

SPRING/SUMMER 2013

# Lab Link

THE NEWSLETTER OF MAIN LINE HEALTH LABORATORIES



## Testing 1, 2, 3

### Serum and Urine Protein Electrophoresis with Reflex to Immunofixation

**R**eflex testing for Serum and Urine Protein Electrophoresis is now available. A gold top serum separator tube is required and plasma is not an acceptable choice of specimen (due to interference from fibrinogen).

The new orders are listed in SmartChart as: [Protein Electrophoresis, Serum, Reflex Immunofix](#)  
[Protein Electrophoresis, Urine, Reflex Immunofix](#)

The new orders are listed in Cerner (Riddle Hospital) as:

[Prot Electrophoresis, Ser, Reflex IMMFIX](#)  
[Prot Electrophoresis, UR, Reflex IMMFIX](#)

The main clinical use of serum and urine protein electrophoresis is to search for monoclonal proteins (paraproteins, M-spikes), which are often associated with lymphoproliferative disorders such as multiple myeloma and Waldenstrom's macroglobulinemia. The presence of a presumed monoclonal protein on electrophoresis should be confirmed with serum or urine immunofixation, which confirms that the spike is indeed monoclonal and characterizes the type of monoclonal present (immunoglobulin class and light chain type, intact immunoglobulin vs free light chain). The availability of the reflex test allows the pathologist interpreting serum or urine protein electrophoresis patterns to order the follow up immunofixation test immediately when he identifies or suspects a monoclonal protein, rather than requesting the original ordering physician to provide a supplemental order for immunofixation. ■

## Call the Client Service Center

**T**he Main Line Health Laboratories Client Service Center (CSC) wants you to know that you can call client services for answers to just about anything. Simply call 484.580.4200 and we will assist you with test results, testing requirements, supply and courier transport requests or myriad other questions that are too numerous to list. We strive to serve and support our customers, whatever they need or want. If we don't know the answer to your question immediately, we will find out the answer for you or refer you to someone else who can help.

CSC representatives (CSRs) receive 200 plus calls per day and the average wait time for callers is 30 seconds.

The CSC staff came to us from various backgrounds and stages of life. Their combined years of service to Main Line Health is 186. They draw on a wealth of laboratory experience as they provide superior client service each day.

Clearly, answering phones and satisfying customers is the primary responsibility of all Client Service staff. Following are some of the other functions that are performed daily in the Client Service Center:

- **Sorter:** CSRs rotate daily and work the "sorter." They receive constant transmission of STAT results, searches of INR results and routine or ASAP results which have "fax-to" or "call" requests. These requests are collated, transmitted to the physician and documented all day, every day.

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*Client Service Center team, from left to right: Tami Clark, Sandy Thomas, Toni Martinelli, Fran Fries, Tailia Brown, Peggy Ziegler, Jeanne Annarelli (seated).*

## Stroke Awareness

[www.stroke.org](http://www.stroke.org)

**E**very 40 seconds, someone in the United States has a stroke. A stroke occurs when a blockage stops the flow of blood to the brain or when a blood vessel in or around the brain bursts. Strokes can affect people of all ages and backgrounds and can lead to serious, life-changing complications, including paralysis or weakness on one side of the body; problems with thinking, learning, judgment, and memory; problems understanding or forming speech; and depression.

There are two major types of strokes: ischemic or hemorrhagic stroke.

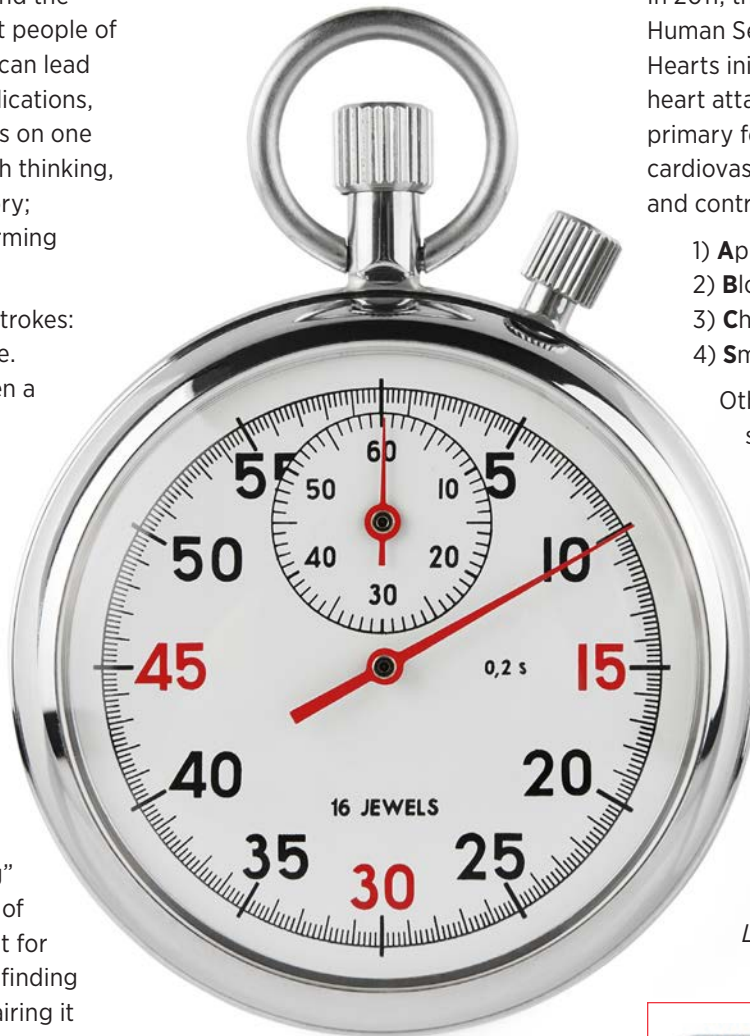
An ischemic stroke occurs when a blood clot or piece of plaque travels into the brain and blocks blood flow. A blood vessel that bursts or leaks into the brain tissue or into the fluid which surrounds the brain is called a hemorrhagic stroke.

Most strokes are ischemic. Treatment is based on the type of stroke and each person's needs. An ischemic stroke can sometimes be treated by a "clot-busting drug" (tPA) given within a few hours of the stroke occurring. Treatment for a hemorrhagic stroke includes finding the cause of bleeding and repairing it if possible. A Transient Ischemic Attack (TIA) or "mini-stroke" is when a person experiences stroke symptoms which last less than 24 hours and resolve completely. TIAs are a warning sign that a stroke may soon occur.

The Main Line Health Stroke Program provides a comprehensive continuum of high-quality stroke care that includes community education, assessment and stroke-prevention efforts, early identification and acute-treatment strategies, rehabilitation, and secondary-stroke prevention efforts. The Joint Commission has certified our four

acute care hospitals—Lankenau Medical Center, and Paoli, Bryn Mawr, and Riddle Hospitals, as Primary Stroke Centers.

At each hospital campus there are program coordinators, physician coordinators and a medical director who are dedicated to stroke. Each year, MLH



treats more than 1,500 patients with strokes or TIAs. We follow a formal "Stroke Alert" system for notifying key departments and clinicians when an acute stroke patient is identified. Certain protocols are followed by the stroke team: after the initial physical exam and neurological evaluation, labs are drawn and labeled as "STROKE" to alert the lab to expedite testing. There is a target turn-around time of less than 45 minutes for laboratory testing from order to result time. The patients proceed to Imaging for further testing.

Main Line Health Laboratories promotes stroke awareness by partnering with Community Health to offer stroke screenings for all employees at each of the acute care hospitals every year during National Laboratory Professionals Week, which occurs the last week of April.

In 2011, the Department of Health and Human Services launched the Million Hearts initiative to prevent a million heart attacks and strokes by 2017. A primary focus is on the ABCs to prevent cardiovascular disease, including strokes, and contribute to overall health.

- 1) **A**ppropriate aspirin therapy
- 2) **B**lood pressure control
- 3) **C**holesterol management
- 4) **S**moking cessation

Other ways to help lower your stroke risk include: drinking only in moderation, exercising daily, eating a low salt, low fat diet, and controlling atrial fibrillation (irregular heart rhythm). If you have any stroke symptoms, seek immediate medical attention. Remember—with a stroke, time lost is brain lost. ■

*Submitted by Elizabeth Cromie, Clinical Laboratory Scientist, Main Line Health Laboratories, Paoli Hospital*



The following tool can help someone recognize stroke symptoms "FAST":

- F** = face: Ask the person to smile. Does one side of the face droop?  
**A** = arms: Ask the person to raise both arms. Does one arm drift down?  
**S** = speech: Ask the person to repeat a simple phrase. Does speech sound slurred/strange?  
**T** = time: If you observe any of these signs, call 9-1-1.



## Client Service Center

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- **Add-on testing:** CSR takes information, calls the facility to check on availability and/or viability of the specimen and follows up with a form faxed to the physician for signature and ICD-9 code. When the form is returned, the information is scanned into our database.
- **Recollections:** CSR receives forms for recollection of a specimen for various reasons (e.g. quantity not sufficient, unlabeled, incorrect specimen type, etc.). CSR investigates the reason (to verify what, where, when and why) and calls the physician and patient, followed by faxing appropriate paperwork to the site where the person will return. All recollections are documented for quality assurance.
- **Requisitions:** Custom requisitions are ordered by CSR with requested changes, additions or deletions.
- **Releases:** Patients sign a release form and request that their test results be mailed or faxed to them upon completion. Approximately 50 releases are processed per day.
- **Returned mail:** Reports are mailed to many out-of-network physicians—some relatively local and others from all over the Delaware Valley and across the country. CSRs regularly receive returned mail from physicians who have moved. These pieces of mail must be investigated, addresses changed and delivered to the proper location.
- **Legal information:** Client Services provides Outpatient Laboratory information to law firms upon request or via subpoena. CSRs work carefully and closely with our Legal Department to provide complete and appropriate information.

### Meet the MLHL CSC staff

**Toni** is a former oncology nurse who came to us from Lankenau Hospital 13 years ago after a back injury sidelined her from nursing.

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## Trauma: The Paoli Laboratory Experience

[www.amtrauma.org](http://www.amtrauma.org)

**O**n October 15th 2010, Paoli Hospital began operating as a Level II trauma center. As Chester County's only trauma center, Paoli is able to respond to the needs of seriously injured patients who no longer need to be transported long distances for care when every minute counts.

To become a Level II trauma center, Paoli had to provide all the resources to care for trauma patients in an immediate and efficient manner. They brought in trauma surgeons from Thomas Jefferson University Hospital to join the team of anesthesiologists, emergency physicians and nurses, and almost every department in the hospital was called upon to offer support.

The laboratory implemented a trauma operations committee to prepare for the increased demand for lab services. Laboratory representatives met with the hospital's trauma implementation team to determine their needs and expectations, and contacted local trauma centers to share their experiences and solutions to challenges that they had encountered. Our laboratory system was fortunate to have several Clinical Laboratory Scientists with prior experience working at a trauma center.

Processes were put into place to identify the trauma specimens on arrival so they could be given priority treatment. Without delay, the specimen processors enter the orders into the computer and deliver them to the Medical Technologist to begin testing. The hematology, chemistry, coagulation and urinalysis results are vitally important to the trauma physicians and directly impact their medical and surgical decisions. Methods were evaluated to determine the fastest way to provide the results.

In the Blood Bank, we increased the inventory of every blood product and added a second courier service to ensure the quickest possible delivery, should our inventory need to be replenished. To decrease the turnaround time for plasma, our Laboratory Medical Director, Blood Bank Medical Director and Blood Bank Manager evaluated the use of pre-thawed plasma versus thawing on demand. We now keep two units of thawed plasma available at all times for immediate use. Pre-tagged O positive and O negative packed cells sit on the emergency release shelf of the Blood Bank refrigerator ready for the fastest possible use. After each use we evaluate the turnaround time to see if we can shave seconds off of our next response. Massive transfusion protocol was established to develop an automatic plan for extreme transfusion needs. This process allows for a constant stream of products in pre-established increments to replace the patient's blood volume—a valuable protocol in the treatment of trauma and non-trauma hemorrhages.

On-call laboratory staff was initiated to supplement the support for each Level I trauma. As soon as the pager sounds, the technologist heads to the lab and works until released. As laboratory employees, we play a vital role in the patient's survival. Our patient support extends beyond the Emergency Room to the Operating Room and the unit where they begin their recovery. We have experienced the stress associated with working in a high performance environment and have shared in the reward of knowing that we made a difference in the life of another person. ■

*Submitted by Paula Garton, Clinical Laboratory Scientist, MLH Laboratories, Paoli Hospital*





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**Peggy** worked at Lankenau for many years as the Lead Phlebotomist and phlebotomy trainer for Patient Care techs. She transferred to CSC six years ago, also due to back issues.

**Sandy**, a phlebotomist and former phlebotomy supervisor at St. Agnes, worked at Lankenau and Bryn Mawr Outpatient Labs, as well as the Outpatient Lab at the Susquehanna Building. She transferred to CSC three years ago when lab services were discontinued at Susquehanna.

**Fran**, a former lead phlebotomist at the Lawrence Park satellite and Assistant Supervisor of Specimen Processing and Phlebotomy at Bryn Mawr Hospital, joined us three years ago. Fran also teaches Phlebotomy at Delaware County Community College.

**Tailia** and **Tami** came to us without any previous healthcare experience but with a strong desire to learn and grow. Both ladies showed great promise and have grown into very talented representatives. Tailia has been with us for ten years and Tami became part of the team seven years ago after a short time as a temp.

**Jeanne** is the Manager. She transitioned to Client Services twelve years ago “for a change” after working many rewarding years as a Medical Technologist in the Stat Lab at Lankenau. As the Lab system has grown and evolved, Jeanne experiences more than her share of change on a daily basis.

### MLHL couriers

MLHL couriers are an integral part of the service team for our clients. **Ruben** is our Lead courier, along with **Angelo**, **Earl** and **Herndon**. Together, they:

- Collate and deliver Clinical and Pathology reports daily to practices that prefer hard copies
- Collate and mail reports to out-of-network physicians
- Hand deliver Pathology slides to all hospitals twice daily
- Take inventory and keep our storeroom stocked
- Fill and deliver supplies to clients
- Strive to fill supply orders within

48 – 72 hours. The MLHL courier phone number is 484.580.4236

- Are also on call for any emergency deliveries that occur during the day

We also have two MLHL couriers, **Anthony** and **Michael**, who work exclusively between Bryn Mawr Hospital and the new Bryn Mawr Medical Arts Building, which houses multiple practices and the Hematology/Oncology Cancer Center. Mike and Anthony are responsible for the timely delivery of blood specimens from the Cancer Center to the Rapid Response Lab throughout the day, to ensure the rapid processing and resulting of specimens.

### What you should know

- The Client Service Center is open from 7:30 am – 8:00 pm, Monday through Friday and from 8:00 am – 2:00 pm on Saturday. After hours calls are transferred to the Core Lab at Lankenau.
- The CSC phone number is 484.580.4200 and the fax number is 610.977.0070
- Results from release forms will be mailed to patients within 5 business days of test completion or faxed within 48 hours of completion
- Non-MLH physicians will receive results via US Mail unless they have specified otherwise
- If we don't know the answer to your question, we will find someone who does

The Client Service staff is knowledgeable, dedicated and committed to providing superior service to our clients and customers. **We look forward to your next call!** ■

*Submitted by Jeanne Annarelli, Client Services Manager, MLH Laboratories*

### Main Line Health Laboratories Contact Information

Client Services 484.580.4200

Main Line Health Laboratories Billing 484.829.6060

Main Line Pathology Associates Billing 610.459.3113

Albert A. Keshgegian, MD, PhD, Medical Director, Main Line Health Laboratories 484.476.3552

Glenn Bull, Administrative Director Rapid Response Labs, Bryn Mawr 484.337.3545

Judyann Gilbert, Administrative Director Core Lab, Lankenau 484.476.2630

Liz Hallinan, Rapid Response Lab Manager, Paoli 484.565.1412

Chris Monzo, Laboratory Information Systems Manager 484.580.4006

Judy Smith, Rapid Response Lab Manager, Riddle 484.227.3221



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[mainlinehealth.org/labs](http://mainlinehealth.org/labs)