OCTOBER, 2018

THE University of Vermont MEDICAL CENTER

Pathology & Laboratory Medicine

Communiqué

IN THIS ISSUE

aspenti HEALTH

Presents

Innovations for Outcomes: Access 2018

When: October 16th, 11:30 – 4:30 PM

Peer Collaboration Session 4:30 – 6:00

Where: The Waterfront Burlington Hilton, 60 Battery Street, Burlington, VT 05401

Conference registration fee is $50 (includes lunch). To Register for this event click Here, and use discount code ASPENTI50 to receive a 50% reduced registration fee. Three hours of CEU's are approved for this conference.

Thought leaders innovating treatment solutions to optimize care for hard to access populations will present and raise discussions around how technology and innovations can assist in the treatment. Recent evidence-based innovations will be highlighted as strategies that effectively aid providers. Discussions with your peers how geographic barriers to treatment can be bypassed via innovation may provide new solutions to static issues.

Speakers:

Plenary Speaker: Dr. John Brooklyn, New approaches to managing and monitoring treatment in opioid use disorders
Lunch Speaker: Ryan Esbjerg, Find your reason
Speaker: Jill Warrington, MD, PhD, How Laboratory innovations can assist public health initiatives and inform practice
Speaker: Mark Pasanen, MD, Project Echo
Keynote Speaker: Dr. Zev Oliver-Schuman, Integrating technology and compassion to enhance addiction treatment: Innovative approaches for improving medication adherence and opioid treatment outcomes

Who Should Attend:

Substance Use & Mental Health Clinicians, License Drug & Alcohol Counselors, Nurse Practitioners, Registered Nurses, and Treatment Center Directors.

TEST UPDATES

Clayton Wilburn, MD
Medical Director
Clinical Chemistry
Phone: 847-9657

HIV Confirmation Assay

On October 24, 2018, the Chemistry laboratory will begin performing the HIV 1 & 2 Antibody Confirmation and Differentiation assay in-house. Currently, all HIV 1 & 2 Antibody Confirmation and Differentiation assays are sent to Mayo Medical Laboratories (MML) for testing. The UVMMC laboratory will be performing the HIV 1 & 2 Antibody Confirmation and Differentiation assay on the same platform utilized by MML, the Bio-Rad Geenius™ HIV 1/2 Confirmation Assay which is an immunochromatographic test for the detection of individual antibodies to HIV Types 1 & 2.

The HIV 1 & 2 Antibody Confirmation and Differentiation assay will still be a reflex order (Order code HIVDI replacing Order code HIVDIF) only for samples that test positive on the HIV 1 & 2 Antibody Screen (Order code: HIVSCN / LAB159 and HIVSS2 / LAB473) or for referring hospital use only. The results will be reported the same as well in EPIC. The only difference you will see is in the comment section of the assay results the performing lab will be listed as UVMMC, not MML.

If you have any questions concerning this change please contact Dr. Clayton Wilburn in the Chemistry Laboratory.

Tick Primer

With tick season upon us, testing for tick-borne illnesses is increasing. Clinical suspicion of tick-borne disease should be based on patient characteristics including illness during tick season with symptoms such as fever, chills, headache, muscle aches, joint pain, neck pain, skin rash, Bell's palsy, heart rhythm disturbances, hypotension, jaundice, sepsis, and possible tick exposure. If these criteria are met there is risk for Lyme disease, anaplasmosis, and babesiosis. Endemic areas for Lyme disease, anaplasmosis, and babesiosis include the Northeastern and Upper Midwestern United States, into Canada.

If the patient presents with a classic erythema migrans "bullseye" rash, no testing is necessary, treatment for Lyme can be initiated while monitoring for symptoms of additional tick-borne illness. If there is no rash and clinical suspicion is high testing may be appropriate and should include a Lyme serology test, with reflex to western blot if serology testing is positive or equivocal. Lyme serology can be insensitive in the first few weeks of infection, so repeat testing might be warranted. If there is concern for Babesia, a blood parasite exam should be ordered to look for the presence of Babesia in the red blood cells. If there is concern for Anaplasma, the best test is a PCR.

The appropriate testing for each disease is:

Lyme disease (Borrelia burgdorferi): Lyme Antibody (Lab test code: LYMAB, EPIC test code: LAB3035)

Babesiosis: Parasite Exam, Blood (Lab test code: BPEX, EPIC test code: LAB2545).

Anaplasma: Ehrlichia/Anaplasma, Molecular Detection, PCR, Blood (Lab test code: EHRL, EPIC test code: LAB3614).

Send out orders to Mayo are discouraged for the following tests: Lyme Disease, Molecular Detection, PCR; Lyme Disease, Molecular Detection, PCR, Blood; Babesia microti IgG Antibodies, Serum; Babesia species, Molecular Detection, PCR, Blood (except for kidney donors); Tick-Borne Panel, Molecular Detection, PCR, Blood; or Tick-Borne Disease Antibodies Panel, Serum. Please let us know if you have any questions.

GET TEST RESULTS ONLINE!

MyHealth Online	Did you know that your patients can get their UVM Medical Center test results online by signing up for a MyHealth Online account? To sign up visit: UVMHealth.org/MedCenterMyHealth

SYRINGE DISPOSAL

The University of Vermont Medical Center does not accept sharps for disposal from patients!

Chittenden Solid Waste District (CSWD) will accept needles that are packaged according to the instructions outlined in their pamphlet "GET THE POINT: Be safe with syringes and other sharps". CSWD also has bright orange stickers to attach to a syringe container to warn handlers to be careful. These items are available at any CSWD location. You can also order them so that they are available for patients at your office 872-8111 or visit www.cswd.net

HCG Name Change

In an effort to alleviate confusion in the ordering of serum Beta-hCG, the UVMMC laboratory is clarifying the order names. Do note that any serum Beta-hCG performed at UVMMC is a quantitative method. The naming changes are as follows:

HCG for Pregnancy will become **Quant Beta HCG, Pregnancy**. The Lab order code will still be HCGS, Epic Code: LAB143 and the reference range will still be specific to pregnancy determination.

HCG Quantitative will become **Quant Beta HCG, Non Pregnancy**. The Lab order code will still be HCGTUM, Epic Code: LAB3190 with no other changes.

This name change went into effect on 8/29/2018. If you have any questions or comments, please contact the medical director of clinical chemistry, Dr. Clayton Wilburn.

TB by Quantiferon Test Kit Change

TB by QuantiFERON Gold Plus Test Kit Changes – 9/28/2018

As per the July, 2018 communication, the manufacturer of our current interferon gamma release assay (IGRA) QuantiFERON Gold for the detection of latent tuberculosis (TB) is discontinuing the current 3-tube IGRA. It is being replaced with the manufacturer's new 4-tube IGRA QuantiFERON Gold Plus.

The changes to the ordering of the test and its results are as follows:

TB by QuantiFERON (Order code QFTBA) is being replaced by QuantiFERON TB Gold Plus (Order code QFTB4) (Follow link for test information).

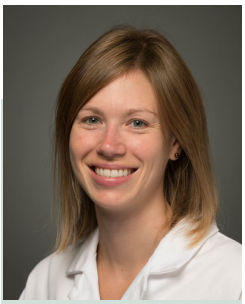
The new results include:

QFTBR – TB Interpretation (reference range: Negative)

QFTTB1 – TB1 Ag minus Nil

QFTTB2 – TB2 Ag minus Nil

the new 4-tube collection kit Is available through Laboratory Customer Service 847-5121 or 800-991-2799. If you have any questions about this upcoming change, please contact Dr. Clayton Wilburn in the chemistry laboratory.



C. Wojewoda, MD
Medical Director
Microbiology
Phone: 847-5140

Legionella Culture Inactivated

Due to low test volumes and low positive yield, Legionella Culture was discontinued on 8/29/2018.

Legionella Urine Antigen test has a 95% specificity and sensitivity and is available in the Microbiology Laboratory at UVMMC. If a culture is warranted, it can be sent to Mayo Medical laboratories.

Virology Testing Changes

On October 24, 2018 the Microbiology Laboratory will update the PCR platforms for detection of viruses in patient samples. This will require changes to how viral testing is ordered.

The viral PCR testing platforms available will be:

- Hologic Panther Fusion used for Influenza A, B, and RSV PCR testing for all inpatients and outpatient nasopharyngeal swab and respiratory fluid samples. In addition, it will be used for an expanded respiratory viral panel PCR which includes parainfluenza types 1- 4, adenovirus, human metapneumovirus, and rhinovirus for both nasopharyngeal swabs and respiratory fluids that should only be used for patients that are immunocompromised or extremely ill inpatients.
- Cepheid GeneXpert Xpress Flu/RSV assay will be available for performing influenza A, B, and RSV on nasopharyngeal swabs from the Emergency Department and Urgent Care at the Fanny Allen Campus.
- Cepheid GeneXpert will be used for enterovirus PCR testing from CSF specimens. Luminex Aries will be the platform used for both herpes simplex virus and varicella zoster virus PCR detection for mucocutaneous and CSF specimens.

CMV qualitative samples from various anatomic specimens will now be sent to Mayo Medical Laboratories and will no longer be performed at UVMMC laboratory. Influenza and RSV results will be available in Epic and no longer be called to inpatient and emergency department providers.

Virology Tests to be inactivated: 10/24/18

Lab Test Code	Epic Test Code	Test Name
CSFPCR	LAB3276	CSF Virus Detection
CUTVD	LAB3275	Mucocutaneous Virus Detection
RESVD	LAB3274	Resp Virus Detection
UCMVP	LAB3278	Urine CMV Virus Detection
EYEVD	LAB3277	Ocular Virus Detection

NEW VIROLOGY TESTS AVAILABLE OCTOBER 24, 2018

Test Name	Lab Code	Instrument	Specimen Stability Info	Sample Information	CPT Code(s)	Test Schedule / Analytic Time / Test Priority
Inpatient/ Outpatient Influenza, RSV PCR*	IOFLUR	Hologic Panther Fusion	Refrigerate, stable 4 days	Collect a nasopharyngeal specimen using a Viral Collection Kit (M6), refrigerate. Respiratory fluids should be collected in a sterile container, 1 ml minimum volume, refrigerate.	Influenza A/B/ RSV: 87631 x1	Daily/One day/ Not available STAT
ED, Urgent Care Influenza, RSV PCR	EDFLUR	Cepheid GeneXpert	Refrigerate, stable 7 days	Collect a nasopharyngeal specimen using a Viral Collection Kit (M6), refrigerate.	Influenza A/B/ RSV 87631 x1	Daily/One day/ Available STAT
Expanded Respiratory Viral Panel, PCR	RESEXP	Hologic Panther Fusion	Refrigerate, stable 4 days	Collect a nasopharyngeal specimen using a Viral Collection Kit (M6), refrigerate. Respiratory fluids should be collected in a sterile container, 1 ml minimum volume, refrigerate.	Respiratory Virus: 87632 x1	Daily/One day/ Not available STAT
Enterovirus PCR, CSF	ENVGE	Cepheid GeneXpert	Refrigerate, stable 3 days or frozen, 7 days	1 ml CSF submitted in sterile container, refrigerate	Enterovirus: 87498 X1	Daily/One day/ Available STAT
Herpes Simplex Virus, PCR	HSVLUM	Luminex Aries	CSF Samples: Refrigerate. stable 7 days Mucocutaneous sites: refrigerate, stable 15 days	Collect a swab using a Viral Collection Kit (M6), refrigerate. CSF should be collected in a sterile container, 1 ml minimum volume, refrigerate.	Herpes Simplex Virus 1 & 2: 87529 x1, 87529.59 x1	Daily for CSF specimens, Monday-Friday for Mucocutaneous specimens/ Same Day/ Not available STAT
Varicella zoster Virus, PCR	VZVLUM	Luminex Aries	Refrigerate stable: 7 days Frozen, stable 7 days	Collect a swab specimen using a Viral Collection Kit (M6), refrigerate. CSF should be collected in a sterile container, 1 ml minimum volume, refrigerate.	Varicella zoster Virus : 87798 x1	CSF Specimens Daily Mucocutaneous specimens. Monday-Friday Same Day/ Not available STAT
CMV, Molecular Detection, PCR	NBCMV	MML	MML	Varies, refer to Mayo Medical Laboratories (MML) specimen requirements for details	87496 x1 Testing performed at Mayo Medical Laboratory	Sent to MML Sunday – Friday, TAT varies, Not available STAT

If Testing is clinically indicated that is not listed here, please call customer service (847-5121 or 1-800-991-2799) to see if send out testing is available.

Continued on page 6

***Flu Testing on Outpatients:** Per CDC guidance, testing for influenza does not need to be performed on all patients with sign and symptoms of influenza to make antiviral treatment decisions. A clinical diagnosis can be made for outpatients with suspected influenza, especially during times of peak activity in the community (usually late December – March in the Northeast). If treatment is clinically indicated, antiviral treatment should **NOT** be withheld from a patient with suspected influenza waiting test results as antiviral treatment is most efficacious if given as soon as possible. Patients who should be treated empirically in an outpatient setting include patient >65 years or <2 years of age, pregnant women, people with comorbidities that place them at high risk (chronic lung disease, heart disease, renal disease, metabolic disease, hematologic disease, and neurologic disease), immunosuppression, morbid obesity, American Indians or Alaskan Natives, and residents of chronic care facilities. Molecular testing is the most appropriate for hospitalized patients for isolation and treatment purposes. Some rapid antigen tests have been reclassified by the FDA as of February 2017, so current testing may not meet regulations. Based on CDC guidelines the Pathology and Laboratory Medicine group does not support point of care influenza testing.

REFERENCE

https://www.cdc.gov/flu/professionals/diagnosis/consider-influenza-testing.htm

HPV Genotyping

Beginning on December 19, 2018, the Microbiology Laboratory will perform HPV genotyping on Endocervical ThinPrep specimens using the Hologic Aptima HPV Genotyping assay. We will no longer send out endocervical/cervical HPV genotyping testing to Mayo Medical Laboratories. Vaginal ThinPrep specimen requests for HPV/genotyping will continue to be sent to Mayo Medical Laboratories.

The Aptima HPV 16, 18/45 genotype assay is a nucleic acid amplification test for the qualitative detection of E6/E7 viral messenger RNA (mRNA) of human papillomavirus (HPV) types 16, 18, and 45 in cervical specimens from women with Aptima HPV assay positive results. The Aptima HPV 16, 18/45 genotype assay can differentiate HPV 16 from HPV 18 and/or HPV 45, but does not differentiate between HPV 18 and HPV 45.

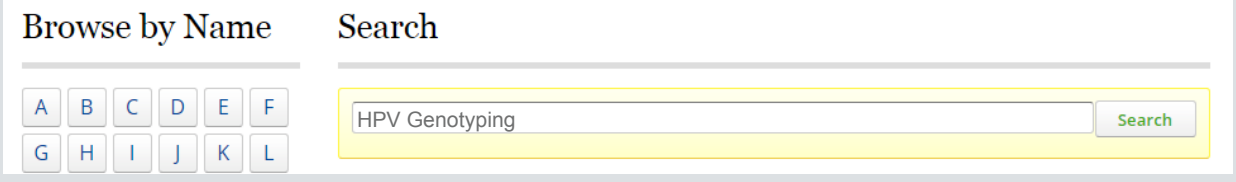
Based on recommendations from the American Society for Colposcopy and Cervical Pathology, the use of HPV genotype-specific testing for HPV16 or HPV16/18 is recommended only for the management of HPV-positive, cytology-negative women (≥ 30 year old). No other clinical indications have sufficient evidence to recommend HPV genotype-specific testing for HPV16 or HPV16/18. Therefore, only HPV positive samples that are cytology negative from women ≥ 30 years of age will be tested if requested[(1)].

Reference

1. Debbie Saslow, Diane Solomon, Herschel W. Lawson, Maureen Killackey, Shalini L. Kulasingam, Joanna Cain, Francisco A. R. Garcia, Ann T. Moriarty, Alan G. Waxman, David C. Wilbur, Nicolas Wentzensen, Levi S. Downs, Mark Spitzer, Anna-Barbara Moscicki, Eduardo L. Franco, Mark H. Stoler, Mark Schiffman, Philip E. Castle, Evan R. Myers; American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology Screening Guidelines for the Prevention and Early Detection of Cervical Cancer, *American Journal of Clinical Pathology*, Volume 137, Issue 4, 1 April 2012, Pages 516–542, https://doi.org/10.1309/AJCPTGD94EVRSJCG

TEST CATALOG

To view a complete listing of tests available at the University of Vermont Medical Center, please visit UVMHealth.org/MedCenterTests



Sarah Harm MD
Medical Director
Transfusion Medicine
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Blood Bank Change for First Time RBC Transfusions

In order to provide the safest blood product transfusions for our patients and to comply with updated AABB Standards for Blood Banks and Transfusion Services, patients receiving blood transfusions for the first time at UVM Medical Center Blood Bank will require two ABO typings from separately drawn specimens. The second determination of ABO may come from a historic record on file in the Blood Bank or may come from a second, current specimen. Until the ABO group has been determined twice, only group O uncrossmatched RBC units will be issued. This policy does not apply to neonates (under the age of 4 months).

Having a prior ABO type in our records to compare against a current ABO type before giving blood transfusions significantly reduces the risk of giving ABO incompatible RBCs to a patient due to sample labeling or patient identification errors. Many of our patients already have been ABO/Rh typed previously and they will not require a second sample to be drawn. The Blood Bank will notify nurses or ordering providers if a second sample is needed when reviewing crossmatch (prepare) orders for RBC unit(s). If a second sample is needed, they will ask that an order for an "ABO/RH" specimen be placed. There is no change to the existing policy concerning a current Type & Screen specimen: a current (in-date) Type & Screen specimen is always required to receive crossmatched RBC units.

For new patients, until the ABO group has been determined twice by the Blood Bank, only group O uncrossmatched RBC units may be issued. A second ABO/Rh determination, once the specimen is received in the Blood Bank, can be performed within 10 minutes. Once completed, group specific RBC units can be crossmatched for the patient (e.g. group A RBC unit to a blood group A patient).

If RBC units need to be urgently transfused before all testing is complete, our current policy and procedure will be followed:

1. Call the Blood Bank and order "Emergency Release Uncrossmatched" products
2. The Emergency Release Uncrossmatched Order form needs to be completed over the phone with the Blood Bank technologist at the time the order for blood is being placed
3. The completed form will be sent to Health Information Management
4. Then, scanned into the patient's electronic medical record and sent to the ordering provider for signature

WHO IS AUTHORIZED TO COLLECT A BLOOD BANK SPECIMEN?

Anyone authorized to collect blood samples can now collect laboratory specimens for Blood Bank.

LABELING REQUIREMENTS FOR A BLOOD BANK SPECIMEN

- Patient's legal name
- Patient's UVMMC medical record number (MRN) and/or date of birth (DOB)*
- Date and time of collection
- Signature/initials of collector or tech code (if available)

*Three unique patient identifiers, full name and MRN and DOB, are preferred.

If you have specific questions about this policy change, please call the Blood Bank (847-3569).

WHAT KIND OF COLLECTION TUBE (PREFERRED) SHOULD BE USED FOR A BLOOD BANK SPECIMEN?

Adult: 6mL pink top, EDTA tube

Pediatric: 5mL lavender (purple), EDTA tube

Cord Blood: 10mL plain red top, serum tube (no gel)

Neonates: Two (2) capillary tubes, red or lavender

WHERE DO I SEND THE BLOOD BANK SPECIMEN?

The Blood Bank is located in East Pavilion Level 1 (EP-1). Blood Bank specimens can be delivered directly to the Blood Bank by hand, by pneumatic tube (station #31), or by courier.

HOW LONG DOES IT TAKE TO GET RESULTS ONCE BLOOD BANK RECEIVES THE SPECIMEN?

STAT Type & Screen specimen: 1 hour

STAT ABO/RH specimen: 10 minutes

THE University of Vermont MEDICAL CENTER

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POSTAGE HERE

PATHOLOGY & LABORATORY MEDICINE COMMUNIQUÉ

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PHONE LABORATORY CUSTOMER SERVICE

(802) 847-5121 | (800) 991-2799

FAX LABORATORY CUSTOMER SERVICE

(802) 847-5905

WEBSITE

UVMHealth.org/MedCenterLabs

Thanksgiving Holiday Laboratory Services Hours

Location	Thanksgiving Day November 22, 2018	Friday November 23, 2018
Main Campus-ACC, Burlington	Closed	7:00 am - 5:00 pm
Fanny Allen MOB, Colchester	Closed	6:30 - 5:00 pm
One South Prospect, Burlington	Closed	7:00 am - 4:00 pm
Blair Park, Williston	Closed	7:00 am - 4:00 pm

Regularly scheduled hours will apply to any days not specifically addressed above, please call laboratory customer service 847-5121 or 1-800-991-2799 for assistance.

THE
University of Vermont
MEDICAL CENTER

October 8, 2018

Dear colleagues,

Re: Distribution of paper lab results via US mail.

On October 12, 2018, UVMMC Pathology and Laboratory Medicine will discontinue US mail distribution of paper results for "Discharge Summary Laboratory Reports". We made this decision based on feedback received by many of our providers. We will also discontinue US mail distribution of "Additional Copy to" Laboratory Reports for providers with hospital privileges. We understand that improved accessibility to patients results generated during an inpatient stay makes paper reports unnecessary.

We will continue to distribute "Additional Copy to" reports via US mail to providers who are not listed in our dictionary of local providers.

Please understand that the laboratory is available to help you:

1. View your patients' laboratory results electronically via the PrismLink computer application, and /or
2. Determine if you are listed as a local provider in our dictionary of local providers.

Please contact a Laboratory Outreach Specialist at 847-5121 or 1-800-991-2799 for assistance between the hours of 6:00 to 21:00.

Thank you for allowing us to serve you and your patients.

Sincerely,

Andrew Goodwin, MD
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