Non-nucleoside reverse transcriptase inhibitors (NNRTI), such as efavirenz, are the second component of combination therapy. The administration of efavirenz is on a bedtime basis. 

**Pharmacokinetics**

Efavirenz is rapidly and almost completely absorbed following oral administration. Peak plasma concentrations are usually reached within 1–2 h. Efavirenz is highly bound to plasma proteins. The terminal elimination half-life of efavirenz is long (25–35 h). Efavirenz is mainly eliminated by metabolism via the cytochrome P450 3A4 (CYP3A4) system to the active metabolites. The plasma clearance of efavirenz is low (85–100 ml/min/kg), and the volume of distribution is large (300–600 liters).

Efavirenz is contraindicated in patients with severe hepatic impairment (Child-Pugh class C) due to the risk of severe adverse events including liver failure. Efavirenz is also contraindicated in patients with active liver disease or hepatitis. Efavirenz is not recommended for use in patients with a history of severe drug reactions, including multiple drug allergy, anaphylaxis, or angioedema. Efavirenz is also contraindicated in patients with active liver disease or hepatitis, including active or history of hepatitis B or C.

**Special precautions**

Efavirenz is not recommended for use in patients with a history of severe drug reactions, including multiple drug allergy, anaphylaxis, or angioedema. Efavirenz is also contrained in patients with active hepatitis or hepatitis B, including patients who have active hepatitis B or C.

**Side effects**

The most common side effects associated with efavirenz use are headache, dizziness, and somnolence. Other side effects include nausea, vomiting, diarrhea, and rash. Rare side effects include liver toxicity, nephrotoxicity, and cardiotoxicity.

**Interactions**

Efavirenz interacts with several other medications, including anti-retroviral drugs, beta blockers, and some anti-inflammatory drugs. Caution is advised when administering efavirenz with these medications.

**Indications**

Efavirenz is indicated as a prophylactic agent for the prevention of HIV infection in individuals who are at risk for HIV infection, including individuals who are at risk for HIV infection due to sexual contact with an infected partner or who are exposed to HIV-infected blood. Efavirenz is also indicated as a secondary prophylactic agent for the prevention of HIV infection in individuals who are at risk for HIV infection due to sexual contact with an infected partner or who are exposed to HIV-infected blood.

**Dosage and Administration**

Efavirenz is typically administered orally, once daily, on an empty stomach. The typical dose is 600 mg once daily, taken at bedtime. However, the dose may be adjusted based on individual patient needs.

**Pharmacology**

Efavirenz is a non-nucleoside reverse transcriptase inhibitor (NNRTI) that is highly active against the HIV-1 reverse transcriptase enzyme. It is a member of the indanone class of NNRTIs.

**Cautions and contraindications**

Efavirenz is contraindicated in patients with severe hepatic impairment (Child-Pugh class C) due to the risk of severe adverse events including liver failure. Efavirenz is also contraindicated in patients with active liver disease or hepatitis. Efavirenz is not recommended for use in patients with a history of severe drug reactions, including multiple drug allergy, anaphylaxis, or angioedema. Efavirenz is also contraindicated in patients with active hepatitis or hepatitis B, including patients who have active hepatitis B or C.

**Clinical use**

Efavirenz is used as a component of combination therapy with other antiretroviral agents. Combination therapy with efavirenz and other antiretroviral agents has been shown to improve virologic suppression and reduce the risk of resistance development.

**Adverse effects**

The most common side effects associated with efavirenz use are headache, dizziness, and somnolence. Other side effects include nausea, vomiting, diarrhea, and rash. Rare side effects include liver toxicity, nephrotoxicity, and cardiotoxicity.

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