Another receptor blocker— INCB9471

The Incyte corporation, based in the state of Delaware in the United States, has at least two anti-HIV compounds under development. Both of these experimental drugs work by interfering with HIV’s ability to attach to and use the CCR5 co-receptor. Incyte’s compounds can stop HIV from infecting cells and so they are called entry inhibitors. Both experimental agents only have code names at this time and the compound that is furthest ahead in clinical trials is called INCB9471.

In lab experiments with cells, INCB9471 has strong anti-HIV activity and seems to work in a slightly different way than maraviroc. The drug is well absorbed in people and needs to be taken only once daily.

In placebo-controlled experiments with 23 HIV positive people, researchers gave 19 volunteers different doses of INCB9471 while the remaining four volunteers received placebo. Results indicated that viral load fell by almost 2 logs after two weeks of exposure to INCB9471 at a daily dose of 200 mg. In these studies, INCB9471 was the only anti-HIV agent used by volunteers. After the 16th day, viral load began to rise, suggesting that HIV was developing resistance to INCB9471 when used as monotherapy.

Two out of 19 people who received the drug had the tropism of their HIV change from R5 to X4 and R5 (dual/mixed). After stopping the drug, both participants had their viral tropism revert to R5. This reversion to R5 suggests that the participants’ immune systems suffered no lasting damage.

Side effects

No serious side effects developed, but each of the following side effects (which were mild) occurred in a different participant:

- constipation
- diarrhea
- nausea
- headache
- hiccoughs
- rash

Another study by Incyte tested low doses of INCB9471 (12 or 25 mg once daily) with 100 mg of ritonavir (Norvir) taken twice daily. This latter drug helps boost and maintain levels of INCB9471 in the blood. When both drugs were taken in combination for 10 days, INCB9471 levels in the blood were just below levels seen when INCB9471 was taken by itself at a dose of 200 mg per day.

Future studies of INCB9471 are ongoing. Eventually the corporation hopes to test this receptor blocker in treatment-experienced PHAs.

REFERENCES:

Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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