95% of cases.

Our pathologists keep our clinical practice current utilizing best practice guidelines and the ability to bring their many years of expertise to help patients and physicians. Our pathologists have fellowship experience and are board certified in Anatomic and Clinical pathology. Dr. Meenakshi

Bhasin is also board certified in Cytopathology. Collectively, our pathologists review cases in the following high-volume areas: breast, gastrointestinal, gynecologic, pulmonary, genitourinary, pancreaticobiliary, non-gyn cytopathology, head and neck pathology, as well as others.



L to R: John Kunesh, MD, Michael Dunlap, MD, Meenakshi Bhasin, MD, Greg Baetge, MD, John Blakey, MD



BLOOD DRIVE CHALLENGE with the Torrance Fire Department

• Collected an additional 300 Red cells • Our collection increased by 25%



Torrance Memorial and the Torrance Fire Department showed acts of love on Valentine's Day by donating blood as the nation continues to face a critical blood shortage. Dr. John Kunesh, Torrance Memorial pathologist and CLIA director gave interviews to the press discussing the importance of life saving blood donations. Mayor of Torrance, Pat Furey, stopped by to donate blood along with Captain, Adam Brown and Chief Brian Hudson from the Torrance Fire Department.

YOU ARE ENCOURAGED TO MAKE A BLOOD DONATION APPOINTMENT AT 310-517-4647.

When our blood supplies became critically low, our Blood Donor Center ramped up their efforts. Employees, donors and the community stepped up to donate.

REVISED CRITICAL RESULTS POLICY

The following is a summary of the critical results changed based on the review of policies from the Mayo Clinic Laboratories, Cedar-Sinai Core Laboratory and the Clinical Laboratory Reference Guide 2021-2022 published by College of American Pathologists.

ADDED:

Lactic Acid greater than 2.0 mmol/L

DELETED:

Amylase
BUN
Creatinine

Lipase
Total Bilirubin for neonates and adults

Hematocrit
D-Dimer

Hepatitis A IgM
Hepatitis B Core IgM
Hepatitis C

CHANGED:

Analyte

Chloride
CO2
Hemoglobin
Platelet Count
Hepatitis B Surface Antigen
HIV 1&2 Ag&AB 4th generation

Old Value

<75 and >126 mmol/L
<12 and >40 mmol/L
<7.0 and >19.9 gm/dL
<37 and >910 cmm
Call all reactive results
Call all positive results

New Value

<75 mmol/L
<12 mmol/L
<6.0 and >22.0 gm/dL
<20 and >1800 cmm
Call results for L&D patients
Call results for L&D patients

MICROBIOLOGY RESPONDS TO COVID-19 DEMANDS

The Department of Pathology's Clinical Microbiology team was once again tasked with confronting the escalating needs for COVID-19 testing especially in the past few months. As case volumes of Omicron increased, the Microbiology laboratory stepped up, adapted and effectively responded to the crisis and increased testing demands. From March 2020 to the present date, we have performed approximately 118,000 COVID tests In-house. Ramping up to perform this volume of tests would not have been possible without the dedication and support of our Microbiology staff, all of whom have gone above and beyond to ensure our patients and clinicians could get COVID tests when needed, and get their results within 1 day, and often within hours. Our staff and pathologists take incredible pride in what we do and how we can improve quality and patient

safety. Dr. Kunesh the lab CLIA Director said "In all, we have learned a lot and are very proud of our response. Laboratory worked as a unified team throughout. We believe our strong response and continued communication has strengthened our relationships with nursing, ID physicians, ED and administration. Everyone is so familiar with each other now after working through all these issues and attending the Command Center meetings that leaders from other departments are coming to us more and more with other issues e.g. Pharmacy requesting ATIII testing, TEG6s testing, and ED and cardiology to discuss transitioning to high sensitivity Troponin I. This is what will make us all better". Microbiology Laboratory is also responsible for culturing, examining, and identifying microorganisms such as bacteria, fungi, acid fast bacilli, etc.

LumiraDX

NEW COVID-19 TESTING TECHNOLOGY

Torrance Memorial rolled out new antigen testing technology, LumiraDx in February. This innovative testing platform uses microfluidic high-sensitivity Immunofluorescence technology, making it highly accurate and superior to other antigen tests currently in market. LumiraDx is extremely accurate, with reporting showing 100% in all but low viral load samples.

This is a great asset as it is small portable unit, making simple workflow and results returned in 12 minutes. This equipment will be used in various areas within the hospital and in several outpatient clinics (TMPN physician offices) and Urgent Care. While its initial use was primarily for symptomatic employees, it is slowly being integrated for patients in the emergency department.



OPEN LAB DRAW STATIONS

TORRANCE

- 3701 Skypark Drive, Suite 220
- 2841 Lomita Blvd, Suite 140 – open until 4pm starting 4/1/2022
- Outpatient Lab Draw Station 3317 Medical Center Drive, 2nd Floor
- McMillen Draw Station, 3333 Skypark Drive, Suite 320 – open until 4pm starting 4/1/2022

PALOS VERDES

- 602 Deep Valley Drive, Suite 300

HERMOSA BEACH

- 705 Pier Avenue, Suite C

MANHATTAN BEACH

- 855 Manhattan Beach Blvd., Suite 206 – open until 4pm starting 4/1/2022

EL SEGUNDO

- DRAW STATION OPENING SPRING 2022

NEW LAB RESTRUCTURING AND AUTOMATION

The Lab reconstruction removed the previous testing platform and installed a new Alinity system. The new platform allows for faster, more accurate results while increasing capacity, lowering costs and is scalable for future growth. The fully-automated track performs all the steps required without a technician needing to move or prepare samples. These steps include:

- Reading the bar code on the samples
- Determining the type of tests needed and routing samples to the appropriate instrument(s)
- Centrifuging the tube and uncapping it
- Portioning the samples
- Separating samples that need to be sent out from those done in-house
- Analyzing the sample's chemistry (37 types of tests available, including blood glucose, electrolytes, hormones, lipids and proteins)
- Interfacing with the electronic medical record (EMR)
- Re-capping the sample
- Delivering the completed sample to refrigerated storage



Torrance Memorial staff involved in the many aspects of making the Lab enhancements possible attended a ceremonial ribbon cutting on November 16, 2021 to celebrate.

The system can prioritize STAT tests and separate samples for repeat testing.

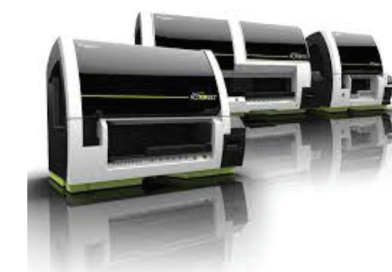


UPCOMING TECHNOLOGY & TESTING OPPORTUNITIES

TECHNOLOGY INVESTMENTS IN INNOVATION – BY JUNE 2022



Virtuo Blood Culture – Coming April 2022



New COAG ACL TOP 550



Blood Bank Ortho Swift

FUTURE TESTING

- Immunology
- Allergy testing
- Infectious Disease Molecular
- Autoimmune Disease
- Serum Proteins
- Calprotectin Fungitell