

# Reducing deaths from severe malaria

## Introduction

Severe malaria represents the tragic end-stage of improperly treated or untreated uncomplicated malaria. It leads to almost certain death unless the condition is rapidly treated with the right drugs. The most vulnerable - pregnant women and young children - are most at risk of dying from severe malaria.

If caught in time, severe malaria can be treated and a recovery to full health is likely. Unfortunately, however, of the estimated 216 million cases of malaria each year, approximately eight million may be severe malaria cases, leading to an estimated 655,000 deaths.

Quinine has, until recently, been the principal treatment for severe malaria. However, it is difficult to administer, carries significant side effects. Studies have recorded mortality rates of 10.9 percent in children under the age of 15 in Africa and 22 percent in adults and children in Asia when treated for severe malaria with quinine..

According to the World Malaria Report (2011) 1.9 million severe malaria cases were reported in Cameroon, Ethiopia, Kenya, Malawi, Nigeria and Uganda. However, it is understood that the true numbers in these countries are likely to be much higher. The World Malaria Report 2012 estimates that approximately 250,000 severe malaria deaths occurred in these six countries in 2010. This represents an extremely high disease burden that needs to be addressed.



*A child with severe malaria receives intravenous artesunate. Photo: William Daniels*

## Injectable artesunate

The World Health Organisation (WHO) recommended artesunate as the preferred treatment for adults with severe malaria in 2006. In 2011, following a Cochrane Infectious Disease Group systematic review, WHO recommended that parenteral artesunate, either by the intravenous or intramuscular route, should be the preferred treatment for severe malaria in both adults and children. Despite this recommendation, and the fact that injectable artesunate has fewer side effects and cost-effective rates of US\$140 per additional life saved versus quinine, several market barriers have hampered the rapid adoption of this crucial treatment:

- » Increased use of inappropriately used injectable artesunate for severe malaria
- » High prices and buyer concerns due to there being only one WHO prequalified supplier in the market
- » Lack of financing to accelerate adoption, causing potential new suppliers to delay making major commitments to marketing this product
- » Inadequate advocacy, education and training at all levels, leading to poor acceptance and use by providers and patients alike

## The project

A consortium of partners, comprising Medicines for Malaria Venture, Clinton Health Access Initiative and Malaria Consortium, has been set up to strengthen the market to accelerate access to and uptake of injectable artesunate. Funded by UNITAID for approximately US\$34m, the multi-country project - Improving Severe Malaria Outcomes - will span six countries over a three year period. Malaria Consortium is focusing on implementation in three of the six countries: Ethiopia, Nigeria and Uganda.

The specific aims of this project are:

- » Increased use of appropriately used injectable artesunate for severe malaria
- » Generic manufacturers producing quality assured injectable artesunate
- » Commitment by other donors/funders to funding injectable artesunate
- » Improved procurement planning for stabilisation of the market for injectable artesunate

Once these aims are achieved, the project will have successfully created a stable and sustainable market for quality assured injectable artesunate with two or more suppliers, which will guarantee access to the treatment for severe malaria. Additionally, it will have ensured the increased use of injectable artesunate over quinine.