呈晖医疗
CHENGHUI MEDICAL

25 Blood Culture Pathogen and Antimicrobial Resistance Gene (G+&Fungi&AMR) Nucleic Acid Detection Kit (Fluorescent PCR-Chip Method)

Sample-to-Answer 25 Target BSI Panel | 4 Samples in 80 Minutes

Powered by Chenghui Multi-Disc (CQ-0404) Fully Automated Molecular POCT Platform



CE
IVD

Detection Targets List (25 targets in Total)

Gram-Positive Bacteria (11)
Enterococcus faecalis, Enterococcus faecium, Listeria monocytogenes, Staphylococcus spp., Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus spp., Streptococcus agalactiae, Streptococcus pneumoniae, Streptococcus pyogenes, PVL-producing Staphylococcus aureus

Fungal Pathogens (9)
Candida albicans, Candida auris, Candida glabrata, Candida krusei, Candida parapsilosis, Candida tropicalis, Cryptococcus (C. neoformans/C. gattii), Aspergillus fumigatus, Pan-Fungal

Antimicrobial Resistance Genes (5)
vanA, vanB, mecA, mecC, SCCmec-orfX

Clinical Challenges

1. **Extended Turnaround Time Delays Critical Targeted Treatment:** Bloodstream infections (BSIs) and sepsis are life-threatening, with mortality rising sharply for every hour of delayed effective therapy. After positive blood culture, conventional workflows take 24–72 hours for bacterial identification and AST, and 3–7 days for fungal pathogens, forcing empiric broad-spectrum therapy that increases treatment failure risk, sepsis mortality and hospital length of stay.
2. **Rampant Drug Resistance & High Fungal Missed Diagnosis Rate:** Hospital-prevalent MRSA, VRE and multidrug-resistant Candida auris carry severe clinical and nosocomial transmission risks. Traditional blood culture has limited sensitivity for invasive fungi such as Aspergillus, leading to frequent missed diagnoses and drastically higher mortality in immunocompromised patients.
3. **Fragmented Solutions Lack Integrated Cost-Effective Diagnostics:** Full-spectrum molecular panels come with high per-test costs, while single-target assays deliver low efficiency. There is a lack of rapid testing solutions matched with Gram stain results, leaving no cohesive, cost-effective rapid diagnostic framework for severe BSI cases.

Core Clinical Benefits



1. **Rapid Full-Spectrum Profiling for Precision Sepsis Treatment:** The kit covers 25 total targets, including 11 prevalent Gram-positive BSI pathogens, 9 fungal targets and 5 core antimicrobial resistance genes. It delivers simultaneous pathogen and resistance profiling in ~80 minutes with only 1 minute of hands-on operation, enabling timely adjustment from empiric therapy to targeted antibacterial/antifungal treatment, reducing sepsis mortality, optimizing antimicrobial stewardship and curbing nosocomial drug-resistant pathogen spread.
2. **High-Efficiency Batch Testing with 4 Parallel Samples:** Compatible with the Multi-Disc (CQ-0404) fully automated analyzer, 4 parallel samples per run significantly improves batch testing throughput, shortening overall reporting time for batch positive blood culture samples and securing critical treatment windows for sepsis patients.
3. **Flexible Complementary Workflow for Complete BSI Diagnostic System:** Pairable with the Gram-negative & AMR panel, it allows laboratories to select targeted panels based on Gram stain results after positive blood culture to balance diagnostic efficiency and cost. For critically ill septic or immunocompromised patients with suspected mixed infections, both panels can run in parallel on the Multi-Disc platform to provide full-spectrum coverage and build a comprehensive rapid etiological diagnostic framework for severe bloodstream infections.
4. **Fully Automated, Low-Threshold Workflow:** Pre-loaded nucleic acid extraction and lyophilized PCR reagents onboard the cartridge. Full automation of purification, amplification and analysis after sample loading; no manual extraction, dedicated PCR lab or specialized operator required.
5. **Onboard Single-Cartridge Quality Control:** Built-in internal control monitors the entire fluidic and PCR reaction process, effectively reducing the risk of false-negative results.
6. **Cold-Chain-Free Storage & Transportation:** Stable for 12 months at 4–28°C for storage and transport, no cold chain required, cutting logistics and inventory costs for healthcare facilities.

CONTACT US:

Website: https://en.chenghuimed.com/
General Inquiries: info@chenghuimed.com
Sales: sales@chenghuimed.com
Service & Support: service@chenghuimed.com
Address: 12th Floor, North Zone, Building 2B, Skyworth Innovation Valley, No. 8 Tangtou 1st Road, Shiyan Street, Bao'an District, Shenzhen, Guangdong Province, China