Monthly Injectable HIV Regimen Is Effective Among Treatment First-Timers

Participants in a study were started on daily oral drugs and then half were switched over to long-acting meds.

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People new to HIV treatment do as well on the investigational injectable regimen of monthly long-acting cabotegravir and rilpivirine (sold in daily pill form as Edurant) as on a daily oral regimen of Triumeq (dolutegravir/abacavir/lamivudine).

Presenting their findings at the 2019 Conference on Retroviruses and Opportunistic Infections in Seattle, Chloe Orkin, MD, of Queen Mary University of London and colleagues screened 809 people with HIV who had never taken ARVs and who had a viral load of 1,000 or greater for the Phase III open-label, multicenter FLAIR study. Participants could have any CD4 count but could not have hepatitis B virus (HBV) or viral mutations conferring resistance to non-nucleoside reverse transcriptase inhibitors, with the exception of a mutation known as K103N.

The conference also saw a presentation about the Phase III ATLAS study of the long-acting regimen in which participants entered the study on a stable daily oral regimen they had already been taking and then were randomized to stay on that regimen or to switch to monthly injectable cabotegravir and rilpivirine. ATLAS found that the injectable treatment was as effective at suppressing HIV as the daily oral regimens.

A total of 629 people were enrolled in the FLAIR trial and started on 20 weeks of Triumeq. Then they were randomized into even groups to either stay on the daily oral regimen or to switch to the injectable treatment.

The 283 people in theinjectable treatment group switched to four weeks of a daily oral formulation of 30 milligrams ofViiV Healthcare's cabotegravir and 25 mg of Janssen's Edurant. Then they received one loading dose, given via an intramuscular injection, of 60 mg of long-acting cabotegravir and 900 mg of long-acting rilpivirine.

Four weeks later, they were started on injections of 400 mg of cabotegravir and 600 mg

of rilpivirine, given every four weeks. (They could receive each injection between three and five weeks after their previous injection.)

The median age of participants was 34 years old, and 11 percent were 50 years old or older. Twenty-two percent were female, 74 percent were white and 18 percent were Black. The median initial CD4 count was 444 and the median CD4 count after the initial 20 weeks of oral therapy that all participants received was 625. Five percent of the participants had hepatitis C virus (HCV).

Forty-eight weeks after the participants were randomized, 93.6 percent of those in the long-acting injectable group and 93.3 percent of those in the daily oral regimen group had a fully suppressed viral load (below 50). Consequently, the study authors concluded that the injectable regimen was noninferior to, or as effective as, the daily oral regimen.

A total of 2.1 percent (6) people in the injectable group and 2.5 percent (7) of those in the oral regimen group had a viral load of 50 or higher at 48 weeks. There were no data on viral load for 4.2 percent (12) of participants in either group, including 2.8 percent (8) in the injectable group and 0.7 percent (2) in the oral group who discontinued treatment because of adverse health events and 1.4 percent (4) in the injectable group and 3.5 percent (10) in the oral group who discontinued treatment for other reasons.

An analysis of the concentrations in plasma of the injectable treatment compared with those seen, and known to be effective, with daily oral therapy with cabotegravir and Edurant indicated that the drug levels were comparable between the two means of delivering these drugs.

Between the long-acting and Triumeq groups, a respective 87 percent and 80 percent experienced any adverse heath event, including the common cold (20 percent and 17 percent), headache (14 percent and 7 percent), upper respiratory tract infection (13 percent and 10 percent) and diarrhea (11 percent and 9 percent). A respective 28 percent and 10 percent experienced drug-related adverse health events, including headache (5 percent and 1 percent) and fever (5 percent and 0). Three percent (nine people) of those in the injectable group and 1 percent (four people) in the daily treatment group experienced adverse health events that led them to withdraw from the study.

Of the 79 people in the injectable group who experienced drug-related adverse health events, 94 percent (74) of them experienced a maximum of grade 1 or 2 of such health events. There was one drug-related serious adverse health event in this group, of arthritis in the right knee. There were no serious adverse health events in the daily treatment group.

A total of 278 of the 283 people in the injectable treatment group received any injections—7,704 injections all told. A total of 28.6 percent of these injections led to injection-site reactions. Of those reactions, 85.3 percent involved pain, 3.9 percent involved a nodule and 3.7 percent involved induration, which is a hardened mass or formation. Ninety-nine percent of the reactions were grade 1 or 2 and 88 percent resolved in less than seven days. As a whole, the reactions lasted a median of three days. Less than 1 percent (2 people) of the injectable treatment group withdrew from the study because of injection-site reactions.

Of the 259 members of the injectable treatment group who responded to a survey at week 48, 257 (99 percent) preferred their new regimen over the daily oral treatment.

According to Janssen, the company intends to file for approval for the injectable regimen from the Food and Drug Administration later this year. This means that the agency, which has already given the regimen a fast-track designation, will likely issue a decision in early 2020.

To read the conference abstract, click here.

To view a webcast of the conference presentation, click here.
