Despite decades of intensified efforts to control malaria with some tangible impact on the prevalence, this parasitic disease still represents a major global health threat to humans across many tropical and subtropical countries. Within the framework of successful public-private partnerships, the no-profit organization Medicines for Malaria Ventures (MMV) discovers and develops safe and effective antimalarial drugs for the neediest population. A growing understanding of the disease and biology of the parasite fuels the pipeline with new candidates in the MMV portfolio that range from early discovery, to preclinical and clinical phases of development, regulatory approval, product readiness and ultimately distribution and access to patients. Will the arsenal of antimalarial drugs in optimized combinations together with accompanying measures of intervention finally lead to global elimination and perhaps eradication of malaria?