



## Respiratory Infection

Developed by a unique laboratory providing accurate and actionable results in one day for infectious diseases and antibiotic resistance genes utilizing innovative molecular technologies, including proprietary TEM-PCR.™



**DxRx** *Linking Diagnostics to Therapeutics*™



### Eurofins Diatherix Distinctions:

- Delivers one-day results
- Identifies bacteria regardless of recent antibiotic use
- Offers simplicity of single-sample collection
- Identifies difficult-to-culture pathogens
- Yields a high level of sensitivity and specificity

### Eurofins Diatherix Benefits:

TEM-PCR technology is a proprietary, multiplex amplification platform designed to overcome the challenges that exist with conventional laboratory methods.

Improved speed and accuracy of laboratory results lead to:

- Reduced antibiotic utilization
- Improved patient outcomes
- Cost reduction and avoidance
- Increased patient satisfaction
- Greater clinical value

### Respiratory Infection Pathogens:

Adenovirus	Respiratory Syncytial Virus (A&B)	<i>Mycoplasma pneumoniae</i>
Coronavirus (229E, HKU1, NL63, OC43) <sup>3</sup>	<i>Acinetobacter baumannii</i>	<i>Neisseria meningitidis</i>
Human Bocavirus	<i>Bordetella pertussis</i>	<i>Pseudomonas aeruginosa</i>
Human Metapneumovirus	<i>Chlamydomphila pneumoniae</i>	<i>Staphylococcus aureus</i>
Human Rhinovirus/Enterovirus Influenza A A(H1N1)pdm09	<i>Haemophilus influenzae</i>	MRSA <sup>1</sup>
Influenza B	<i>Haemophilus influenzae</i> (type B)	PVL <sup>2</sup> gene
Parainfluenza Virus (1, 2, 3, 4) <sup>3</sup>	<i>Klebsiella</i> spp.	<i>Streptococcus pneumoniae</i>
	<i>Legionella pneumophila</i>	<i>Streptococcus pyogenes</i> (Group A)
	<i>Moraxella catarrhalis</i>	

<sup>1</sup> Methicillin-resistant *Staphylococcus aureus*    <sup>2</sup> Pantone-Valentine leukocidin    <sup>3</sup> Types reported separately

*This test is primarily designed to provide diagnostic information on patients with lower respiratory tract symptoms.*

**Acceptable Specimen Sources:**  
bronchial, bronchial washing, bronchoalveolar lavage, ear, eye, nares, nasal, nasopharyngeal, oral, oropharyngeal, pharyngeal, pleural, sputum, throat



# Accurate diagnostic results lead to better treatment for patients

DETECTION	# Specimens	% Total Specimens*
Only 1 bacterial detection, no viral detections	56,036	16.52%
Only 1 viral detection, no bacterial detections	42,818	12.63%
At least 2 bacterial co-detections; no viral detections	45,854	13.52%
At least 2 viral co-detections; no bacterial detections	5,647	1.67%
At least 1 bacterial and at least 1 viral detection	96,814	28.55%
Zero detections	91,932	27.11%
<b>TOTAL</b>	<b>339,128</b>	<b>100.00%</b>

\* Data on file: December, 2008 – February, 2020

## Simultaneous detection of bacteria and viruses can improve patient outcomes and reduce healthcare costs.

TEM-PCR provides the ability to identify patients with viral, bacterial or both viral and bacterial pathogens from a single specimen in one day and allows the clinician to:

- Withhold antibiotics in patients with viral detection
- Administer appropriate antibiotic and/or antiviral therapy
- Incorporate evidence-based medicine to enhance the quality and cost-effectiveness of patient care

### Chief complaints for consideration:

*Acute bronchiolitis due to other infectious organism; Acute bronchitis; Acute nasopharyngitis (common cold); Acute pharyngitis; Acute sinusitis NOS; Acute tonsillitis; Allergic rhinitis NOS; Asthma NOS; Chronic sinusitis NOS; Cough; Fever NOS; Nasal & sinus disease NEC; Pneumonia, organism NOS; Viral infection NOS; Wheezing*

