

**Xpert**<sup>®</sup>

The only rapid molecular *in vitro* diagnostic Enteroviral meningitis test.



"Knowing whether the meningitis is viral or bacterial is imperative to early effective treatment. Because Xpert<sup>®</sup> EV is significantly faster than existing methods for diagnosing meningitis, it could minimize delays in treating patients. Swift recognition of the cause and appropriate treatment is critical to patient recovery."

> Adopted from FDA News, P07-46, March 16, 2007

## The Need

Enteroviruse (EV) meningitis is very common among young children, but very difficult to differentiate from bacterial meningitis due to similar clinical presentations. As a result, patients are often admitted and treated empirically.

- EV meningitis is estimated to cause 28,000 to 43,000 cases annually in Europe
- EV meningitis is usually self-limiting and does not require antibiotic treatment
- EV meningitis and bacterial meningitis are very difficult to differentiate by symptoms alone
- Suspected meningitis patients are often admitted and treated empirically
- Empirical treatment of suspected meningitis patients are costly for hospitals

# The Solution

Rapid and accurate detection of enterovirus from the Central Spinal Fluid (CSF) specimen enables establishment of an effective patient management pathway.

- Rapid and accurate EV result in about 2.5 hours is clinically actionable
- Physicians can confidently identify patients with EV meninigitis and manage them appropriately instead of empirical treatment
- · Timely answers provide assurance to patients and their families to reduce anxiety

# Sensitive and Specific

Provide the best patient management decisions.

### TABLE 1A: PROSPECTIVE CLINICAL SAMPLES EVALUATED AGAINST "CLINICAL DIAGNOSIS"



SENSITIVITY: 96.3%, 95%; CI 81.0-99.9% SPECIFICITY: 97.2%, 95%; CI 91.9-99.4%

## Comprehensive

Complete coverage of significant serotypes.

## TABLE 3: ENTEROVIRUS SEROTYPES DETECTED BY THE XPERT® EV ASSAY

Serotypes
Coxsackie A2-A8, A10, A12, A14, A16, EV71
Coxsackie A9, B1-B6, Есно 1-7, 9, 11-21, 24-27, 29-33, EV69
Coxsackie A11, A13, A15, A17-22, A24
EV68, EV70
Poliovirus 1-3

CAUTION: The results obtained with the Xpert EV assay should be used only as an adjunct to clinical observation and other information available to the physician. Positive Xpert EV results do not rule out other causes of meningitis, including bacteria, mycobacteria, other viruses (e.g. herpes family viruses, arboviruses, mumps virus, etc.) and fungi.

\*Coxsackie A1 not available for testing



## TABLE 1B: BANKED PROSPECTIVELY COLLECTED CLINICAL SAMPLES EVALUATED AGAINST "CLINICAL DIAGNOSIS"

		Clinical Diagnosis	
		+	-
GeneXpert®	+	23	3
	-	0	96
	Totals	23	99

SENSITIVITY: 100%, 95%; CI 85.2-100% SPECIFICITY: 97%, 95%; CI 91.4-99.4%

## Simplicity Xpert<sup>®</sup> EV

- Fully automated process reduces handling time to just minutes
- Random access for flexibility and workflow optimization
- Rapid results to improve patient management
- Fully integrated reagent and instrument system for accuracy and reproducibility

### WORKFLOW:

## 6 Easy Steps Total hands-on time: <5 Minutes



### ORDERING INFORMATION

Xpert® EV (10 cartridges with reagents)	Catalog No.	GXFV-100N-10
Apert LV (10 cartilidges with leagents)	Catalog NO.	0/1 -10014-10

### References:

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- HA. Viral meningitis. Semin Neurol. 2000; 20(3): 277-92.
  Romero JR, Rotbart HA. Enteroviruses. In: Murray PR, Baron EJ, eds. Manual of Clinical Microbiology. 8th edition. Washington, DC: American Society for Microbiology, 2003: 1427-1438.
  Robinson CC, Willis M, Meagher A, et al. Impact of rapid polymerase chain reaction results on management of pediatric patients with enteroviral meningitis. Pediatric Infectious Disease Journal. 2002; 21: 283-6.
- 5. Cost Savings Through Rapid Diagnosis of Enteroviral Menengitis. Pediatric Infectious Disease Journal. 2004

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The purchase of this product includes a limited, non-transferable license under U.S. Patents Nos. 6,787,338; 6,503,720 and 6,303,305, and claims 9, 10, 11, 56, 76, 80 and 107 of U.S. Patent No. 6,174,670, and corresponding claims in patents and patent applications outside the United States, owned by the University of Utah Research Foundation and licensed to Idaho Technology, Inc, No. 6, 174,070, and corresponding claims in patents and patent applications outside the Onited States, owhere by the University of Otan Research Foundation and increase to reach recent objects of acad or estimated in the states of the onited states of the onite



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