

The Swiss Expert Committee for Travel Medicine (ECTM) assessed available data for the Qdenga® vaccine and issues the following recommendations for Travellers in the statement of July 2024 – the short summery

1. Vaccination against dengue fever virus with Qdenga® in persons with no previous dengue fever infection is not recommended.
2. Vaccination with Qdenga® **can be recommended** for travellers aged 6 years and older **who have evidence of previous dengue infection**, defined as i) a laboratory confirmed dengue infection (PCR, antigen or seroconversion) or ii) a compatible history of dengue infection with a positive IgG serological test.
AND will be exposed in a region with significant dengue transmission.

09/24 :Pediatric referral for evaluation of Dengue-Vaccination in a 5yr old boy

History:

Oct.23 (4yrs) : 2-weeks holiday in Thailand (Koh Chang and Bangkok)
3 days before return the child developed a high fever, otalgia & rhinitis
A hospital check showed : febrile child with URTI

Lab:

Blood values more or less normal
Nasopharyngeal swab for RSV –Ag & Influenza A/B neg.

Dengue diagnostic: Dengue NS1-Ag neg, IgM neg., IgG pos.

Conclusion in Thailand : Febrile URTI with probable H/o Dengue Fever in the past

Question from parents :

Shall we vaccinate our child as we are planning to continue our holidays in the tropics?

Crossreactivity of **Flavivirus** due to structural similarities of the following viruses

Dengue

Zika

Yellow Fever

Japanese Encephalitis

West Nile

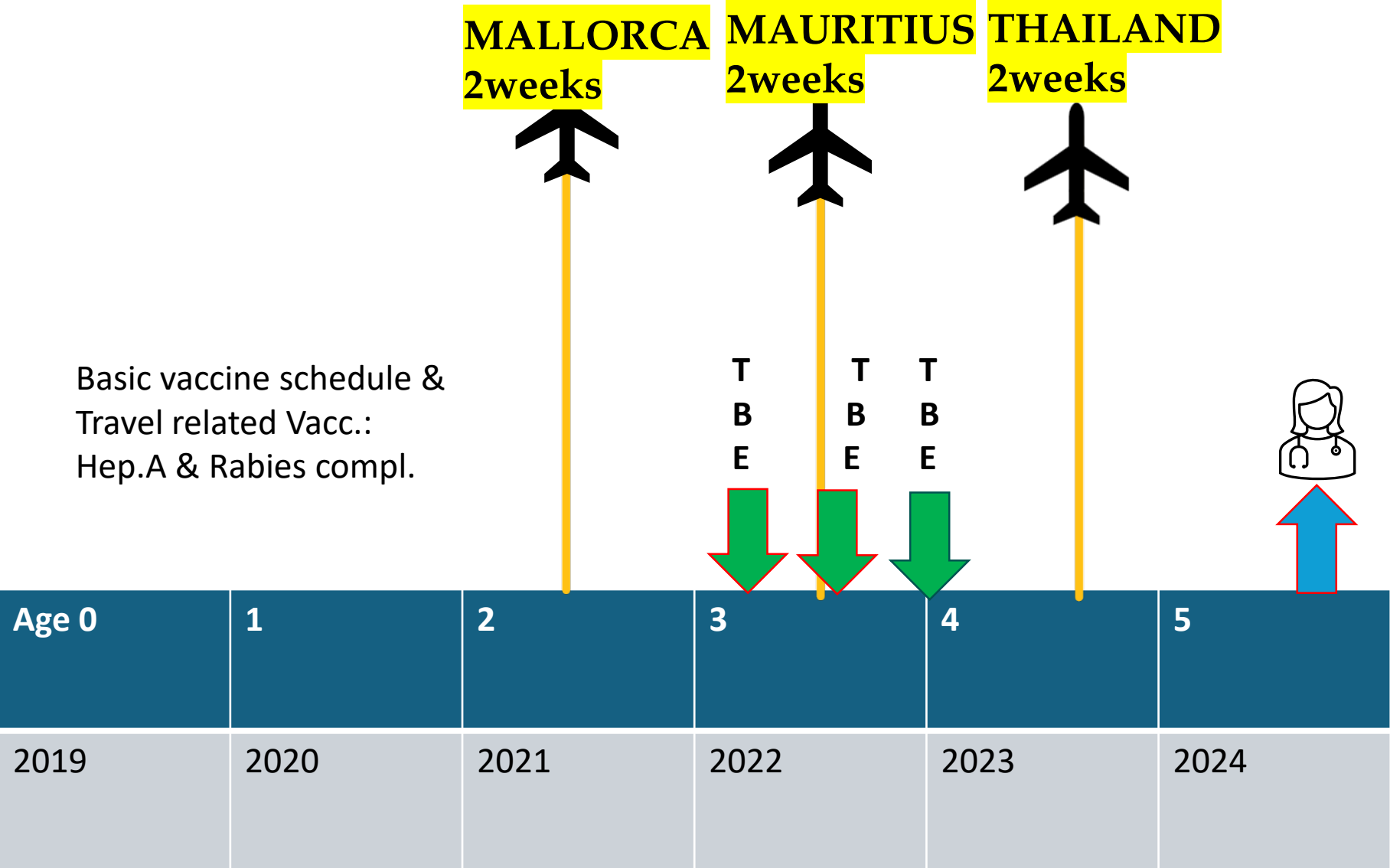
FSME

Usutu

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BACKGROUND HISTORY OF CHILD

Bangkok10/23:
Dengue:
IgG pos, IgM neg. NS1Ag neg



SEROLOGIE		Resultat		Ref.bereich	Unit
0005932300 Serum, Abnahmedatum 04.09.2024 00:00					
Flavivirus Screening Panel					
FSME (TBEV) Virus IgM		< 1 : 10		< 1 : 10	Titer
Interpretation: negativ					
FSME (TBEV) Virus IgG	↑	>= 1 : 100		< 1 : 10	Titer
Interpretation: POSITIV					
Yellow Fever Virus IgM		< 1 : 10		< 1 : 10	Titer
Interpretation: negativ					
Yellow Fever Virus IgG	↑	>= 1 : 100		< 1 : 100	Titer
Interpretation: POSITIV					
Japanese Encephalitis Virus IgM		< 1 : 10		< 1 : 10	Titer
Interpretation: negativ					
Japanese Encephalitis Virus IgG	↑	>= 1 : 100		< 1 : 10	Titer
Interpretation: POSITIV					
West Nile Virus IgM		< 1 : 10		< 1 : 10	Titer
Interpretation: negativ					
West Nile Virus IgG	↑	>= 1 : 100		< 1 : 10	Titer
Interpretation: POSITIV					

SEROLOGIE	Resultat	Ref.bereich
0005932300 Serum, Abnahmedatum 04.09.2024 00:00		
Dengue Virus 3 IgM	< 1 : 10	< 1 : 10
Interpretation: negativ		
Dengue Virus 4 IgM	< 1 : 10	< 1 : 10
Interpretation: negativ		
Dengue Serologie IgG (IFAT)		
Dengue Virus 1 IgG	↑ >= 1 : 100	< 1 : 100
Interpretation: POSITIV		
Dengue Virus 2 IgG	↑ >= 1 : 100	< 1 : 100
Interpretation: POSITIV		
Dengue Virus 3 IgG	↑ >= 1 : 100	< 1 : 100
Interpretation: POSITIV		
Dengue Virus 4 IgG	↑ >= 1 : 100	< 1 : 100
Interpretation: POSITIV		

Strategies to mitigate Cross-Reactivity

Is the integration of **clinical**, **epidemiological** and **laboratory** findings enough to decide on which traveler to vaccinate

or

is “improving assay specificity» amongst others an urgent way out?