



GARDP'S NON-PROFIT APPROACH TO ANTIBIOTIC R&D AND ACCESS:



FOCUS ON AFRICA

Drug-resistant infections are one of the biggest threats to public health globally, but it is people in Africa that are the hardest hit. The high burden of bacterial infections across the continent makes Africa particularly vulnerable to antimicrobial resistance (AMR).

While African governments are taking steps to address AMR, access to antibiotics and diagnostics across Africa is limited, together with clean water, sanitation and hygiene (WASH) and other interventions that can prevent the spread of infections. Difficult-to-treat, multidrug-resistant Gram-negative infections are expected to start outpacing antibiotic development, posing a major challenge.

AMR in Africa

- **1.05 million:** The estimated number of AMR-linked deaths in 2019 alone¹
- **Two-thirds** of all antibiotics used in African healthcare settings were skewed towards only four antibiotics²
- **More than half** of AMR deaths in Africa between 1990 and 2021 occurred in children under 5³

The lack of access to quality-assured essential antimicrobials is among the main drivers of AMR in Africa. To address this, GARDP is developing a portfolio of antibiotic treatments across key disease areas – serious bacterial infections and sepsis in adults, children and newborns, as well as sexually transmitted infections. Our work spans the entire antibiotic pipeline from antibiotic discovery, clinical research and post-registration studies to manufacturing, commercialization and ultimately access.

GARDP works with partners to develop new antibiotic treatments that target World Health Organization priority pathogens and improve access to essential antibiotics. Through its not-for-profit model, GARDP works with countries, including those in Africa, to develop these treatments, working with in-country experts, ministries of health and research facilities, such as the South African Medical Research Council (SAMRC), which also helps fund GARDP.

GARDP's mission in Africa is supported by GARDP Africa, which forms part of its international network and was created with support from the Drugs for Neglected Diseases Initiative (DNDI). In addition, GARDP and WHO created the SECURE initiative to improve access to essential antibiotics, particularly in low- and middle-income countries.



“Antimicrobial resistance is one of the most urgent health challenges facing Africa today. Research and development carried out in Africa is essential to delivering effective and equitable solutions.”

Carol Ruffell

Director, GARDP Africa

1. The burden of bacterial antimicrobial resistance in the WHO African region in 2019: a cross-country systematic analysis - The Lancet Global Health
2. Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP) Country Reports – Africa CDC
3. Naghavi, Mohsen et al. Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050. *The Lancet* (2024)
4. Patterns of antibiotic use, pathogens and prediction of mortality in hospitalized neonates and young infants with sepsis: A global neonatal sepsis observational cohort study (NeoOBS) *PLOS Medicine* (2023)

GARDP's response to AMR in Africa

NEONATAL SEPSIS

Hospitals in Kenya, Uganda, South Africa and Ghana are participating in GARDP's global clinical trial to evaluate potentially life-saving antibiotic treatment regimens for newborns with sepsis. This follows GARDP's global observational study of 3,200 newborns in 11 countries across four continents. The aim of the study was to inform the development of improved antibiotic treatment regimens for neonatal sepsis worldwide ⁴.

GARDP and GARDP Africa are consortium members of SNIP-AFRICA. Led by Penta and supported by Global Health EDCTP3, it has developed a clinical research platform for the implementation of adaptive trials in Sub-Saharan Africa.

SERIOUS BACTERIAL INFECTIONS & SEPSIS

GARDP is supporting the government of Kenya to develop a project to introduce cefiderocol, a novel antibiotic active against multidrug-resistant Gram-negative bacteria (developed by Shionogi & Co., Ltd) into select tertiary hospitals in Kenya. Implementers networks are also being developed to improve access to Reserve antibiotics in Africa, currently with a specific focus on Kenya and South Africa.

GARDP and GARDP Africa are consortium members of ComBac-Africa, funded by EDCTP3, to improve treatment of multidrug-resistant infections in Guinea-Bissau, Nigeria and Côte d'Ivoire. Our focus is to improve access to relevant antibiotics.

SEXUALLY TRANSMITTED INFECTIONS

In 2023, GARDP reported positive results in a pivotal phase 3 trial of a first-in-class oral antibiotic, zoliflodacin, to treat uncomplicated gonorrhoea. Over half of the 930 participants enrolled in the global trial were from South Africa's five sites. Women, adolescents and people with HIV in five countries participated in the trial. Dr Reddy's Laboratories has been appointed as the commercial partner for zoliflodacin, while the registration dossier for zoliflodacin will be submitted in South Africa in 2026. GARDP has also completed STI prevalence studies in Kenya and Zambia, while patient journey research of STI patients in South Africa is underway.

DISCOVERY & EXPLORATORY RESEARCH

Research is underway between GARDP, H3D's integrated drug discovery centre in Cape Town and Ersilia's open-source AI hub to identify and optimize antibiotics for preclinical development.



GARDP's work in Africa

