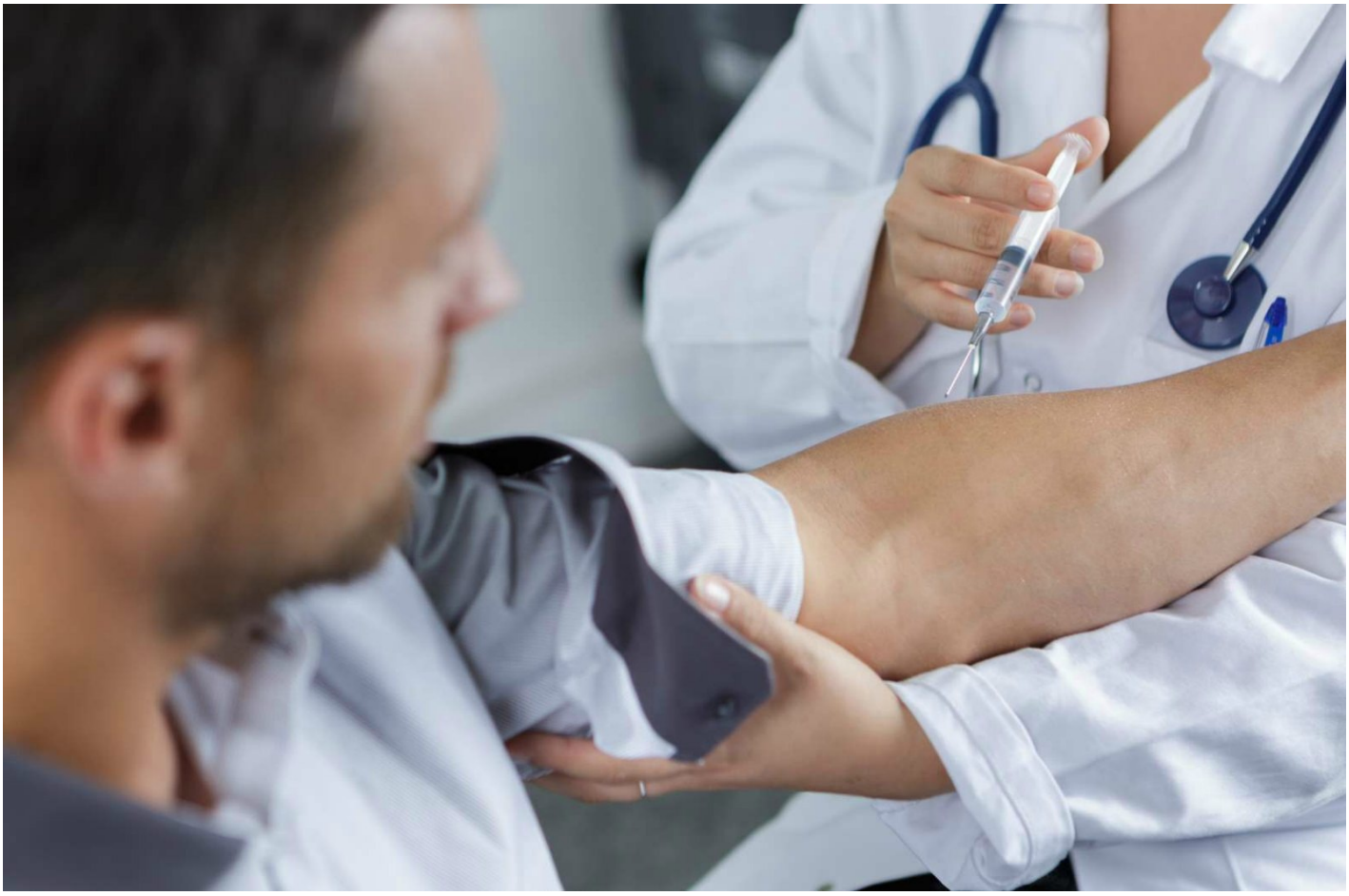
Carbovir Compounds Offer New Alternatives For AIDS Patients

University of Minnesota



When the National Institutes of Health requested that he patent his discovery, Dr. Robert Vince, professor of medicinal chemistry and director of the Center for Drug Design at the University of Minnesota, realized the impact his anti-HIV Carbovir compounds could have on AIDS patients.

In December 1998, the Food and Drug Administration approved Carbovir-based Ziagen®, which was developed through a license with a pharmaceutical company. It inhibits HIV's ability to reproduce in the white blood cells called T cells, which regulate the body's immune system.

In order to reproduce, HIV attaches to a protein on a T cell's surface. The virus is then able to enter the cell and replicate. Like other nucleoside analogues, Carbovirs interfere with the enzyme HIV uses to manufacture new viral particles within an infected cell. They work by incorporating into the elongating DNA strands and terminating the extension process. Carbovirs work earlier in the HIV replication process compared to the well-known protease inhibitors and therefore offer a more attractive option in early treatment.

> *Today, medications containing Carbovir compounds, including Ziagen®, Trizivir®, and Epzicom™, contribute to the treatment of hundreds of thousands of AIDS patients worldwide.*

The sale of these medications has generated more than $200 million in royalties for the University of Minnesota. Portions of this royalty have been re-invested back into the university through the establishment of the Center for Drug Design to do further research in the drug development arena.

This story was originally published in 2007.

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