Final stakeholder meeting of the

IDAMS and DENFREE Consortium in collaboration with WHO-TDR at Institut Pasteur, Paris 21-22 November 2016 Amphi Duclaux

Free Registration
deadline : November 15, 2017

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The IDAMS and DENFREE consortium in collaboration with WHO-TDR are pleased to welcome you to our final stakeholder meeting, which will take place at the Institut Pasteur, Paris on the 21-22 November 2016. This joint meeting is part of a common dissemination strategy of progress made in our comprehension of dengue transmission, protective immunity and disease pathogenesis, and in the development of innovative tools to improve disease surveillance, prediction of severe disease, vaccines and mosquito control.

BACKGROUND

DENFREE : Our main focus was on finding key factors determining dengue transmission and dynamics in order to develop new tools and strategies for controlling dengue transmission. We estimated the risk of spreading DENV to uninfected areas, especially in Southern Europe where susceptible vectors exist. The major tools generated are predictive models that enable specific interventions, whether concerning the environment, mosquito or human, to be made and that can undermine an epidemic. We aimed to develop an easy-to-use point of care diagnostic tool that is sensitive to detect virus in both human and mosquito samples, which improved DENV surveillance. Inherent in this approach was the belief that improved surveillance and diagnosis of the asymptomatic dengue carriers contributed to effective intervention, especially during early stages of pathogen invasion into a naïve region.

IDAMS: The overall concept of the IDAMS research project was to assemble a consortium of international experts working together to develop new and innovative tools to be applied to the control of dengue in a global context. The core of the work focussed on:

- improving diagnosis and clinical management of dengue through two linked work packages designed **a)** to identify readily available clinical and laboratory parameters and/or viral and immunological markers, that differentiate between dengue and other common febrile illness within 3 days of fever onset, and **b)** to identify any of the available markers that are predictive of the likelihood of evolving to a more severe disease course
- assessing the risk of dengue spread though linked work packages focused on **a)** mapping and modelling techniques to define the current extent of dengue disease globally and to evaluate possible scenarios of spread or risk to previously uninfected regions in the future, and **b)** developing effective and affordable early warning and outbreak response systems.

OVERALL OBJECTIVE (AIM) AND SPECIFIC OBJECTIVES OF THE MEETING

1. Aim:

To identify best practices in dengue risk assessment, management and surveillance as a contribution to the Global Strategy for Dengue Prevention and Control

2. Objective:

1. To review, collate and summarize outputs of IDAMS and DENFREE leading to:
- Evidence supporting policy – to be passed onto global & country policy-makers
- Relevant implementation/operational research needs to facilitate the deployment and scale-up of evidence-supported measures
- Gap in knowledge that have not been filled or have been highlighted by the 2 projects
2. To discuss the evidence generated through the IDAMS and DENFREE Consortia regarding: a) Burden of disease; b) Dengue surveillance including dengue alert for outbreaks and early response; c) Clinical and laboratory warning signs for severe dengue; d) Viral and immunological aspects; e) Vector surveillance and control.
3. To take notice of the current spread of other viral diseases transmitted by the same vector and identify further priority areas for research on dengue and Zika.
4. To develop, in a participatory approach with key stakeholders (particularly Ministries of Health, International Organizations such as WHO, RCCC and national dengue control services), recommendations for the adaptation of the global dengue guidelines according to the new evidence generated.

DAY 1 21st November		**Speaker / Chair**
8.30-9.00	Registration	
9.00-9.30	Welcome, Presentation of participants Opening: Purpose of the meeting	DENFREE, IDAMS, TDR, EU officer, IP director
	Dengue burden **IDAMS WP4, DENFREE WP1**	
9.30-9.50	Role of evaluating and monitoring dengue burden in countries and WHO Regions	R. Velayudhan, WHO
9.50-10.10	Global dengue burden re-assessed	S. Hay / O. Brady
10.10-10.30	**Coffee Break**	
10.30-10.50	Asymptomatic infection epidemiology	C. Fortas
10.50-11.10	Economic assessment of dengue burden	A. Farlow
11.10-11.30	Wrap up discussion and use of data	
Dengue case definition, dengue diagnostics, prediction of severe disease **IDAMS WP1 & WP2**		
11.30-12.00	Overall and diagnostic profile of the IDAMS observational prospective study	T. Jaenisch, B. Wills, C. Simmons, M. Guzman
12.00-12.30	Clinical case definition for dengue & differentiation from other febrile diseases	B. Wills, T. Jaenisch, P. Lam & K. Rosenberger
12:30-13:30	**Lunch Break**	
13:30-14.00	Warning signs for severe dengue – rationale and findings	T. Jänisch, B. Wills
14.00-14.20	Virological and genetic predictors of severe dengue	C. Simmons, M. Guzman
14.20-14.50	Wrap up discussion and use of data	
14.50-15.20	**Coffee break**	
Virology, Immunology and genetics **DENFREE WP 2,6,7,8, IDAMS WP2**		
15.20-15.40	Human genetic susceptibility to dengue	B. Sierra / L. Pereira
15.40-16.00	Viral population study in asymptomatic vs symptomatic dengue infection	V. Doung, M. Vignuzzi
16.00-16.20	Antibody responses to dengue viruses	F. Sallusto and C. Simmons
16.20-16.40	Highly potent broad spectrum anti-dengue antibodies	A. Rouvinski
16.40-17.00	Serotyping Dengue virus infections	M. Schreiber
17.00-17.20	Immunological profile of asymptomatic dengue	T.Cantaert /A.Sakuntabhai
17.20-17.40	Wrap up discussion and use of data	
19.00	*Reception*	

Day 2 22nd November		**Speaker / Chair**
Mathematical modelling DENFREE WP3,4		
9.00-9.15	Forecast/Prediction dengue epidemic models	Nico Stollenwerk
9.15-9.30	Zika R0 in South Pacific	Bernard Cazelles
9.30-9.45	Successful & Unsuccessful examples in dengue prediction: Lessons for chikungunya and Zika outbreaks	Xavier Rodo
9.45-10.00	Agent based model in Bangkok	E. Daudé – A. Vaguet
10.00-10.15	Modeling Dengvaxia implementation	M. Aguiar
10.15-10.30	Dengue in Periodic Environments	J. Rocklov
10.30-10.45	Wrap up uptake and use of data	
10.45-11.00	**Coffee Break**	
***Outbreak response* IDAMS WP3 and WP4**		
11.00-11.15	The expansion of dengue vectors	M. Kraemer, O. Brady
11.15-11.30	Alarm signals for dengue outbreaks and early response	L. Bowman, M. Petzold, A. Kroeger
11.30-11.45	Country experiences with dengue alarm and early response: Brazil, Mexico, Malaysia,	G. Coelho, G. Tejeda, L. Hakim
11.45-12.00	Handbook for dengue outbreak detection & response	S. Runge Ranzinger
12.00-12.15	Wrap up uptake and use of data	
12.15-13.30	**Lunch Break**	
***Vector control:* IDAMS WP4, DENFREE WP 5 and DengueTools**		
13.30-13.45	A new tool for community involvement in dengue control	F. Monasso
13.45-14.00	Implementation of auto-dissemination in Il de Madeira	G. Devine
14.00-14.15	European vector competence and viral adaptation	P.S. YEN/L. Lambrechts
14.15-15.00	DengueTools presentation 2	P. Reiter
15.00-15.15	Wrap up uptake and use of data	
15.15-15.40	**Coffee Break**	
	Dengue Futures & Zika	
15.40-16.00	Zika	NN, WHO
16.00-16.20	Dengue Futures and Zika risk mapping	J. Messina
16.20-16.40	Zika in Latin American IDAMS sites	E. Marques, P. Brasil, A. Tami, NN El Salvador
16.40-17.00	Harmonisation of tools & protocols for Zika research	Thomas Jaenisch
17.00–17.20	Zika-Dengue Interactions	J. Mongkolsapaya
17.20-17.40	Diagnostic challenges of Zika	R. Peeling & C. Simmons
17.40-18.00	Wrap up discussion, use of data and conclusion	