NexGen Testing

Wound Pathogens

Our wound 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 wound infections

Methicillin-resistant staphylococcus aureus and multi-drug resistant microbes have become problematic causative agents of nosocomial infections. They are also major causes of non-healing diabetic and post-surgical wounds.

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 turn-around from specimen receipt
- Higher accuracy than conventional culture[1]

Helps improve clinical confidence and decrease patient risks

- Detects polymicrobial infections
- Unaffected by concurrent antibiotic use
- Identifies potential antibiotic resistance
- Aids in quick clinical decision-making
- Reduces false negatives 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

Wound Pathogens

Acinetobacter baumanii
Anaerococcus vaginalis
Bacteroides fragilis
Candida albicans, glabrata, parapsilosis, tropicalis
Citrobacter freundii
Clostridium perfringens, septicum
Corynebacterium jeikeium, striatum, tuberculostearicum
E. coli
Enterobacter aerogenes, cloacae
Enterococcus faecalis, faecium
Finegoldia magna
Fusobacterium necrophorum, nucleatum
Klebsiella pneumoniae
Peptoniphilus harei, ivorii
Peptostreptococcus prevotii, anaerobius, asaccharolyticus, magnus
Proteus mirabilis
Pseudomonas aeruginosa
Serratia marcescens
Staphylococcus aureus
Staphylococcus (coagulase negative: epidermidis, haemolyticus, lugdunensis,saprophyticus)
Streptococcus agalactiae (group B strep (GBS))
Streptococcus pneumoniae
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)