NetworkReferenceLab
A Full-Service Comprehensive Testing Lab
11133 Dunn Road • Saint Louis, Missouri 63136

Christian hospital
BJC HealthCare
Care for Life℠

Client Response: 314-653-4455 | Toll-free: 1-800-533-7720 | Fax: 314-653-4156

Lab News:

October 2013, Vol. 2 No. 2

A Panther® Comes to Molecular Diagnostics

The Panther system, a product of Hologic®, was recently installed in the Molecular Diagnostics department in the Laboratory at Christian Hospital. The instrument is being utilized for Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (GC) testing using mRNA nucleic acid amplification testing. The automation of a once manual assay has significantly decreased the turnaround time for those tests.

The Panther will also allow the Molecular Diagnostics department to bring Human Papilloma Virus (HPV) testing in-house later this year, decreasing the turnaround time for this test as well. Correlation testing is now underway.

All of these tests are available from the ThinPrep ® collection vial used for PAP tests, providing all-in-one collection for women's health testing.

We at Christian Hospital Laboratory are proud to continue the improvement of our services to our providers and most of all, the patients in our community.

Prostate Specific Antigen Testing Reminder

It is important for the practitioner to specify which PSA test (screening or diagnostic) they wish to order. If the test being ordered is a yearly PSA screen, please be sure to use the appropriate diagnosis code for this testing. If ordering a diagnostic PSA, please be sure to give diagnosis codes for the symptoms the patient is experiencing which indicate the PSA diagnostic as appropriate testing.

Patient Order Information Requirements

- Patient's full legal name. Please do not use nicknames
- Patient DOB and SSN
- Current mailing address
- Copy of insurance card or patient information sheet
- Diagnosis code(s)
- For minors include name and DOB of guarantor
- Indicate if patient is fasting or non-fasting
- Date and time of specimen collection
- Source of specimen

Has Your Office Moved?
Please Contact **Network**ReferenceLab Customer Service at (800) 533-7720 with your new address or phone number so we can update your information.

October is Breast Cancer Awareness Month

Glucose Reference Range and Alert Value Range Changes

By Gregory S. King, MD
Medical Director of Laboratories
Director, Chemistry, Immunology and Toxicology

Beginning November 1, 2013, the laboratory will change reference ranges and alert value call ranges for glucose testing. The new ranges are as follows:

Reference Range: 70-199 mg/dL

Note: Either a fasting plasma glucose >126 mg/dL or a random glucose >200 mg/dL plus symptoms is diagnostic for diabetes when confirmed on another day. Fasting values > 100 mg/dL but <125mg/dL are diagnostic for impaired fasting glucose.

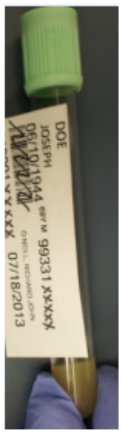
Alert Results: ≤ 50 mg/dL or ≥ 450 mg/dL

Supply Orders:
Use only supplies provided by **Network**ReferenceLab for testing. Media for certain types of testing may vary by laboratory. Please allow 3 business days for delivery of requisitions and supplies. Orders may be faxed to: (314) 653-4404 or (314) 653-4156 or ordered online at https://www.bjc.org/nrl_forms.aspx?id=3091

PLACEMENT OF LABELS ON LAB COLLECTIONS

The lab has identified some issues that cause delay in reporting test results. Several of those issues can be resolved by **placing the hospital identification stickers and/or the lab labels such that the lab tech can still see the amount of blood in the tube.**

Placing the labels on the tubes as indicated below will help minimize these problems.

All lab tubes have a manufacturer label on them.	Place the ID sticker on the tube so that it covers the manufacturer label.	Final product: Lab techs can see the volume of blood in the tube.
		
Minimal fill line for most rapid results from Chemistry.*		

Molecular Testing for Respiratory Viruses

Respiratory Pathogen Multiplex PCR

By Steven M. Johnson, MD
Director, Microbiology and Infectious Molecular DNA

Molecular testing technology for sensitive and rapid detection of pathogenic microorganisms continues to evolve into mainstream testing and virology continues to be an area of early adoption of molecular testing. Traditional viral culture has been a slow process that may require days to weeks of incubation of specimens to adequately detect infection. Molecular methods which can identify the presence of viral nucleic acids in a few hours have become increasingly available at many centers, including Children's Hospital of St. Louis, the virology reference laboratory for Christian Hospital and Network Reference Laboratory.

Some rapid viral molecular tests that have previously been available include detection of Herpes simplex virus and Varicella-Zoster virus, particularly valuable for CSF infections or skin lesions. And nucleic acid testing for blood-borne viruses such as HIV and hepatitis C has long been available for situational testing needs. A recently added test that has replaced respiratory virus culture is the Respiratory Pathogen Multiplex PCR which is a pcr panel for rapid detection of nucleic acid of 20 respiratory tract pathogens using the Biofire Filmarray technology. This test is now orderable in the Horizon Expert Order electronic ordering system. This pcr testing can be performed on sputum, bronchial washings, or BAL specimens as well as throat swabs, nasopharyngeal swabs and aspirates, and tracheal aspirates. Universal Transport Medium is the transport media. This testing has a sensitivity that for most organisms in the panel is as good as and frequently much better than culture. The organisms detected by the Respiratory pathogens Multiplex PCR include influenza A and B viruses, parainfluenza viruses, coronaviruses, RSV, Rhinovirus/Enterovirus , adenovirus, metapneumovirus and the nonviral agents Bordetella pertussis, Mycoplasma pneumoniae, and Chlamydophila pneumoniae. Rhinovirus and Enterovirus are both detected but not distinguished from one another. It is recognized that unlike the other above viruses, adenovirus is detected suboptimally but alternative testing specifically for adenovirus can be ordered if desired.

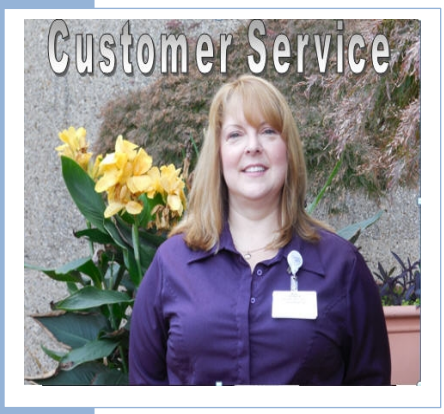
Please note that CMV and Herpes simplex virus are not covered in the Filmarray, but these are seldom significant respiratory tract pathogens, and can be ordered as separate pcr tests if desired.

An alternate test also offered by Children's Hospital that has narrower targets is also available for highly sensitive detection of only influenza and RSV: Flu/ RSV PCR.

While this molecular testing at Children's hospital improves the prospects of identification of a viral type of infection when such detection would affect patient care and has an expected turnaround time from order to reporting of less than 24 hours, it does not exclude the possibility of co-infection by ordinary respiratory bacterial agents of pneumonia.

Christian Hospital/Network Reference Laboratory will continue to perform rapid viral antigen testing for influenza A and B and RSV on nasopharyngeal swabs as in the past.

The switching of viral testing to molecular methods at Children's Hospital will continue to be implemented for other specimen types, likely to be ready for implementation in the next few months.



Network in a Nutshell…

Sonya Standefer, MLT (ASCP)

I am Sonya Standefer, MLT (ASCP). I have been working for Network Reference Laboratory for 14 years as part of the client response team. I started 29 years ago as a phlebotomist at Alton Memorial Hospital. Then very shortly graduated and began my career as a medical laboratory technician. I am one of the voices you might hear when you place a call to, or receive a call from our laboratory. My goal is to provide you with the best customer service. I am here to offer help with any questions you might have. I will try to make every experience that you have with Network a pleasant one. I believe we are all part of a great team that is striving for excellent patient care. I hope you will look to Network as part of your team.

Did You Know?
The Breast Health Center at Northwest Healthcare and Dr. Chris Menendez, the only surgeon in north St. Louis County who specializes solely in breast health, partners with the award-winning pathology lab at Christian Hospital to provide rapid turnaround times on biopsies. Working together, we are providing the women of this community the best care in the region.

American Society of Clinical Oncology and College of American Pathologists Update HER2 Clinical Practice Testing Guidelines

The human epidermal growth factor receptor 2 (HER2) guideline which was originally issued in 2007 was recently updated and a press release went out from American Society of Clinical Oncology (ASCO) and the College of American Pathologists (CAP) on October 7, 2013.

The updates will appear in the *Journal of Clinical Oncology* and *Archives of Pathology & Laboratory Medicine.*

"Our ability to identify cancer subtypes that will lead to more individualized therapeutic decisions and that are shown to improve clinical outcomes is rapidly improving. Consequently, and more than Ever before, society must demand access to high-quality cancer biomarker tests that can demand access to high-quality cancer biomarker tests that can help cancer specialists match the right treatments with the right patients. This guideline update strengthens and clarifies recommendations for HER2 testing based on new evidence." Antonio C. Wolff, MD, FACP, professor of oncology at the Johns Hopkins Kimmel Comprehensive Cancer Center.

The following are a few of the updates mentioned in the ASCO press release:
-Always test HER2 status on all newly diagnosed invasive breast cancers (primary site and/or metastatic site)
-Discuss the role of HER2-targeted therapy if the HER2 test result is positive
-Delay the decision to recommend HER2-targeted therapy if the HER2 test result is equivocal
-Do not administer HER2-targeted therapy if the HER2 test is negative
-Confirm that the testing laboratory conforms to standards for CAP accreditation

For full press releases, see: www.asco.org and www.cap.org

In conjunction with
MAYO CLINIC
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