

Technical Bulletin

Rapid Multiplex Pneumonia Panel Available at Central

TO: Medical Staff and Clients

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SUBJECT: New Pneumonia Panel detects thirty-three (33) pathogen and drug resistance genes

Effective July 6, 2020, the DLS Central Molecular Laboratory will perform the BioFire Diagnostics, LLC (BioFire) FilmArray Pneumonia Panel. It is a multiplex nucleic acid amplification test (NAAT) for the simultaneous detection and identification of various bacteria and viruses, as well as select antimicrobial resistance genes, from lower respiratory tract specimens from patients suspected to have infection.

The overall performance in bronchoalveolar lavage was 96.2% Sensitive and 98.3% Specific. Performance in sputum (including endotracheal aspirate) was similar at 96.3% Sensitive and 97.2% Specific. Performance of specific targets and combinations are available at: https://www.online-ifu.com/ITI0075/25047/EN.

VIRUSES: Adenovirus, Coronavirus (not SARS-COV-2/COVID-19), Human Metapneumovirus, Human Rhinovirus/Enterovirus, Influenza A, Influenza B, Parainfluenza Virus, Respiratory Syncytial Virus

ANTIMICROBIAL RESISTANCE GENES:

Methicillin resistance: Carbapenemases: ESBL: *mec*A/C and MREJ KPC, NDM, Oxa-48-like, VIM, IMP CTX-M

BACTERIA, Semi-Quantitative ($\geq 10^4$)*: Acinetobacter calcoaceticus-baumannii complex, Enterobacter cloacae complex, Escherichia coli, Haemophilus influenza, Klebsiella (Enterobacter) aerogenes, Klebsiella oxytoca, Klebsiella pneumoniae group, Moraxella catarrhalis, Proteus spp., Pseudomonas aeruginosa, Serratia marcescens, Staphylococcus aureus, Streptococcus agalactiae, Streptococcus pneumoniae, Streptococcus pyogenes

*Many of these organisms are normally in the respiratory track in low numbers, so detection of at least 10⁴ is intended to indicate sufficient quantities that may correlate with colonization and/or infection

ATYPICAL BACTERIA, Qualitative: Chlamydia pneumoniae, Legionella pneumophila, Mycoplasma pneumoniae

Test	Specimen	Unit Code	Collection	Turn-around Time
Pneumonia	Sputum, induced sputum,	7212	Daily	2-3 hours after receipt
Panel PCR	ET aspirate, BAL			of sample

Specimen stability is 1 day from time of collection at 2-8°C (refrigerated).

Please refer any questions to Dr. Amy Woron, Manager - DLS Molecular Laboratory at 441-5436, or DLS Client Services at 589-5101.