Islatravir-Based HIV Regimen Fails Few Study Participants

None of the people who experienced virologic failure on regimens containing the experimental drug had a viral load of 200 or higher.

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In a two-year study of Merck's islatravir, few people with HIV did not achieve and sustain a fully suppressed viral load on regimens including various doses of the experimental antiretroviral.

Chloe Orkin, MD, of Queen Mary University of London, and her colleagues conducted a randomized, double-blind, dose-ranging trial of islatravir (formerly MK-8591), the first nucleoside reverse transcriptase translocation inhibitor. Findings from the study were presented at the virtual HIV Drug Therapy Glasgow meeting.

Islatravir is in clinical trials for both HIV treatment and pre-exposure prophylaxis (PrEP) against the virus.

The study enrolled 121 people with HIV who had never been treated for the virus. They were randomized initially to received islatravir at either 0.25 milligrams, 0.75 mg or 2.25 mg daily plus Pifeltro (doravirine) and lamivudine daily; or they received a fixed-dose combination of Delstrigo (doravirine/tenofovir disoproxil fumarate/lamivudine). The study was set to run for 96 weeks.

Those in the islatravir groups who had a fully suppressed viral load (less than 50) 20 weeks into the study or later were taken off lamivudine at their next clinic visit.

Orkin and her colleagues defined virologic failure as having a viral load of 50 or greater after having achieved full viral suppression at any time during the study, called a rebound. Or this outcome was defined as not achieving a viral load below 50 by week 48 of the study, called a nonresponse.

Researchers presented 48-week results from the study at the 2019 International AIDS Society Conference on HIV Science. At the Glasgow meeting, Orkin presented follow-up results at 96 weeks.

At week 96 of the study, 86.2% (25 of 29) of those who received 0.25 mg of islatravir had a fully suppressed viral load, as did a respective 90.0% (27 of 30) and 67.7% (21 of 31) of those who

received 0.75 mg and 2.25 mg the drug. By comparison, 80.6% (25 of 31) of those who received Delstrigo had a viral load below 50.

During the first 48 weeks of the trial, six participants discontinued treatment due to virologic failure. This included two rebounders each in the 0.25 mg and 0.75 mg of islatravir groups, one nonresponder in the 2.25 mg group and one rebounder in the Delstrigo group.

Following the 48-week mark, one additional participant discontinued treatment due to virologic failure. This person, who was in the 2.25 mg group, saw their virus rebound to 70 at the 72-week point.

All those who experienced virologic failure had a viral load between 50 and 79. This meant that none had a viral load high enough to conduct resistance testing on their virus.

After the seven people who discontinued treatment switched to new HIV regimens, three—one each from the 0.25 mg and 0.75 mg groups and one from the Delstrigo group—continued to have a viral load that was above 50 and yet remained low.
