

Stepping up the fight:

INDUSTRY COLLABORATION TO END HIV, TUBERCULOSIS AND MALARIA



PREFACE



CLAUDINE TALON, FIRST LADY OF BENIN

The trio of HIV, tuberculosis (TB) and malaria is the most worrying cocktail of epidemics for human capital in Africa. It inhibits all development action, undermines the fight against poverty and maintains economic immigration. It defies us every day and seems to blunt the ardor of each other, especially with regard to malaria and HIV. Funding is dwindling, while new challenges in addressing the diseases are emerging. The challenge of mastering this triple burden of diseases leaves us no choice.

'Funding is dwindling, while new challenges in addressing the diseases are emerging. The challenge of mastering this triple burden of diseases leaves us no choice'

Whether governments of most concerned countries, or of less concerned countries, international organizations, non-governmental organizations (NGOs), donors or scientists, the obligation to find ways and means to revive the dynamics of the financing of health programs is incumbent upon us all, because in case of failure, the consequences will spare no one.



THOMAS CUENI, DIRECTOR GENERAL, IFPMA

As the biopharmaceutical industry, we recognize that we are at a pivotal moment. Now is the time to step up our fight against HIV, TB and malaria — we must do more, innovate more, and most importantly, partner more. To support Member States in accelerating efforts to achieve universal health coverage (UHC) and ensure that no one is left behind or suffers financial hardship, we must continue to build bridges between key actors across the health system and adopt flexible approaches to meet countries unique needs. We cannot achieve our goals in HIV, TB, and malaria without a collaborative ecosystem where all partners — governments, industry, academia, civil society, multilaterals — work together with an open mind, putting patients first. Our industry stands ready to support global leaders meeting under the auspices of international gatherings such as the G7 and the G20 to foster collaboration between global health actors and address global health challenges. Dedicating our time, resources, and expertise towards expanding quality health coverage is not a cost but a crucial investment in human capital as the ultimate driver of development and prosperity.

We have created <u>Global Health Progress</u> as a resource to demonstrate our partnerships — from individual company programs to multicompany initiatives — contributions to the Sustainable Development Goals (SDGs) and enhance opportunities for further collaboration. We believe sharing knowledge is critical and we continue to learn from one another, drawing on complementary strengths and expertise to develop global health programs and enhance action.



PHILIPPE LAMOUREUX, DIRECTOR GENERAL, LEEM

In response to The Global Fund's call to step up the fight against HIV, TB and malaria, given the growing levels of drug resistance, our members stand ever more committed to the pursuit of essential research and development (R&D) efforts and providing holistic approaches to achieve stronger health systems. Our teams understand the urgent need for continued innovation adapted to its environment and cultural sensitivities, to ensure access for patients. Today, there is a vibrant pipeline to address current unmet needs and achieve better health outcomes for all. We will continue to invest to advance society's understanding of disease and make new and improved treatments and prevention tools.

'Our members stand ever more committed to the pursuit of essential research and development efforts and providing holistic approaches to achieve stronger health systems'



STEPPING UP THE FIGHT AGAINST HIV, TUBERCULOSIS AND MALARIA

Ending the epidemics of HIV, TB and malaria is within our reach. HIV was once an untreatable and almost uniformly fatal virus; today, R&D advances have transformed it into a manageable condition, extending the lives of millions of people living with the virus. Companies continue to invest in TB R&D and work in partnership to find innovative solutions to emerging challenges, spearhead development and ensure the availability of new drugs and vaccines to prevent and treat TB. We have also made progress tackling malaria — year by year, new countries are certified malaria-free — Algeria and Argentina marked this milestone in 2019.¹

The global community has come together, committing to achieving the Sustainable Development Goals (SDGs) by 2030.² Achieving these goals is possible, but we need to step up the fight — 2030 is only 11 years away, and we are not yet on track to meet our targets. We continue to tackle many of the most immediate pressing needs in expanding access to care and treatment for HIV, TB and malaria. Nevertheless, to fully stem the tide of the epidemic, all sectors are needed to advance therapies and move health systems towards UHC so that all individuals and communities receive the health services they need without suffering financial hardship.³

On the 10th October 2019, The Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) is embarking on its Sixth Replenishment in Lyon, France. This replenishment seeks to raise at least USD\$14 billion to drive progress over the next three years, aiming to save more than 16 million lives, avert 234 million infections, and bring the world closer to achieving the SDGs. As part of this effort, The Global Fund is calling on all actors — including multilateral and bilateral partners, governments, civil society, and the private sector — to 'accelerate innovation, coordinate and collaborate more efficiently, and execute programs more effectively.'4

The biopharmaceutical industry remains deeply committed to supporting this fight. As we stand alongside the global health community in taking critical next steps, we continue to commit to:

01. SHARING KNOWLEDGE TO DRIVE EFFECTIVE PROGRAM EXECUTION

By sharing our experiences, we continually learn from and improve our global health programs in HIV, TB and malaria. The International Federation of Pharmaceutical Manufacturers & Association's (IFPMA) new resource, Global Health Progress, explores industry collaborations in the era of the SDGs, compiling information by disease area, program strategy, and more. With this resource, we hope to enhance collaborations, along with sharing learnings and expertise, for example opportunities to develop mobile health interventions or fight counterfeit and substandard medicines.⁵

02. COLLABORATING TO STRENGTHEN HEALTH SYSTEMS

Through our partnerships, we are leveraging our expertise and that of our partners to build stronger, integrated health systems that improve health and quality of life. Beyond medicines, we are supporting community outreach to increase awareness and reduce stigma, building health workforce capacity, strengthening supply chains, supporting regulatory capacity building, enhancing infrastructure, and finding innovative solutions to ensure all people are able to access high-quality care and treatment.

03. ACCELERATING INNOVATION

Our industry continues to invest in innovation and R&D, exploring vaccines, treatments, cures, and new tools to prevent infections — including pediatric formulations, shorter treatment regimens, and targeted solutions to address patient adherence, long-term tolerability, comorbidities and drug resistance. To excel these efforts, we work in partnership and through open innovation to share our scientific knowledge and scale-up manufacturing capabilities in low- and middle-income countries (LMICs).



In this report, we have brought together highlights on how we are advancing our work in HIV, TB and malaria, with 14 exemplary case studies that illustrate some of our contributions to support the elimination of these diseases.

We have the opportunity to achieve the SDGs over the next 11 years, requiring increased collaborations across sectors — we invite all actors to explore our work and engage with us as we deepen the quality and impact of our programs.

"I think talking and being open is really important because once I came out with my diagnosis I felt free. My doctor had introduced me to a place where I could go and meet other people who were also in the same situation as me. Everything changed and I started learning things about my medication, how it could help me in the future and how I can lead a normal life.

A lot of people don't want to be tested because they're scared of being judged, and that's when I decided that I wanted to speak up about that stigma and raise awareness. HIV is no longer a death sentence, it's so different now."

Paida Mutopo, Advocate living with HIV

01 SHARING KNOWLEDGE TO DRIVE EFFECTIVE PROGRAM EXECUTION

Global Health Progress showcases:

collaborations which are supporting HIV, TE and malaria

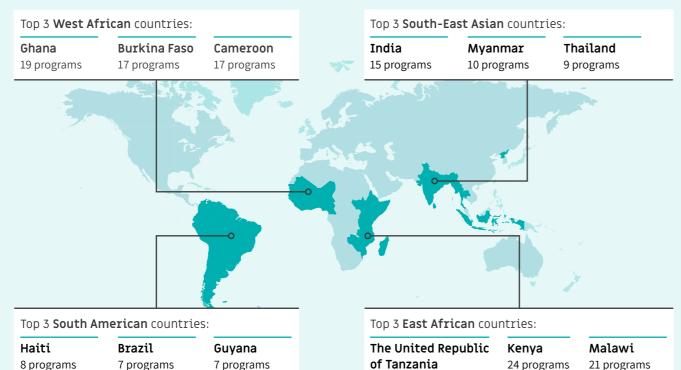
Our collaborations are working in:

159 countries around the world

Our programs are collaborating with:

481 mul

Our programs are working across the globe:



Our programs support countries beyond medicines and the **top 5 program strategies** are:





Health Service Delivery—Treatment 17 programs



Health Systems Strengthening
15 programs

Our programs adopt holistic approaches to supporting countries and the SDGs beyond health:



25 programs

44%

of our programs in HIV, TB, and malaria support SDG 5 (gender equality and women's empowerment)



46% of our programs in HIV, TB, and malaria support SDG 10 (reduce inequalities)

O2 COLLABORATING TO STRENGTHEN HEALTH SYSTEMS

We are working with partners across sectors to **develop our HIV, TB and malaria programs:**



24% (18/76) of our collaborations are multi-company programs



71%
of our programs include a collaboration with more than one partner type

Our industry works with a diversity of partners:

Partner type	Percentage of programs collaborating with partner type	Program total
Global NGOs	50%	38 out of 76
Academia or research institutes	38%	29 out of 76
Governments	34%	26 out of 76
Private foundations	33%	25 out of 76
Intergovernmental organization and multilaterals	29%	22 out of 76
Local NGOs	20%	15 out of 76
Bilateral development organizations	18%	14 out of 76
Generic manufacturers	17%	13 out of 76

Our most common partners are:





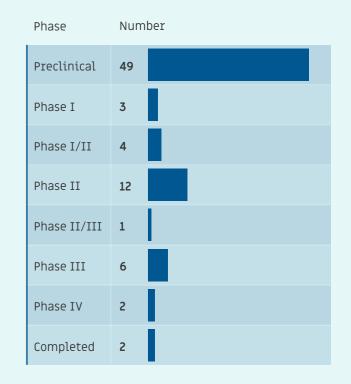
Clinton Health
Access Initiative
8 programs

PATH Malaria
Vaccine Initiative
5 programs

03 ACCELERATING INNOVATION



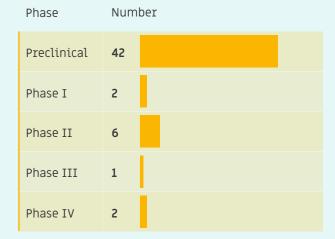
79 R&D pipeline projects for TB⁶





The biopharmaceutical industry has:

R&D pipeline projects for malar



HIV



Over the past 40 years, breakthrough innovations and cross-sector collaborations have transformed the global response to the HIV epidemic.

Global, collaborative strategies have been foundational in mobilizing action and supporting countries to halt the HIV epidemic, such as UNAIDS 95-95-95 target to end AIDS by 2030 and Count Down to Zero — the global plan to eliminate new HIV infections among children.^{8, 9} However, today over 36.9 million people are still living with HIV.¹⁰

To address the ongoing burden of HIV, local health systems need to be able to provide the appropriate care and treatment for people living with the disease. The biopharmaceutical industry has a central role to play in health system strengthening, building resilient and sustainable healthcare systems in service of UHC.

We are supporting holistic approaches to scale up HIV prevention, treatment, and care with the aim of helping communities and people living with HIV (PLHIV). The comprehensive approaches our companies adopt increase access to treatment through affordable antiretroviral therapy (ART), licensing agreements to provide sustainable treatment supplies (e.g., the UN-backed Medicines Patent Pool), capacity building, and infrastructure support. Sharing and applying evidence-based knowledge has allowed us to make remarkable progress in tackling HIV. For example, mother-to-child-transmission has been virtually eliminated in high-income countries, and learnings are being applied in LMICs.

However, more action and innovation are needed to achieve a world without HIV, particularly in light of the growing threat of HIV drug resistance. 11 We continue to invest in R&D to discover novel HIV solutions. Recently, we have made a step-change in the way HIV is managed by protecting at-risk populations through pre-exposure prophylaxis (PrEP). Today, more than 50 new medicines and vaccines are in development.¹² Comprehensive research is investigating emerging HIV challenges such as the immunogenicity of multiple vaccine regimens, HIV remission, combination treatments and formulations for target populations. Initiatives where we work together, including the International Partnership for Microbicides (IPM) and the International AIDS Vaccine Initiative (IAVI), are accelerating research efforts. These collaborations are tackling the biggest challenges in HIV and propelling us on our journey towards finding a cure.

SPOTLIGHT ON:

6/39 HIV PROGRAMS IN THIS REPORT

Explore the full range of programs at globalhealthprogress.org

TOP 3 PROGRAM STRATEGIES FOR HIV:



Community Awareness and Linkage to Care 14 programs



Health Service Delivery—Prevention 13 programs



Drug Development and Research 12 programs

TOP HIV PROGRAM RECIPIENT COUNTRIES:

South Africa

Uganda

Lesotho

17 programs

17 programs

16 programs

Kenya 17 programs United Republic of Tanzania

17 programs

TOP 3 PARTNERS TYPES WORKING ON HIV:

Global NGOs

20 programs

Governments

12 programs

Intergovernmental Organization and Multilaterals 12 programs

TOP 3 PARTNERS WORKING ON HIV:

Clinton Health Access Initative

7 programs

US presidents Emergency Plan for AIDS Relief

7 programs

ViiV Healthcare

5 programs

Test-and-Treat Demonstration Project

Active Since: 2015



Gilead's Test-and-Treat Demonstration Project provides HIV screening and treatment, alongside training for local healthcare professionals and community education to reduce transmission and improve adherence.



STRATEGY:

Health service delivery — diagnosis and treatment



SCOPE:

Active in 2 districts in Tanzania

SUPPORTING PARTNERS (3 OF 6):

- → Dioceses of Shinyanga
- → Doctors with Africa CUAMM
- Missionary Sisters of Our Lady of Apostles (OLA)

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

The Test-and-Treat Demonstration Project focuses on the provision of HIV screening and early treatment initiation. Accompanying health systems strengthening activities include health workforce training, support to sensitize the local population to the subject of HIV — particularly within families of those infected with HIV — and task shifting initiatives to increase community health workers remit.

RESULTS AND MILESTONES

- → Since October 2018, over 112,00 people have been tested for HIV and over 3,000 adults and children have been given treatment.
- → Mother-to-child-transmission has been prevented in approximately 200 babies.

Mentor Mothers

Active Since: 2006



Mentor Mothers works to reduce mother-to-child-transmission through education and provision of support for local mothers living with HIV in Sub-Saharan Africa.



STRATEGY:

Community awareness and linkage to care



SCOPE:

Active in 9 countries in Sub-Saharan Africa



TARGET POPULATION:

Women and children

SUPPORTING PARTNERS (1 OF 1):

→ Mothers2mothers (m2m)

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

Mentor Mothers empowers local mothers living with HIV to become frontline healthcare workers in communities and healthcare centers. Using both one-on-one and group sessions, Mentor Mothers provides essential health education and support to women to help protect their babies from HIV infection while also maintaining their own health.

RESULTS AND MILESTONES

- → Over 1.3 million women in nine counties have been reached through counselling and other services provided by over 1,800 local mothers living with HIV.
- → In Uganda, program evaluations indicate that for every USD\$1 spent on Mentor Mothers programs a cost saving of USD\$11.40 was achieved through HIV treatments being averted.

Global Access Program

Active Since: 2014



The Global Access Program works to expand access to Roche's diagnostic tests and treatments for HIV, Hepatitis B and C, TB and resistance assays for TB, alongside providing human papillomavirus (HPV) screening.

PROGRAM OVERVIEW

Roche collaborates with partners to supply its diagnostic tests and treatments at reduced prices. Beyond diagnostic support, the program works to build local capacity and infrastructure. The program has established over 60 molecular testing centers and 145 national testing labs across five countries. An accompanying education program trains doctors and nurses in limited resource settings on viral-load diagnostics. The Roche Scientific Campus in Johannesburg, South Africa was established to train lab personnel and address the lack of diagnostic workers and laboratory capacity.

RESULTS AND MILESTONES

- → Since 2008, over nine million infants have been tested for HIV and over 26 million patients on HIV/AIDS therapy have received viral load monitoring.
- → Over 1,800 healthcare professionals have been trained on diagnostic testing.



STRATEGY:

Health system strengthening and price scheme



SCOPE:

Active in 82 countries

SUPPORTING PARTNERS (3 OF 18):

- Clinton Health Access Initiative (CHAI)
- → The Global Fund
- → US Presidents Emergency Plan for Aids Relief (PEPFAR)

See <u>Global Health Progress</u> for the full program overview.

SECURE THE FUTURE®

Active Since: 1999



SECURE THE FUTURE® was created to help catalyze support and capacity building for the HIV/AIDS and cancer responses in Sub-Saharan Africa, with a particular focus on women and children.

PROGRAM OVERVIEW

Since 1999, The BMS Foundation's SECURE THE FUTURE® initiative has worked with partners in Africa to provide care and support for communities affected by HIV/AIDS. SECURE THE FUTURE®'s focus has evolved to help address the changing NCD needs of PLHIV and Africa's next major health challenge, cancer. Starting in 2015, SECURE THE FUTURE® began creating partnerships based on years of experience in HIV to address lung, cervical, breast and pediatric cancers and blood disorders.

RESULTS AND MILESTONES

- Overseen more than USD\$240 million investment for over 250 programs which have increased capacity for care, raised awareness and mobilized communities.
- → BIPAI has treated over one million children and has more than 300,000 children directly in care, 40 percent of whom are teenagers and adolescents.



STRATEGY:

Health systems strengthening



SCOPE:

Active in 7 countries in Sub-Saharan Africa



TARGET POPULATION:

Women and children

SUPPORTING PARTNERS (3 OF 30):

- → Baylor International Pediatric AIDS Initiative (BIPAI)
- Governments of Botswana, Uganda and Malawi
- → who

See <u>Global Health Progress</u> for the full program overview.

Partnership to End AIDS and Cervical Cancer



Active Since: 2019

In 2019, MSD* joined PEPFAR and the George W. Bush Institute in the Partnership to End AIDS and Cervical Cancer. The initiative aims to reduce cervical cancer among HIV positive women using an accelerated strategy for prevention, screening, and treatment.



STRATEGY:

Health service delivery — prevention, screening, diagnosis



SCOPE:

Active in 8 countries in Sub-Saharan Africa



TARGET POPULATION:

Women

SUPPORTING PARTNERS (3 OF 3):

- → George W. Bush Institute
- The Joint United Nations
 Programme on HIV/AIDS (UNAIDS)
- → U.S. President's Emergency Plan for AIDS Relief (PEPFAR)

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

The partnership aims to reduce cervical cancer incidence by 95 percent among 3.5 million women living with HIV in eight Sub-Saharan African countries. These countries have the highest rates of HIV prevalence and cervical cancer deaths in the world. HPV is the major cause of cervical cancer, and women who are HIV-positive are four to five times more likely to develop invasive cervical cancer. The program is working to support women with cervical cancer in Sub-Saharan Africa where over 100,000 women are diagnosed annually.

*MSD is known as Merck & Co., Inc. in the US & Canada.

Antiretroviral Licensing



ViiV Healthcare (in which GSK is a majority shareholder) is working to scale up access to treatment for PLHIV through voluntary licensing to enable rapid global access to dolutegravir (DTG), a WHO recommended ART.



STRATEGY:

Licensing agreements



SCOPE:

Global commitment

SUPPORTING PARTNERS (2 OF 19):

- Aurobindo Pharma
- → Medicines Patent Pool (MPP) and 17 sub-licensees

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

DTG is recommended by the WHO as a preferred ART. In partnership with generic manufacturer Aurobindo Pharma, and via the United Nations (UN)-backed MPP, ViiV uses voluntary licenses to enable the development, manufacturing and sale of generic DTG formulations. 94 countries are covered by agreements to provide adult formulations and 121 countries for pediatric formulations.

RESULTS AND MILESTONES

- → As of July 2019, there are 12 approved generic formulations containing DTG.
- → Between 2017 and 2018, over 36.9 million packs of DTG and DTG based ARV's were delivered, providing at least 3.9 million PLHIV with treatment across 61 countries.

TUBERCULOSIS



Notable progress has been made in tuberculosis (TB) diagnosis and treatment, saving an estimated 53 million lives between 2000 and 2016; however, TB remains the ninth leading cause of death worldwide.^{13, 14}

TB is preventable and curable; although, challenges such as long treatment regimes, latent TB, stigma associated with the disease, difficulties administering drugs, and the increase of multi-drug resistant TB (MDR-TB) means the disease is difficult to eliminate.

The global health community recognizes that vulnerable people, especially those in LMICs, require more support and attention to effectively tackle TB. In 2018, the UN High Level Meeting on TB made a call to action for enhanced multisector collaboration, resulting in the adoption of a political declaration to end TB. This political support has helped countries strengthen their healthcare systems to provide appropriate TB care and treatment to patients as part of the road to UHC. The private sector is a key stakeholder supporting the WHO and global advocacy efforts to accelerate social and political action to end TB, including a multi-pronged approach from the biopharmaceutical industry. For instance, we are helping countries build capacity, develop manufacturing partnerships, and create pooled procurement mechanisms. We think beyond traditional models of care to tackle TB, including behavior change interventions to increase adherence to medicines and appropriate use of therapies to prevent the acceleration of drug resistance.

We are working to develop treatments that act more rapidly, are effective at stopping the spread of the disease, are safe to use in conjunction with HIV treatments, and prevent and treat latent TB (the biggest killer among people with HIV).13 After 50 years with few treatment advancements, we have recently made exciting progress: three new medicines (delamanid, bedaquiline and pretomanid) have been approved for the treatment of MDR-TB. Partnerships have been central to developing these novel treatments which provide patients with simpler, shorter treatment options and have the potential to transform access to treatment for vulnerable populations. Further to these advancements, we recognize the need to continue exploring innovative solutions and are working on over 75 TB R&D projects, including a new TB vaccine for adults, to help stop TB in its tracks.6

SPOTLIGHT ON:

4/32 TB PROGRAMS IN THIS REPORT

Explore the full range of programs at globalhealthprogress.org

TOP 3 **PROGRAM STRATEGIES** FOR TB:



Drug Development and Research 18 programs



Health Service Delivery—Prevention 9 programs



Community Awareness and Linkage to Care 8 programs

TOP TB PROGRAM RECIPIENT COUNTRIES:

India 10 programs

South Africa 9 programs

China 8 programs

TOP 3 PARTNER TYPES WORKING ON TB:

Academia

17 programs

Global NGOs

17 programs

Governments

15 programs

TOP 3 PARTNERS WORKING ON TB:

Bill and Melinda Gates Foundation

10 programs

National Institute of Health

8 programs

Infectious Disease Research Institute

7 programs

Otsuka FighTBack Initiative

Active Since: 2015



FighTBack works to increase access to treatment and care for patients with MDR-TB through capacity building, R&D and responsible access to treatment.



STRATEGY:

Health systems strengthening



SCOPE:

Global commitment

SUPPORTING PARTNERS (3 OF 6):

- EndTB Consortium (Médecins Sans Frontières, Partners in Health, and Interactive Research & Development)
- → Global Drug Facility
- US Agency for International Development (USAID)

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

Otsuka's FighTBack initiative aims to accelerate and safeguard access to treatment for patients diagnosed with MDR-TB. Collaborating with partners, the initiative supports capacity building, expands access to treatment and encourages responsible treatment use. Otsuka participates in collaborative studies involving Delamanid, including the EndTB project led by the EndTB Consortium, and the MDR-END project led by Seoul National University Hospital, which evaluates new regimens for the treatment of MDR-TB.

RESULTS AND MILESTONES

- → Almost 20,000 Delamanid treatment courses have been distributed to over 90 countries.
- → 400 treatment courses were donated to South Africa and India in 2016 and 2018.

Sanofi and CDC Collaboration on New Tuberculosis Treatments





Sanofi and the U.S. CDC are working together to further R&D for the TB drug, rifapentine, by expanding its treatment scope and role in treating non-resistant latent and active TB.



STRATEGY:

Drug development and research



SCOPE:

Global commitment

SUPPORTING PARTNERS (1 OF 1):

U.S. Centers for Disease Control and Prevention (CDC)

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

Since 1998, the U.S. CDC has worked to identify new indications for rifapentine, a Sanofi drug used to treat pulmonary drugsusceptible TB. The program aims to simplify and shorten the treatment of TB. The program also shares information about existing treatments and compounds under development to speed up the identification of promising new TB treatments, including latent TB treatments.

RESULTS AND MILESTONES

→ In 2011, a CDC study showed rifapentine is an effective treatment for latent TB and has subsequently been registered in eight countries for the indication.

TB Drug Accelerator

Active Since: 2012

















The TB Drug Accelerator is a groundbreaking collaboration among multiple academic research institutions, pharmaceutical companies and a product development partnership (PDP) to facilitate discovery and development of novel compounds against TB.

PROGRAM OVERVIEW

Sponsored by the Bill & Melinda Gates Foundation, the TB Drug Accelerator aims to identify new drugs that can contribute to safer, shorter, simpler, and more affordable TB treatment regimens. By bringing together eight academic research institutions, nine pharmaceutical companies, and the TB Alliance, a non-profit PDP, the unique collaboration shares best practices, research methods and data, and is working to develop a proof-of-concept for a one month, three drug regime by 2024.

RESULTS AND MILESTONES

→ To date, scientists from four continents have shared and tested more than three million compounds for screening.



STRATEGY:

Drug development and research



SCOPE

Global commitment

SUPPORTING PARTNERS (3 OF 12):

- → Bill & Melinda Gates Foundation
- → Global Alliance for TB Drug Development (TB Alliance)
- → Weill Medical College, Cornell University

See <u>Global Health Progress</u> for the full program overview.

Johnson & Johnson's 10-Year TB Initiative

Active Since: 2018



J&J is supporting global efforts to end TB through a comprehensive initiative that aims to save an estimated 1.8 million lives and prevent 12 million new TB infections over the next decade.

PROGRAM OVERVIEW

J&J has long been collaborating on the fight against TB and, in 2012, introduced the first new TB medicine in over 40 years. J&J is partnering in three key areas through its 10-year initiative: (1) Improving the detection of TB; (2) Continuing to expand access to MDR-TB treatment; and, (3) Accelerating R&D to develop new regimens. Since 2015, J&J has committed to donate 105,000 courses of its MDR-TB treatment, bedaquiline, through a four-year donation program. Bedaquiline is now offered at a not-for-profit price to over 130 countries through the Stop TB Partnership's Global Drug Facility.

RESULTS AND MILESTONES

- → As of June 2019, J&J has provided more than 125,000 courses of bedaquiline to 127 countries, including all 30 highest burden TB countries.
- In partnership with country governments, over 20,000 health workers have been trained on TB management.



STRATEGY:

Health system strengthening Drug development and research



SCOPE:

Global commitment

SUPPORTING PARTNERS (3 OF 4):

- Chinese Centre for Disease Control
- → Innovative Medicines Initiative (IMI)
- U.S. Agency for International Development (USAID)

See <u>Global Health Progress</u> for the full program overview.



MALARIA



Between 2000 and 2015, the rate of new cases of malaria fell by 37% globally and an estimated 6.8 million malaria deaths have been averted globally since 2001, demonstrating recent improvements to stop the spread and burden of the disease.¹⁵

This progress is reflected in over 38 countries now declared malaria-free and a further 21 countries are on the path to malaria elimination by 2021. However, progress has stalled and 2018 was the second consecutive year that the WHO reported that the number of people affected by malaria has plateaued.

The slowing of malaria control and new malaria threats, such as resistance to artemisininbased combination therapies (ACTs), means an increased holistic and global response, including continued surveillance, is a high priority to ensure antimalarial resistance elimination becomes a reality. Platforms to advance action, such as the Roll Back Malaria (RBM) partnership, help ensure support to countries extends beyond medical products. The biopharmaceutical industry is helping to strengthen healthcare systems to tackle malaria as part of our comprehensive approach to achieve UHC. Our support includes ensuring access to antimalarials and fit-for-purpose hospital equipment, improving sanitation, and expanding healthcare workers' malaria expertise.

We continue to invest in R&D to develop innovative solutions to malaria challenges. For example, our PDPs help to develop innovative prevention and diagnosis interventions, and our mHealth programs help to prevent medicine stock-outs and improve treatment supply. We currently have over 50 R&D pipeline malaria products in development, including one Phase III product, and most recently a new pediatric treatment has been approved.⁷ This treatment will help to reduce the burden of malaria in children, one of the most vulnerable populations. Beyond treatment, our industry is also working on innovations in vaccines: the GSK-PATH collaboration on the RTS,S vaccine, the world's first malaria vaccine, has been introduced in pilot immunization programs in Kenya, Malawi, and Ghana.¹⁸ Such innovations are providing new and effective ways to prevent the spread of malaria in high-prevalence populations and are central to achieve malaria elimination.

SPOTLIGHT ON:

4/25 MALARIA PROGRAMS IN THIS REPORT

Explore the full range of programs at globalhealthprogress.org

TOP 3 PROGRAM STRATEGIES FOR MALARIA:



Drug Development and Research 15 programs



Health Service Delivery—Prevention 8 programs



Community Awareness and Linkage to Care 8 programs

TOP MALARIA PROGRAM RECIPIENT COUNTRIES:

Ghana 10 programs United Republic of Tanzania
10 programs

Kenya 8 programs

TOP 3 PARTNER TYPES WORKING ON MALARIA:

Academia

25 programs

Global NGOs

16 programs

Private Foundations

10 programs

TOP 3 PARTNERS WORKING ON MALARIA:

Medicines for Malaria Venture

7 programs

Bill and Melinda Gates Foundation

6 programs

National Institute of Health

5 programs

Novartis Malaria Initiative

Active Since: 2001



The Novartis Malaria Initiative is working with partners to achieve malaria elimination through the provision of treatment in endemic countries. The initiative incorporates capacity building activities to expediate progress towards elimination.



STRATEGY:

Health service delivery — treatment



SCOPE:

Treatment delivered to over

SUPPORTING PARTNERS (3 OF 31):

- → Kenya Medical Research Institute
- → Medicines for Malaria Venture (MMV)
- → Swiss Tropical and Public Health Institute

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

The Novartis Malaria Initiative focuses on four key pillars to support better diagnosis and treatment of malaria in endemic countries: Access; Treatment; Capacity building; and, R&D. Novartis leads two of the most advanced malaria development programs worldwide. Together with partners, the company is developing novel combinations that are active against resistant strains and offer the potential for a single-dose cure for Plasmodium falciparum and Plasmodium vivax. Novartis supplies malaria treatments without profit to the public sector of malaria-endemic countries. Beyond access to medicines, Novartis uses comprehensive approaches, such as training, to help countries and communities to deliver better healthcare.

RESULTS AND MILESTONES

Novartis and partners have delivered 885 million treatments without profit to malaria-endemic countries, including 375 million pediatric treatments.

Comic Relief Partnership to Fight Malaria and Improve Health



Active Since: 2015

A strategic partnership between Comic Relief and GSK is working to bolster the fight against malaria by strengthening healthcare systems through targeted grants to organizations on the frontline of tackling malaria.



STRATEGY:

Health systems strengthening



SCOPE:

Active in 7 countries

SUPPORTING PARTNERS (3 OF 25):

- BBC Media Action
- Clinton Health Access Initiative (CHAI)
- → Comic Relief

See <u>Global Health Progress</u> for the full program overview.

PROGRAM OVERVIEW

In partnership with Comic Relief, GSK is working in malariaendemic countries to strengthen healthcare systems' ability to fight malaria. The partnership has created a £22 million fund and provides grants to organizations working in Ghana, Mozambique, Sierra Leone, Tanzania and the Greater Mekong sub-region of South-East Asia. Grants are allocated and managed by Comic Relief and complement national malarial control programs by focusing on access to prevention, diagnosis and treatment. Beyond grant making, the partnership aims to inspire global action on malaria by sharing compelling stories of impact and empowering a generation of advocates.

RESULTS AND MILESTONES

The partnership has reached more than 1.7 million people to date, including over 226,000 children under five.

MOSKI KIT

Active Since: 2001



MOSKI KIT provides an 'edutainment' training toolkit for teachers and children to raise awareness and provide education on malaria, supporting better disease prevention, diagnosis, and management.

PROGRAM OVERVIEW

MOSKI KIT provides teachers with materials to teach primary school children about the basics of malaria, using engaging educational tools and games. MOSKI KIT also works to empower children to become advocates, spreading key messages within their community in support of broader behavioral change. The messages used in the tools are based on national malaria strategic plans and are designed in collaboration with specialists and end-users.

RESULTS AND MILESTONES

In March 2016, the MOSKI KIT was awarded the prize for Most Valuable Patient Service Initiative at the EyeforPharma Awards in Barcelona, Spain.



STRATEGY:

Community awareness and linkage to care



SCOPE:

Active in 17 countries in Sub-Saharan Africa



TARGET POPULATION:

Children

SUPPORTING PARTNERS (1 OF 1):

National Malaria Control Programs

See <u>Global Health Progress</u> for the full program overview.

Medicine for Malaria Venture













The Medicines for Malaria Venture (MMV) works to discover, develop and facilitate the delivery of new and effective antimalarial drugs by leveraging pharmaceutical and biotechnology partners' facilities, knowledge and expertise.

PROGRAM OVERVIEW

MMV manages the largest portfolio of antimalaria R&D and access projects ever assembled. The network incorporates over 400 partners managing a portfolio of over 65 projects. MMV focuses on: (1) Facilitating equitable access to quality antimalarials; (2) Developing better medicines for case management; and, (3) Advancing new tools for resistance and elimination to help countries reduce transmission and become malaria free.

RESULTS AND MILESTONES

- → Since 1999, MMV and partners have developed and advanced ten new medicines.
- Since 2009, over 350 million courses of malaria treatment, Coartem® Dispersible, have been supplied across 50 malaria-endemic countries.



STRATEGY:

Drug development and research



SCOPE

Active in 55 countries

SUPPORTING PARTNERS (3 OF 8):

- Drugs for Neglected Diseases Initative (DNDI)
- → PATH
- → Wellcome Trust

See <u>Global Health Progress</u> for the full program overview.



STANDING UNITED TO **STEP UP THE FIGHT** TO ELIMINATE HIV, TUBERCULOSIS AND MALARIA

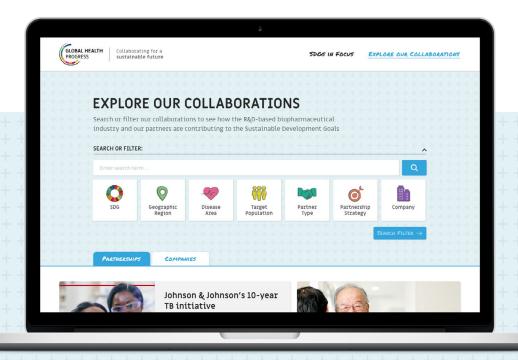
To achieve a HIV, TB and malaria free world we need to come together to tackle the global challenges of these disease. In support of The Global Fund replenishment, now is the time to work together to accelerate care and treatment for HIV, TB and malaria for people around the world, with a focus on the most vulnerable. We must learn from one another and share expertise with diverse partners. In doing so, we will seek out new frontiers in R&D for life-saving treatments and vaccines and establish meaningful partnerships to pool resources to ensure no time is wasted.

The 14 program case studies showcased in this report represent a small segment of the work done by our member companies to address HIV, TB and malaria. We are currently collaborating on an additional 62 programs targeting

these disease areas and over 200 programs contributing across all areas of health. The full breadth of our collaborations can be explored on <u>Global Health Progress</u>.

However, we recognize we need to excel our collaborations as part of our commitment to the SDGs and UHC, we want to advance our global health partnerships and programs to build bridges across sectors, opening new doors and giving rise to sustainable and innovative health solutions. We invite interested parties and potential partners to register their interest on Global Health Progress to work together on existing or new programs.

We believe together we can change the way we tackle key global health challenges, ensuring patients receive the care and treatment they need, and no one is left behind.



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ABOUT IFPMA

IFPMA represents R&D-based biopharmaceutical companies and associations across the globe. The biopharmaceutical industry's two million employees discover, develop, and deliver medicines and vaccines that improve the lives of patients worldwide. Based in Geneva, IFPMA has official relations with the UN and contributes industry expertise to help the global health community find solutions that improve health for populations around the world.



ifpma.org

ABOUT LEEM

Les entreprises du médicament (Leem) is the French industry association which represents drug companies operating in France. On a national level, Leem acts as a champion and advocate for the biopharmaceutical industry. In this capacity, it participates in numerous official ministerial and inter-ministerial committees. Leem is representing and defending the pharmaceutical industry, engaging in agreement-based policy with the state, negotiating with social partners, promoting and defending ethical standards, and promoting France's attractiveness as an industrial hub. Leem is a member of the European Federation of Pharmaceutical Associations and Industries (EFPIA) and IFPMA.



leem.org

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ACRONYMS AND ABBREVIATIONS

ACT	Artemisinin-based combination therapies			
AIDS	Acquired immunodeficiency syndrome			
ART	Antiretroviral Therapy			
BIPAI	Baylor International Pediatrics AIDS Initiative			
CDC	Centers for Disease Control and Prevention			
DNDi	Drugs for Neglected Diseases Initiative			
DTG	Dolutegravir			
EFPIA	European Federation of Pharmaceutical Associations and Industries			
FEFIS	French Federation of Healthcare Industries			
GBP	Great British Pound			
HIV	Human immunodeficiency virus			
HPV	Human papillomavirus			
IAVI	International AIDS Vaccine Initiative			
IDRI	Infectious Disease Research Institute			
IFPMA	International Federation of Pharmaceutical Manufacturers & Associations			
IMI	Innovative Medicines Initiative			
IPM	International Partnership for Microbicides			
Leem	Les entreprises du médicament			
LMICs	Low- and Middle-Income Countries			
m2m	mothers2mothers			
MDR-TB	Multi-Drug Resistant Tuberculosis			
MEDEF	French Enterprise Movement			
MMV	Medicines for Malaria Venture			
MPP	Medicines Patent Pool			
NGO	Non-governmental organization			
PDP	Product Development Partnership			
PEPFAR	U.S. President's Emergency Plan for AIDS Relief			
PLHIV	People Living with HIV			
PrEP	Pre-exposure Prophylaxis			
R&D	Research and Development			
RBM	Roll Back Malaria			
SDG	Sustainable Development Goal			
ТВ	Tuberculosis			
TB Alliance	Global Alliance for TB Drug Development			
TBDA	TB Drug Accelerator			
UHC	Universal health coverage			
UN	United Nations			
UN HLM	United Nations High Level Meeting			
USAID	U.S. Agency for International Development			
USD	United States Dollar			
WH0	World Health Organization			



