Office Test for Resistant Pandemic Flu Available

BY MICHELE G. SULLIVAN

A biosciences company in Canada has developed a genetic assay for in-office use to identify oseltamivir-resistant pandemic influenza A(H1N1).

The test results, available in 2 working days, could be used to help guide patient treatment decisions, said Yvan P. Côté, Ph.D., vice president of Warnex Medical Laboratories Inc., Montreal. Although physicians shouldn't wait on test results to initiate treatment, the short turnaround time would give quick notice on any need to switch drugs due to resistance, he said in an interview.

The test uses genetic sequencing to detect the H275Y mutation of the neuraminidase gene, which has been shown to cause resistance to oseltamivir. Dr. Cote said that Warnex could supply testing kits to physicians, who would then send the sample to the Montreal lab for processing.

The prevalence of oseltamivir-resistant mutations is unclear, Dr. Cote said. "We are doing some research on that, but have no data to share. What we do believe is that there is a potential for increased resistance as [oseltamivir] is used more frequently."

Isolated incidents of resistance have been seen in Denmark, Japan, Hong Kong, and Canada. Four cases have been detected so far in the United States, according to the Centers for Disease Control and Prevention. All tested viruses retain their sensitivity to the other neuraminidase inhibitor, zanamivir, although the pandemic H1N1 strain is universally resistant to the adamantane antiviral medications, amantadine and rimantadine. ■