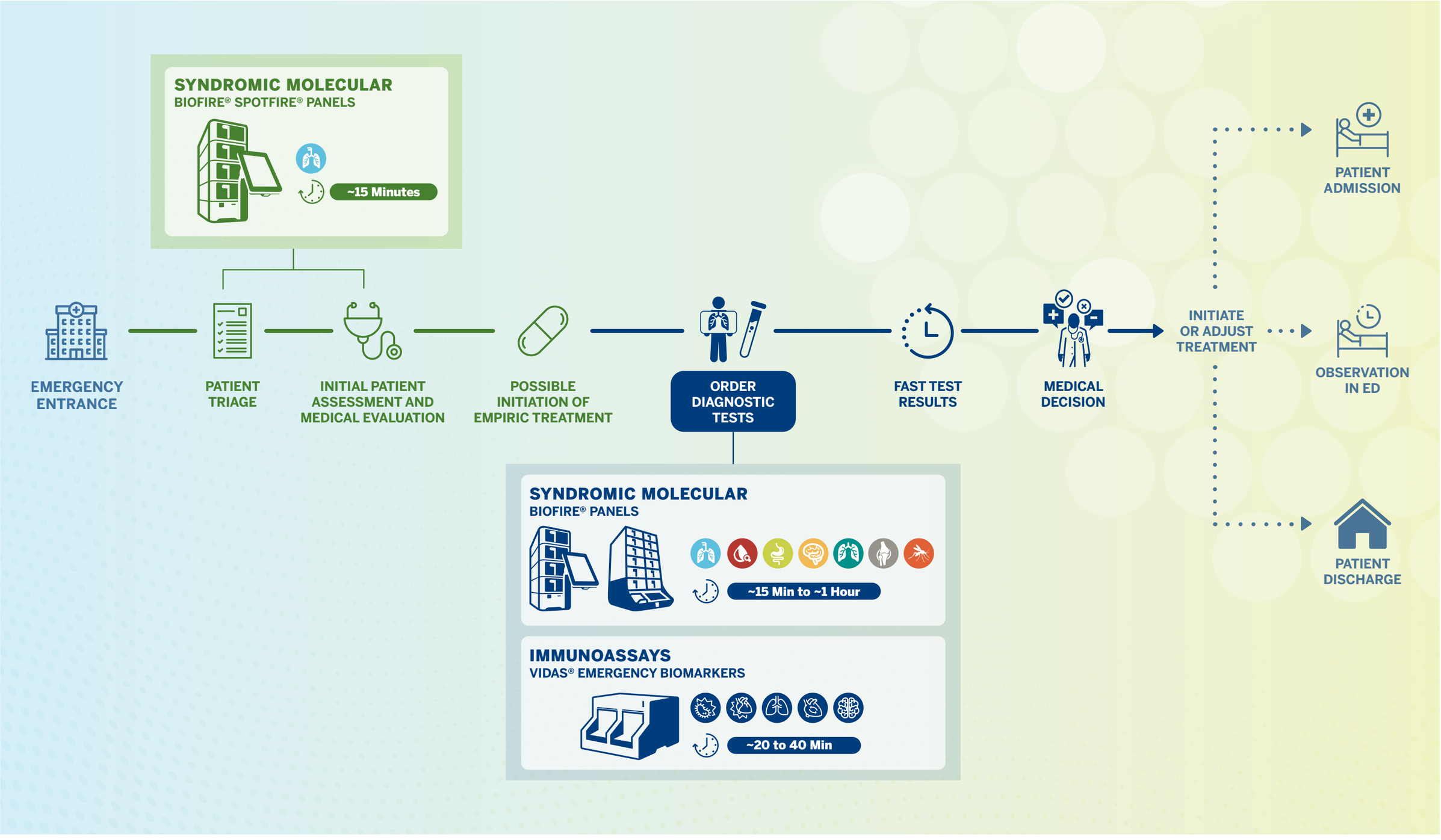
BIOMÉRIEUX

INNOVATIVE EMERGENCY DEPARTMENT SOLUTIONS FOR ENHANCED PATIENT CARE

PIONEERING DIAGNOSTICS

OPTIMIZE THE EMERGENCY DEPARTMENT PATIENT JOURNEY USING BIOMÉRIEUX SOLUTIONS



HOW DO YOU AVOID ED OVERCROWDING, ENSURE SAFETY AND OPTIMIZE PATIENT CARE WITH FAST DIAGNOSTICS?

In the Emergency Department (ED) the stakes are high – and so are the pressures. Effective and efficient patient triage is now recognized[1] as a key factor for optimizing patient care in the ED, but this is challenging when symptoms are ambiguous and overlapping. bioMérieux's BIOFIRE® syndromic PCR molecular testing solutions and the VIDAS® Emergency Panel's biomarker-based immunoassays empower ED teams to triage rapidly and confidently.

BIOFIRE® SYNDROMIC PCR MOLECULAR TESTING

The BIOFIRE® syndromic approach is a symptom-driven broad grouping of probable pathogens into one test that provides fast, comprehensive, and clinically actionable results. Using multiplex PCR technology, BIOFIRE Panels are designed to detect the most common pathogens and antimicrobial resistance genes.

VIDAS® EMERGENCY AND CRITICAL CARE PANEL OF BIOMARKER-BASED IMMUNOASSAYS

VIDAS® assays offers key biological markers linked to conditions often seen in the ED, including cardiac necrosis, heart failure, venous thromboembolism, traumatic brain injury, and severe bacterial infections. The biomarkers provide fast and actionable insights.

Comprehensive emergency panel
on a single instrument

24 / 7
On-demand automated testing

Fast & Simple results

All-inclusive kits
limited calibrations and controls

References
1. Wiler JL, *et. al.* Optimizing emergency department front-end operations. Ann Emerg Med. 2010;55:142-160.e1

TRANSFORMING EMERGENCY DEPARTMENT WITH VIDAS® AND BIOFIRE®

Shorten Time in the Emergency Department

- Detect pathogen quickly with comprehensive results and fewer additional tests needed.[1,2]
- Improve ED flow by making fast, confident decisions to discharge, observe, or admit patients.[2,3,4,5,6,7,9]
- Results available during the patient's visit in the ED.[2]

Help clinicians rule in/out patient conditions

- Confirm the need for hospitalization with detection of critical conditions.[7]
- Reduce unnecessary CT scans or hospitalizations with strong negative predictive values.[8]
- Rule out transmissible infections to avoid unnecessary isolation.[2,3]
- Avoid unnecessary admissions.[7]

Improve treatment decisions

- Detect pathogens and resistance markers quickly and broadly to guide targeted antibiotic treatment decisions.[10,11,13,14,15]
- Distinguish bacterial from non-bacterial analytes or infections quickly to avoid unnecessary antibiotic use.[1,2,11,12,17,18,24]
- Support Antimicrobial Stewardship effects and help prevent secondary infections.[17,19,20]
- Reduce the duration of empiric antimicrobial treatment and accelerate time to targeted therapy.[12,13,21,22]
- Improve patient management: adjust or de-escalate antibiotic treatment sooner.[17,21,23]

Increase confidence with accurate results

- Use clinically validated platforms with high sensitivity and specificity of results.[25]
- Trust results to guide therapeutic decisions when time is critical.[2]

Reduce time to result

- Deliver significantly faster results compared to traditional methods — under an hour and as little as ~15 minutes.[2,16,26,27]
- Prioritize fast diagnostics for critical conditions such as sepsis, traumatic brain injuries, meningitis, or respiratory cases.[8,13,26,28]

Improve patient outcomes

- Identify infections early to enable timely, lifesaving interventions.[29]
- Enable earlier appropriate antibiotic therapy in sepsis, where every hour of delay increases chance of mortality.[17,20,24,29]

References
1. Echavarria M., *et al.*, (2018) J Clin Virol. Nov;108:90-95. / 2. Meltzer AC *et al. Acad Emerg Med*. Published online October 10, 2025. / 3. Poelman R., *et al.*, (2020) Future Microbiology. 15(8):623-632. / 4. Duff S., *et al.*, (2018) Future Microbiol. May;13:617-629. / 5. Yoo I.H., *et al.*, (2021) Diagnostics (Basel). 11(7):1175. / 6. Ponikowski P., *et al.* (2016) Eur Heart J. 37(27):2129-2200 / 7. Lindahl B., *et al.* (2017) Heart.103(2):125-131 / 8. Bazarian J., *et al.* Lancet Neurol. 2018;17:782-789. / 9. Cambien, G. *et al.* The Journal of hospital infection, S0195-6701(25)00337-8. 29 Oct. 2025, doi:10.1016/j.jhin.2025.10.018 / 10. Markussen, D. L. (2024) *JAMA Netw Open*, 7: e240830. / 11. Lee BR., *et al.*, (2019) J Clin Virol. 110:11-16. / 12. Moffa MA., *et al.*, (2020) Antibiotics. 9(6):282. / 13. Messacar K., *et al.*, (2020) Diagn Microbiol Infect Dis. 97(4):115085. / 14. Cancella de Abreu M., *et al.*, (2023) Biomarkers. 28(4):396-400. / 15. Berinson B., *et al.* (2025) Microbiol Spectr. 10.1128/spectrum.01263-25. / 16. O'Brien P., *et al.*, (2018) Pediatri Infect Dis J. 37(9):868-871. / 17. Schuetz P,*et al.* Expert Review of Molecular Diagnostics 2017;17(6):593-601 / 18. Brigadoi G. *et al.* antibiotics (2022) doi: 10.3390/antibiotics11091192 / 19. Meltzer A.C., *et al.*, (2022) J Am Coll Emerg Physicians Open. 3(1):e12616. / 20. Chiasson J., *et al.*, (2022) J Pharm Pract. 35(5):722-729. / 21. Cartuliares, M. B (2023) *PLoS Med*, 20: e1004314. / 22. Albrich WC, *et al.* Arch Intern Med. 2012;172(9):715-722 / 23. Cartuliares, M. B., (2025). *Microbiol Spectr*, 13: e0126025 / 24. Broyles MR. (2017) Open Forum Infect Dis. 4(4):ofx213. / 25. Overall performance based on prospective clinical study for the BIOFIRE Panels, data on file, BIOFIRE Diagnostics / 26. Serigstad, S., *et al.* (2022). Sci Rep 12(1): 326. / 27. Rappo U., *et al.*, (2016) J. Clin. Microbiol. 54(8):2096-2103. / 28. Rule R., *et al.*, (2021) PLoS One. 16(7):e0254389. / 29. ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes (2025), Circulation.151(13):e771-e862

BIOMÉRIEUX

Fast, accurate diagnostic tools and biomarkers for impactful clinical decision-making in the Emergency Department (ED).

EMERGENCY IMMUNOASSAY BIOMARKERS WITH VIDAS®

Comprehensive Emergency Panel on a single instrument.
24/7 on-demand automated testing.

PARAMETER: **B.R.A.H.M.S PCT™**
CODE: **PCT**
TEST TIME (minutes): **20**

PARAMETER: **NT-proBNP2**
CODE: **PBN2**
TEST TIME (minutes): **20**

PARAMETER: **High sensitive Troponin I**
CODE: **TNHS**
TEST TIME (minutes): **20**

PARAMETER: **D-Dimer Exclusion™ II**
CODE: **DEX2**
TEST TIME (minutes): **20**

PARAMETER: **TBI (GFAP, UCH-L1)**
CODE: **GFAP**
CODE: **UCH-L1**
TEST TIME (minutes): **39**

SYNDROMIC MOLECULAR TESTING WITH BIOFIRE®

BIOFIRE® SPOTFIRE® Rapid results in ~15min

BIOFIRE® SPOTFIRE®
RESPIRATORY/SORE THROAT (R/ST) PANELS
Up to 15 Targets. ~15 Minutes.

BIOFIRE® SPOTFIRE®
RESPIRATORY/SORE THROAT (R/ST) PANELS MINI
Up to 6 Targets. ~15 Minutes.

BIOFIRE® FILMARRAY® TORCH 175+ Targets. ~1 Hour.

BIOFIRE®
RESPIRATORY 2.1 PANELS
Up to 23 Targets. ~45 Minutes.

BIOFIRE®
BLOOD CULTURE IDENTIFICATION 2 PANEL
43 Targets. ~1 Hour.

BIOFIRE® FILMARRAY®
GASTROINTESTINAL PANELS
Up to 22 Targets. ~1 Hour.

BIOFIRE® FILMARRAY®
MENINGITIS / ENCEPHALITIS PANEL
14 Targets. ~1 Hour.

BIOFIRE® FILMARRAY®
PNEUMONIA PANELS
Up to 34 Targets. ~1 Hour.

BIOFIRE®
JOINT INFECTION PANEL
39 Targets. ~1 Hour.

BIOFIRE® FILMARRAY®
TROPICAL FEVER PANEL
6 Targets. ~50 Minutes.

Product availability varies by country. Please consult your local bioMérieux representative.

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