

ePlex[®] Blood culture identification panels

In the race against time for sepsis, get rapid ID using the most comprehensive panels for bloodstream infections





Physicians today are faced with significant challenges in the diagnosis of sepsis. It can **take days** to identify the causative organisms and treatment options for blood stream infections, which can lead to delays in effective antimicrobial therapy, increased hospital costs and higher patient mortality rates.



The high cost of sepsis

Every year sepsis strikes nearly 50 million people across the globe.¹



The emerging risk of fungal pathogens

Fungal pathogens are a growing cause of BSI and are associated with some of the highest rates of inappropriate initial therapy and mortality.⁵



Bloodstream Infections (BSI) are the most expensive condition treated in hospitals² costing about

€**25,000**



Hospital mortality rate of invasive candidiasis is estimated between



Excess costs per episode up to⁵

3-4 seconds⁴

resulting in a death every







Rapid identification is critical

traditional methods can take days to identify the causative agents of sepsis.



Antimicrobial resistance: a serious global threat

Up to 50% of antibiotics prescribed in hospitals are either unnecessary or inappropriate, and taking antibiotics when not needed can put patients at risk for serious adverse events and lead to the development of antibiotic resistance.⁹

For every hour effective antibiotics are delayed, the sepsis mortality rate increases up to





of patients receive ineffective initial antibiotic therapy.⁸



Antimicrobial-resistant infections currently claim at least

50,000

lives each year across Europe and the US.¹⁰



By 2050, it is estimated that



people will **die** annually due to antimicrobial resistant infections.¹⁰

ePlex[®] **BCID Panels** – enable physicians to rapidly identify more clinically relevant bloodstream infections and their resistance genes while quickly ruling out blood culture contamination, which can result in earlier treatment decisions. Rapid molecular diagnosis of sepsis has been shown to improve patient outcomes, antimicrobial stewardship and reduce hospital costs.



Rapid identification and reporting

True sample-to-answer workflow: ePlex[®] is so easy to use it can be run on any shift, so critical patient samples never have to wait until morning.



The value of resistance genes

resistance genes can detect the potential for resistance even in cases where antibiotics appear active by AST but may not be effective clinically, so even if a gene hasn't been expressed, the resistance genotype won't be missed.¹¹



ePlex[®] BCID assays deliver results in



Beating conventional culture-based tests by as much as **2 days**

With automated results reporting via LIS and remote alerts there is

no delay

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Deliver important information to aid in

rapid infection control¹²

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Speed & reliability

of resistant markers, combined with the broad coverage of AST, provide optimal patient care.

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Enabling timely treatment decisions for more patients

ePlex[®] BCID includes the broadest coverage of bacterial and fungal organisms and resistance genes available from a sample-to-answer multiplex diagnostics platform.

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Patient centered care

Rapid ID of the causative agents in BSI with multiplex molecular diagnostics has been shown to decrease time to targeted therapy by ~25 hours¹⁴ and length of hospital stay by 2.5 days¹⁵ resulting in:

Coverage of





Detect more

BSI while quickly ruling out blood culture contaminants

Designed to enable prompt treatment decisions.



Patient care Antimicrobial stewardship Patient satisfaction Patient safety

Potential to improve

Potential to decrease

Time to answer Time to targeted therapy Hospital length of stay Total cost of care



Comprehensive coverage of pathogens and resistance genes

Gram-Positive Targets

- Bacillus cereus group Bacillus subtilis group Corynebacterium Cutibacterium acnes (Propionibacterium acnes) Enterococcus Enterococcus faecalis Enterococcus faecium Lactobacillus Listeria Listeria monocytogenes Micrococcus Staphylococcus Staphylococcus aureus Staphylococcus epidermidis Staphylococcus lugdunensis Streptococcus Streptococcus agalactiae (GBS) Streptococcus anginosus group Streptococcus pneumoniae Streptococcus pyogenes (GAS)
- **Gram-Negative Targets** Acinetobacter baumannii Bacteroides fragilis Citrobacter Cronobacter sakazakii Enterobacter (non-cloacae complex) Enterobacter cloacae complex Escherichia coli Fusobacterium nucleatum Fusobacterium necrophorum Haemophilus influenzae Klebsiella oxytoca Klebsiella pneumoniae Morganella morganii Neisseria meningitidis Proteus Proteus mirabilis Pseudomonas aeruginosa Salmonella Serratia Serratia marcescens Stenotrophomonas maltophilia

Fungal Targets

Candida albicans Candida dubliniensis Candida famata Candida glabrata Candida guilliermondii Candida kefyr Candida krusei Candida lusitaniae Candida parapsilosis Candida tropicalis Cryptococcus gattii Cryptococcus neoformans Fusarium Malassezia furfur Rhodotorula Trichosporon

Resistance Genes

mecA	vanA
тесС	vanB
CTX-M	NDM
IMP	OXA
KPC	VIM

Pan Targets

Candida Gram-Negative Gram-Positive

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GenMark Diagnostics, Inc. A member of the Roche Group 5964 La Place Court Carlsbad, CA 92008 USA

GenMark Diagnostics Europe GmbH A member of the Roche Group Chollerstrasse 4 6300 Zua Switzerland

info@genmarkdx.com

diagnostics.roche.com



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