

LAB ALERT

Date: September 13th, 2016

New Test: Meningitis/Encephalitis Panel (MEEP) for Cerebrospinal Fluid

Dear Regional Pathology Services Clients,


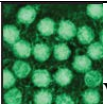
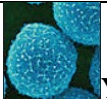
We are very excited to announce that we are now offering a new FDA-approved test called the Meningitis/Encephalitis Pathogen Panel (MEEP). This test uses a nested multiplex PCR-approach to amplify DNA targets directly from cerebrospinal fluid (CSF) in patients with signs and symptoms of meningitis or encephalitis. **It is strongly recommended that this test be ordered only if the CSF WBC is >10 nucleated cells/ μ L. Exceptions are patients that are immunosuppressed or < 2 years of age.** This panel will replace traditional CSF viral culture.

1 Test. 14 Targets. Same Day Results.

The MEEP is able to detect fourteen analytes: 7 viruses, 6 bacteria, and 1 yeast (Table 1). MEEP results will be reported as “Detected” or “Not detected.” Please note that the MEEP is not a replacement for CSF bacterial and/or fungal culture but should be ordered in conjunction with bacterial culture and/or the cryptococcal antigen test.

If a CSF culture is not ordered and a bacteria or yeast is detected, a CSF culture will be automatically ordered for subsequent isolation and susceptibility testing. It is possible that organisms may not be isolated due to the increased sensitivity of the MEEP compared to culture. The MEEP does not differentiate between active and latent herpes virus infections. In addition, only encapsulated strains of *Neisseria meningitidis* and *Escherichia coli* strains that possess the K1 capsular antigen can be detected by this panel. MEEP results should be interpreted in the context of host factors and other clinical information.

Table 1: Analytes detected using the Meningitis/Encephalitis Pathogen Panel.

 Bacteria	 Viruses	 Yeast
Gram-negative <i>Escherichia coli</i> K1 <i>Haemophilus influenzae</i> <i>Neisseria meningitidis</i> Gram-positive <i>Listeria monocytogenes</i> <i>Streptococcus agalactiae</i> (Group B Strep) <i>Streptococcus pneumoniae</i>	Cytomegalovirus Enterovirus Herpes simplex virus 1 Herpes simplex virus 2 Human herpesvirus 6 Human parechovirus Varicella zoster virus (VZV)	<i>Cryptococcus neoformans/gattii</i>

Specimen Requirements: CSF specimen collected by lumbar puncture. Minimum sample volume required is 0.4 mL. DO NOT CENTRIFUGE.

Storage/Transport: Stable at room temperature for <24 hours; refrigerated for up to 7 days.

Unacceptable Criteria: CSF specimens collected from indwelling CNS medical devices (e.g. shunts), CSF that has been centrifuged and frozen specimens.

Turn-around Time: Performed daily, reported on the same shift as received.

Interfaced Clients: Below is the information for the interface build

Panel Order Code: MEEP

Result Name	RESULT CODE	RESULT	CPT	LOINC
Escherichia coli	MPECOL	E coli	87798	31824-6
Haemophilus influenzae	MPHINF	H influenzae	87798	61366-1
Listeria monocytogenes	MPLMON	L monocytogenes	87798	61369-5
Neisseria meningitidis	MPNMEN	N meningitidis	87798	49671-1
Streptococcus agalactiae (Group B Strep)	MPSAGA	S agalactiae	87653	48683-7
Streptococcus pneumoniae	MPSPNE	S pneumoniae	87798	49672-9
Cytomegalovirus (CMV)	MPCMV	CMV Cytomegalovirus	87496	30326-3
Enterovirus	MPENT	Enterovirus	87498	29558-4
Herpes simplex virus 1(HSV-1)	MPHSV1	HSV 1	87529	16952-4
Herpes simplex virus 2(HSV-2)	MPHSV2	HSV 2	87529	16960-7
Human herpesvirus 6 (HHV-6)	MPHHV6	Human herpesvirus 6	87532	33942-4
Human parechovirus	MPHPAR	Human parechovirus	87798	51669-0
Varicella-zoster virus (VZV)	MPVZV	VZV	87798	21598-8
Cryptococcus neoformans/gattii	MPCRYP	C neoformans/gattii	87798	na
Commet: MPCMT	MPCOMM	Comment		

Further information regarding interpretation and directing antimicrobial therapy based on the MEEP will soon be available on the Nebraska Medicine Antimicrobial Stewardship website at <http://www.nebraskamed.com/careers/education-programs/asp/clinical-microbiology>.

For questions or pricing please contact client services at 402-559-6420 or toll free at 1-800-334-0459 and ask to speak with one of our client coordinators.