Malaria vaccines indicator

Financing & funding

Estimated financial cost of materials per vaccine dose (syringes, needles, safety box) (in USD)

If procuring through UNICEF Supply Division (as of March 2026): a box of 100 AD syringes with needles (0.5 ml) is priced at US$ 4.20; a box of 25 safety boxes (each with a 5-liter capacity or around 100 AD syringes) is priced at US$ 21.50. 1, 2

For RTS,S/AS01 reconstitution, a box of 100 syringes (2mL) is priced at US$ 5.40. 3

Estimated vaccine financial cost per dose (in USD)

In the Gavi 6.0 strategic period (2026-2030), Gavi supported malaria vaccine doses are priced the same (US$ 2.99) regardless of product. 4

Prices of malaria vaccines are expected to decline 5, 6 : RTS,S/AS01 from €9.30/dose to less than US$ 5/dose progressively by 2028 7, and R21/Matrix-M (2-dose vial) from currently US$ 3.90/dose to US$ 2.99/dose should be expected from end-2026. 8

The R21/Matrix-M one-dose vial presentation is only available for non-Gavi countries; as of November 2025, the price is US$ 4.20 per dose. 5

UNICEF prices are subject to change. Access to the most up to date price can be found on UNICEF Supply Division vaccine price webpage. [5] Users are encouraged to confirm those prices by contacting UNICEF Supply Division.

Estimated financial cost per person vaccinated (in USD)

Resources required for malaria vaccine delivery are comparable to those needed for other new vaccine introductions. Malaria vaccine cost of delivery estimates suggest a cost range that varies both by country and delivery strategy. [9] [10] This range is indicative of the varied resource requirements for malaria vaccines across countries in sub-Saharan Africa.

Excluding the cost of vaccines and the initial setup costs, the estimated recurrent cost of delivery per dose ranged from US$0.29 to US$ 0.86 (financial), and from US$ 0.59 to US$ 2.29 (economic) based on a retrospective cost of delivery study of the phased pilot subnational introduction and delivery of a 4-dose schedule of RTS,S/AS01 [11]

Findings suggest that vaccine delivery using the seasonal schedule, with mass campaigns approach is the costliest option and the hybrid schedule without mass campaigns is the least costly option. [12]

Direct comparisons of the results across delivery costing studies should be made with caution, as the methods, delivery strategies and schedules, settings and context can vary widely.

Cost-effectiveness ratio

Mathematical models estimate that introduction of RTS,S/AS01 and R21/Matrix-M into childhood immunization programmes could have a substantial impact on reducing malaria cases and deaths in endemic settings in Africa, with greater public health impact and cost effectiveness at higher levels of transmission. [13]

At assumed RTS,S/AS01 vaccine prices between US$5-10 per dose, incremental cost-effectiveness ratios (ICERs) were generally less than US$ 100 per disability adjusted life year (DALY) averted at moderate and high transmission intensities (>20% *P.falciparum* parasite rate

among children 2-10 years of age (*Pf*PR2-10)) and across age-based, seasonal and hybrid delivery approaches [13, 14, 15] . At an assumed price of US$ 3 per dose and 20% *Pf*PR2-10, R21/Matrix-M ICERs ranged between US$ 30–48 per DALY averted depending on a range of delivery approaches, transmission settings, and intensities. [13, 16] Estimates were more uncertain in low or very low transmission intensities (<10% PfPR2-10). [13]

Cost–effectiveness varies considerably by several factors, including, the burden of disease, seasonality, malaria vaccine effectiveness, indirect effects, vaccination coverage, vaccine price, delivery costs, delivery approaches, and schedules. Caution is recommended when comparing estimates of cost-effectiveness for different interventions evaluated by different methods, with different outcome measures and time intervals, and in different contexts (e.g., with different concurrent health interventions and standards of care).

Is there a Gavi programme to support the introduction of this vaccine? If a Gavi programme is available, what support is available to countries?

Gavi opened funding windows for malaria vaccines in late 2022 to support the introduction and scale-up of the vaccines. Countries may request Gavi support to introduce the malaria vaccine using a 4- or 5-dose schedule, depending on local epidemiology, in areas with moderate or high *P. falciparum* malaria transmission. Requests for Gavi support for malaria vaccine in areas of low transmission may be considered based on a strong programmatic justification and subnational tailoring of malaria control interventions [17].

In the 6.0 strategic cycle starting 2026, Gavi's scope of support is limited to the vaccine requirements for up to 70% of countries' areas of moderate and high *P. falciparum* malaria transmission [18]. WHO has developed guidance for countries considering where to introduce the malaria vaccine [19], according to national plans and priorities – as well as funding available.

Gavi supports WHO recommended and pre-qualified vaccines (RTS,S/AS01 and R21/Matrix-M). Countries approved to introduce malaria vaccines are matched with one of the two products. Switches from one product to another will be allowed on an exceptional basis with defined criteria, aligned with Gavi policy [20].

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