

Bilayer Tablet of Antiviral Drugs

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Abstract: *Bilayer tablets are prepared with one layer of drug for immediate release while second layer designed to release drug, later, either as second dose or in an extended release manner. HIV/AIDS has always been one of the most thoroughly global of diseases.*

Antiretroviral therapy can inhibit HIV replication in patients and prevent progression to AIDS. However, it is not curative. Here we provide an overview of what antiretroviral drugs do and how the virus persists during therapy in rare reservoirs, such as latently infected CD4⁺ T cells. We also outline several innovative methods that are currently under development to eradicate HIV from infected individuals. These strategies include gene therapy approaches intended to create an HIV-resistant immune system, and activation/elimination approaches directed towards flushing out latent virus. This latter approach could involve the use of novel chemically synthesized analogs of natural activating agents

Keywords: Bilayer tablet, HIV, AIDS, CD4 cells (T cells), Antiretroviral drugs, Nucleoside Reverse Transcriptase Inhibitors (NRTIs), Lamivudine (3TC), hepatitis B virus (HBV), Non- Nucleoside Reverse Transcriptase Inhibitors (NNRTIs).