



MMV, SIGMA-TAU SYMPOSIUM

# DIHYDROARTEMISININ/PIPERAQUINE: ADVANCING AND OPTIMIZING TREATMENT FOR UNCOMPLICATED MALARIA

WEDNESDAY, OCTOBER 5<sup>TH</sup>; 14:00 - 15:00 - ROOM 1  
CENTRE DE CONVENCIONS INTERNACIONAL DE BARCELONA - **BARCELONA** - SPAIN



# THE ROLE OF THE MMV-SIGMA TAU PARTNERSHIP IN DEVELOPING EURARTESIM AS A QUALITY ACT FOR MALARIA ENDEMIC COUNTRIES

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## The MMV Imperative

- In response to a virtually empty malaria drug pipeline, MMV was established in 1999 with a mission to **discover, develop and deliver** safe, effective and affordable antimalarial drugs
- As a not-for-profit PDP, MMV's goal is to **cure and protect the vulnerable** and help to ultimately **eradicate malaria**



***“From its outset, MMV has been a hard-nosed business venture with a compassionate, humanitarian heart.”***  
Margaret Chan, Director General, WHO



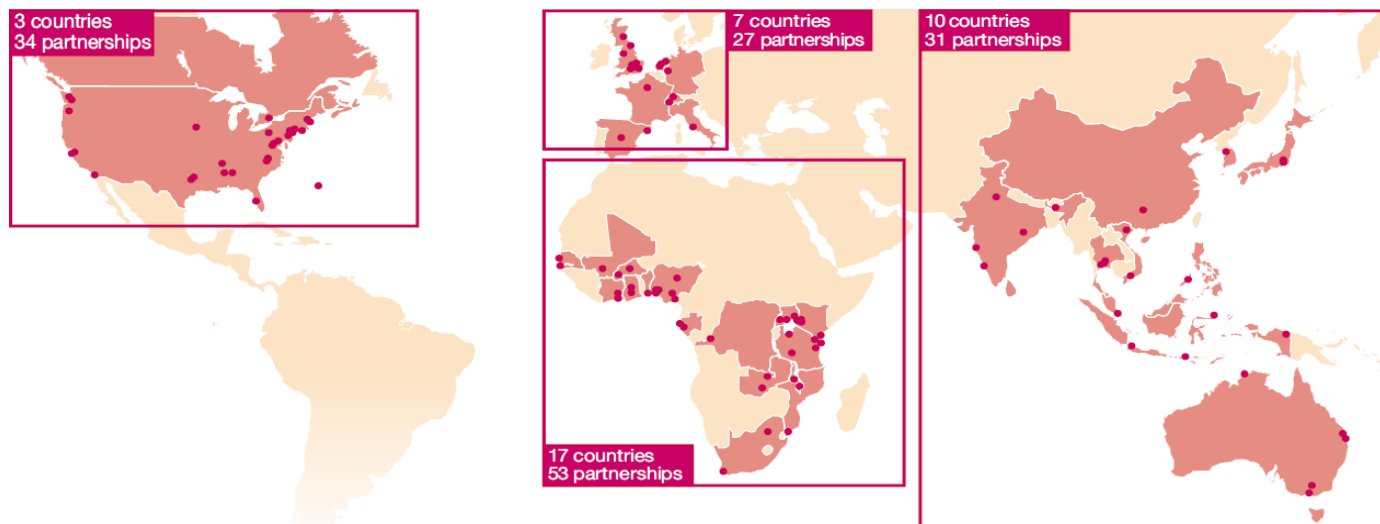
# The MMV Approach: an effective PDP Model

*“MMV shows how the market can work for the world’s poorest people.”*

Melinda Gates

A successful public-private drug development partnership (PDP):

- A new way of doing business by using the potent synergies of over 150 partnerships in 43 countries
- Innovative and cost-effective
- Shares the risk of R&D investment across all sectors
- Leveraging private sector assets, creating a virtuous circle



## MMV Achievements

- First affordable, high quality pediatric ACT launched and saving lives – 72mn treatments delivered to 35 countries
- Two new ACTs submitted to EMA for regulatory approval
- WHO Prequalification of injectable artesunate
- Over 50 projects in antimalarial pipeline targeting new goal of malaria eradication
- Focused access global plan to ensure medicines reach those who need them most



***“The contribution of MMV and its partners towards building an essential arsenal of new antimalarials is invaluable.”***

Awa Marie Coll-Seck, Roll Back Malaria Partnership (RBM)

# MMV R&D Challenges

- Treatment of acute uncomplicated *P. falciparum* malaria
- Treatment of severe malaria
- Treatment for *P. vivax* malaria
- Treatments for children under 5 and pregnant women
- Medicines to block transmission
- Medicines to tackle resistance to first-line antimalarials
- Access to effective treatment for the poorest/ most vulnerable



# ... MMV's Solutions: R&D Portfolio 2011

Research		Translational			Development		
Lead Gen	Lead Opt	Preclinical	Phase I	Phase IIa	Phase IIb/III	Registration	Phase IV
Novartis miniportfolio	Novartis 2 Projects	MK 4815 (Merck)	NITD609 Novartis	OZ 439 (Monash/UNMC/ STI)	AZCQ Pfizer	DHA-Piperaquine Sigma-tau	Coartem®-D Novartis <b>APPROVED</b>
GSK miniportfolio	GSK 2 Projects	GNF156 Novartis	Tafenoquine GSK			Pyronaridine-AS Shin Poong/University of Iowa	ASAQ Winthrop sanofi aventis/OND <b>APPROVED</b>
Broad/Genzyme miniportfolio	Aminoindole Broad/Genzyme	AN3661 Anacor					IV artesunate Guilin <b>APPROVED</b>
Pfizer Screening	Aminopyridine UCT						
sanofi aventis Orthologue screen	Pyrazoles Drexel						
AstraZeneca Screening	Quinolones USF/ VAMC						
Kinases Monash	DHODH UTSW/UW/Monash						
Antimalarials St Jude/Rutgers							
Other Projects 12 Projects							

**MMV has worked with partners to build the largest pipeline of antimalarials in history**

**Over 50 projects with regular review by MMV's Expert Scientific Advisory Committee (ESAC)**



# MMV's Access work: Assuring health impact

## Access strategies supporting uptake of MMV's medicines

### Health Impact

Acceptance of  
Quality  
Treatments

Expansion of  
Access to  
Treatment

Measure and  
Monitor Impact





## MMV & sigma-tau: Partners in developing safe, efficacious DHA-PQP to international GMP<sup>1</sup> standards

### Sigma-tau-MMV partnership from 2004

- Sigma-tau: Founder's commitment
- Partnership scope includes joint product development, ongoing product enhancement and delivery

### Dihydroartemisinin Piperavaquine (DHA-PQP) Product Overview:

- One of five ACTs recommended by WHO Standard Treatment Guidelines for first-line treatment of uncomplicated falciparum malaria (*Strong recommendation, high quality evidence.*)
- First line treatment in four malaria endemic countries, 2<sup>nd</sup> line treatment in three additional countries
- Under EMA regulatory review. Not WHO-prequalified yet.
- **8 clinical trials, including Phase III in Asia and Africa**

## Future Path for DHA-PQP

### Future Plans – post regulatory approval:

- Longitudinal study with European and Developing Countries Clinical Trials Partnership (EDCTP)
- INESS Safety and Effectiveness Studies in Ghana, Tanzania, Mozambique and Burkina Faso
- Paediatric dispersible formulation

## Conflict of Interest Statement

- G. Jagoe is a member of MMV's Executive Management Group and has been involved in collaborations around the development of three MMV-supported drugs and in facilitating access to two MMV-supported drugs.
- MMV does not profit from any of its partnership alliances.
- G. Jagoe has not received compensation from any of the companies in the malaria disease area nor does he hold stocks or options in any of these companies.
- G. Jagoe did not receive travel assistance or honoraria for this presentation.
- G. Jagoe and MMV colleagues are solely responsible for the content of this presentation.



Thank You