Lenacapavir reduces viral load in multidrug-resistant HIV-1 infection

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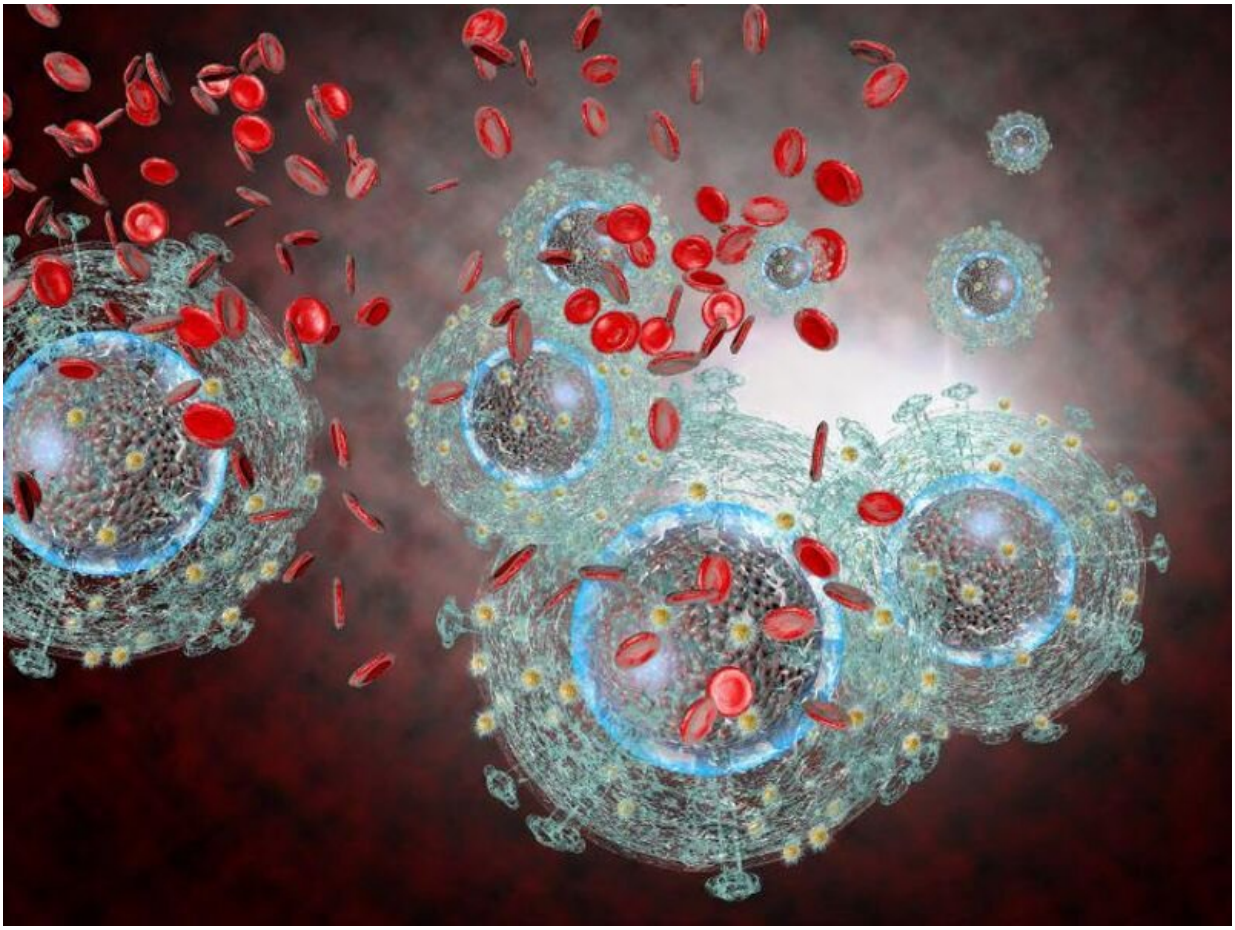

Patients with multidrug-resistant HIV-1 infection receiving the capsid

inhibitor lenacapavir have a greater reduction in viral load than those receiving placebo, according to a study published in the May 12 issue of the *New England Journal of Medicine*.

Sorana Segal-Maurer, M.D., from NewYork/Presbyterian Queens in Flushing, and colleagues enrolled patients with multidrug-resistant HIV-1 infection in two cohorts, according to the change in the plasma HIV-1 RNA level between screening and cohort-selection visits in a phase 3 trial. In cohort 1, patients were first randomly assigned to receive oral lenacapavir or placebo for 14 days; the lenacapavir group then received subcutaneous lenacapavir once every six months, while the placebo group received oral lenacapavir followed by subcutaneous lenacapavir; both groups also received optimized background therapy. In cohort 2, all patients received open-label oral lenacapavir on days 1 through 14 with optimized background therapy, then received subcutaneous lenacapavir. Seventy-two patients were enrolled: 36 in each cohort.

The researchers observed a decrease of at least 0.5 $\log_{10}$ copies/mL in the viral load by day 15 in 88 and 17 percent of patients in the lenacapavir and placebo groups, respectively, in cohort 1. At week 26, 81 and 83 percent of patients in cohorts 1 and 2, respectively, reported a viral load of less than 50 copies/mL, with a least-squares mean increase of 75 and 104 cells/mm^3 in the CD4+ count, respectively. There were no serious adverse events related to lenacapavir reported.

"Lenacapavir led to a significant decrease in viral load as functional monotherapy," the authors write.

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