

Cabotegravir and Rilpivirine

November 23, 2021

In news- Recently, the **UK's National Institute for Health and Care Excellence (NICE)** has recommended the country's first long-acting injectable treatment for HIV-1 infection in adults.

About Cabotegravir and Rilpivirine-

- **Cabotegravir (also called Vocabria and made by Viiiv Healthcare) with rilpivirine (also called Rekambys and made by Janssen), is recommended** as an option for adults with HIV-1 infection.
- Currently treatment for HIV involves lifelong antiretroviral tablets that need to be taken every day, which keep viral loads to levels at which the infection cannot be detected and transmitted between individuals.
- **Clinical trial results show that cabotegravir with rilpivirine is as effective** as oral antiretrovirals at keeping the viral load low.
- Rilpivirine is from a class of drugs known as non-nucleoside reverse transcriptase inhibitors (NNRTIs).
- Cabotegravir is from a class of drugs known as integrase inhibitors.
- **NICE has recommended the combination as an option for adults with HIV-1 infection in those cases when antiretroviral medicines have kept viral loads to low levels** and there is no evidence of viral resistance.
- Both **cabotegravir and rilpivirine are administered as 2 separate injections** every 2 months, after an initial oral (tablet) lead-in period.

HIV/AIDS-

- The human immunodeficiency virus (HIV) targets the immune system and weakens people's defense against many infections and some types of cancer that people with

healthy immune systems can fight off.

- As the virus destroys and impairs the function of immune cells, infected individuals gradually become immunodeficient.
- The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS), which can take many years to develop if not treated, depending on the individual.
- AIDS is defined by the development of certain cancers, infections or other severe long-term clinical manifestations.
- HIV is spread primarily by unprotected sex, contaminated blood transfusions, hypodermic needles, and from mother to child during pregnancy, delivery, or breastfeeding.
- HIV disease can be managed by treatment regimens composed of a combination of three or more antiretroviral (ARV) drugs.
- Current antiretroviral therapy (ART) does not cure HIV infection but highly suppresses viral replication within a person's body and allows an individual's immune system recovery to strengthen and regain the capacity to fight off opportunistic infections and some cancers.

Extra

reading:

<https://journalsofindia.com/enzymes-to-block-hiv-replication/>