

Integrase Inhibitors

Integrase inhibitors are a class of antiretroviral medication, which are used to treat HIV. They work by inhibiting HIV genome integration into the host DNA, by inhibiting HIV integrase. This medication can lead to insomnia and hypercholesterolemia.



PLAY PICMONIC

-gravir Suffix

Gravy

These medications are easily recalled because they share a "-gravir" suffix. An example is the medication raltegravir.

Indications

HIV

Band-AIDS

Integrase inhibitors are designed to treat HIV. Treatment is usually given with other medications.

Mechanism

Blocks Insertion of Viral Genome

Blocking Insertion of Virus Genome

This drug class works by blocking the insertion of the HIV viral genome into the host cell chromosome.

Inhibit Actions of Integrase

Inhibiting-chains Stopping Action of Integra

Integrase inhibitors block viral genome integration by reversibly inhibiting HIV integrase, the viral enzyme which integrates the viral genome.

Side Effects

Hypercholesterolemia

Hiker-cholesterol-burger

A side effect of this medication is hypercholesterolemia, so patients should have baseline labs monitored.

Increased LFT's

Up-arrow Liver with Test-tubes

Increases in liver function tests such as AST, ALT, and bilirubin are seen often in patients taking raltegravir but more commonly in patients who also have hepatitis. These increases may lead to pruritis and jaundice.

Insomnia

Taped-awake-insomniac

Many patients complain of insomnia after beginning treatment with integrase inhibitors.

Increased Creatine Kinase (CK)

Up-arrow Calvin Klein-model

Increases in creatinine kinase are seen in up to 10% of patients taking raltegravir. This increase is associated with muscle pain and, more severely, can result in rhabdomyolysis.