Dengue and Zika Viral Infections in Patients with Acute Febrile Illness in Northeastern Thailand

AFI patient come to the hospital
(June 2016 – June 2017)

Blood sample collection
(143 samples)

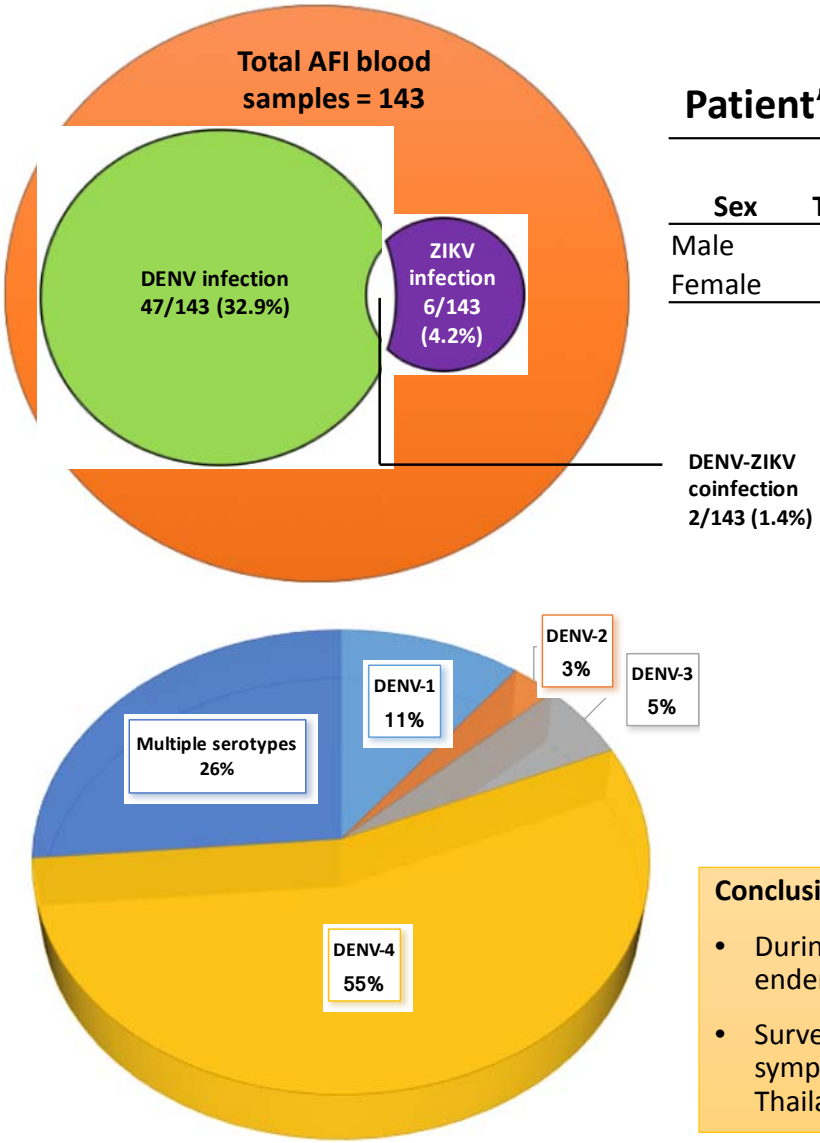
- NS1 antigen
- Anti-dengue IgM
- Anti-dengue IgG

RT-PCR
(GAPDH, DENV, ZIKV)

DENV positive samples were subjected to DENV serotyping using RT-PCR

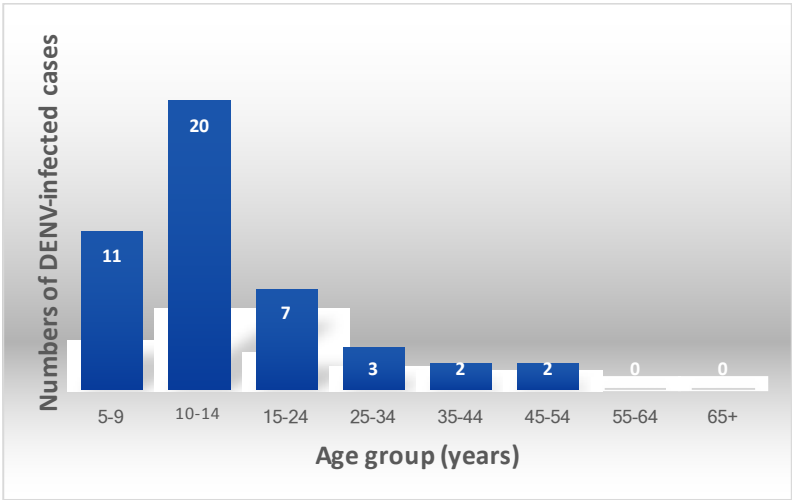
Amplified ZIKV fragments were confirmed by sequencing.

To investigate the prevalence of DENV and ZIKV infections as well as DENV-ZIKV co-infection in acute febrile illness (AFI) patients in northeastern Thailand.



Patient's gender

Sex	Total (n)	DENV infected (n)	Zika infected (n)	DENV+Zika coinfecetd (n)	non-infected (n)
Male	69	30	1	1	37
Female	74	15	3	1	55



Conclusion

- During a 13-month study period, DENV-4 was predominant. ZIKV was also co-circulating in a DENV endemic region.
- Surveillance of arboviral infections, especially DENV and ZIKV in AFI patients presenting dengue-like symptoms is required to assess relative transmission risk to local populations in northeastern, Thailand.