

Severe Malaria Update

RBM CM WG at ASTMH
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Management

Defeating Malaria Together

Key products for severe malaria



Artesunate Suppositories 100 mg /
Suppositoires d'artesunate 100 mg

**Artesunate
Rectocaps**



FOSUN PHARMA
Innovation for Good Health



Larinate received WHO
prequalification Dec 2018

Artemether 80mg injectable (Sanofi) WHO prequalified on August 29, 2019

Registration status

Inj AS: 33 countries

RAS: 16 countries

Countries	INJ AS	RAS	Countries	INJ AS	RAS
Benin			Mali		
Burkina Faso			Mauritania		
Cameroon			Mozambique		
Chad			Myanmar		
China			Niger		
DRC			Nigeria		
Ethiopia			Republic of the Congo		
Gabon			Senegal		
Ghana			Sierra Leone		
Guinea			South Africa		
Indonesia			Sudan		
Ivory Coast			Tanzania		
Kenya			Thailand		
Liberia			Togo		
Madagascar			Uganda		
Malawi			Zambia		
Malaysia			Zimbabwe		

Severe Malaria Stakeholders Meeting, 21-22 Oct 2019, Abuja

- Convened by Medicines for Malaria Venture (MMV) and the Clinton Health Access Initiative (CHAI)
- Under the auspices of the RBM Case Management Working Group
- In collaboration with UNICEF, Swiss Tropical and Public Health Institute (Swiss TPH), Médecins Sans Frontières (MSF), and funded by Unitaid.
- Objectives
 - Share experiences from existing efforts to improve the continuum of severe malaria care from community to referral facility levels incorporating rectal artesunate and injectable artesunate
 - Achieve better patient care and reduce mortality from severe malaria.
- The meeting was composed of plenary sessions, panels of experts, and action-oriented country-by-country brainstorming.

Participants at the Severe Malaria Stakeholder Meeting



Key Themes Severe Malaria Stakeholder Meeting

- Coordination in funding and implementation
- Service delivery pre- and post-referral
- Referral
- Logistics & supply chain management



Following slides with summary of the Severe Malaria Stakeholder Meeting, 21-22 October 2019 in Abuja were presented during the Severe Malaria Symposium on November 21 at ASTMH 2019 by Jordan Burns

Funding and Implementation Coordination

- Dedicated **national task forces** can help deliver unified messages to donors.
- Efforts to **connect the private sector with national guidelines and policies**, with the aim to improve quality as well as **data capture and visibility**, especially in countries where a large percentage of patients seek private sector care.



*Photo Credit:
Lan Andrian/GHSC-PSM*

Logistics and Supply Chain Management [1]

- **Increased trends in procurements** of injectable and rectal artesunate, and in WHO prequalified suppliers.
- **Weak quantification** for severe malaria products and understanding of consumption.
- Need to **phase out injectable quinine** as severe malaria treatment.

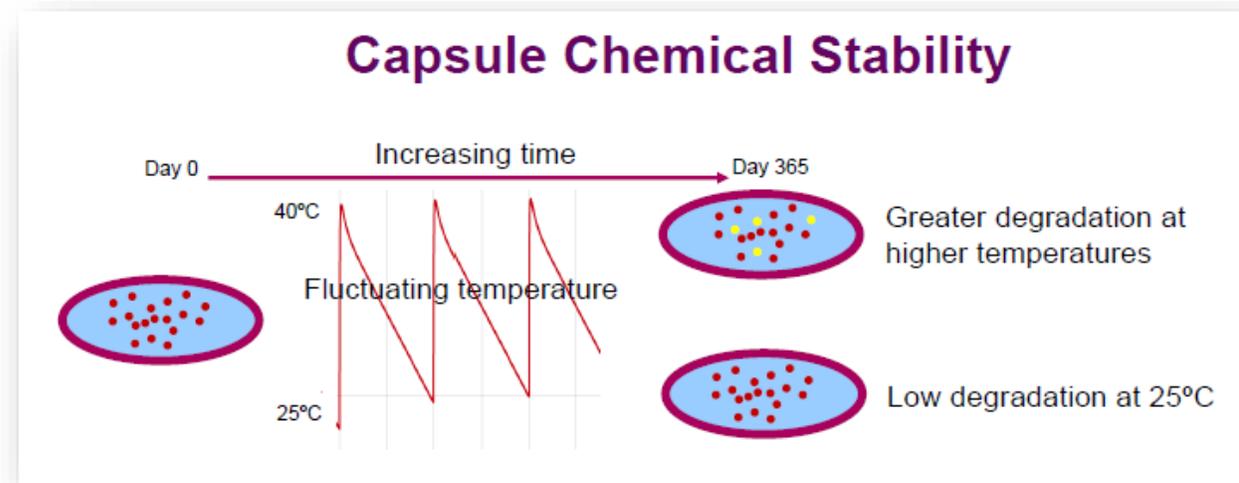


Photo source: Greg Roche/JSI

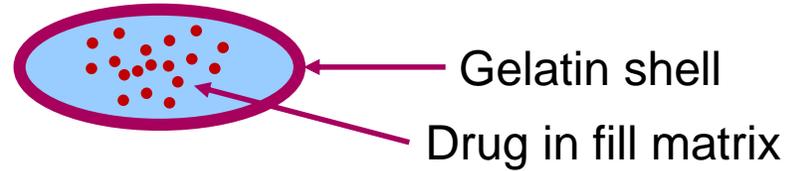
Logistics and Supply Chain Management [2]

- Concerns around the integrity of rectal artesunate under extreme temperatures, but **laboratory studies suggest that it is a reasonably robust product.**
- **Artesunate rectal capsules in lieu of suppositories**, as the latter are not suitable in hot and humid climate zones (paraffin wax-based matrix vs. gelatin capsules).
- Call for better guidance and programmatic approach on the **storage and transport of rectal artesunate in hot environments.**

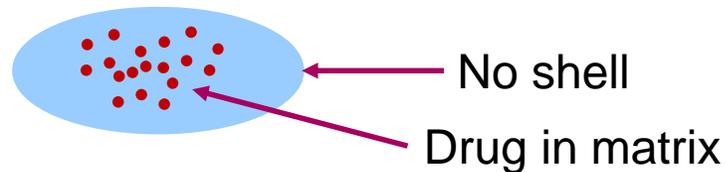
Photo Credit: Andrew Slade; Presentation on Rectal Artesunate supply chain and stability guidance – Abuja 2019



Suppository vs. Softgel Capsule



- Softgel rectal capsule
 - Consistent thermostable shape
 - The resistance of the gelatin shell allows, with care, insertion when soft



- “Classic” fat or wax-based suppository
 - Melts in the hand and deforms easily
 - Difficult to insert when soft and unusable when molten

Service Delivery Pre- and Post-Referral [1]

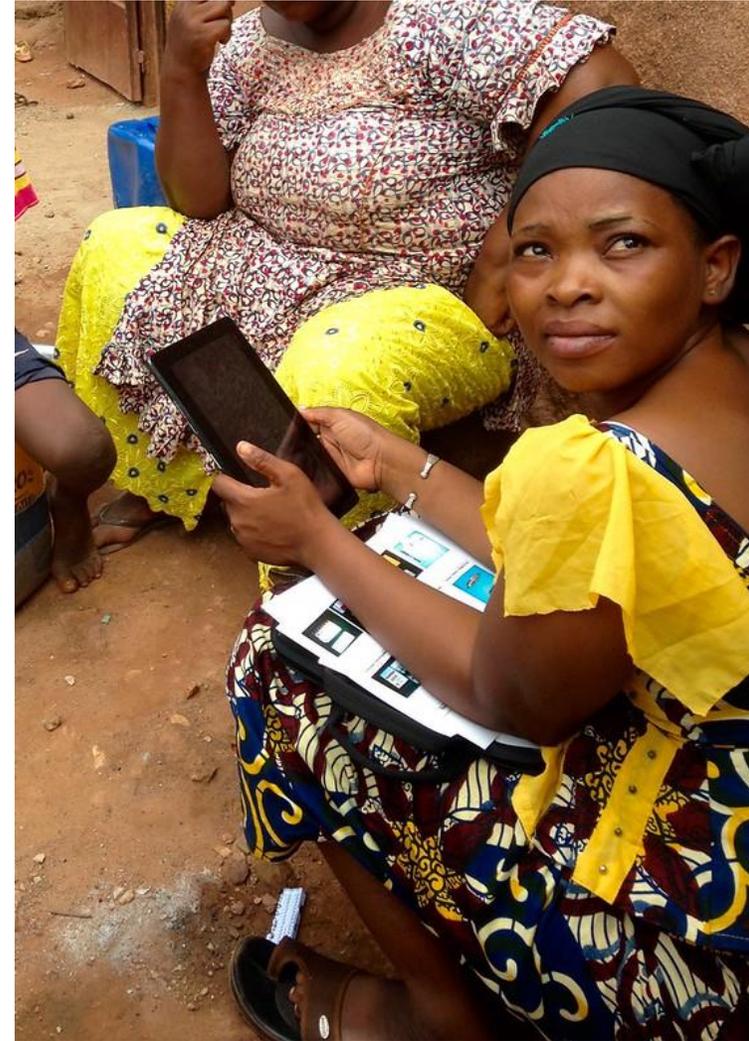


- In the context of cost recovery systems/user fees and provider/patient treatment preferences, there is **suspected misuse and overuse** of injectable artesunate.

Photo Source:
Lan Andrian/GHSC-PSM

Service Delivery Pre- and Post-Referral [2]

- Investment in well-functioning data systems like DHIS2 and improved digital access at community level can help to **strengthen the surveillance component** of severe malaria.



*Photo Source:
Jordan Burns/PMI*

Referral [1]



- Hidden mortality from severe malaria and associated-complications are likely influenced **by care-seeking behaviors**, as many studies suggest.

*Photo Source:
Lisa Kramer, PMI*

Referral [2]



- **Communities should be engaged** in improving the referral process and organized around it, but should not be expected to replace the formal health system.
- Countries are exploring creative solutions for improving **emergency transport options** (e.g. Zambia and Nigeria).

*Photo Source:
Zambia – Transaid/MMV*

Remaining Questions...



How can we improve **quantification** for severe malaria commodities?

How can we encourage **roll-out of interventions** at the community-level while keeping structural limitations and community health worker burden in mind?

How can we address challenges with cost recovery systems and incentives to **over-prescribe severe malaria treatment**?

How can we improve the way **severe malaria cases are captured** in country HMIS/DHIS2 systems?

Patient testimonials

- From Transaid, one of MMV's partners in Zambia:

