First-of-its-Kind Health Economic Analysis Shows Early Use of Fast Diagnostics in Sepsis Care Could Save Thousands of Lives and Reduce Health System Costs Across G7 Countries

Marcy-l'Étoile (France), April 20, 2026 – bioMérieux, a world leader in *in vitro* diagnostics, announces the publication of a multi-country health economic analysis assessing the impact of deploying fast identification and antimicrobial susceptibility testing (ID/AST) early in the care pathway for patients with bloodstream infections at high-risk of sepsis.

The analysis is the first to provide evidence that early use of fast diagnostics can reduce preventable deterioration into sepsis, improve patient outcomes, and generate substantial cost savings for healthcare systems consistently across all studied countries. Conducted by the Office of Health Economics (OHE), one of the world's leading independent health economics research organizations, the analysis examined healthcare systems across Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

Unmet Needs in Sepsis Management
Sepsis, a life-threatening reaction to an infection, is responsible for 21 million deaths globally each year.[i] The initial hours of sepsis management are critical, and targeted antibiotic treatment is a key determinant of survival. Yet conventional diagnostic methods take two to three days to deliver results, forcing high-stakes treatment decisions with incomplete information.[ii]

As a result, nearly 1 in 5 bloodstream infection patients receive an inappropriate initial treatment, increasing the risk of deterioration and driving higher costs for the hospital and health system.[iii]

The model-based health economic analysis evaluates what would happen if fast ID/AST were systematically used early in the care pathway before clinical deterioration occurs. Built using real-world hospital data from France, the health economic evaluation incorporates epidemiology, care pathways, costs, progression to sepsis, mortality, and long-term consequences over a 13-month time frame. It was then validated and adapted for each G7 country using local data inputs including incidence, diagnostic testing patterns, and country-specific healthcare costs, together with clinical expert review to ensure alignment with national practices and standard of care. The findings are consistent across Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

Faster Identification Significantly Improves Patient Outcomes
Previous studies have demonstrated that fast ID/AST technologies can return actionable diagnostic results within less than 30 hours, substantially shortening time-to-results compared to the standard of care in each country. The analysis builds

PRESS RELEASE

on this established evidence by quantifying the clinical impact of deploying these faster diagnostics early in the care pathway.

Across all seven countries, the results from the model-based health economic evaluation show that early access to diagnostic information can prevent thousands of patients with bloodstream infection from progressing to sepsis or septic shock annually. Notably, the number of reported sepsis cases fell by an average of more than 20%. This leads to fewer sepsis related deaths and a significant reduction in long-term post sepsis complications, improving patient's quality of life.

"While the magnitude varies by country, the direction is consistent: the model demonstrates that early diagnostics reduce the likelihood that high-risk patients progress to sepsis. Preventing cases of sepsis could therefore reduce the risk of long-term complications after hospital discharge, including recurrent infections, cognitive decline, psychological effects, and organ-specific complications. At bioMérieux, we are committed to ensuring that every patient receives the right diagnostic at the right time. We hope these findings will support governments, payers, and health systems in advancing the structural reforms needed to expand timely access to fast ID/AST," explains Dr Julien Textoris, MD, PhD, Vice President, EMEA Medical Affairs, bioMérieux.

A System-Wide Return on Investment

Across all G7 countries, the evaluation shows that deploying fast ID/AST early in the care pathway is consistently cost saving, regardless of how each health system is structured or financed.

Importantly, 53% to 83% of all savings occur during the initial hospitalization, when the clinical and economic consequences of deterioration are most concentrated[iv] because early diagnostic information prevents the likelihood that patients progress into one of the most resource intensive stages of sepsis care.

At the per-patient level, savings range from €500 in Canada to €3,800 in Japan, driven primarily by fewer ICU admissions, shorter hospital stays, and reduced management of severe complications.

At the population level, depending on country size, incidence, and cost structures, annual national savings range from €26 million in Canada to €2.5 billion in the United States. These savings reflect both avoided acute phase costs and reduced long-term complications.[iv]

The Case for Policy Change

Today, diagnostics represent only a small fraction of healthcare spending, yet remain constrained by value frameworks that fail to capture their broader health system and population-level impact, bundled reimbursement models that treat them as costs rather than value generating tools, and misaligned incentives where laboratories bear the expense while savings are realized by other parts of the health system.

"*Our health economic analysis demonstrates that these diagnostics deliver substantial value for both patients and health systems, far exceeding their upfront cost. This provides policymakers with a clear, evidence-based rationale to rethink*

how diagnostics are valued and funded," says Dr. Sophie Vandepitte, Global Director Market Access Strategy at bioMérieux and Postdoctoral Researcher in Health economics and Management at Ghent University.

These modelled findings make a compelling case for a prospective real-world study to confirm their impact in clinical practice, and in the meantime, they chart a clear way forward: update reimbursement structures, strengthen diagnostic capacity, align incentives, and embed fast testing early in clinical pathways so that patients benefit when it matters most.

The full research, *The Value of Fast Diagnostics in Time-Critical Infections: A Use Case in Bloodstream Infections and Sepsis,* is available at: https://www.ohe.org/publications/the-value-of-fast-diagnostics-in-time-critical-infections/

ABOUT BIOMÉRIEUX

Pioneering Diagnostics

A world leader in the field of *in vitro* diagnostics since 1963, bioMérieux is present in 46 countries and serves more than 160 countries with the support of a large network of distributors. In 2025, revenues reached €4.1 billion, with over 94% of sales outside of France. bioMérieux provides diagnostic solutions (systems, reagents, software and services) which determine the source of disease and contamination to improve patient health and ensure consumer safety. Its products are mainly used for diagnosing infectious diseases. They are also used for detecting microorganisms in agri-food, pharmaceutical and cosmetic products.

www.biomerieux.com.

bioMérieux is listed on the Euronext Paris stock market.
Symbol: BIM – ISIN Code: FR0013280286
Reuters: BIOX.PA/Bloomberg: BIM.FP

CONTACTS

Investor Relations
Aymeric Fichet
Tel: +33 (0)4 78 87 20 00
investor.relations@biomerieux.com

Media Relations – Corporate
Olivier Rescanière
Tel: +33 (0)6 69041095
media@biomerieux.com

PRESS RELEASE

[i] Gray A, Chung E, Hsu R et al. Global, regional, and national sepsis incidence and mortality, 1990–2021: a systematic analysis. *The Lancet Global Health,* 2025.

[ii] Bauer, K.A., Perez, K.K., Forrest, G.N. and Goff, D.A., 2014. Review of rapid diagnostic tests used by antimicrobial stewardship programs. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 59 Suppl 3, pp.S134-145. DOI: 10.1093/cid/ciu547.

[iii] Kadri, S.S., Lai, Y.L., Warner, S., Strich, J.R., Babiker, A., Ricotta, E.E., Demirkale, C.Y., Dekker, J.P., Palmore, T.N., Rhee, C., Klompas, M., Hooper, D.C., Powers, J.H., Srinivasan, A., Danner, R.L. and Adjemian, J., 2021a. Inappropriate Empiric Antibiotic Therapy in Bloodstream Infections at U.S. Hospitals based on Discordant In vitro Susceptibilities: A Retrospective Cohort Analysis of Prevalence, Predictors and Mortality Risk. *The Lancet Infectious Diseases*, 21(2), pp.241–251. DOI: 10.1016/S1473-3099(20)30477-1.

[iv] Hassan S., Hamlyn T., Fong H., Hampson G. 2026. *The Value of Fast Diagnostics in Time-Critical Infections.* OHE Contract Research Report, London: Office of Health Economics