

# IMPACT OF ADVANCED DIAGNOSTICS ON SEPSIS AND ANTIMICROBIAL RESISTANCE: NEW ASPECTS AND RECENT DEVELOPMENTS

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**S**epsis is a potentially life-threatening complication of an infection. Sepsis occurs when chemicals released into the bloodstream to fight the infection trigger inflammatory responses throughout the body. This inflammation can trigger a cascade of changes that can damage multiple organ systems, causing them to fail. Mortality related to sepsis remains high. Inappropriate antimicrobial treatment is a major concern and is associated with increased mortality. This has led to a growing interest in the development of diagnostic tests for the rapid diagnosis of pathogens causing bloodstream infections to allow early administration of adequate targeted antimicrobial therapy in critically ill patients. By shortening the time to pathogen identification and allowing for detection of organisms missed by blood culture, new diagnostic methods may provide clinical benefits for the management of patients with sepsis. While a number of reviews on the diagnosis of sepsis have recently been published I am here to present up-to-date new developments including multiplex PCR, mass spectrometry and array techniques.

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