Islatravir Shows Double Potential

Merck’s experimental HIV drug proves effective and well tolerated

September 30, 2019 By Benjamin Ryan

Merck’s investigational antiretroviral (ARV) islatravir has shown promise both for treatment and prevention of HIV in a pair of studies. The drug, formerly known as MK-8591, is a nucleoside reverse transcriptase translocation inhibitor, belonging to a new ARV class.

Touting the drug’s benefits, Jean-Michel Molina, MD, of Hôpital Saint-Louis in Paris, who led the study of its use as treatment, says, “Islatravir combines a high potency at low doses even against resistant viruses, with a high genetic barrier to resistance, a long intracellular half-life and so far a good tolerability profile.”

The treatment study included 121 first-timers to ARVs who were randomized to start a regimen of one of four doses of islatravir—between 0.25 milligrams and 2.25 mg—plus Pifeltro (doravirine) and lamivudine, or to receive Delstrigo (doravirine/tenofovir disoproxil fumarate/lamivudine). If those who received islatravir had an undetectable viral load at 24 weeks, they dropped the lamivudine.

The regimen of islatravir plus Pifeltro proved safe and suppressed HIV at a high rate, regardless of the islatravir dose. The two-drug regimen was comparable in efficacy to Delstrigo.

The researchers concluded that Phase III trials of islatravir plus Pifeltro are warranted.

A separate 12-week, placebo-controlled trial that included 16 HIV-negative volunteers suggested that a matchstick-sized islatravir-infused implant likely has the potential to work as pre-exposure prophylaxis (PrEP) for an entire year before it requires replacement. Levels of the drug reached and remained above the threshold previously found to protect against a simian form of HIV in monkey studies.

A Phase II trial of an oral once-monthly dose of islatravir for HIV prevention is launching this fall.