

What will make the next generation of antimalarials the game changer we need to win the malaria fight ^[1]

Publish Date: 05 November 2014 11:19 CET



Novartis is in the fight against malaria for the long haul. Together with Chinese partners, Novartis developed the first artemisinin-based combination therapy (ACT), today's gold standard in malaria treatment, and launched the first child-friendly, dispersible formulation developed jointly with Medicines for Malaria Venture. Today, Novartis partners with the best institutions and intensifies its research efforts to develop new compounds against malaria to eventually eliminate the disease. With two compounds in Phase 2 clinical development and one drug target in pre-clinical research, Novartis scientists are building one of the most promising malaria pipelines in the industry.

Read the Q&A with Dr. Roger Waltzman, in charge of the development of our most advanced compound against malaria.

Q: What kind of treatments will it take to eliminate malaria?

A: A two-pronged approach is required to eliminate malaria. First, new treatments must be developed that attack the malaria parasites in novel ways in case resistance against current treatments spreads. These treatments will also need to provide a "complete cure". Second, within malaria-endemic countries, a large proportion of people with malaria do not show malaria symptoms and therefore do not seek treatment for their infection. They constitute a reservoir of malaria parasites that can be transmitted to other, more vulnerable populations, therefore targeting and treating these individuals is central to achieving the goal of malaria

elimination.

Solve for M

The race is on to make the next generation of malaria treatments the last. Read the new series, [Solve for M: 5 Key Challenges to Ending Malaria](#) [2] by Malaria No More and the Gates Foundation

[Solve for M](#) [2]

Q: What is a "complete cure" for malaria? How is it different from what we have today?

A: "Complete cure" implies that the treatment not only targets the parasites in the blood in their asexual stage, which is the stage when symptoms of malaria appear, but also in their sexual stage (gametocytes). Gametocytes can be harbored in the human without provoking any symptoms, and transported upon a mosquito bite, infecting other humans. A complete cure would enable a patient to be cleared from all malaria parasites and stop transmission to other humans. Current treatments do not necessarily offer the potential for a complete cure.

Q: Why is a single-dose treatment important and how do you see it affecting malaria prevalence globally?

A: Developing a new combination, similar to today's three-day ACT treatment, which is powerful enough to treat malaria in one single dose, would enable the patient to take the entire treatment at once, virtually eliminating the risk of insufficient treatment. Indeed, with current treatments patients sometimes save tablets for other family members or friends or in case they are infected by malaria again, not realizing they may be inadequately treated. Also, parasites can become resistant to treatments when dosing is inadequate. A single-dose treatment has the potential to ensure complete and effective treatment for patients. In addition, depending upon its efficacy and safety, the treatment could be given to people who show no symptoms but harbor malaria parasites in their blood, and can therefore transmit malaria. Ultimately, treatment of asymptomatic people could help eliminate the disease in broad population groups, potentially leading to malaria eradication.

Source URL: <https://www.novartis.com/news/what-will-make-next-generation-antimalarials-game-changer-we-need-win-malaria-fight>

Links

[1] <https://www.novartis.com/news/what-will-make-next-generation-antimalarials-game-changer-we-need-win-malaria-fight>

[2] <http://www.malarianomore.org/news/d/solve-for-m>