

Assessing Dengue Vaccine Characteristics and Adverse Effect Profiles – A Single-Centre Prospective Cohort Study.

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Background

Since 2023, the dengue vaccine Qdenga® (TAK-003) has been administered during travel consultations at our travel clinic (TC). Uncertainty remains regarding its effectiveness and necessity for dengue-naïve and short-term travellers. Well-founded evidence and targeted support for travel medicine advisors are needed to optimize up-to-date recommendations.

Materials & Methods

We routinely collected data from consenting travellers vaccinated with Qdenga® at our TC, including adverse effects, prior dengue infections, and other notable circumstances. Based on these observations, we developed a prospective study, in which we recruited travellers who received Qdenga® during pre-travel consultations at our TC. After enrollment, travellers completed an anonymous online questionnaire covering demographic and medical history, travel purpose, prior dengue infections, adverse events within 14 days post-vaccination, and potential dengue exposure between doses.

Results

Retrospective data from May 2023 to January 2026 included 542 individuals with a median age of 42 years (IQR 27–59); 54% were female (n=293). Overall, 80% received both the first and second Qdenga® doses (n=431), 18% received only the first dose (n=99), and 2% received only the second dose at our TC (n=12). Among first-dose recipients, 94% attended a regular travel consultation with a travel nurse (n=501), 5% had a medical consultation with a travel nurse (n=26), and 1% had a medical consultation with a doctor (n=3).

Prospective data are currently collected and the results of the first 100 participants will be presented in Belfast.

Conclusion

Uptake of Qdenga® is high in our setting. Detailed post-vaccination data are needed to inform vaccination policy.