



Novartis Social Business

Malaria Initiative: Access

Improving affordability and availability of medicines

Over the past decade, the Novartis Malaria Initiative has pioneered the pharmaceutical response in the fight against malaria by spearheading what has become one of the industry's largest access-to-medicine programs.

Pioneering the supply of treatments without profit

Through a partnership with the World Health Organization (WHO) initiated in 2001, Novartis was the first company in the healthcare industry to commit to the not-for-profit supply of antimalarial treatments to the public sector of endemic countries.

In May 2011 we entered a new phase, with the expiration of the WHO agreement. Nevertheless, we continue to provide our artemisinin-based combination therapies (ACTs), Coartem® (artemether-lumefantrine, AL) for adults and Coartem® *Dispersible* (AL) for children*, to public health systems in developing countries on the same terms as before.

Since 2001, we have provided more than 750 million treatments¹, including more than 300 million pediatric treatments, without profit to malaria-endemic countries, contributing to a significant reduction of the death toll from malaria. In 2015, more than 64 million Coartem® treatments have been delivered by Novartis¹.

Treatments are brought to malaria-endemic countries through funding from the Global Fund to fight AIDS, Tuberculosis and Malaria, UNDP, UNICEF, UNITAID, the President's Malaria Initiative in the US, the World Bank, Missionpharma, Doctors without Borders, and many other development organizations.

Today, eight WHO prequalified AL combinations are available² and AL accounts for the largest volume of ACTs delivered (73% in 2013)³.

We have completed one of the largest and fastest scale-ups in the industry: from four million treatments in 2004 to more than 64 million treatments delivered in 2015 to more than 60 countries. In the same timeframe, thanks to economies of scale in sourcing and manufacturing, significant cost reductions were achieved, which allowed the price to be reduced by half for public-sector buyers over the years.

In order to ensure patient access in countries where the need is the greatest and resources are most limited, Novartis has adopted a differential pricing strategy.

We are also exploring novel distribution channels to improve treatment availability for patients who do not have access to public health services and rely on the private sector to purchase their antimalarials (i.e. small pharmacies, patent medicine stores and general stores). This led the Novartis Malaria Initiative to launch in 2012 a program in several malaria-endemic countries to expand access to quality-assured ACTs in the private sector. Importantly, the program does not rely on donor funding, thus is sustainable long-term.

In 2015, we received WHO prequalification for our new dosage strength ACT which reduces the pill burden for patients**. This makes it the first artemether-lumefantrine (AL) with a reduced pill burden available for public sector procurement.

* Infants and children weighing 5 kg to less than 35 kg and 12 years of age or less.

** Patients weighing 35 kg and above.

“It took much more than a clever idea and effective use of IT to make this solution work on the ground. At the outset, finding the right partners in the non-profit and commercial sectors was critical for both sourcing funding and skills, while appointing the right people to form and lead the steering committee was equally important. [...] The project was held together by the partners’ shared commitment to the end result, not any external measures.”

Donald A. Marchand, Professor of Strategy Execution and Information Management, IMD

Recognizing our contribution to global health

In recognition of its contribution to the Millennium Development Goals (MDGs), the Novartis Malaria Initiative was honored with the 2010 *World Business and Development Award* by the United Nations Development Program, the International Chamber of Commerce and the International Business Leaders Forum. Further, in 2013, Malaria No More rewarded Novartis with the *Global Corporate Citizenship Award* for its leading role in the fight against malaria.

In 2015, Dr Youyou Tu, was awarded the *Nobel Prize* in medicine or physiology for her discovery of artemisinin in 1972. This discovery led to the development of ACTs which revolutionized the treatment of malaria.

In recent years SMS for Life has also won several prestigious awards including the *Wall Street Journal's Technology Innovation Award* in the Health-Care IT category and the *Global Business Coalition Business Action on Health Awards* in the Technology for Health category. SMS for Life also received a catalytic grant from the UN Foundation's Innovation Working Group and the mHealth Alliance.

Finding innovative solutions to expand access

Our expertise and innovation extend beyond research and development. For example, we have pioneered the use of mobile phone technology to help expand access to medicines in the most remote areas of the world.

Prompt access to effective treatments is vital for the successful management of malaria; however, drug stock-outs continue to be a problem for many healthcare facilities. This led Novartis to spearhead SMS for Life with the support of multiple private and public partners including the Global Fund and various African health ministries. The aim of the initiative is to eliminate stock-outs of essential medicines in public health facilities, increase access and quality of care in rural areas, and reduce the number of deaths from malaria. The project uses a combination of mobile phones, tablet PCs, SMS messages and electronic mapping technology to regularly track stock levels of essential medicines and to report key disease surveillance indicators. SMS for Life 1.0, the

phone- and SMS- based version, has been rolled out in more than 10,000 healthcare facilities in sub-Saharan Africa, including more than 3,000 facilities in Cameroon. Further, the solution is now being used to track rapid diagnostic tests, bed nets, health data and blood supplies. It also tracks availability of medicines against leprosy and tuberculosis. An enhanced version called SMS for Life 2.0, based on tablet computers, has improved functionality and can track more stock items as well as more disease surveillance indicators. The platform will also be used to deliver high-quality training to health workers directly at their health facility. SMS for Life 2.0 is currently under advanced discussions for implementation in Gabon, Nigeria and Zambia.

We also encourage our own associates to support access to medicines. As part of our collaboration with Malaria No More on the Power of One campaign, Novartis associates contributed to the fundraising efforts, leading to the delivery of 3.6 million treatments for children with malaria in Africa.



Looking ahead: improving access to reach elimination

Spearheading programs to expand access to lifesaving medicines is one stepping stone toward malaria elimination. Looking forward, action is required on several interconnected fronts.

Quality

High-quality antimalarials, including the elimination of monotherapies and substandard drugs, are crucial to avoid the development of parasite resistance⁴. Coartem[®] and Coartem[®] Dispersible are the first fixed-dose ACTs using lumefantrine as the partner compound. An advantage of this combination is that lumefantrine is not available as a monotherapy, and it has never been used by itself for the treatment of malaria⁵. Therefore, the potential risk of resistance may be much lower than with other agents. Renewed international attention should also be given to deter counterfeits.

Affordability and accessibility

Effective treatments need to be made affordable for patients in all market segments, including the private sector, to enhance access for those living in urban slums and rural villages with no public health facility. Programs to enhance access among the growing middle class in Africa that purchases antimalarials

in the private sector can help bridge the gap. In the private sector, Novartis is also working with partners and governments to lower importation and distribution costs which may ultimately benefit patients with more affordable retail prices.

Case management

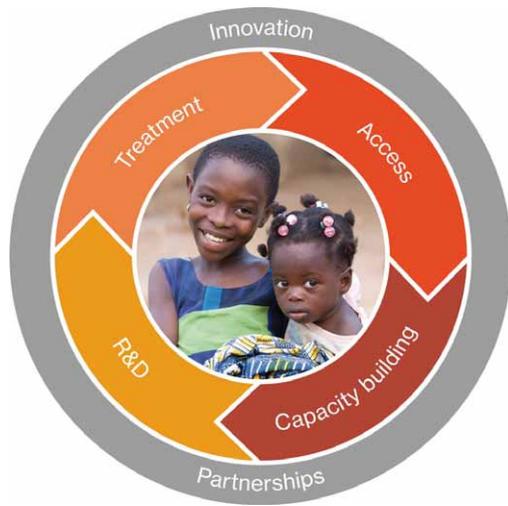
Malaria elimination requires effective case management to scale up malaria diagnostic testing, treatment and surveillance systems. Programs such as SMS for Life support this strategy by tracking surveillance data in addition to providing stock visibility of diagnostics and treatments.

Patient adherence

Continued information is necessary to maximize treatment adherence, hence successful health outcomes. Further, formulations such as pediatric formulations or high-strength dosage forms that reduce pill burden, user-friendly packaging and patient education can enhance treatment adherence⁵.

Parasite resistance

Ongoing research and development is needed beyond artemisinin derivatives in large part due to the potential for widespread resistance developing. Research into the next generation of antimalarials is thus paramount to malaria elimination⁶. Efforts should also focus on prevention and developing prophylactic medicines.



The Novartis Malaria Initiative

For over a decade, the Novartis Malaria Initiative has been a pioneer in the fight against malaria. Focused on treatment, access, capacity building and R&D, the initiative is the largest access-to-medicine program within Novartis measured by the number of patients reached annually. Together with our partners, and with our continued patient-centric approach, we are committed to the common goal of malaria elimination.

Contact

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