Emergence Potential of Sylvatic Dengue Virus Type 4 in the Urban Transmission Cycle is Restrained by Vaccination and Homotypic Immunity

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Abstract

Sylvatic dengue viruses (DENV) are both evolutionarily and ecologically distinct from human DENV and are maintained in an enzootic transmission cycle. Evidence of sylvatic human infections from West Africa and Southeast Asia suggests that sylvatic DENV come into regular contact with humans. Thus, this potential of emergence into the human transmission cycle could limit the potential for eradicating this cycle with vaccines currently in late stages of development.