Infectious Diseases

Inhaled Laninamivir Octanoate for Influenza Prophylaxis in Children—Does it work?

by Dr Lewis First MD, MA, Editor-in-Chief, Pediatrics

The use of an anti-influenza pharmaceutical agent laninamivir octanoate, a long-acting neuraminidase inhibitor, has been shown in adults to effectively prophylax against this virus after flu exposure, although it is not as effective a prevention strategy as getting the vaccine itself. So what about children? Can it play a role in prophylaxis in this younger population?

Since this had not yet been shown in the clinical effectiveness trials done to date, Nakano et al. (10.1542/peds.2016-0109) performed a double-blind multicenter placebo-controlled trial to see if this drug could prevent the development of influenza when used in 343 randomized children less than 10 years of age exposed to an index case regardless of whether or not they had received vaccine. The authors’ outcome measure was the development of influenza within a 10-day period of the index case itself being diagnosed. The results showed less breakthrough of influenza in those who got the laninamivir octanoate as a single dose of 20 mg compared to those who got placebo.

While you may not find that you want to use this drug in the future (which needs to be started within 48 hours of contact with an index case), and turn instead to oseltamivir or zanamivir which need to be dosed more frequently than laninamivir, this study offers the opportunity to consider a single-dosed drug with some nice results at least according to this study. To add further import to the findings, Drs. Flor Munoz and Henry (Hank) Bernstein (10.1542/peds.2016-2371) from the Committee on Infectious Diseases for the AAP share a commentary on why this study may bode well for the future. To see whether inhaled laninamivir becomes a mainstay in addition to the influenza vaccine for preventing disease in those exposed to the virus, read the study and commentary for yourself. You’re likely to find both nothing to sneeze at.

Further Reading

- Effect of a Single Inhalation of Laninamivir Octanoate in Children With Influenza
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