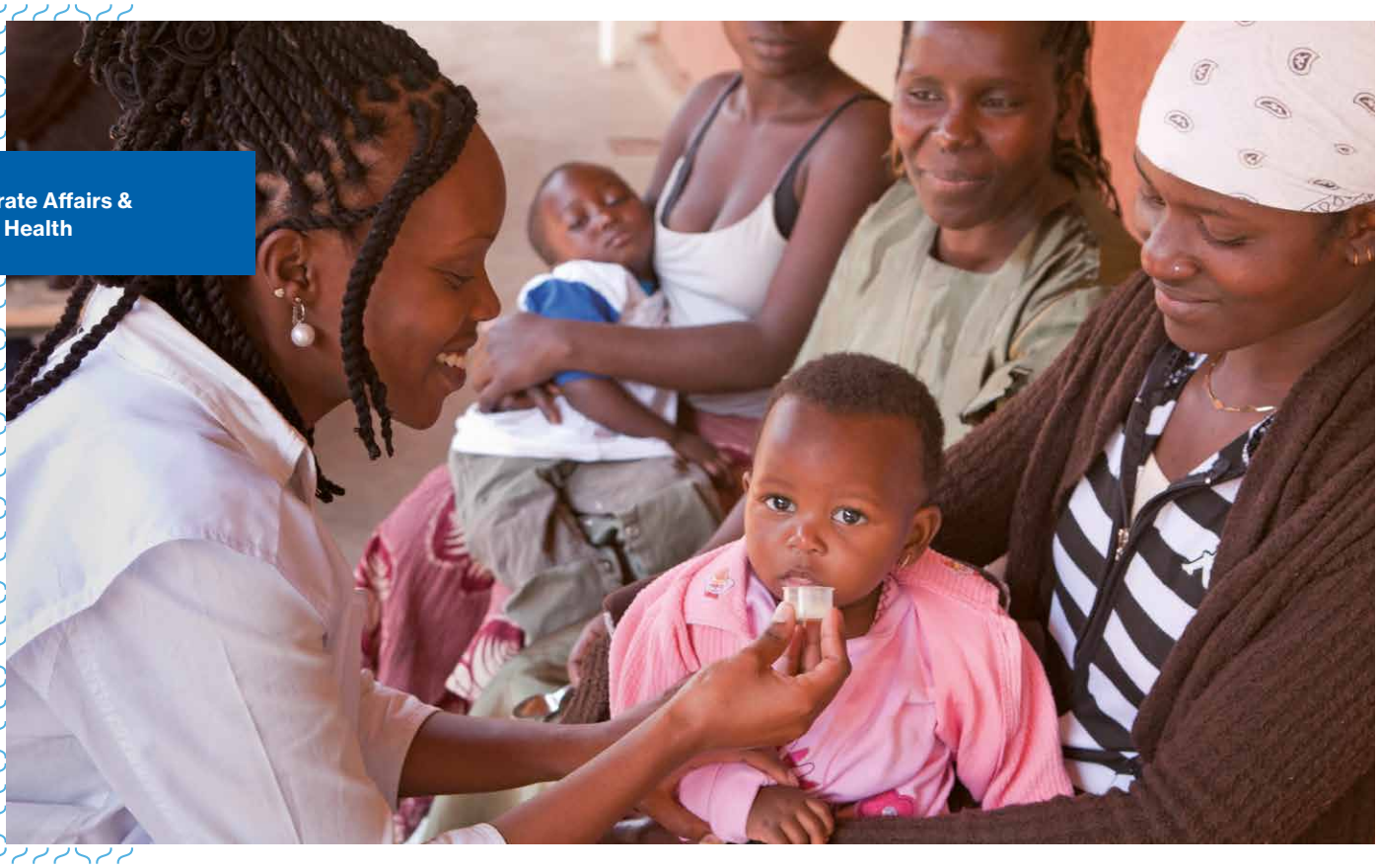
Corporate Affairs &
Global Health



Malaria

Contributing to the fight against malaria

Novartis has been in the front ranks of a revolution in the treatment of malaria, launching the first fixed-dose artemisinin-based combination therapy (ACT) in 1999 and the first dispersible pediatric ACT developed in partnership with Medicines for Malaria Venture (MMV) in 2009.

Further, in a landmark agreement with the World Health Organization, we committed to making our ACT available without profit to the public sector of malaria-endemic countries. Although the agreement expired, we continue to provide treatments on the same terms as before.

To date, we have delivered more than 1 billion treatment courses of our antimalarial, Coartem, including more than 450 million courses of our child-friendly formulation in more than 70 countries, contributing to a significant reduction in malaria death.

USD 100 m

FROM NOVARTIS
to advance R&D of next-generation treatments through 2023

Three

NOVEL ANTIMALARIALS
in clinical development

>1 billion

ANTIMALARIALS
delivered by Novartis

NOVARTIS | Reimagining Medicine

Researching and developing next-generation treatments

In 2018, Novartis announced a commitment of more than USD 100 million to advance research and development of next-generation treatments through 2023. Further in 2022, in conjunction with the Kigali Summit on Malaria and Neglected Tropical Diseases, Novartis also announced a five-year financial commitment of USD 150 million to the fight against malaria.

We currently lead a number of malaria development programs featuring compounds that employ new mechanisms of action and activity against artemisinin-resistant strains of the disease.

KAF156 (ganaplacide) belongs to a novel class of antimalarial compounds that act against both the blood and liver stages of the parasite's lifecycle. It demonstrated activity against both *vivax* and *falciparum* malaria, including artemisinin-resistant parasites. It is being developed as a combination with a new formulation of lumefantrine. Positive Phase 2 clinical trial results in adults and children support the progression of the combination toward Phase 3. Novartis leads the development of this compound with scientific and financial support from MMV in collaboration with the Bill & Melinda Gates Foundation.

KAE609 (cipargamin) is another compound with a novel mechanism of action, which displays extremely rapid parasite clearance in patients. It is being developed for the treatment of severe malaria with financial support from Wellcome.

In 2020, Novartis advanced another novel malaria therapy, INE963, a fast acting long-lasting antimalarial with an entirely new mechanism of action. INE963 is in early clinical trials. It is developed in collaboration with MMV and received the organization's "Project of the Year" award in 2020.

Malaria continues to strike hardest against pregnant women and children in Africa. Therefore, we are also developing a new optimized dose strength of our ACT to address the need for treatment for malaria in infants weighing less than five kilograms. The clinical trial for this new treatment started in 2021 and is ongoing.

The clinical trials for ganaplacide are conducted as part of the WANECAM2 consortium, while trials for cipargamin and our infant formulation are part of the PAMAfrica research consortium led by MMV. Both trials are funded by the European and Developing Countries Clinical Trials Partnership (EDCTP).

Going beyond the pill

We aim to extend our contribution to areas beyond treatment. For instance, in Nigeria, to strengthen access to diagnosis and treatment for children under age 5 with malaria, we worked with Society for Family Health to build the capacity of patent and proprietary medicine vendor shops to diagnose and treat children more effectively. This led to nearly 37 000 children being treated for malaria and other conditions, including pneumonia and diarrhea. In Kenya, Novartis is partnering with Save the Children to increase prevention, diagnosis and treatment for these childhood diseases. In India, we ran a malaria screening campaign in Odisha state, a highly endemic area, leading to the screening of more than 120 000 people.

Further, Novartis works with partners such as the EDCTP to develop clinical trial infrastructure and to build research capability in Africa.