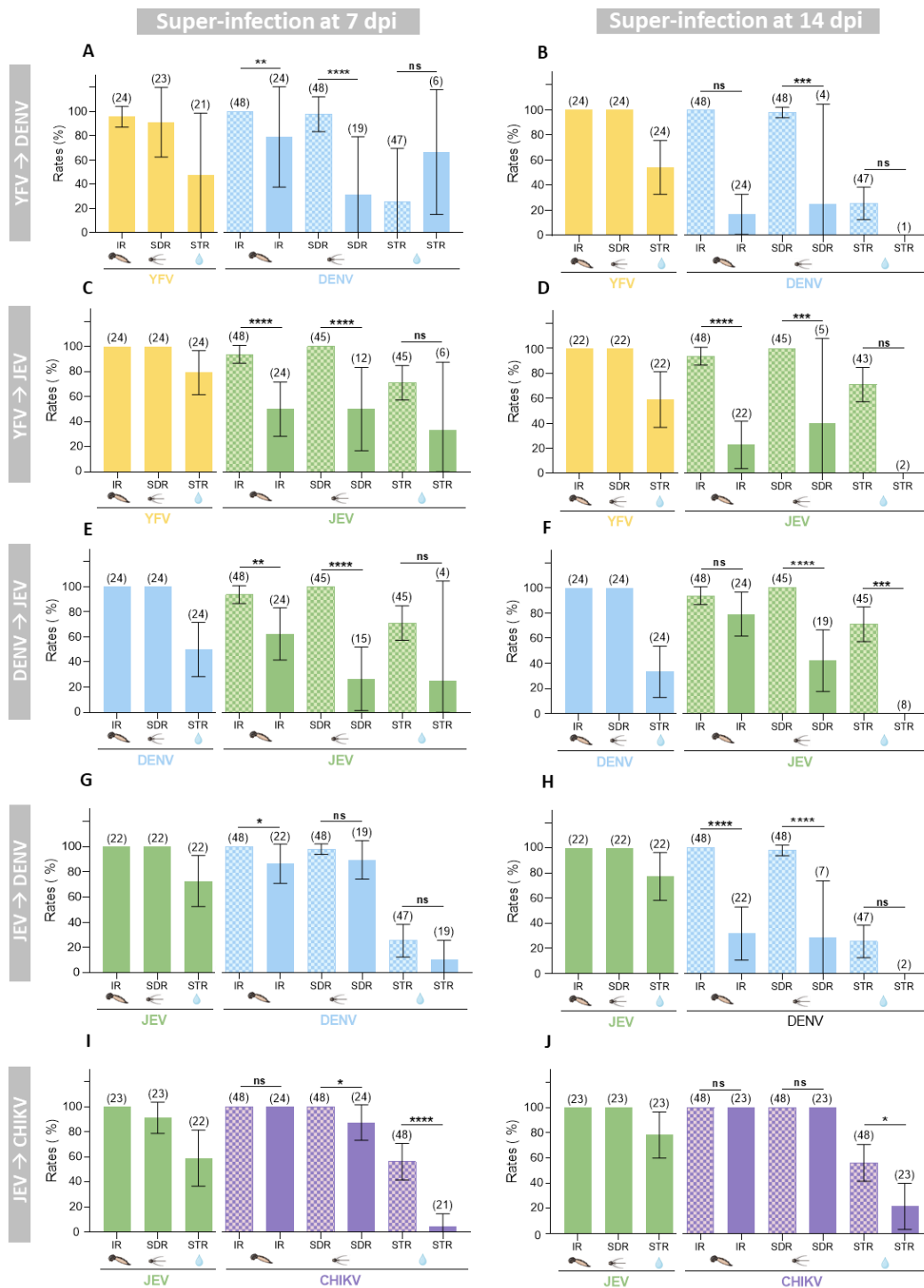


**Figure ED1. Co-infection of *Ae. aegypti* with DENV and JEV** at a final titer of  $10^7$  FFU/mL and mosquitoes were examined at 7 (A), 14 (B), and 21 (C) dpi; pairwise comparisons of infection (IR), stepwise dissemination (SDR), and stepwise transmission rates (STR) of the viruses in mono- and co-infection. Stars indicate statistical significance of comparisons by Fisher's exact test (pairwise comparison; ns: not significant,  $*P \leq 0.05$ ,  $**0.001 \leq P \leq 0.01$ ).



**Figure ED2. Super-infection of *Ae. aegypti* mosquitoes from Thailand 7 or 14 days after primo-infection and mosquitoes were examined at 14 post super-infection to estimate IR, SDR, and STR. For the second virus, pairwise comparisons of infection (IR), stepwise dissemination (SDR), and stepwise transmission rates (STR) for mono- and super-infections were made. (A-B) Super-infection YFV followed by DENV at day 7 post primo-infection (A) or at day 14 post primo-infection (B). (C-D) Super-infection YFV followed by JEV at day 7 post primo-infection (C) or at day 14 post primo-infection (D). (E-F) Super-infection DENV followed by JEV at day 7 post primo-infection (E) or at day 14 post primo-infection (F). (G-H) Super-infection JEV followed by DENV at day 7 post primo-infection (G) or at day 14 post primo-infection (H). (I-J) Super-infection JEV followed by CHIKV at day 7 post primo-infection (I) or at day 14 post primo-infection (J). Stars indicate statistical significance of comparisons by Fisher's exact test (pairwise comparison; ns: not significant, \* $P \leq 0.05$ , \*\* $0.001 \leq P \leq 0.01$ , \*\*\* $0.0001 \leq P \leq 0.001$ , \*\*\*\* $P \leq 0.0001$ ).**