GARDP

Global Antibiotic Research & Development Partnership

A joint DND*i* / WHO initiative

ACTIVITY REPORT 2017

Antimicrobial resistance (AMR) is a major and rapidly growing global public health challenge, with estimates of up to 700,000 deaths per year.[1] The resistance of bacteria to antibiotics is one of the biggest threats to global health, food security, and development today. Antibiotic resistance can affect anyone, of any age, in any country.[2]

The current pipeline for new antibiotics and biological treatments fails to address the biggest threats increasingly posed by drug-resistant Gram-negative bacteria, which has been identified by the World Health Organization (WHO) as a global public health priority. Furthermore, as new and remaining players in the field of antibiotic development struggle to mobilize financial resources, a coordinated effort, spanning research and development through to stewardship and access, is urgently needed to ensure both old and new antibiotics remain available and effective for generations to come.

The Global Antibiotic Research & Development Partnership's (GARDP) vision is a world where patient needs-driven R&D ensures that effective, appropriate, and affordable antibiotic treatments are developed and available to all those who need them.

As a not-for-profit research and development organization, GARDP addresses global public health needs by developing and delivering new or improved antibiotic treatments, while endeavouring to ensure their sustainable access.

GARDP was initiated by WHO and the Drugs for Neglected Disease *initiative* (DND*i*) in May 2016. GARDP is an important element of WHO's 2015 Global Action Plan on Antimicrobial Resistance that calls for new public-private partnerships to encourage research and development of new antimicrobial agents and diagnostics. GARDP is incubated by DND*i*, which currently provides GARDP's governance.

Cover illustration © courtesy of World Health Organization.

[1] O'Neill, J. (Chair) (2016). Tackling drug-resistance globally: Final Report and recommendations. Available at: **https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf**

[2] World Health Organization. (2018). Antibiotic Resistance. Available at: **http://www.who.int/news-room/fact-sheets/detail/antibiotic-resistance**

During its first full year in operation, GARDP has:

DEVELOPED A...

SEVEN YEAR BUSINESS PLAN

which prioritizes R&D strategies on global health priorities

PUBLISHED...

a strategy to address

ANTIBACTERIAL RESISTANCE

in newborn babies

SECURED...

€56 MILLION

ADDITIONAL FUNDING

REVIEWED...

SOME 20 ASSETS

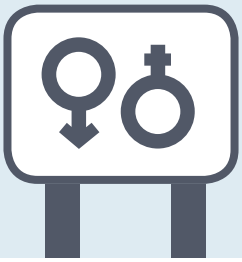
from several pharmaceutical companies and launched REVIVE – an online resource for the antimicrobial R&D community

REVIVE
Advancing Antimicrobial R&D

PUBLISHED...

A SCIENTIFIC ROADMAP

and target product profiles for GARDP's sexually-transmitted infections (STIs) programme



ESTABLISHED...

a country partnership with

SOUTH AFRICA

ENTERED INTO A...

PARTNERSHIP AGREEMENT

with Entasis Therapeutics to develop a novel, first-in-class antibiotic for multidrug-resistant gonorrhoea

AND OPENED...

A JOINT DND*i*/GARDP OFFICE

CONDUCTED...

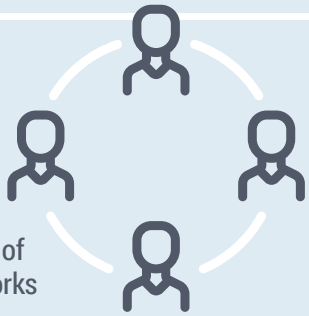
A SURVEY ON ANTIBIOTICS

used to treat late-onset sepsis in newborns which indicates high levels of drug resistance in neonatal units

BUILT...

A SKILLED TEAM

with expertise from a range of sectors and scientific networks



Message from Dr Manica Balasegaram, Director of GARDP

I am extremely proud of all we have achieved in 2017. In our first full year in operation, we have developed a business plan that articulates a seven-year roadmap, prioritizing sepsis in newborns and STIs – two disease areas of high global public health need on which to focus our R&D efforts.

We applaud the G20 Health Ministers, who through the Berlin Declaration following their first meeting cautioned that success in the fight against AMR cannot be achieved with current treatments. The Declaration* welcomed and sought to build on initiatives, including GARDP, to 'reinvigorate research and development in science and industry for antimicrobials.' The Declaration also recognized the importance of reactivating the R&D pipeline through incentive mechanisms that avoid reliance on high price/volume combinations and the need to promote appropriate use of antibiotics.

The challenge of antibiotic R&D is not an easy one, but it is vital to ensure that new and existing treatments are accessible to all those who need them. Our business model to develop and deliver treatments allows us to enter at any point along the drug R&D pipeline all the way through to patient access globally, while paying attention to the needs of developing countries. Any new approach must reflect the realities of clinical practice and take into account the diversity of national health systems challenges, and levels of economic development.

* G20 Germany 2017. *Berlin Declaration of the G20 Health Ministers: Together Today for a Healthy Tomorrow*. Available at: **https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/G/G20-Gesundheitsministertreffen/G20_Health_Ministers_Declaration_engl.pdf**

Through the generous support of our donors and partners, GARDP is already demonstrating how we can contribute to addressing the AMR challenge. During the last 12 months, we have built a skilled and dedicated team with expertise from a range of sectors and backgrounds, while leveraging the efforts of our partners. Such growth has enabled us to launch programmes that address two global public health priorities, namely sepsis in newborns and STIs, which includes a partnership to develop a new treatment for drug-resistant gonorrhoea. Our third programme focuses on recovering knowledge, data, and assets of forgotten or abandoned antibiotics and identifying new treatments.

We have benefited from our unique WHO and DND*i* parentage. Our incubation period, hosted by DND*i*, has allowed us to capitalize on DND*i*'s R&D expertise and infrastructure, while WHO's technical expertise in different disease areas has helped to guide our priority setting.

Our plans for 2018 are even more ambitious. These include: starting a global observational study, and two clinical trials; developing new public and private partnerships; accelerating our work to recover molecules for their potential value for antimicrobial drug development; and recovering and sharing the knowledge of established antimicrobial researchers with those starting their careers.

However, and as recognized by the G20 Health Ministers in Berlin who called for 'broadening the voluntary financial support' for initiatives such as ours, we need further public and private funding to achieve these ambitious plans. By leveraging the funds we receive, our approach will contribute to achieving the Sustainable Development Goals – and a world where effective, appropriate, and affordable antibiotic treatments are developed and available to all those who need them.

I am incredibly excited about our plans for the year ahead, and look forward to working with our team, current donors and partners, as well as welcoming new ones to ensure we can achieve our objectives.

Overview and achievements

January

Declaration at the first-ever G20 Health Ministers meeting specifically calls for 'broadening the voluntary financial support' for initiatives, including GARDP, which 'reinvigorate research and development in science and industry for antimicrobials'.

February

gardp.org goes live, receiving over 9,900 visitors from 146 countries in the first seven months.

March

GARDP publishes its first business plan outlining the overall R&D strategy, prioritization process, and sustainable access approach, serving as a roadmap for its R&D programmes in the coming years.

Priority programmes are identified following ten expert meetings (in 2016) to understand the most pressing AMR related medical needs and R&D gaps, with significant support from WHO.

April

GARDP conducts a survey on current antibiotics used to treat late-onset neonatal sepsis. Results indicate high levels of drug resistance in neonatal units.

May

R&D roadmap for multidrug-resistant gonorrhoea is published in *PLOS Medicine*, to mark the launch of GARDP's first programme at the STI & HIV World Congress in Rio de Janeiro, Brazil.

First agreement with a pharmaceutical company is announced. The deal with Entasis Therapeutics focuses on developing a novel, first-in-class, oral antibiotic for gonorrhoea. The partnership comes as WHO releases new data that show that antibiotic resistance is making gonorrhoea – a common STI – much harder to treat.

June

REVIVE
Advancing Antimicrobial R&D

GARDP sets out its ambitions for REVIVE – an online resource for the antimicrobial R&D community – at the American Society of Microbiology conference in Boston, USA. REVIVE is part of the Antimicrobial Memory Recovery and Exploratory Programme, which aims to recover the knowledge, data, and assets of forgotten or abandoned antibiotics and to identify new treatments. Some 20 assets from several pharmaceutical companies have been reviewed in 2017.

THE LANCET
Global Health

GARDP publishes its ambition to tackle antibacterial resistance in newborn babies (neonates) in *The Lancet Global Health*. AMR puts the achievements of the Sustainable Development Goal to reduce neonatal mortality directly at risk.

GARDP's Scientific Advisory Committee meets for the second time – following its first meeting in May – to provide expert advice and input into programmes and projects.

GARDP comprises a core team of 17 staff, while leveraging the efforts of a further 20 individuals from external partners from a range of sectors and backgrounds. These include public health, microbiology, infectious diseases, industry and academia, as well as the expertise of individuals working in developing countries. In addition, GARDP also receives dedicated support from its host, DND*i*, including GARDP's governance.

July | August | **September** | October | **November** | **December**

The Government of Germany hosts a pledging event raising EUR56 million for GARDP. Germany, together with the governments of Luxembourg, Monaco, the Netherlands, South Africa, Switzerland, and the United Kingdom, and the Wellcome Trust pledge to support GARDP's development of treatments to fight antibiotic resistance.

A joint DND*i*/GARDP office opens in South Africa with support from the South African Medical Research Council. The office facilitates close collaboration with a broad range of partners across the South African government, academia, hospitals, industry, and civil society for GARDP's programmes in South Africa.

The DND*i* board reaffirms that an independent legal entity will be created for GARDP.

A holistic approach to developing and delivering treatments in the fight against antimicrobial drug resistance

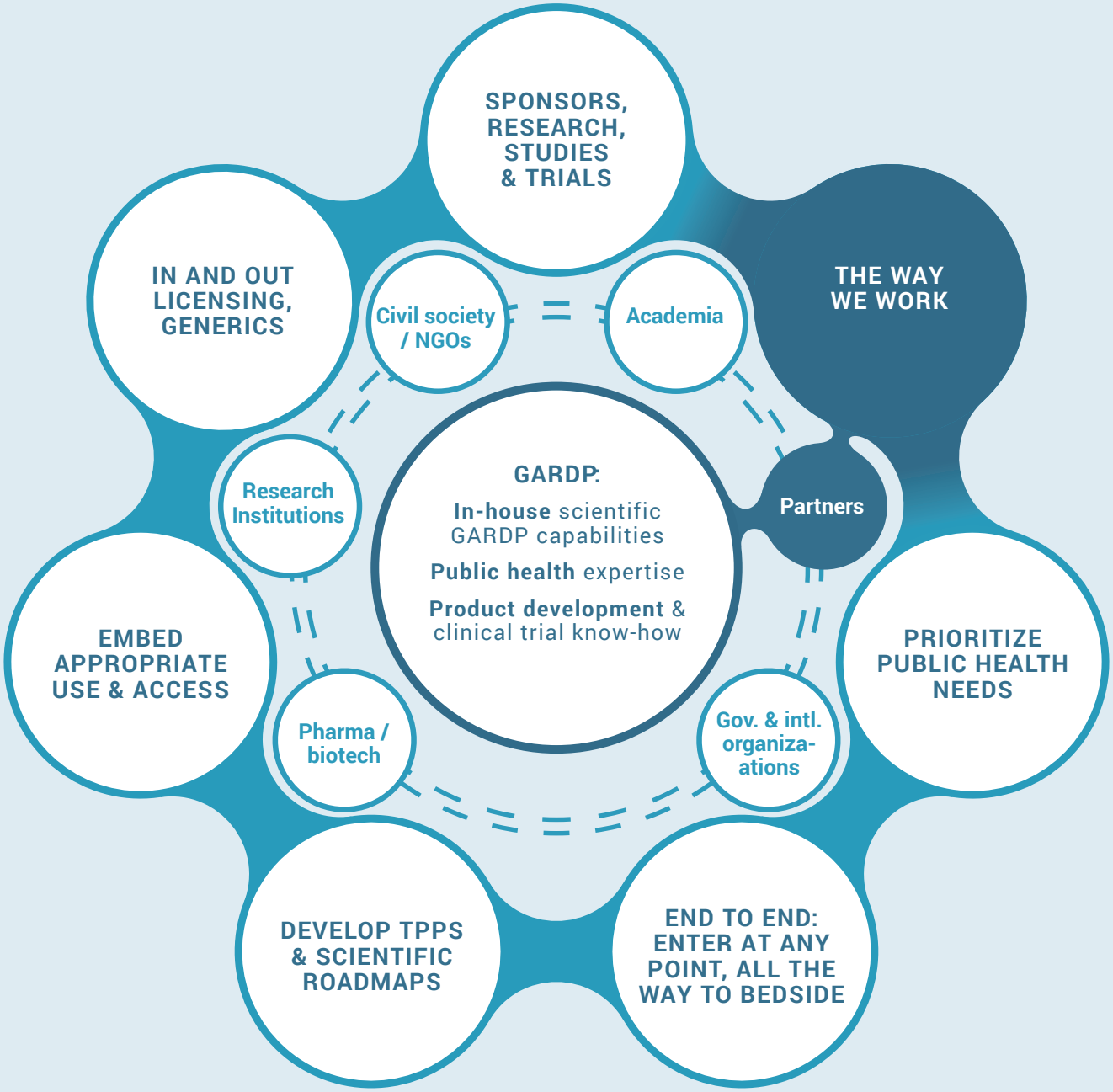
GARDP works closely with all stakeholders in the field of antibiotic R&D, developing strong and equitable partnerships – including with pharmaceutical and biotechnology companies, start-ups, other product development partnerships, academia, civil society, and health authorities from across the world to develop new antibiotic treatments.

GARDP is an important public health R&D component of the antibiotic R&D ecosystem. As a not-for-profit actor, it can champion unique and alternative approaches to addressing conservation of, and access to, new antibiotic treatments. Notably, GARDP:

- addresses global public health priorities, incorporating the needs of developing countries;
- works from any entry point and with multiple actors along the R&D pipeline through to patient access;
- targets important indications less likely to be developed by other actors;
- ensures that new antibiotics developed by GARDP are affordable to all in need.

In developing new antibiotic treatments, GARDP actively drives research that addresses public health priorities. These are determined by considering the intersection between WHO priority pathogens; specific populations' health needs; and individual diseases, and broader syndromes. Its R&D model invests funding it receives in programmes driven and directly executed by GARDP through strong partnerships.

One of the key components of GARDP's model is a tailored approach to ensuring sustainable access, including embedding stewardship and conservation within an access approach throughout all programmes. This includes; building in access and appropriate use considerations when developing target product profiles, and, notably, ensuring agreement with other actors; optimizing use of existing antibiotics; ensuring affordability of new antibiotics; and improving formulations and drug profiles. GARDP includes clauses that ensure affordability and appropriate use of any new products developed by GARDP in any partnership agreement.


SPONSORS, RESEARCH, STUDIES & TRIALS
IN AND OUT LICENSING, GENERICS
THE WAY WE WORK
Civil society / NGOs
Academia
Research Institutions
GARDP:
In-house scientific GARDP capabilities
Public health expertise
Product development & clinical trial know-how
Partners
EMBED APPROPRIATE USE & ACCESS
PRIORITIZE PUBLIC HEALTH NEEDS
Pharma / biotech
Gov. & intl. organiza-ations
DEVELOP TPPS & SCIENTIFIC ROADMAPS
END TO END: ENTER AT ANY POINT, ALL THE WAY TO BEDSIDE

Neonatal sepsis: a global concern

By 2023, GARDP aims to deliver a first-line treatment for clinically diagnosed cases of neonatal sepsis and initiate clinical trials evaluating a treatment for cases of confirmed infection by multidrug-resistant Gram-negative bacteria.

While significant progress has been made in recent years to improve child health globally, including a 50 percent reduction in child mortality since 1990, the number of preventable deaths in newborn babies (neonates) remains unacceptably high. Neonatal deaths now represent 44 percent of all deaths in children under the age of five. Of great concern is the estimated 214,000 neonatal deaths in 2015 attributed to drug-resistant infections.[2]

Antibacterial resistance is one of the main barriers to achieving Sustainable Development Goal 3, which seeks to ensure healthy lives and promote wellbeing for all. Drug-resistant infections pose a particular threat to babies and very young children, as their immune systems are not fully developed.

A major challenge in responding to this crisis is the knowledge gap: limited research on newborns has resulted in a lack of evidence concerning the appropriate treatment of serious and drug-resistant infections in this vulnerable population. GARDP's neonatal sepsis programme aims to provide an evidence base for the use of antibiotics, both old and new, in neonates with serious bacterial infections.

The two main objectives are to develop and deliver a new antibiotic first-line treatment for clinically diagnosed cases of neonatal sepsis where drug-resistant, Gram-negative bacteria are suspected, and a new treatment for confirmed multidrug-resistant bacterial infections.

Other long-term objectives of the programme include the development of formulations that are adapted for use in infants, as well as collaborations with WHO and other relevant stakeholders to ensure that the R&D innovation of new treatments encompasses a solid strategy for stewardship, and affordable and sustainable access.

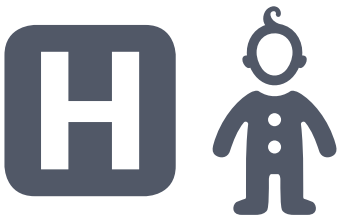
GARDP's initial feasibility survey completed in 2017 indicates high levels of drug-resistance in neonatal units. Other progress, following the development of two target product profiles in 2016, includes building partnerships and multi-stakeholder collaborations, including with St George's, University of London and the PENTA Foundation. Protocols for a clinical trial assessing the pharmacokinetics of a potential drug candidate and an observational study have been approved. Both are ready for implementation in 2018.

[1] Liu. L. *et al.* (2015). Global, regional, and national causes of child mortality in 2000–13, with projections to inform post-2015 priorities: an updated systematic analysis. *Lancet*; 385: 430–40.
[2] Laxminarayan, R. *et al.* (2016). Antimicrobials: access and sustainable effectiveness 1; Access to effective antimicrobials: a worldwide challenge. *Lancet*: 387: 168-75.

Global burden of AMR in neonates

Clinical diagnosis of severe bacterial infections is challenging in neonates since symptoms and signs can be non-specific and difficult to detect.

Hospitalized neonates and infants are at



HIGH RISK

of developing multidrug-resistant, hospital-acquired infections.

INCREASING RATES OF ANTIBACTERIAL RESISTANCE

reported in both resource-rich and resource-poor countries.

Globally,

214,000 NEONATAL DEATHS A YEAR

are estimated to be due to drug-resistant infections.[2]

Pooled data demonstrate that over

40% OF SEPSIS IN NEONATES

was due to bacteria resistant to the currently recommended WHO regimen.

A novel, first-in-class oral antibiotic in clinical development targeting drug-resistant gonorrhoea

By 2023, GARDP aims to register a new drug for gonorrhoea in several high-burden countries, ensure its integration into relevant policies and guidelines, and initiate its implementation together with a suitable treatment conservation and access strategy.

With an estimated 78 million new cases occurring globally among adults each year[1], gonorrhoea is one of the most common STIs and development of resistance in gonorrhoea is a major public health concern. Gonorrhoea has been identified by WHO as a priority pathogen, as almost all antibiotic classes used to treat the infection have lost their efficacy because of AMR.

Globally, reports of gonorrhoea strains resistant to the current first-line treatment recommended by WHO, and other commonly used antibiotics, are increasing. This is backed by new data released by WHO showing that of 77 countries surveyed across the world, more than 60% report at least one isolate that was either resistant or had decreased susceptibility to last-line antibiotics.[2]

To help address this global public health need, GARDP with support from WHO and international experts, drafted ideal and acceptable target product profiles to guide the development of its STI R&D strategy. Published in PLOS Medicine[3], the peer-reviewed article comprehensively outlines GARDP's strategy to develop new treatments. Starting with a focus on gonorrhoea, the strategy details, for the first time, a R&D road map for new treatments against drug-resistant gonorrhoea.

Key components of the strategy include evaluating the use of existing antibiotics and combination treatments for STIs, supporting the development of simplified treatment guidelines, and accelerating the development of a new treatment for gonorrhoea while integrating sustainable access and stewardship.

The first step to working towards the STI strategy was realized through GARDP's partnership agreement with Entasis Therapeutics. The partnership will see GARDP develop zoliflodacin – a novel, first-in-class oral antibiotic that has potent activity against drug-resistant gonorrhoea. A phase III clinical trial is planned in multiple countries including South Africa, Thailand, the EU and the United States.

In parallel to the GARDP-sponsored phase III trial, GARDP will carry out non-clinical activities, including microbiology surveys, to ensure that the product is effective against recent and geographically diverse strains of gonorrhoea.

GARDP is also implementing a chemistry, manufacturing, and controls plan that includes developing a commercial formulation of zoliflodacin for use in clinical trials and beyond. In addition, a partnership agreement was signed with the WHO

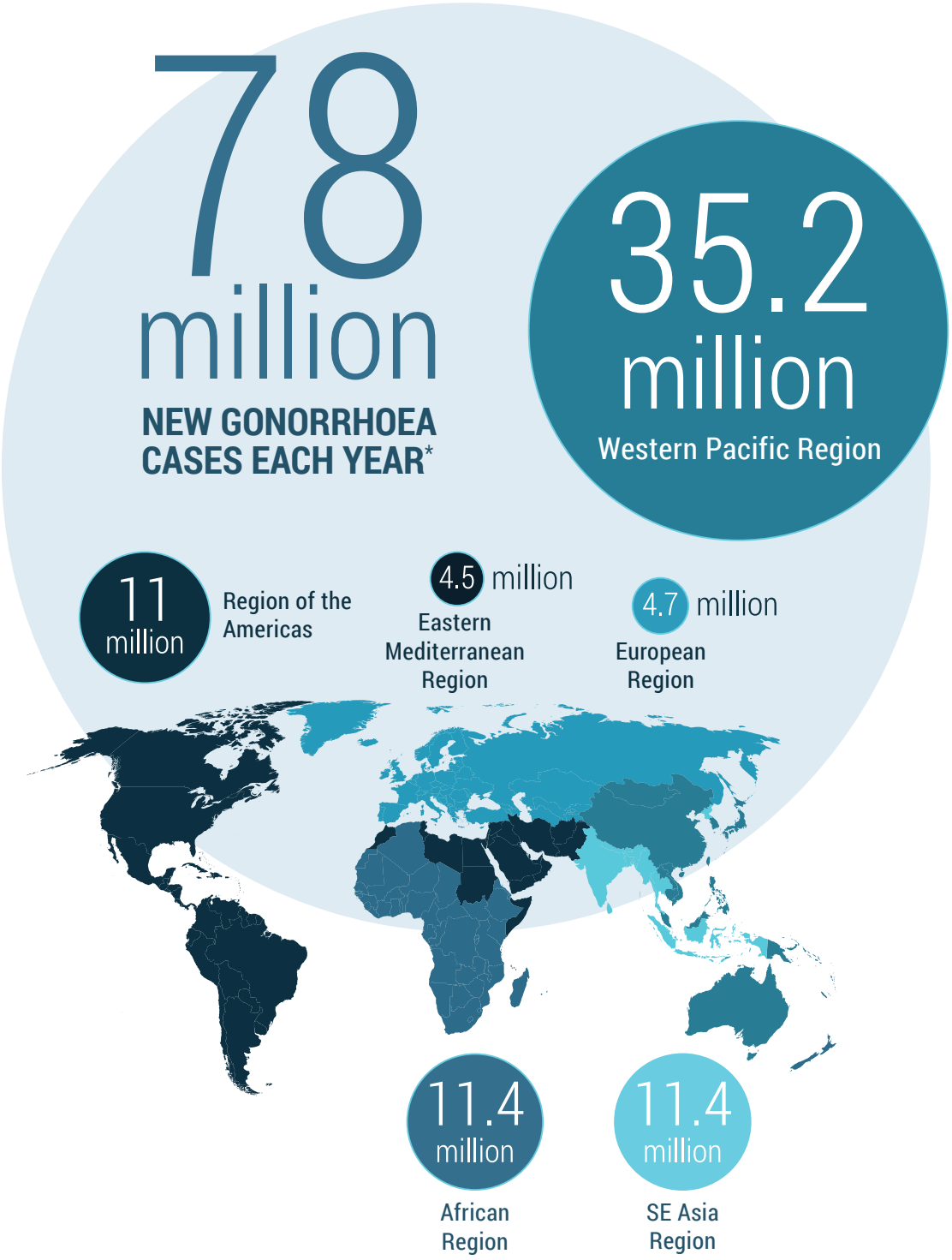
[1] Newman, L. *et al.* (2015). Global estimates of the prevalence and incidence of four curable sexually transmitted infections in 2012 based on systematic review and global reporting. *PLoS ONE*: 10(12); e0143304

[2] Wi, T. *et al.* (2017). Antimicrobial resistance in *Neisseria gonorrhoeae*: Global surveillance and a call for international collaborative action. *PLoS Medicine*: Jul 7;14(7):e1002344.

[3] Alirol, E. *et al.* (2017). Multidrug-resistant gonorrhoea: A research and development roadmap to discover new medicines. *PLoS Medicine*: Jul 26;14(7): e1002366.

Collaborating Centre for Gonorrhoea and other STIs at Örebro University Hospital (Sweden) to further characterize the *in vitro* activity of zoliflodacin.

If zoliflodacin receives regulatory approval, Entasis will grant GARDP an exclusive licence with sublicensing rights in 168 low- and middle-income countries, while retaining commercial rights in high-income markets. Both GARDP and Entasis are committed to affordable and equitable pricing in their respective territories. The licence also contains provisions on affordability and sustainable access.



* Source: Wi, T. *et al.* (2017). Antimicrobial resistance in *Neisseria gonorrhoeae*: Global surveillance and a call for international collaborative action. *PLoS Medicine*: Jul 7;14(7): e1002344.

Addressing the void in antibiotic discovery

GARDP aims to champion a new generation of antibiotic R&D researchers by sharing experts´ knowledge and building a long-term portfolio of therapeutic interventions necessary to address the unavoidable development of resistance to any novel compound brought to patients.

There has been a void in the discovery and development of antibiotic drugs over the last 20 years. To help address this, GARDP's Antimicrobial Memory Recovery and Exploratory Programme (AMREP) began its activities in September at the 2017 ASM-ESCMID conference in Boston, USA.

Through two workstreams – namely, Memory Recovery and Exploratory – AMREP aims to recover the knowledge, data, and assets of forgotten or abandoned antibiotics as well as to identify new drugs. The programme has the potential to support GARDP's other R&D programmes through efforts that could lead to recovered candidates for pre-clinical or clinical development, while also contributing resources and training to the broader antibiotic R&D community.

AMREP's Memory Recovery workstream evaluates recovered molecules for their potential value as antimicrobial drug development candidates. Up until December 2017, around 20 assets were reviewed from several pharmaceutical companies. To pool and avoid duplication of efforts towards developing new antibiotics, GARDP is actively building collaborative partnerships.

In addition to recovering molecules, GARDP has developed a website – REVIVE – to share the knowledge of former and current antimicrobial researchers and developers, with scientists in the early stage of their careers as well as those entering the field. The aim is to help improve, accelerate, and streamline antimicrobial drug discovery, research, and development.

REVIVE went live in November 2017. In addition to expanding the pool of experts, a programme of webinars and workshops are planned for 2018.

Through REVIVE, GARDP is connecting the antimicrobial R&D community to facilitate learning and promote good practice in the conduct of antimicrobial drug R&D. The website supports exchanges between early-career clinical and non-clinical researchers with world-class experts in antimicrobial R&D. So far, more than 100 experts have engaged with REVIVE.

The Exploratory workstream strategy supports pre-clinical research. This includes building a long-term portfolio of therapeutic interventions necessary to address the ultimate and unavoidable development of resistance to any new therapy that is brought to patients.

To further this work, GARDP held two expert meetings to help define clinical needs and possible activities. An outline programme strategy, approved by the Scientific Advisory Committee and the Board of Directors in November, is under active development. Discussions are ongoing with individual companies and academic groups around innovative discovery approaches.

revive.gardp.org connecting the antimicrobial R&D community

FACILITATING LEARNING

REVIVE has a strong educational focus to address critical steps along the antimicrobial drug discovery and R&D pipeline. Activities include webinars, blogs, roundtables at conferences, and workshops.

CONNECTING PEOPLE

Individuals with an interest in antimicrobial R&D can interact with experts in an open forum or directly through a 'talk to an expert' feature. This can help upcoming researchers gain access to highly experienced and knowledgeable experts across a range of specialities.

SHARING KNOWLEDGE

REVIVE is creating a resource repository, and links to partners and their resources.

Developing partnerships, delivering antibiotics for all

Building on initial partnerships from 2016 with Germany, The Netherlands, Switzerland, South Africa, and Médecins Sans Frontières / Doctors Without Borders, the German Federal Ministry of Health and Ministry of Education and Research organized and hosted a pivotal pledging event for GARDP in September.

At the event, a total of EUR56 million was pledged by Germany together with the Governments of Luxembourg, Monaco, The Netherlands, South Africa, Switzerland, and the United Kingdom, and the Wellcome Trust.

By the end of the year GARDP had secured a total of EUR64 million in commitments and pledges, which represents almost 25% of the total funding required to deliver GARDP's ambition to develop new treatments for bacterial infections where drug resistance is present or emerging, or for which inadequate treatment exists.

Despite the growing problem of global antibiotic resistance, very few new antibiotics have entered the market in the last decades. In response, the G20 under Germany's presidency has pledged to invigorate research and development efforts to find new drugs. The fact is that we cannot do without antibiotics. The additional EUR56 million in funding made available today for the Global Antibiotic Research & Development Partnership is a major step forward in the fight against the global health risk that antibiotic resistance presents.

Hermann Gröhe,
former Federal Minister of Health, Germany

GARDP gratefully acknowledges the following partners for their ongoing engagement and support:

- German Federal Ministry of Health
- Germany Federal Ministry of Education and Research
- Luxembourg Development Cooperation and Humanitarian Aid
- Luxembourg Ministry of Health
- Médecins Sans Frontières / Doctors Without Borders
- Principality of Monaco Ministry of Foreign Affairs and Cooperation
- Netherlands Ministry of Health, Welfare and Sport
- South African Medical Research Council
- Swiss Federal Office of Public Health
- UK Department of Health and Social Care
- UK Department for International Development
- The Wellcome Trust

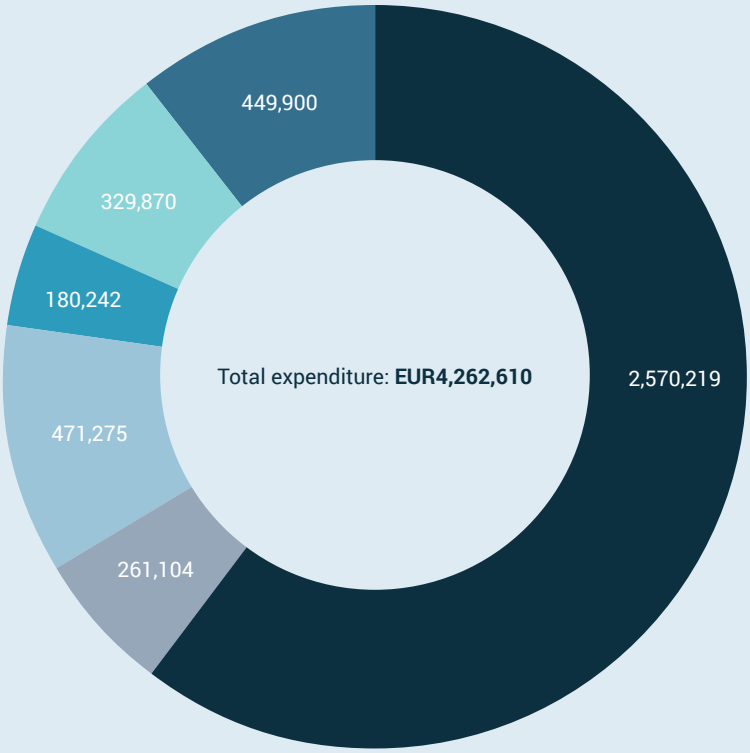
The collaboration between the South African Medical Research Council and GARDP is evidence that public-private partnerships have the ability to design responsive interventions, that when taken to scale, can positively transform the socio-economic constructs of our communities where needed.

Professor Glenda Gray,
President and CEO of the South African Medical Research Council

GARDP 2017
EXPENDITURE PER PROGRAMMATIC AREA

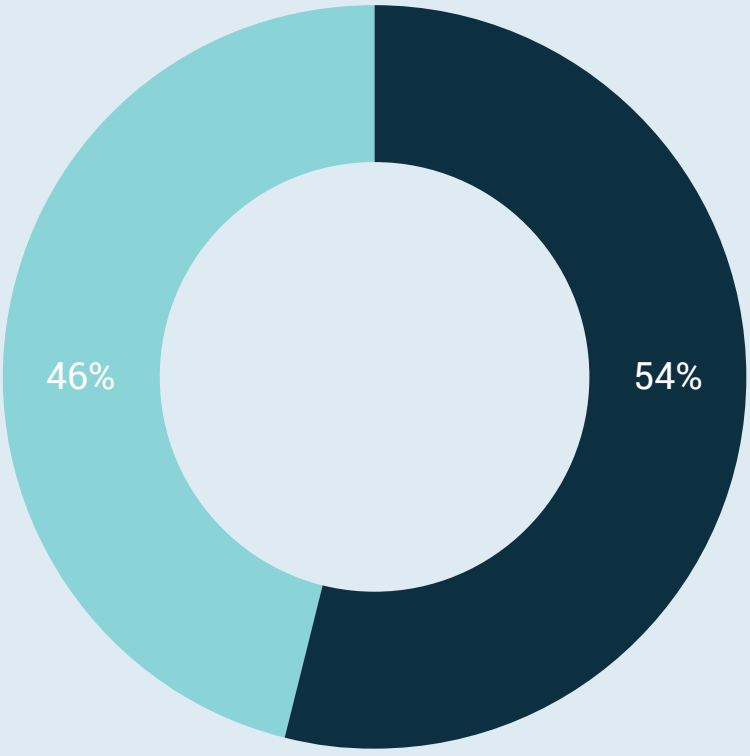
- AMR general programmes*
- Antimicrobial Memory Recovery and Exploratory Programme (AMREP)
- Neonatal Sepsis Programme
- Sexually Transmitted Infections Programme
- Resource platforms, communications and advocacy
- Non-social mission expenditure: fundraising and general & administration

Currency: EUROS



GARDP 2017
INCOME DIVISION BETWEEN RESTRICTED AND UNRESTRICTED

- Restricted
- Unrestricted



* AMR general programmes include: all preliminary work required to build programme and projects, namely initial programme planning, business development, partnership building, and research and development transversal support (expertise in chemistry, manufacturing and control, translational work, coordination with DND*i*).

** Resource platforms comprises costs related to regional offices.

The financial information is extracted from DND*i*'s 2017 financial and performance report audited by Deloitte. The full report is available at: **www.dndi.org/key-financial-figures**.

Selected media coverage

The Guardian — July 2017

Untreatable gonorrhoea 'superbug' spreading around world, WHO warns

BBC

Oral sex spreading unstoppable bacteria

LE FIGARO — July 2017

MST : attention à la «chaude-pisse», difficile à soigner

nature

Untreatable gonorrhoea on the rise worldwide

The New York Times

A Dangerous, 'Silent Reservoir' for Gonorrhea: The Throat

CNN — July 2017

This STD is becoming 'smarter' and harder to treat

De Telegraaf — Sept 2017

Twee miljoen euro voor nieuwe antibiotica

stern

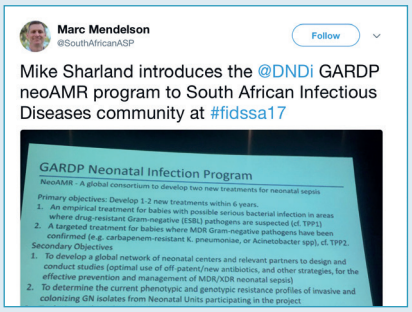
56 Millionen für neu entwickelte Medikamente bis 2022

Social media

Georg Schütte: @Georg_Schuette
State Secretary, Federal Ministry of Education and Reseach

Marc Sprenger: @Marcsprenger4PH
Director AMR @WHO Geneva leading coordination of Global Action Plan Antimicrobial Resistance across WHO

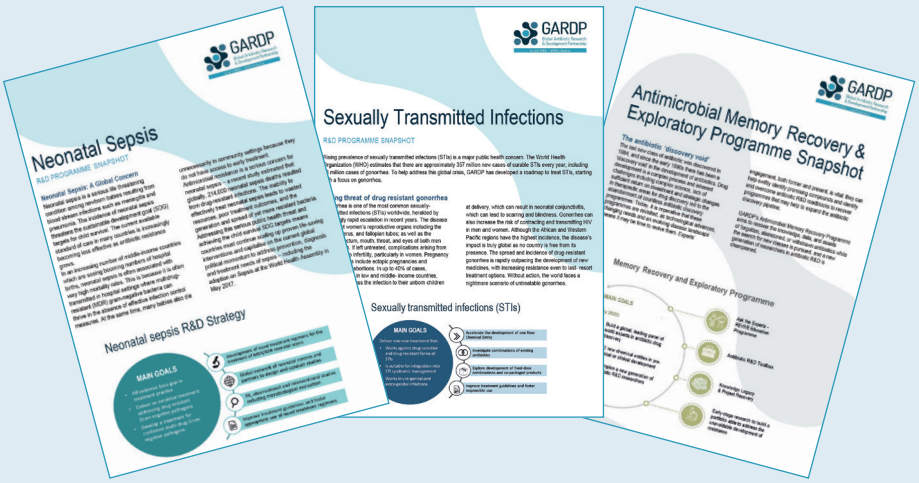
Tedros Adhanom Ghebreyesus: @DrTedros Director General of the World Health Organization



Marc Mendelson: @SouthAfricanASP
Co-Chair South African Antibiotic Stewardship Programme & President of the International Society for Infectious Diseases

John Rex: @John H. Rex_NewAbx
John H. Rex, MD: Antibiotic developer

Programme snapshots available on gardp.org



Governance

GARDP is led by its Director who also serves as a member of DND*i*'s executive team. DND*i*'s Board of Directors oversees GARDP's governance as part of hosting GARDP during its incubation.

GARDP's Scientific Advisory Committee, comprising scientists with expertise in AMR, drug discovery and development, and public health, provide independent expert advice to the Board of Directors.

The Committee advises and makes recommendations on choice of R&D research and development projects, while scrutinizing GARDP's R&D process.

SCIENTIFIC ADVISORY COMMITTEE MEMBERS AND OBSERVERS AS OF DECEMBER 2017:

Jutta Heim, Chair; University of Basel, Switzerland

Karl-Heinz Altmann, Swiss Federal Institute of Technology, Switzerland (Member)

Rashmi H Barbhaiya, Advinus Therapeutics, India (Member)

Graeme Bilbe, DND*i*, Switzerland (Observer)

Anthony Coates, St George's University, UK (Member)

Patrice Courvalin, Institut Pasteur, France (Observer)

George Drusano, Institute for Therapeutic Innovation, University of Florida, USA (Member)

Maria Cecilia Ferreyra, Médecins Sans Frontières, Spain (Member)

Mark J Goldberger, formerly Food and Drug Administration, United States (Member)

Herman Goossens, Antwerp University Hospital, Belgium (Member)

Robert Gurny, University of Geneva, Switzerland (Member)

Shabir A Madhi, National Institute for Communicable Diseases, South Africa (Member)

Nicola Magrini, WHO, Switzerland (Observer)

Lúcia Martins Teixeira, Federal University of Rio de Janeiro, Brazil (Observer)

Marc Mendelson, University of Cape Town, South Africa (Member)

Malcolm Page, formerly Basilea, Switzerland (Member)

David Shlaes, formerly Case Western Reserve University, USA (Member)

Kazuhiro Tateda, Toho University, Japan (Member)

Kamini Walia, Indian Council of Medical Research, India (Member)

Nicholas White, Mahidol University, Thailand (Member)

Yonghong Xiao, Zhejiang University, China (Observer)

DND*i* BOARD MEMBERS AS OF DECEMBER 2017:

Marie-Paule Kieny, Chair (Institut national de la santé et de la recherche médicale (INSERM), France)

Suerie Moon, Secretary (The Graduate Institute, Switzerland)

Alwyn Mwinga, Patient representative (Zambart, Zambia)

Derrick Wong, Treasurer (Non-profit management consultant)

Noor Hisham Abdullah (Ministry of Health, Malaysia)

Jorge Bermudez (Fundação Oswaldo Cruz, Brazil)

Christian Bréchot (Institut Pasteur, France)

Joanne Liu (Médecins Sans Frontières International, Switzerland)

Bernhards Ogutu (Kenya Medical Research Institute (KEMRI), Kenya)

John Reeder (Tropical Disease Research Institute, World Health Organization – Permanent Observer)

Bennett Shapiro (PureTech Ventures, formerly with Merck & Co., USA)

Marcel Tanner (University of Basel and Federal Institute of Technology, Switzerland)

GARDP

Global Antibiotic Research & Development Partnership

A joint DND*i* / WHO initiative

The Global Antibiotic Research & Development Partnership (GARDP) is a joint initiative by the World Health Organization (WHO) and the Drugs for Neglected Disease *initiative* (DND*i*). As an important element of WHO Global Action Plan on Antimicrobial Resistance, this not-for-profit research and development organization addresses global public health needs by developing and delivering new or improved antibiotic treatments, while endeavouring to ensure sustainable access. Launched in May 2016, GARDP is incubated by DND*i*, which currently provides GARDP's governance.

Following a successful first full year in operation, GARDP's priorities for the next year include:

CONDUCT A...

CLINICAL TRIAL

to confirm the correct dose and evaluate safety for a drug licensed over 40 years ago that has not been widely used in newborns with sepsis.

COMMENCE A...

global

OBSERVATIONAL STUDY

to understand sepsis in newborns and current antibiotic prescribing practices to treat it.

CONDUCT A...

FOOD EFFECT CLINICAL TRIAL

to inform a phase III clinical trial for a novel, first-in-class oral antibiotic to treat drug-resistant gonorrhoea.

LAUNCH GARDP'S...

4TH PROGRAMME

on paediatric antibiotics, focusing on accelerating the development of, and optimizing new and current antibiotics.

CONTINUE BUILDING...

revive.gardp.org

as a resource to support the antimicrobial discovery, research, and development community.

REVIVE
Advancing Antimicrobial R&D

COMPLETE...

recruitment for

KEY R&D POSITIONS

to continue delivering programme ambitions at pace.

SET UP...

GARDP as an

INDEPENDENT SWISS FOUNDATION

with an operational Board of Directors.

FORMALIZE...

FURTHER PARTNERSHIPS

with governments, industry and not-for-profit actors.

Global Antibiotic Research & Development Partnership (GARDP)
Drugs for Neglected Diseases *initiative* (DND*i*)
15 Chemin Louis-Dunant – 1202 Geneva – Switzerland

Email: gardp@dnd*i*.org
www.gardp.org

Designed by: ACW, London, UK – acw.uk.com

World Health Organization

DNDi Drugs for Neglected Diseases *initiative*