Vaccines For HIV And AIDS On The Horizon

(NAPSA)—Vaccines currently being developed may soon offer protection against HIV and AIDS.

That development is eagerly awaited because, according to a recent United Nations study, HIV infection rates among high-risk groups such as gays, drug users and sex workers are on the rise around the world.

A publicly traded company named GeoVax, Inc. (GOVX.OB) may be the first to put vaccines on the market that can help alleviate the suffering that results when HIV progresses to AIDS.

Based in Smyrna, Ga., the company is at work on both preventative and therapeutic vaccines. The preventative vaccine is intended for those without HIV, with the aim of keeping them from being infected by the virus in the first place. Meanwhile, the therapeutic vaccine is designed for those with HIV, in the hopes of protecting them from suffering the effects of AIDS itself. If successful, this latter vaccine would supplant the need for oral medications, thus reducing costs and drug-related side effects.

The vaccines, initially developed by Dr. Harriet Robinson at Emory University in collaboration with researchers at the NIH, the National Institute of Allergy and Infectious Diseases (NIAID) and the CDC, incorporate two vaccine delivery components: a recombinant DNA and a recombinant poxvirus, known as modified vaccinia Ankara (MVA), both of which deliver genes that encode inactivated HIV-1-derived proteins to the immune system.

A therapeutic vaccine for those with HIV that is currently being developed could potentially supplant the need for long-term oral medications.

Both the DNA and MVA vaccines contain sufficient HIV-1 genes to support the production of noninfectious viruslike particles in vaccinated people, which display forms of proteins that appear authentic to the immune system. When used together, the recombinant DNA component is used to prime immune responses that are boosted by administration of the recombinant MVA component. However, in certain settings, the recombinant MVA alone may be sufficient for priming and boosting the immune responses.

"Our current focus is on a vaccine for use against clade B, an HIV-1 virus subtype that is common in the United States and the industrially developed world," says Robert T. McNally, president and CEO. "However, once efficacy can be documented against clade B, we plan to develop vaccines designed for use to combat the subtypes that predominate in developing countries."

For more information, visit www.geovax.com.