

**Luminex**<sup>®</sup>

# VERIGENE<sup>®</sup> Bloodstream Infection Testing Panels

Rapid Detection Can Lead to Better Outcomes.



# Introduction

Every hour appropriate antimicrobial treatment is delayed, a patient's mortality rate increases by 7.6%. Additionally, prescribing incorrect or unnecessary treatment places a significant unnecessary financial burden on our healthcare system.<sup>1</sup>

The VERIGENE<sup>®</sup> Bloodstream Infection portfolio empowers laboratories to rapidly identify causative pathogens (as well as their associated resistance markers) that can lead to sepsis, enabling physicians to get their patients on the right antibiotics, faster. VERIGENE assays have been proven to synergize with antimicrobial stewardship programs, reduce the use of unnecessary antibiotics, and effectively manage infection control.<sup>2-4</sup>

## Key Benefits:

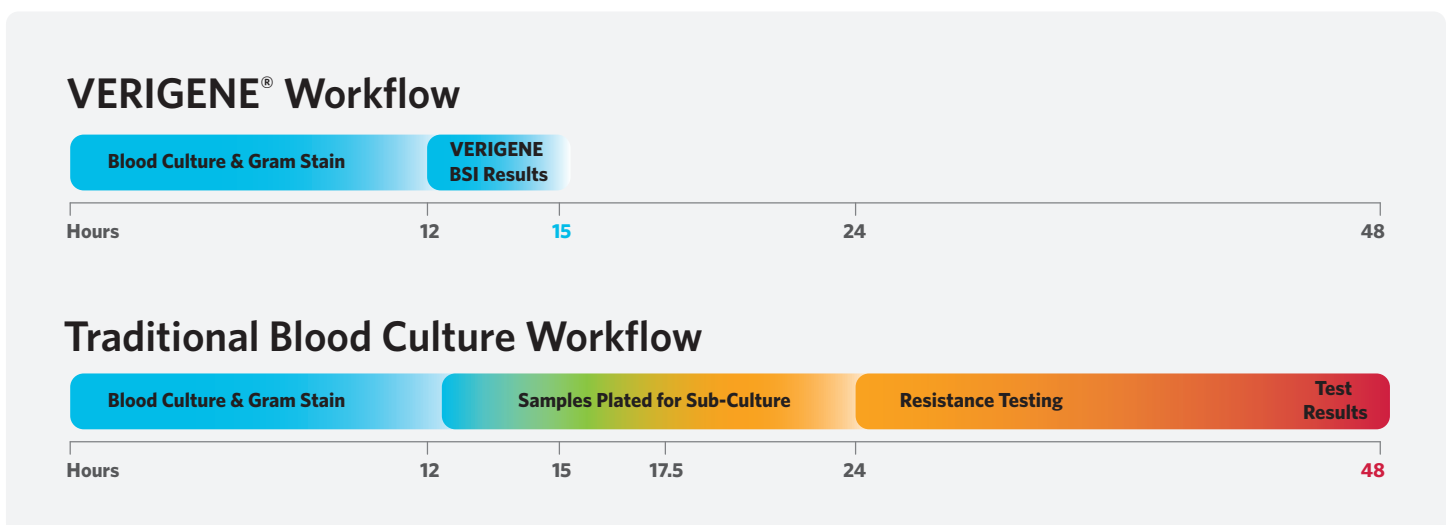
- Direct detection vs. PCR amplification leads to fewer false-positives.
- Separation of Gram positive and Gram negative assays provides flexibility, reduces costs, and limits over-testing.
- Enables automation, using a sample-to-answer system.
- Supports an on-demand and scalable workflow.
- Delivers results in approximately 2.5 hours, with <5 minutes hands-on time.

**Clinically Relevant** - Improve clinical outcomes and support antimicrobial stewardship.

**Economically Responsible** - Optimize therapy sooner, reducing patient length-of-stay.

**Operationally Efficient** - A simple workflow delivers timely, actionable results.

**Time to results is 3x faster using the VERIGENE<sup>®</sup> System vs. traditional methods.<sup>5</sup>**



The VERIGENE<sup>®</sup> sample-to-answer platform delivers results in under 15 hours versus 48 hours for conventional methods.<sup>5</sup> Clinical studies have demonstrated that the VERIGENE<sup>®</sup> Bloodstream Infection assays lower overall healthcare costs, shorten the patient's length of stay, and most importantly, improve patient outcomes by enabling a more targeted treatment plan—quicker.<sup>6-9</sup>

# Syndromic Testing

## BSI Panel Coverage

VERIGENE® Gram positive and Gram negative bloodstream infection assays provide the flexibility to test for clinically relevant targets based on a positive blood culture bottle. This unique approach offers the economic advantage of testing only for necessary pathogens, as well as their antimicrobial resistance.



### VERIGENE® BC-GP

#### Species

*Staphylococcus aureus*  
*Staphylococcus epidermidis*  
*Staphylococcus lugdunensis*  
*Streptococcus anginosus* Group  
*Streptococcus agalactiae*  
*Streptococcus pneumoniae*  
*Streptococcus pyogenes*  
*Enterococcus faecalis*  
*Enterococcus faecium*

#### Genus

*Staphylococcus* spp.  
*Streptococcus* spp.  
*Listeria* spp.

#### Resistance

*mecA* (methicillin)\*  
*vanA* (vancomycin)\*\*  
*vanB* (vancomycin)\*\*

\*The assay detects the presence of the *mecA* gene in a sample, but does not determine which *Staphylococcus* species (*S. aureus* and/or *S. epidermidis*) contained the gene.

\*\*The assay detects the presence of the *vanA* or *vanB* gene in a sample, but does not determine which *Enterococcus* species (*E. faecalis* and/or *E. faecium*) contained the gene.

### VERIGENE® BC-GN

#### Species

*Escherichia coli*\*  
*Klebsiella oxytoca*  
*Klebsiella pneumoniae*  
*Pseudomonas aeruginosa*

#### Genus

*Acinetobacter* spp.  
*Citrobacter* spp.  
*Enterobacter* spp.  
*Proteus* spp.

#### Resistance

CTX-M (ESBL)  
 IMP (carbapenemase)  
 KPC (carbapenemase)  
 NDM (carbapenemase)  
 OXA (carbapenemase)  
 VIM (carbapenemase)

\*BC-GN will not distinguish *Escherichia coli* from *Shigella* spp. (*S. dysenteriae*, *S. flexneri*, *S. boydii*, and *S. sonnei*).

# Ordering Information

Product Name	Part Number
<b>Assays</b>	
<b>VERIGENE® Gram-Positive Blood Culture Nucleic Acid Test Kit</b> 20 BC-GP Test Cartridges 20 Extraction Trays	20-005-018
<b>VERIGENE® Gram-Positive Blood Culture Nucleic Acid Utility Kit</b> 20 BC-GP Utility Trays	20-012-018
<b>VERIGENE® Gram-Negative Blood Culture Nucleic Acid Test Kit</b> 20 BC-GN Test Cartridges 20 Extraction Trays	20-005-021
<b>VERIGENE® Gram-Negative Blood Culture Nucleic Acid Utility Kit</b> 20 BC-GN Test Cartridges 20 Extraction Trays	20-012-021

## REFERENCES

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**Luminex®**  
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