DIAGNOSTICS

MOLECULAR DIAGNOSTICS & SPECIALISTS REVIEW: HELPING CUT COSTS

Ipsum's molecular testing for pathogen detection (urine, bone, skin, aspirate, swab, etc.) includes two levels of experts reporting cases. With the first layer, Polymerase Chain Reaction (PCR) data is reviewed and approved by a Molecular Biologist (ASCP Certified). After this data review is complete, a board certified infectious disease physician performs the final report review and approval. This second layer of professional evaluation offers a higher level of quality in actionable information. The infectious disease physician discriminates the pathogen versus the organisms that are colonizers and/or contaminants (i.e., would not require treatment). The patient's clinical information such as medication allergies, health conditions (pregnancy, renal disease, etc.) are reviewed and treatment considerations provided by the infectious disease doctor is truly "precision" medicine.

We also offer infectious disease consultation to our providers, this is a service included with the molecular PCR pathogen detection, to ensure the highest quality of patient care without adding cost for patients or insurance companies.

This unique process aids in proper, timely treatments that speed healing time, reduce additional provider visits and prevents unnecessary medications that could lead to resistance.

PCR vs traditional wound culture:

PCR is superior to traditional wound culture because it is faster (results within 24 hours vs days to weeks), more sensitive and less prone to cross contamination. Testing for both bacterial and fungal pathogens is done with a single swab.

PCR vs Urine dipstick:

Urine dipsticks are quick and easy for point-of-care testing but do not provide microbiological diagnosis. Urine dipsticks can give false-negative results with non-nitrite producing pathogens such as Enterococcus and Staphylococcus spp, making them less sensitive in screening for UTIs in the elderly and pregnant patients who have higher rates of gram positive infections.

PCR vs Standard 24 hour urine cultures:

Urine cultures fail to spot a high proportion of uropathogens that may be clinically relevant, especially gram positives and fungal pathogens (12% detection rate of non-E. coli pathogens). Expanded Quantitative Urine Culture (EQUC) method identifies more pathogens but takes 48 hours of growth time. If a pathogen is isolated and identified with culture, antimicrobial susceptibility testing takes an additional 1-2 days.