First clinical experiences with the Qdenga® vaccine in Germany: a multicentric TravelMedVac study

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Vaccine reactogenicity can differ between different population groups. The tetravalent live dengue vaccine Qdenga® was licensed in Germany in 2022. Thus far, it is not known whether predominantly dengue-naïve travellers report different reactogenicity patterns than observed in the pivotal clinical trials for populations from endemic settings.

Between March-December 2023, we conducted an online study with 99 participating centers from the German TravelMedVac network. Individuals were invited to complete a short, anonymised reaction survey 10 days after receipt of the first and second dose of Qdenga®.

The survey included 827 participants aged 40.9 years (range 8-74), including 54% (n=446) females, 46% (n=378) males and 1% (n=3) non-binary individuals. After the first dose (n=609), side effects occurred in 57% (n=349). These were most pronounced between the 7th and 11th day after vaccination, with headache (24% (148/609)) being the most common symptom. Self-reported weakness (22% (133/609) and myalgia (18% (112/609)) were also reported. In contrast, localised symptoms, such as post-injection pain (11% (25/218)) occurred between the 1st and 3rd day after the second vaccination. Fever was more common after the first vaccination (9% (52/609) vs. 3% (6/218)). A total of 179 (21.6%) co-administrations were reported, and 69 (8%) patients travelled to endemic regions between the first and second dose.

Adverse events were frequently reported in this non-endemic setting. Systemic and local reactions were more common than reported in previous trials, but these were mainly mild. There is a need for well-coordinated networks to assess vaccine reactogenicity among travellers.