## •I¦I•HNL Lab Medicine





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### FOR THE MOST UP-TO-DATE TEST INFORMATION, VISIT OUR ONLINE HANDBOOK AT HNL.COM/TESTMENU

The American Medical Association (AMA) Current Procedural Terminology (CPT) codes published by HNL Lab Medicine are guidelines and are intended for informational purposes only. CPT coding is the exclusive responsibility of the billing entity. HNL Lab Medicine strongly recommends confirmation of CPT codes with third-party payors and/ or the AMA. We assume no responsibility for billing errors due to reliance upon CPT codes provided by HNL Lab Medicine. OIG guidelines recommend tests ordered should be reasonable and necessary for the patient, given their clinical condition. Physicians who order medically unnecessary tests for which federal healthcare plan reimbursement is claimed may be subject to penalties. Individual components of profiles or panels may be ordered individually. Physicians who consider reflex testing unnecessary may order an initial test without the reflexed test. Reflex or confirmation tests are performed at an additional charge.

HNL Lab Medicine® 794 Roble Road Allentown, PA 18109 United States

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## **TEST UPDATE**

### Vitamin B7, Biotin

Effective Date	October 2, 2023	
Description	HNL Lab Medicine no longer accepts Gold Top SST Tubes samples for Vitamin B7, Biotin testing. In addition, the use of aliquots in an amber transport tube is no longer necessary.	
Description	Instead, aliquot 1 mL serum or EDTA plasma from Red Top or Lavender Top EDTA tubes. They are the appropriate collection tubes for specimen integrity. Please refer to the Lab Handbook for up-to-date acceptable tube information.	
Test Name	Vitamin B7, Biotin	
Test Code	VITB7	
SPECIMEN REQUIREMENTS		
Minimum Volume	1 mL serum or EDTA plasma	
Container	Red Top Tube OR Lavender Top EDTA Tube	
	200x         0.08           100x         0.08           100x         0.00           100x         0.00	
Collection	Separate serum or plasma from cells.	
	Iransfer 1 mL serum or plasma into plastic aliquot tube and freeze.	

### **Additional Information**

If you have additional questions regarding this test, please contact Technical Support between the hours of 8 a.m. and 4:30 p.m. For general questions, Customer Care is available to assist at any time.

#### **Technical Support/Customer Care**

Call 877-402-4221

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VITR7

# TEST UPDATE

## **CHEMISTRY & IMMUNOASSAY TUBE STANDARDIZATION**

### Dark Green Lithium Heparin Tubes

Effective Date	October 1, 2023	
Description	As part of our on-going standardization for chemistry and immunoassay testing, HNL Lab Medicine no longer accepts dark green lithium heparin tubes. Due to sample integrity concerns with chemistry and immunoassay tubes that do not have separators, we will no longer accept these tubes after October 1st. Serum tubes with separators (gold and red) as well as Plasma tubes with separators (mint green) are the appropriate collection tubes for specimen integrity. Please refer to the Lab Handbook for up to date acceptable tube information.	
	NORE     DOB       NORES     DOB       ADDRESS     SEX M/F       WHOOT     TIME       VOOT     TIME	
	Please Note:	
	<ul> <li>Whole Blood Glucose &amp; Ionized Calcium (whole blood) testing is NOT changing and will remain in the LITH dark green tubes.</li> </ul>	

- Northern tier locations will continue to send venous blood gas (VBGs) & carboxyhemoglobin (CBXY) in LITH dark green tubes. The process for VBGs remains unchanged.
- LVH-Schuylkill should follow their current tube types. Ammonia testing at LVH-Schuylkill ONLY should remain in LITH dark green tubes.
- Always refer to the tube type printed on the lab label to ensure an appropriate collection container. The label will always reflect the most up-to-date tube type information.

#### **Additional Information**

If you have additional questions regarding this test, please contact Technical Support between the hours of 8 a.m. and 4:30 p.m. For general questions, Customer Care is available to assist at any time.

#### **Technical Support/Customer Care**

Call 877-402-4221

## **NEW TEST**

Circulating Tumor Cells	MISC
Effective Date	October 1, 2023
Description	The CELLSEARCH® CTC Test is a simple, actionable blood test that helps oncolo- gists assess the prognosis of patients with metastatic breast, prostate, or colorec- tal cancer.
	blood test for enumerating circulating tumor cells (CTCs).
Test Name	Circulating Tumor Cells
Test Code	MISC
Alternate Name	CELLSEARCH® CTC

### **Additional Information**

If you have additional questions regarding this test, please contact Technical Support between the hours of 8 a.m. and 4:30 p.m. For general questions, Customer Care is available to assist at any time.

### **Technical Support/Customer Care**

Call 877-402-4221

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## **NEW TEST**

## Joint Infection by PCR

Joint Infection by PCR	JIPCR
Effective Date	September 21, 2023
Description	HNL Lab Medicine now offers a new syndromic panel for the diagnosis of joint infections. This panel is a qualitative multiplexed nucleic acid-based test capable of the simultaneous detection and identification of bacteria, yeast, and associated markers of antimicrobial resistance from synovial fluid obtained from individuals suspected to have a joint infection.
Test Name	Joint Infection by PCR
Test Code	JIPCR
Testing Schedule	7 days/week
Report Availability	1-2 days
SPECIMEN REQUIREMENTS	
Minimum Volume	500 μΙ
Container	Sterile container with no preservative or anticoagulants
Collection	At least 1 ml of synovial fluid is recommended so that synovial fluid analysis and culture can also be performed. Culture MUST also be ordered for off panel targets and for performance of antimicrobial susceptibility for all organisms.
Clinical Utility	This panel has been demonstrated to aid in clinical decision making with the rapid detection of fastidious organisms and the ability to identify common resistance markers to begin prompt, appropriate treatment. The panel is not all inclusive for all causes of joint infection. Particularly notable are the absence of coagulase negative Staphylococcus (apart from S. lugdunensis) and Cutibacterium acnes. These organisms were excluded as they can be common contaminants. This panel should be used in conjunction with routine culture methods. A utilization guide to help with the interpretation of the on-panel targets is included. Treatment recommendations are based on local or published antibiograms. Definitive treatment should be determined based on the clinical context and all available information, including susceptibility testing of cultured organisms.

Gram Positive Bacteria	Gram Negative Bacteria	Resistance Genes	Yeast
Anaerococcus prevotti/vaginalis Clostridium perfringens Cutibacterium avidum/granulosum Enterococcus faecalis Enterococcus faecium Finegoldia magna Parvimonas micro Peptoniphilus spp. Peoptostreptococcus anaerobius Staphylococcus aureus Staphylococcus lugdunensis Streptococcus spp. S. agalactiae S. pneumoniae S. pyogenes	Bacteroides fragilis Citrobacter spp. Enterobacter cloacae complex Escherichia coli Haemophilus influenzae Kingella kingae Klebsiella aerogenes Klebsiella pneumoniae group Morganella morganii Neisseria gonorrhoeae Proteus spp. Pseudomonas aeruginosa Salmonella spp. Serratia marcescens	Carbapenemases IMP KPC NDM Oxa-48-like VIM ESBL CTX-M Methicillin Resistance mecA/C and MREJ Vancomycin Resistance vanA/B	Candida spp. C. albicans
Enterococcus faecium Finegoldia magna Parvimonas micro Peptoniphilus spp. Peoptostreptococcus anaerobius Staphylococcus aureus Staphylococcus lugdunensis Streptococcus spp. S. agalactiae S. pneumoniae S. pyogenes	Haemophilus influenzae Kingella kingae Klebsiella aerogenes Klebsiella pneumoniae group Morganella morganii Neisseria gonorrhoeae Proteus spp. Pseudomonas aeruginosa Salmonella spp. Serratia marcescens	Oxa-48-like VIM ESBL CTX-M Methicillin Resistance mecA/C and MREJ Vancomycin Resistance vanA/B	

Target	Description	Treatment		
	Gram Positive Bacteria			
Enterococcus faecalis	Causes difficult to treat infections of native and prosthetic joints.	Ampicillin		
Enterococcus faecium	Causes difficult to treat infections of native and prosthetic joints.	Vancomycin Refer to Resistance Marker Guidance if Detected		
Staphylococcus aureus	The main pathogens in joint infections. In febrile patient blood cultures should be obtained to rule out concomitant bacteremia.	Oxacillin/Cefazolin Refer to Resistance Marker Guidance if Detected		
Staphylococcus lugdunensis	A coagulase negative staphylococcus with virulence factors that lead to infections more like those caused by S. aureus than other coagulase negative species.	Oxacillin/Cefazolin Refer to Resistance Marker Guidance if Detected		
Streptococcus spp.	Second most frequent genus causing joint infections.	Ceftriaxone		
Streptococcus agalactiae Streptococcus pyogenes	B-hemolytic streptococci are uncommon causes of joint infections.	Penicillin		
Streptococcus pneumoniae	More frequently seen as a hematogenous infection. Occurs in patients with underlying joint disease.	Penicillin		
Anaerococcus prevotti/vaginalis				
Finegoldia magna	Anaerobic Gram-positive Cocci seen in soft tissue, bone and joint infections, and septic	Penicillin		
Peptoniphilus spp.	arthritis	Metronidazole		
Peoptostreptococcus anaerobius				
Clostridium perfringens	Anaerobic, spore-forming, Gram positive rod.	Ampicillin/Sulbactam Piperacillin/Tazobactam Metronidazole		
Cutibacterium avidum/granulosum	Gram-positive, aerotolerant anaerobic rods implicated in prosthetic joint infections, such as hip prothesis	Penicillin (+/- Rifampin), Ceftriaxone Vancomycin		
Parvimonas miero	Anaerobic bacteria that can cause septic arthritis	Penicillin		
Parvinionas micro	recent dental procedures or infections.	Ampicillin		
Gram Positive Resistance Marker				
mecA/C	A marker of oxacillin resistance in Staphylococcus spp.	Vancomycin		
mecA/C and MREJ	MREJ is a marker specific for mecA/C found in S. aureus. Detection of mecA/C and MREJ indicates detection of MRSA	Vancomycin		
vanA/B	A marker of vancomycin resistance in Enterococcus spp.	Linezolid Daptomycin		

Gram Negative Bacteria			
Bacteroides fragilis	An obligate anaerobe that is an infrequent cause of native or prosthetic joint infections	Metronidazole Ampicillin/Sulbactam Piperacillin/Tazobactam	
Citrobacter spp. Enterobacter cloacae cmplx Klebsiella aerogenes Morganella morganii Serratia marcescens	Members of the Enterobacterales with intrinsic resistant mechanisms. More frequently seen in prosthetic joint infections.	Cefepime Refer to Resistance Marker Guidance if Detected	
E. coli Klebsiella pneumoniae grp Proteus spp. Salmonella spp.	Member of the Enterobacterales seen in both native and prosthetic joint infections. More frequently occurring in prosthetic joint infections.	Ceftriaxone Refer to Resistance Marker Guidance if Detected	
Haemophilus influenzae	Occurs in patients with concurrent extraarticular infections. Frequently occurred in children <2 prior to vaccination.	Ampicillin/Sulbactam Ceftriaxone	
Kingella kingae	Causative agent of septic arthritis and osteomyelitis in young children	Ampicillin/sulbactam Ceftriaxone	
Neisseria gonorrhoeae	Gram negative diplococcus Causes septic arthritis of native joints following hematogenous spread.	Ceftriaxone Doxycycline may be added if coinfection with C. trachomatis is not ruled out.	
Gram Negative Resistance Markers			
IMP, KPC, NDM, Oxa-48-like, VIM	Markers for carbapenem resistance in Gram negative pathogens. Organisms with carbapenemases can be difficult to treat. Selection of an appropriate antibiotic should be based on susceptibility testing if the isolate is recovered.	Consult Infectious Disease	
CTX-M	An Extended Spectrum Beta-Lactamase (ESBL) in Gram negative pathogens. Other beta-lactamases are found in clinical isolates, and a negative result does not guarantee susceptibility to beta- lactams.	Consult Infectious Disease	
Yeast			
Candida spp.	Infections can occur following direct inoculation or hematogenous spread. Often causes infections in the use Q with receipt the weet for	Caspofungin Voriconazole	
Candida albicans	recovered yeast in joint infections.	Fluconazole	

#### **Additional Information**

If you have additional questions regarding this test, please contact Technical Support between the hours of 8 a.m. and 4:30 p.m. For general questions, Customer Care is available to assist at any time.

#### **Technical Support/Customer Care**

Call 877-402-4221

References:

- Douglas R. Osmon, Elie F. Berbari, Anthony R. Berendt, Daniel Lew, Werner Zimmerli, James M. Steckelberg, Nalini Rao, Arlen Hanssen, Walter R. Wilson, Diagnosis and Management of Prosthetic Joint Infection: Clinical Practice Guidelines by the Infectious Diseases Society of America, Clinical Infectious Diseases, Volume 56, Issue 1, 1 January 2013, Pages e1–e25, https://doi.org/10.1093/cid/cis803
- 2. BioFire® Joint Infection Panel Instruction Booklet. bioMerieux. Salt Lake City, UT.
- 3. CLSI. Performance Standard for Antimicrobial Susceptibility Testing. 33rd ed. CLSI supplement M100. Clinical and Laboratory Standards Institute; 2023.

## PATIENT SERVICE CENTER UPDATES

### **NEW LOCATION - NOW OPEN**

Dickson City Patient Service Center



HNL Lab Medicine has officially opened its brand-new Patient Service Center in Dickson City. This state-of-the-art facility was designed with the community in mind, providing easy access to high-quality laboratory services, including pediatric laboratory services, in a welcoming and patient-focused environment.

#### **Open House Event with Free Glucose Screenings**

To celebrate the opening of the Dickson City Patient Service Center, HNL Lab Medicine invites the community to an open house event on Thursday, October 26, 2023, from 10:00 am to 2:00 pm. During this special event, visitors will have the opportunity to explore the new facility, meet dedicated staff members, and learn about the comprehensive range of laboratory services offered.

As part of HNL Lab Medicine's commitment to community health, free glucose screenings will be provided during the open house. This is an excellent opportunity for individuals to check their blood sugar levels and receive valuable health information from experienced professionals.

#### **Event Details:**

- Date: Thursday, October 26, 2023
- •Time: 10:00 am 2:00 pm
- Location Name: HNL Lab Medicine Dickson City Patient Service Center
- Address: 249 Scranton Carbondale Hwy., Fashion Mall, Dickson City, PA 18047

"We are excited to introduce our new Patient Service Center to the Dickson City community," said Jessica Bargilione, Vice President of Marketing. "Our commitment to providing exceptional care is at the heart of everything we do, and this new center is a testament to that commitment. We look forward to welcoming our neighbors to our open house event and offering free glucose screenings to promote health and wellness in our community."



The Dickson City Patient Service Center is a valuable resource for residents seeking convenient and reliable laboratory services.

## **GENERAL INFORMATION**

Mycoplasma Genitalium ( Mgen ) Case Study

## Unmasking the Hidden Threat: Mycoplasma genitalium

In the ever-evolving world of diagnostics, a proactive approach is crucial to providing exceptional patient care. HNL Lab Medicine proudly presents its convenient Mycoplasma genitalium testing, a comprehensive solution for detecting M. genitalium infections. Through an extensive prevalence study, in partnership with Hologic, we have unveiled insights that highlight the urgent need for M. genitalium testing in local patient populations.



### About M. genitalium

M. genitalium is a sexually transmitted bacterium belonging to the class Mollicutes. This infection is strongly associated with urethritis in men and cervicitis in women. Consequences of M. genitalium infections can include pelvic inflammatory disease (PID), preterm delivery, spontaneous abortion, and infertility.

M. genitalium infections largely go unrecognized, as infected individuals are either asymptomatic or have symptoms similar to those associated with other bacterial infections of the urogenital tract. M. genitalium testing is recommended by the Centers for Disease Control and Prevention for all recurrent episodes of cervicitis and nongonococcal urethritis. Testing should be considered for cases of PID. Current treatment recommendations are focused on chlamydial, gonorrheal or trichomonal infections. However, antimicrobial therapy for these infections is organism-specific, and therapeutic regimens effective against these organisms have reduced efficacy for curing M. genitalium infections. Therefore, effective and comprehensive treatment relies on the detection of the appropriate organism, making M. genitalium testing necessary in certain circumstances.



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### **Unveiling the Prevalance**

Our study involved analyzing a total of 261 patient samples, encompassing a diverse range of cases. These samples were randomly selected from specimens collected for symptomatic and asymptomatic Neisseria gonorrhoeae, Chlamydia trachomatis, and Trichomonas vaginalis testing.

The total positivity rate stood at 8%, which included 61 samples where M. genitalium testing was specifically ordered. Random testing of 200 additional samples, where M. genitalium was not initially flagged by clinicians, revealed a positivity rate of 6%.

This reveals the elusive nature of M. genitalium, making its inclusion an imperative element of symptomatic testing protocols.

### **Data-Driven Insights**

Hard data speaks volumes. Our prevalence study findings emphasize the significance of M. genitalium testing. Our goal is to facilitate informed decision-making and encourage the inclusion of M. genitalium testing in symptomatic STI testing protocols. By sharing these prevalence study results, we aim to highlight the urgent need for proactive testing.

Contact HNL Lab Medicine today to discover how we can enhance your diagnostic capabilities and help you stay one step ahead of health concerns like M. genitalium. Empower your practice, protect your patients, and become a proponent of proactive healthcare. Together, we can make a tangible difference in the lives of those we serve.









By partnering with HNL Lab Medicine, healthcare providers can enhance their diagnostic capabilities and protect their patients from the risks associated with M. genitalium infections.

Questions? Contact our Genomics team at 484.244.2900

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Download Unmasking the Hidden Threat: Mycoplasma genitalium Case Study