



AN INTRODUCTION TO SEMA ReACT

To address the challenges faced by rural and remote communities at risk of severe malaria, the overarching aim of the 4-year SEMA ReACT study – “Severe Malaria treatment with Rectal artesunate and ACT in remote areas” – is to generate data on the clinical outcomes of treatment strategies and the feasibility of treatment provision by community health workers.

SEMA ReACT was launched in April 2023 with support from the European and Developing

Countries Clinical Trials Partnership (EDCTP3) and co-funded by the European Union and the Swiss State Secretariat for Education, Research and Innovation (SERI).

The SEMA ReACT Consortium partners include the University of Antwerp (UA), Belgium; the Tropical Diseases Research Centre (TDR) Zambia; University of Kinshasa (UNIKIN) DRC; the National Institute for Medical Research (NIMR) of Tanzania and Medicines for Malaria Venture (MMV), Switzerland. They bring a wealth

of experience in the rollout and deployment of rectal artesunate capsules (RAS), including study design, execution and data management, social science research, and translation of research results into clinical practice.

In June 2023, the first SEMA ReACT Consortium meeting was held in Livingstone, Zambia. Partners from five different countries (DRC, Tanzania, Zambia, Belgium and Switzerland) met face-to-face to discuss implementation of this 4-year study.

STUDY HYPOTHESES AND OUTCOMES

Aiming to save the lives of children aged 6 months to ≤ 5 years in places where referral for follow-up treatment is difficult, the SEMA ReACT study is based on the hypotheses that:

- Deployment of RAS in the health system improves access to healthcare by those who would have otherwise sought it elsewhere.
- RAS + ACT can be implemented in remote areas in children aged 6 months to ≤ 5 years.

The proposed intervention (SEMA ReACT) will be assessed in terms of its clinical effectiveness as well as its implementation feasibility.

Study outcomes: The data generated by the project will enable policy makers to decide how best to address severe malaria and realize the potential impact of RAS + ACTs in rural settings. Moreover, increased evidence and understanding will ensure that normative treatment guidance addresses the needs of

all patient populations and allow countries to maximize the impact of current tools. This will ultimately help reduce the burden of malaria mortality and morbidity in Africa, particularly among the youngest and most vulnerable.

[Link to info sheet for more details](#)

LAUNCH OF SEMA ReACT ANNOUNCED AT CPHIA LUSAKA

On 27 November 2023, MMV and the TDRC, Zambia held a side event – Defeating malaria through equitable partnerships – at the Conference on Public Health

in Africa (CPHIA) in Lusaka. During her presentation, SEMA ReACT's Science lead, Dr Christine Manyando, Head Public Health Department at TDRC announced

the launch of the project.

[The press release, picked up by several media platforms, is available here.](#)



MMV and partners after the side event during CPHIA, 27 November 2023



SEMA ReACT Coordinator and Scientific Lead talking with a journalist at CPHIA

Active participation of NMCPs

The National Malaria Control Programs (NMCPs) of Zambia, DRC and Tanzania play an important role in the delivery of SEMA ReACT, including engaging with a wide range of stakeholders at national and regional levels. Furthermore, the sustained success of the findings generated by the study relies on the commitment of and coordination by the NMCPs, ensuring a continuous response to the challenges posed by malaria.

SEMA ReACT AT ASTMH 2023

The Severe Malaria symposium – Reimagining the continuum of care for severe malaria patients – organized by MMV was well attended (~180 people). The agenda included four talks, one of which was a presentation on SEMA ReACT by Jean-Pierre Van geertruyden (Consortium Coordinator). The innovative approach to this much needed study to fill evidence gaps was debated and well received by the audience.



Panel discussion during symposium at ASTMH



Jean-Pierre Van geertruyden presents the SEMA ReACT project at ASTMH

HCW TRAINING IN DRC

From 4 to 6 December 2023, 33 healthcare workers were trained in Kapolowe General

Reference Hospital, DRC. Topics included an overview of uncomplicated and severe malaria,

integrated management of childhood illness, the SEMA ReACT protocol, implementation and data collection.



Trainers and trainees during the 3-day workshop at the Kapolowe district hospital.

Protocol submission in progress

The SEMA ReACT study protocol is in the final stages of development. It has been reviewed by an independent advisory committee and submission to ethics committees is anticipated in December 2023.

Donation of RAS

Strides Pharma Science Ltd., has generously offered to donate rectal artesunate (RAS) for use in the SEMA ReACT study. Shipment from India to DRC and Zambia is scheduled for early January 2024.

