NexGen Testing

Respiratory Pathogens

Our respiratory pathogen testing utilizes quantitative Real-Time PCR to rapidly analyze your patient's sample in 24 hours. RT-PCR technology precisely detects the correct pathogen(s) and identifies antibiotic drug resistance. This allows providers the ability to prescribe timely and effective treatment.

Rapid and accurate solution eliminates guesswork in diagnosing and treating upper respiratory infections

Acute respiratory infection is a significant cause of morbidity and mortality in young, geriatric and immunocompromised patients. Co-infection is also high within these populations and access to advanced technology is essential to detect multiple pathogens at once. False negative test results can lead to a delayed diagnosis and poor clinical outcomes.

Molecular diagnostic testing quickly identifies pathogens and detects potential antibiotic resistance, so effective treatment can begin sooner.

Accurate diagnosis within 24 hours with real-time PCR for pathogen identification and antibiotic resistance detection

- PCR, a molecular technique, can be used to precisely analyze the genetic material of pathogens
- Provides a more definitive diagnosis than POC antigen assays
- 24-hour turnaround from receipt of specimen
- More accurate than conventional culture[1]
- CAP and CLIA accredited

Helps improve clinical confidence, decrease patient risks

- Detects polymicrobial infections
- Unaffected by concurrent antibiotic use
- Identifies potential antibiotic resistance
- Aids in quick clinical decision-making
- Reduces false negative results
- Aids in antibiotic stewardship
- Reduces potential unnecessary drug exposure and adverse events

1. Rhoads, D., Wolcott, R., Sun, Y., Dowd, S. (23 February 2012). Comparison of culture and molecular identification of bacteria in chronic wounds. Int. J. Mol. Sci., 13, 2535-2550. Retrieved from www.mdpi.com/journal/ijms

Respiratory Pathogens

Acinetobacter baumanii
Adenovirus Respiratory HAdV-B
Aspergillus fumigatus, niger
Bordetella pertussis , parapertusis, bronchiseptica
Chlamydia trachomatis
Chlamydophila pneumoniae
Citrobacter freundii
Coccidioides immitis, posadasii
Coronavirus - 229E, NL63, OC43, and HKU1
Cytomegalovirus (CMV, Human Herpes Virus 5)
E. coli
Enterovirus A + B probes
Enterovirus C + D probes
Haemophilus influenzae
Herpes simplex virus 1 and 2 (HSV-1, HSV-2)
Human herpes virus 3 (Varicella zoster virus)
Human metapneumovirus
Influenza virus A, B
Klebsiella pneumoniae
Legionella pneumophila
Moraxella catarrhalis
Mycobacterium tuberculosis and avium/intracellulare, kansasii groups
Mycoplasma pneumoniae
Parainfluenza virus (types 1,2,3,4)
Proteus mirabilis
Pseudomonas aeruginosa
Respiratory syncytial virus
Rhinovirus A, B, C
Serratia marcescens
Staphylococcus aureus
Streptococcus agalactiae (group B strep. (GBS))
Streptococcus pneumoniaae
Streptococcus pyogenes

Antibiotic Resistance

VanA, VanB (Vancomycin Resistance genes)

mecA (Methicillin resistance gene)

ermB, C; mefA (Macrolide Lincosamide Streptogramin Resistance)

qnrA2 (Fluoroquinolone resistance genes)

tet M (Tetracycline resistance genes)

SHV, KPC Groups (Class A beta lactamase)

CTX-M1 (15), M2 (2), M9 (9), M8/25 Groups (Class A beta lactamase)

IMP, NDM, VIM Groups (Class B metallo beta lactamase)

ACT, MIR, FOX, ACC Groups (AmpC beta lactamase)

OXA-48,-51 (Class D oxacillinase)

PER-1/VEB-1/GES-1 Groups (Minor Extended Spectrum beta lactamases)

dfr (A1, A5), sul (1, 2) probes (Trimethoprim/ Sulfamethoxazole resistance)