



The Novartis Malaria Initiative has become one of the healthcare industry's largest access-to-medicine programs.

Malaria is preventable and curable, yet it is still one of the most deadly diseases in developing countries. For over a decade, we have led the path toward malaria elimination.

Treatment – launching first-in-class therapies

Novartis has been in the front ranks of a revolution in the treatment of malaria, ever since it launched Coartem® (artemether-lumefantrine, AL) in 1999.

- Coartem®, the first fixed-dose artemisinin based combination therapy (ACT) brought to market, has been delivered to millions of malaria patients.
- Coartem® is the first ACT prequalified by the World Health Organization (WHO) in 2004¹.
- Coartem® *Dispersible* is the first dispersible ACT specifically developed for infants and children* with malaria** launched by Novartis in 2009 in collaboration with Medicines for Malaria Venture (MMV).

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

** Uncomplicated infections due to *Plasmodium falciparum* or mixed infections including *P. falciparum*.

- Globally, the number of ACT treatment courses procured from manufacturers increased from 11 million in 2005 to 331 million in 2015².

Fast facts

- Malaria is caused by a parasite transmitted by mosquitoes. When an infected mosquito bites a human, malaria parasites enter the bloodstream and cause symptoms that include fever, headache and vomiting⁷.
- Every 2 minutes, a child dies of malaria in Africa².
- Worldwide, in 2015, there were about 212 million cases of malaria, causing an estimated 429,000 deaths².
- Since 2001, Novartis has provided more than 800 million Coartem® treatments without profit⁶, contributing to a significant reduction of the death toll from malaria.
- Emerging resistance against ACTs requires next-generation treatments against malaria.

Research & Development – leading the path to malaria elimination

Scientists need to stay one step ahead of the malaria parasite to provide innovative treatments to support elimination efforts.

We lead two of the four most advanced malaria development programs worldwide, with two drug candidates with new mechanisms of action^{3,4,5} in Phase 2 clinical trials. If successfully developed, they would be the first antimalarials in many years not belonging to the artemisinin class, and provide a new option to treat the disease and counter emerging artemisinin resistance.

Access – improving affordability and availability of medicines

In 2001, we pioneered the supply of ACTs without profit to public-sector buyers. Since 2001, more than 800 million Coartem[®] treatments, including more than 300 million pediatric treatments, have been delivered⁶ in more than 60 malaria-endemic countries, contributing to a significant reduction of the death toll from malaria.

In 2016, we launched an innovative technology-based healthcare program called SMS for Life 2.0 in Kaduna State, Nigeria. The enhanced program uses smartphones and tablet computers to enable local healthcare workers to track stock levels of antimalarials, other medicines and vaccines, and send notifications to district medical officers when stock levels are low. The program also allows to monitor disease surveillance and to train healthcare workers using on-demand eLearning modules.

In another initiative to improve affordability and availability, we are partnering with The Global Fund to expand access to ACTs especially in the private sector through an innovative financing mechanism, called the Co-Payment Mechanism. Since 2010, more than 100 million Coartem[®] treatments, including 62 million Coartem[®] *Dispersible* treatments, were provided through this channel. In an effort to complement these efforts, Novartis is also making its antimalarials available in the private sector.

Capacity building – empowering communities and local healthcare professionals

Beyond treatment, the Novartis Malaria Initiative offers best practice sharing workshops, training materials, logistics management and other types of technical expertise to empower local populations to care for their health. All these elements are critical to ensuring long-term health impacts.

We regularly bring together African public health officials responsible for malaria control to share best practice in community awareness, health worker training, stock management and distribution, and health impact measurement.

We have also developed specific materials to educate the young generation about malaria in endemic countries. In Mozambique, where malaria is the leading cause of sickness and death, we provided community workers with booklets telling the story of *Tatu* who is fighting malaria to support them in explaining malaria prevention, symptoms, diagnosis and treatment. This is done in cooperation with US Peace Corps volunteers through their Malaria Task Force which organized activities in schools and soccer clubs.

References

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The Novartis Malaria Initiative is part of Novartis Social Business, a unit which includes Novartis Access, SMS for Life and the Novartis Healthy Family programs.

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