

# Our 30-year quest for a malaria vaccine

Helping to protect young children in Africa



## Partnership

Collaboration has been critical to the candidate vaccine's development. The Walter Reed Army Institute was involved in early research and PATH Malaria Vaccine Initiative, with backing from the Bill & Melinda Gates Foundation, supported clinical trials.

**\$350m+**

invested by GSK to date. Further \$260m investment expected to complete candidate vaccine development



**\$200m+**

invested in grants from partners to fund candidate vaccine research



Discovery



Scientific breakthrough



Research continues



Results published



Regulatory process



If approved, GSK has committed to offer it at a **not-for-profit price**



## Next steps

Providing information to public health authorities so they can decide if and how to make the candidate vaccine available to those who need it most.

If approved, a vaccine would complement current disease prevention methods such as mosquito nets and indoor spray.

**1984**

GSK scientific team set up to find a malaria vaccine

**1987**

GSK scientists develop component parts of the candidate vaccine at a laboratory in Belgium

Candidate vaccine triggers immune system to defend against malaria parasite when it enters the human bloodstream

**1992**

Research using an early version of the candidate vaccine in human adults begins in the US

**1997**

First adult volunteers protected with the candidate vaccine

**1998**

The first of many research studies in adults in Africa begin

**2004**

Research supports efficacy of candidate vaccine in African children

**2009**

Late stage (phase III) research begins in Africa. Over 15,000 infants and young children enrolled across seven African countries

**2011**

First results of late stage research published in scientific journals from infants aged 6-12 weeks and children aged 5-17 months at the time of first vaccination

**2014**

GSK submits a regulatory file to the European Medicines Agency (EMA) for the new malaria candidate vaccine

**2015**

The EMA provides a positive opinion on the new malaria candidate vaccine. This is an important step towards making it available for children



**50%**

of the world's population is at risk of malaria



The deadliest form of malaria in humans is the *Plasmodium falciparum* parasite most prevalent in sub-Saharan Africa (SSA)

**90%**

of malaria deaths occur in SSA

**83%**

of these deaths are in children under 5<sup>1</sup>



**One child dies** from malaria every minute in Africa<sup>2</sup>

<sup>1</sup> WHO World Malaria Report, 2014  
<sup>2</sup> WHO Malaria Factsheet No. 94