Diagnostic solutions help **fight antibiotic resistance** so that these treatments remain lifesaving for you and future generations.



PIONEERING DIAGNOSTICS

ANTIMICROBIAL RESISTANCE, THE SILENT PANDEMIC

The massive and inappropriate use of antibiotics in humans, animals and agriculture has prompted the emergence and spread of bacteria that are no longer susceptible to those drugs specifically designed to kill them.

TODAY, ANTIBIOTIC RESISTANCE IS DIRECTLY RESPONSIBLE FOR **1.3 MILLION DEATHS EVERY YEAR¹**.

Resource-limited countries are bearing the brunt of the burden and will continue to be disproportionately affected in the coming years². This situation is all the more worrying as new therapeutic options are scarce and investments in the development of innovative molecules is declining.

This health issue is now recognized worldwide but political and financial commitments are far too limited and unequally implemented.

Without effective antibiotics³:

MODERN **MEDICINE TAKES A STEP BACKWARD**

People would die from the simplest infections or minor injuries. Cancer treatments, complex surgical procedures or organ transplants become almost impossible.



HEALTH SYSTEMS AND ECONOMIES COLLAPSE

The annual costs could become as massive as those of the 2008 globa financial crisis but for a much longer time. The GDP shortfall would exceed 3.4 trillion annually after 2030.

HUMAN **DEVELOPMENT IS** JEOPARDIZED

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for 2030- such as ending poverty, ending hunger, ensuring healthy lives, reducing inequality, and revitalizing global partnerships - are likely to remain unachieved.

THE TIME TO ACT IS NOW!

We must urgently:

- (AMS) programs
- microbiology laboratories
- reduce unnecessary use of antibiotics in animals and agriculture in a One Health approach
- improve hygiene and infection control and prevention to limit the spread of resistant pathogens
- facilitate access to antibiotics and diagnostic tests
- reinforce global surveillance of antimicrobial resistance
- foster the development of new antibiotics and alternatives as well as vaccination

The right antibiotic must be prescribed at the right time and the right dose, for the right duration.



increase awareness and educate healthcare professionals worldwide optimize antibiotic use by implementing antimicrobial stewardship

increase the use of diagnostic testing and strengthen the role of

encourage research and development of new diagnostic tests.

DIAGNOSTIC TESTS HELP PRESERVE ANTIBIOTIC EFFICACY FOR GENERATIONS URE

For too long, the crucial role of diagnostics as a foundation of effective and high-quality health care has been neglected

The Lancet Commission on diagnostics. The Lancet 2019

Diagnostic tests have an impact at:

- healthcare costs.

individual level, by contributing to optimal patient management and outcomes

collective level, in the protection and improvement of public health while reducing

> New products and investment into robust, rigorous, and affordable diagnostics will provide hope and can save millions of lives

Antimicrobial Resistance: The Silent Pandemic - Citi GPS: Global Perspectives and Solutions. December 2022

Uptake of existing diagnostics to identify infections more accurately could minimize unnecessary antibiotic use and decrease the growing threat of antibiotic resistance

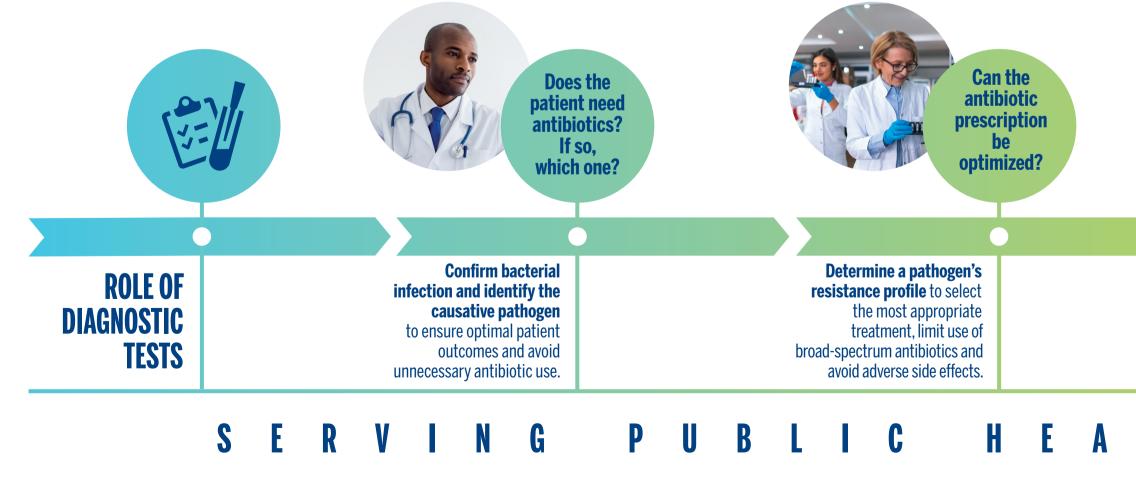
Trevas D, et al. Diagnostic Tests Can Stem the Threat of Antimicrobial Resistance: Infectious Disease Professionals Can Help, Clin Infect Dis, 2021

DIAGNOSTICS DRIVING ANTIMICROBIAL STEWARDSHIP FORWARD

As a world leader in *in vitro* diagnostics, bioMérieux has been committed to the fight against infectious diseases since 1963.

We offer a unique and comprehensive range of diagnostic solutions to:

- support antimicrobial stewardship providing earlier and optimized therapy for better patient management and a responsible use of antibiotics
- inform epidemiological surveillance programs at hospital, country and global levels.



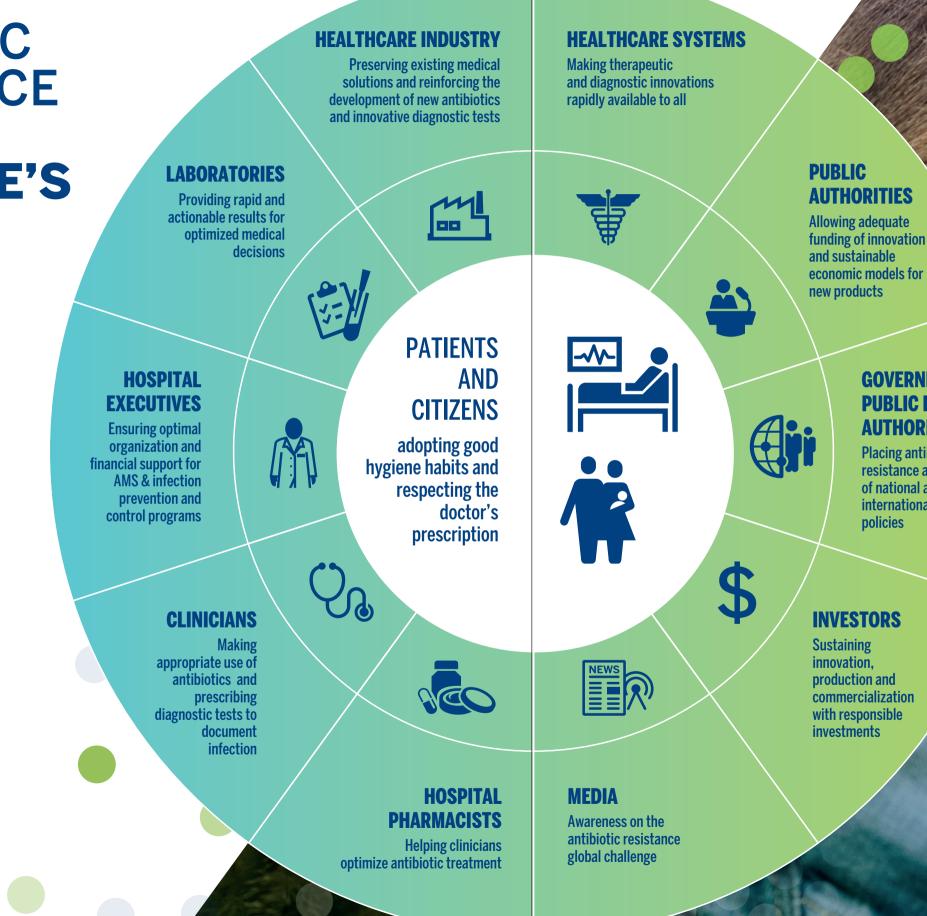
80% of our R&D budget is dedicated to the fight against antimicrobial resistance.

> When can the antibiotic treatment be safely discontinued?

Monitor patient response to personalized treatment duration and discontinue antibiotics as early as possible.

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FIGHTING ANTIBIOTIC RESISTANCE IS **EVERYONE'S CONCERN**



GOVERNMENT & PUBLIC HEALTH AUTHORITIES

Placing antimicrobial resistance at the heart of national and international health

OUR COMMITMENTS

INTERACTION WITH OUR ECOSYSTEM

INDUSTRY, HOSPITAL & ACADEMIC

We partner with selected hospitals to create antimicrobial stewardship Centers of Excellence intended for generation of real-world data to demonstrate the medical & economic value impact of diagnostic solutions.

We co-lead the EU-funded consortium VALUE-Dx which aims to demonstrate the medical and economic value of diagnostics in respiratory tract infections by optimizing antibiotic use.

Together with Boehringer Ingelheim and Evotec, we are partners of Aurobac Therapeutics, a joint venture to create the next generation of antimicrobials and diagnostics.

We collaborate with the main pharma companies developing new antibiotics: our tests are used in clinical trials to validate the efficacy of new treatments in targeted patients.

We support the Toulouse School of Economics to encourage research on economics models to address the market failure for innovation in antibiotics and healthcare products.

NATIONAL & INTERNATIONAL ORGANIZATIONS

We are a signatory to the Declaration on Antimicrobial Resistance at the 2017 World Economic Forum in Davos.

We are a representative of the diagnostics industry on the AMR Industry Alliance's Board.

We are a leading member of the AMR working group at AdvaMed and MedTech Europe.

We are piloting the French «Antibiorésistance» project of the Industrial and Governmental Health Strategy Committee.

We partner with the Fleming Fund since 2019 to strengthen diagnostic capacity in low- and middle-income countries.

PUBLIC HEALTH IMPACT

PATIENT ASSOCIATIONS

We collaborate with associations to raise awareness of the importance of in vitro diagnostics in patient care and to include patients' input in the Company's decision-making processes.

EDUCATION AND AWARENESS

We carry out awareness and educational activities on the challenge of antibiotic resistance and to support antimicrobial stewardship for healthcare professionals, patients and the general public.

SURVEILLANCE

We are the only private partner of the Global Point Prevalence Survey managed by Antwerp University, that studies antibiotic consumption and antimicrobial resistance in hospitals worldwide.

Fighting antibiotic resistance is at the heart of bioMérieux's global public health mission for many decades. It is part of our **Corporate Social Responsibility** objectives to:

- increase by 30% patient results supporting antimicrobial stewardship in 2025
- integrate 80% of antibiotics referenced in human medicine in our antibiogram solutions.

AMR and climate change are each driven by consumption of goods (carbon and antibiotics) that can provide people with valuable short-term benefits but impose long-term costs, such as existential threat from extreme weather or from lifethreatening infections⁵.

ALGERIA ARGENTINA AUSTRALIA AUSTRIA BELGIUM BRAZIL **CANADA** CHILE **CHINA COLOMBIA CZECH REPUBLIC** DENMARK EGYPT **FINLAND FRANCE GERMANY** GREECE HUNGARY **INDIA** ITALY **IVORY COAST JAPAN KENYA**

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