

THE VALUE OF FAST DIAGNOSTICS IN TIME-CRITICAL INFECTIONS

A multi-country health economic analysis assessed the impact of deploying fast identification and antimicrobial susceptibility testing (fast ID/AST) early in the care pathway for patients with bloodstream infections at high-risk of sepsis. Results were consistent across each of the G7 countries included in the analysis: Canada, France, Germany, Italy, Japan, UK, and U.S.

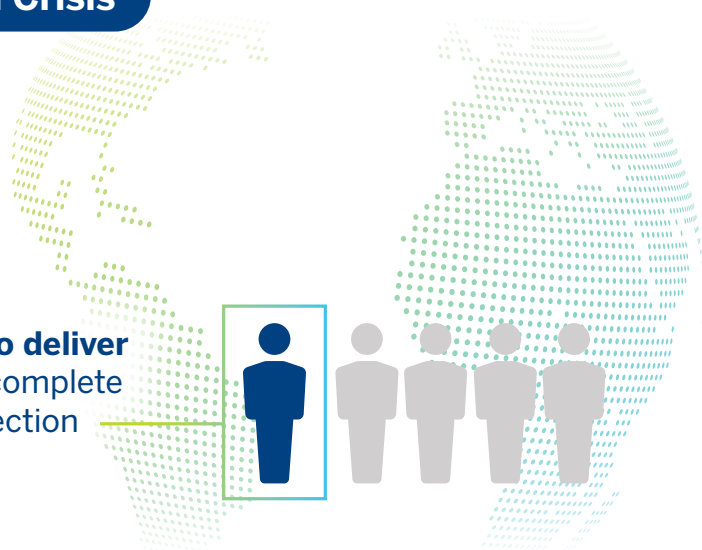
Sepsis: A Health Crisis

Sepsis is a life-threatening reaction to an infection. Latest data indicates it was responsible for

21 MILLION DEATHS

globally (in 2021).¹

Conventional diagnostic methods take 2 to 3 days to deliver results, forcing high-stake treatment decisions with incomplete information.² As a result, nearly **1 in 5** bloodstream infection patients received an inappropriate initial treatment.³



Faster Identification Significantly Improves Patient Outcomes

Fast ID/AST are estimated to reduce time to appropriate antimicrobial therapy from 43-70 hours to 28 hours, a decrease of 35-60%,^{4,5,6} reducing the risk of progression to sepsis across all seven countries.⁷

SEPSIS-RELATED DEATHS

500.7K sepsis-related deaths associated with bloodstream infections annually

432.7K sepsis-related deaths associated with bloodstream infections annually

68K
deaths
avoided

SEPSIS CASES

718.2K sepsis cases due to bloodstream infections annually

560.4K sepsis cases due to bloodstream infections annually

157.8K
cases
avoided

■ WITH CURRENT STANDARD OF CARE ■ WITH FAST ID/AST

These numbers represent the total sum of the values across each of the seven countries.

Fast ID/AST: A System-Wide Return on Investment

Across all seven countries, fast ID/AST reduced the national healthcare payer annual costs related to sepsis by

€4.33 BILLION

The majority of savings from the use of fast ID/AST was reflected in 53-83% reduction of costs for initial hospitalization. Of the total savings, more than €1 billion is attributable to reduced post-sepsis consequences.

Results are based on a healthcare payer health economic analysis and represent estimated outcomes under modeled assumptions.

Acute care savings from avoiding progression to sepsis and septic shock mean:



Fewer ICU admissions



Shorter hospital stays



Reduced care needed for severe complications



Reduced long-term complications

The Case for Standard of Care Change



Incorporate fast ID/AST into new standard care pathways



Create incentives to accelerate change that benefit both patients and society

ACCESS THE FULL REPORT

This contract research report, 'The value of fast diagnostics in time-critical infections' was commissioned and funded by bioMérieux and conducted by the Office of Health Economics.

Read the report in full: Hassan S., Hamlyn T., Critical Infections Fong H., Hampson G. 2026. The Value of Fast Diagnostics in Time. OHE Contract Research Report, London: Office of Health Economics.



OHE Office of Health Economics

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