New HIV Drug Class Shows Promise

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Cenicriviroc, an investigational antiretroviral from the new dual CCR5/CCR2 inhibitor class, performed well in a Phase II trial, although with a high drop-out rate because of a complicated dosing. Investigators are currently developing a simplified regimen to mitigate that problem. Presenting their findings at the 14th European AIDS Conference in Brussels, researchers recruited 143 treatment-naive people with HIV for this double-blind/double-dummy study.

The participants were randomly assigned to take Truvada (tenofovir/emtricitabine) plus either 100 milligrams or 200 mg of cenicriviroc or 600 mg of Sustiva (efavirenz). Because cenicriviroc was only available as a 50 mg pill at the time of the study, participants took four pills (which were either cenicriviroc or a placebo) in the morning, one pill (efavirenz or a placebo) at bedtime and one Truvada at a time of their choosing.

This dosing schedule appeared to contribute to the high rate of dropouts: 29 percent in the 100 mg of cenicriviroc group left the study prematurely, compared with 27 percent in the 200 mg cenicriviroc group and 39 percent in the Sustiva group. Twenty-one percent of the Sustiva arm dropped out because of adverse events, compared with none in the 100 mg cenicriviroc arm and 2 percent in the 200 mg arm.

At 24 weeks, 76 percent in the 100 mg arm reached an undetectable viral load, compared with 73 percent in the 200 mg arm and 71 percent in the Sustiva group. By 48 weeks, these numbers had dropped considerably, mostly because of all the dropouts. The respective rates of a fully suppressed viral load considering all those initially assigned to each group was 68, 64 and 50 percent.

The CCR2 receptor latches onto a cytokine called MCP-1, which promotes inflammation. Tests found that those taking cenicriviroc had lower levels of MCP-1, which showed that the drug was successfully blocking the CCR2 receptor.

There was also evidence that levels of soluble CD14, which is an indicator of inflammation, dropped at the 24-week mark among those taking cenicriviroc; meanwhile it rose in those taking Sustiva. By 48 weeks the levels in the cenicriviroc arm rose again and reached a plateau around the level found at the beginning of the study. Meanwhile, the CD14 levels continued on an upward swing among those taking Sustiva.

To read the aidsmap story, click here.

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