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who had not visited China. This case illustrates the importance of isolating patients and suspected cases for at least 14 days after exposure and of community-wide screening to enhance diagnosis of COVID-19.

We declare no competing interests.

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Covert COVID-19 and false-positive dengue serology in Singapore

Dengue and coronavirus disease 2019 (COVID-19) are difficult to distinguish because they have shared clinical and laboratory features.^{1,2} We describe two patients in Singapore with false-positive results from rapid serological testing for dengue, who were later confirmed to have severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection, the causative virus of COVID-19.

The first case is a 57-year-old man with no relevant past medical, travel, or contact history, who presented to a regional hospital on Feb 9, 2020, with 3 days of fever and cough. He had thrombocytopenia (platelet count $140 \times 10^9/\text{mL}$) and a normal chest radiograph. He was discharged after a negative rapid test for dengue NS1, IgM, and IgG (SD Bioline Dengue Duo Kit; Abbott, South Korea). He returned to a public primary health-care clinic with persistent fever, worsening thrombocytopenia ($89 \times 10^9/\text{mL}$), and new onset

lymphopenia ($0.43 \times 10^9/\text{mL}$). A repeat dengue rapid test was positive for dengue IgM and IgG (Dengue Combo; Wells Bio, South Korea). He was referred to hospital for dengue with worsening cough and dyspnoea. A chest radiograph led to testing for SARS-CoV-2 by RT-PCR (in-house laboratory-developed test detecting the *N* and *ORF1ab* genes) from a nasopharyngeal swab, which returned positive. The original seropositive sample and additional urine and blood samples tested negative for dengue, chikungunya, and Zika viruses by RT-PCR,³⁻⁵ and a repeat dengue rapid test (SD Bioline) was also negative. Thus, the initial dengue seroconversion result was deemed a false positive.

The second case is a 57-year-old woman with no relevant past medical, travel, or contact history, who presented to a regional hospital on Feb 13, 2020, with fever, myalgia, a mild cough of 4 days, and 2 days of diarrhoea. She had thrombocytopenia ($92 \times 10^9/\text{mL}$) and tested positive for dengue IgM (SD Bioline). She was discharged with outpatient follow up for dengue fever. She returned 2 days later with a persistent fever, worsening thrombocytopenia ($65 \times 10^9/\text{mL}$), and new onset lymphopenia ($0.94 \times 10^9/\text{mL}$). Liver function tests were abnormal (aspartate aminotransferase 69 U/L [reference range 10–30 U/L], alanine aminotransferase 67 U/L [reference range <55 U/L], total bilirubin 35.8 $\mu\text{mol/L}$ [reference range 4.7–23.2 $\mu\text{mol/L}$]). Chest radiography was normal and she was admitted for dengue fever. She remained febrile despite normalisation of her blood counts and developed dyspnoea 3 days after admission. She was found to be positive for SARS-CoV-2 by RT-PCR from a nasopharyngeal swab. A repeat dengue test (SD Bioline) was negative and an earlier blood sample also tested negative for dengue by RT-PCR.⁶ The initial dengue IgM result was deemed to be a false positive.

Failing to consider COVID-19 because of a positive dengue rapid test result has serious implications not only for the patient but also for public health. Our cases highlight the importance of recognising false-positive dengue serology results (with different commercially available assays) in patients with COVID-19. We emphasise the urgent need for rapid, sensitive, and accessible diagnostic tests for SARS-CoV-2, which need to be highly accurate to protect public health.

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