

RBM Partnership Key Messages: RTS,S/AS01 Vaccine Announcement

As of 06 October 2021

Context

On 6 October 2021, following the recommendation of WHO advisory bodies (the WHO Strategic Advisory Group of Experts on Immunization and the Malaria Policy Advisory Group), the WHO Director-General has announced the WHO recommendation to scale up deployment of RTS,S/AS01E (RTS,S), the first malaria vaccine, as a complement to existing malaria prevention and control tools among children under 5 in sub-Saharan Africa and in other regions with moderate to high *P. falciparum* malaria transmission. As the first malaria vaccine to be recommended for widespread use by the WHO, we expect the announcement to attract significant attention from endemic countries, the malaria community, and the media.

Positioning

Accelerating progress toward ending malaria requires significantly increasing access to proven and new malaria prevention interventions - including IPTp, dual-insecticide long-lasting insecticidal nets, SMC, case management and the first malaria vaccine – to the millions of people still at risk of this preventable disease. Accelerating progress also requires countries and partners to use real-time data to tailor the right mix of malaria interventions to local contexts based on potential for saving lives and maximizing the impact of limited resources, consistent with the High Burden, High Impact approach launched with WHO 3 years ago.

The RBM Partnership to End Malaria welcomes the WHO's recommendation to scale up deployment of RTS,S, the first vaccine against a parasite, as a complementary pediatric malaria prevention tool. The RBM Partnership urges donor and malaria endemic countries and partners to continue increasing funding so countries can reach all those at risk of malaria with cost-effective life-saving tools, and to stay committed to researching, developing, and introducing new and more effective technologies.

Introduction

After more than three decades of research and development, the World Health Organization (WHO) made a historic recommendation to add the RTS,S/AS01 (RTS,S) vaccine for children under 5 to the current set of complementary malaria prevention tools available to malaria endemic countries. The ongoing commitment and efforts of a collaborative public-private partnership between many partners paved the way for this significant innovation breakthrough. Use of RTS,S beyond pilot countries marks the latest milestone in malaria innovation and lays the foundation for next generation technologies to help us end malaria for good.

Partners are encouraged to use and amplify key messages, calls-to-action and supporting points below.

Key Messages

To accelerate momentum towards ending malaria, we urgently need to increase access to and optimize the use of highly effective current tools while staying invested in developing and scaling new ones.

- Over the past two decades, increased funding, political commitment and innovative tools have drastically reduced the global burden of malaria, [preventing 1.5 billion cases and saving 7.6 million lives](#).
- However, the rate of progress against the disease [has plateaued in high burden countries since 2015](#). Between 2015 and 2019, malaria cases in high burden countries [declined by less than 2 percent](#), compared to the 27 percent decline during the period between 2000 and 2015.
- Although malaria is preventable and treatable, the disease has progressively concentrated in high-burden communities, endangering lives, burdening health systems and slowing economic development.
- The increase in drug and insecticide resistance, stagnant funding, and the COVID-19 pandemic have made the fight against malaria more challenging than ever before – and even more critical to win.
- Countries are far from reaching maximum coverage of highly effective interventions like insecticide-treated nets (ITNs), Indoor Residual Spraying (IRS), Seasonal Malaria Chemoprevention (SMC) and Intermittent Prevention and Treatment in pregnancy and infancy (IPTp/i) as well as wider community case management.
 - Only 1 in 3 pregnant women receive the full course of IPTp
 - 68% of households in sub-Saharan Africa had at least one insecticide treated bed net in 2019.

The WHO recommendation to scale up the RTS,S vaccine as a complementary malaria prevention tool for children under 5 at risk from *P. falciparum* malaria is a significant milestone in the history of malaria innovation.

- GSK's RTS,S/A01 vaccine is the world's first malaria vaccine shown to provide partial protection against malaria in children under 5, and is the first-ever vaccine against a human parasite recommended for use by WHO.
- Since 2019, more than 2.3 million doses have been administered, reaching more than 800,000 children in select areas of moderate-to-high malaria transmission in Ghana, Kenya and Malawi. This effort was achieved through a large-scale pilot program led by countries and coordinated by the WHO, working closely with GSK, PATH, the London School of Hygiene and Tropical Medicine, and Unicef, among other partners
- The RTS,S malaria vaccine was created in 1987 at GSK laboratories. In 2001, GSK and PATH began working together to develop RTS,S for young children living in malaria-endemic regions in sub-Saharan Africa. This public-private partnership's collaborative work paved the way for this significant achievement.

There is no ‘one size fits all’ approach to ending malaria. To maximize limited resources, countries must scale up community case management and a range of complementary tools and tailor and time them to the local context.

- The protection provided by RTS,S – when used in combination with recommended vector control – has the potential to save tens of thousands of children per year. However, countries will need to determine if and how RTS,S can complement their malaria control strategy by evaluating a range of considerations, including epidemiology, supply, cost and logistics, to determine when and where RTS,S can be most effective.
- RTS,S is a complementary pediatric malaria prevention and control intervention that should be paired with other interventions in the core package of WHO-recommended measures, such as effective insecticide-treated mosquito nets (ITNs) or indoor residual spraying (IRS).
- RTS,S offers an opportunity to reach more children with malaria prevention. However, there should be simultaneous efforts made to increase access and use to all recommended malaria interventions
- Countries, with support from partners, must scale up coverage of highly effective ITNs, IRS and SMC and IPT_{p/i} – as well as community case management – to save more lives, strengthen community health and make best use of limited resources.

The RBM Partnership will continue its work supporting malaria endemic countries in using a data-driven approach to determine the optimal mix of malaria prevention and control tools for their context. We also welcome more research and analyses to assess the impact of combining tools.

- Using high quality, local data, countries can better target malaria interventions at sub-national level to maximize impact and make the best use of limited resources. This approach lies at the heart of the ‘High Burden to High Impact’ country-led approach championed by WHO and the RBM Partnership.
- The RBM Partnership already is working with countries to make data-driven decisions about the potential deployment of RTS,S to help save as many lives as possible.
 - Countries need the data, capacity and buy-in to define and implement the optimal intervention mix of tools at sub-national levels that considers the cost-effectiveness of each individual tool on its own but also in comparison to combining different sets of tools, for example the improved (pyrethroid+PBO and dual AI) LLINs now scaling across Africa and the opportunity for increasing IPT_p and IPT_i coverage.
- Additional research to assess cost and effectiveness of combining tools, e.g. RTS,S in combination with chemoprevention
 - A recent study in the *New England Journal of Medicine* showed that the combination of seasonal RTS,S vaccination and SMC-SPAQ was around 70% more effective in reducing malaria episodes and deaths in children compared to either intervention alone.

It is critical that countries continue investing in the development and scale up of more effective malaria interventions that will save more lives and help us reach zero malaria.

- RTS,S is a first-generation vaccine designed to reduce illnesses and death in young African children.
- Thus, even with RTS,S we do not have the tools we need to eliminate malaria. Building on what we’ve learned from RTS,S, we must continue to invest in and accelerate the development of next-generation vaccine technology (such as mRNA) to deliver a highly efficacious, all-ages, and durable vaccine for elimination.

- Vaccines by themselves will not be the only solution to the problem of malaria.
- We must continue to improve case management and invest in the development, testing and delivery of transformative and cost-effective interventions –e.g., improved diagnostics and antimalarials, monoclonal antibodies and vector control outside the home – that will bend the curve toward ending malaria.
- Until we eradicate malaria, we will need constant innovation to stay one step ahead of evolution. New tools and interventions must be deployed strategically in combination with existing malaria prevention and treatment measures.
- Continued progress also requires well-trained health workers who are empowered and resourced with digital tools that improve their effectiveness.
- Governments must identify and serve those communities that are consistently not reached with quality malaria services, especially those delivered through the public health system.
- By increasing investment in innovation, giving countries the ability to use the right set of tools to meet their needs, and committing to accelerate access to life-saving tools, we can end malaria and deliver a healthier, more prosperous world for all.