Commercial Antibody-Based Tests for Diagnosis of Acute Chikungunya Infection

We endorse the recommendations of Blacksell et al. (2) for the development of reliable, rapid, point-of-care commercial assay formats for Chikungunya virus (CHIKV) infections.

Though the performances of both the Chikungunya IgM antibody rapid immunochromatographic test (ICT) device and a Chikungunya IgM antibody enzyme-linked immunosorbent assay (ELISA) manufactured by Standard Diagnostics (South Korea) were poor (ICT test sensitivity, 1.9 to 3.9%; specificity, 92.5 to 95%) in the blood samples collected at the North Colombo Teaching Hospital, Sri Lanka (2), the results obtained by us, with the use of the OnSite Chikungunya IgM combo rapid test kit (CTK Biotech, San Diego, CA) in New Delhi during the 2010 spurt in cases with dengue and CHIKV infections, were heartening. The sensitivity and specificity of the above rapid test in relation to the IgM capture ELISA were 0.71% (95% confidence interval [CI], 0.3 to 0.94%) and 1.0% (95% CI, 0.46 to 2.1%), respectively (1).

Although the currently available rapid diagnostics for point-of-care diagnosis and CHIKV infections are, to some extent, serving their purpose (1, 2), it would be desirable if more efficient assay formats were developed. The rapid diagnostics would be the only option in countries where laboratory facilities are less than satisfactory.

ACKNOWLEDGMENTS

We have no potential conflicts of interest, and there is no financial support to report.

REFERENCES


Subhash C. Arya
Nirmala Agarwal
Sant Parmanand Hospital
Delhi, India

Address correspondence to Subhash C. Arya, subhashbhapaji@gmail.com.

Ed. Note: The author of the published article declined to respond.

Copyright © 2012, American Society for Microbiology. All Rights Reserved.
doi:10.1128/CVI.05543-11