Emforiv®EF (Tablets)

1316
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Emtricitabine (FTC)
Tenofovir Disoproxil Fumarate (TDF)
Efavirenz (EFV)

Antiviral

Emforiv EF Tablets 200:300:600MG (FILM COATED)

PRESENTATION:
Emforiv® EF Tablets 200:300:600mg: Light pink, capsule shaped, biconvex film coated tablet embossed 'ETEF' on one side and breakline on the other side. Each film coated tablet contains: Emtricitabine (FTC) 200mg, Tenofovir Disoproxil Fumarate (TDF) 300mg, Efavirenz (EFV) 600mg, Lactose and other excipients.

CLINICAL PHARMACOLOGY:
Emtricitabine is converted intracellularly in stages to the triphosphate. This triphosphate halts the DNA synthesis of HIV through competitive inhibition of reverse transcriptase. Emtricitabine-resistant strains of HIV have been identified and cross-resistance to other nucleoside reverse transcriptase inhibitors may occur. Emtricitabine is a nucleoside reverse transcriptase inhibitor related to cytosine with antiviral activity against HIV-1 and hepatitis B virus.
Tenofovir is converted intracellularly to the diphosphate. This diphosphate halts the DNA synthesis of HIV through competitive inhibition of reverse transcriptase and incorporation into viral DNA. Tenofovir-resistant strains of HIV have been identified and cross-resistance to other reverse transcriptase inhibitors may occur.
Efavirenz is a non-nucleoside reverse transcriptase inhibitor with activity against HIV. It is used with other antiretrovirals for combination therapy of HIV infection and AIDS.

Pharmacokinetics:
Emtricitabine is rapidly and extensively absorbed from the gastrointestinal tract after oral doses, with peak plasma concentrations occurring after 1 to 2 hours. Bioavailability is reported to be 93% for the capsules. Binding to plasma proteins is reported to be less than 4%. The plasma elimination half-life is about 10 hours. Emtricitabine is metabolised to a limited degree, but is excreted largely unchanged in the urine and to a lesser extent in the faeces. It is partially removed by haemodialysis.
Tenofovir disoproxil fumarate is rapidly absorbed and converted to tenofovir after oral doses, with peak plasma concentrations occurring after 1 to 2 hours. Bioavailability in fasting patients is about 25%, but this is enhanced when tenofovir disoproxil fumarate is taken with a high fat meal. Tenofovir is widely distributed into body tissues, particularly the kidneys and liver. Binding to plasma proteins is less than 1% and that to serum proteins about 7%. The terminal elimination half-life of tenofovir is 12 to 18 hours. Tenofovir is excreted mainly in the urine by both active tubular secretion and glomerular filtration. It is removed by haemodialysis.
Efavirenz is absorbed after oral doses and peak plasma concentrations occur after about 3 to 5 hours. Steady-state plasma concentrations are reached in 6 to 7 days after multiple dosing. Food increases the bioavailability of efavirenz. Efavirenz is more than 99% bound to plasma proteins and is distributed into the CSF.

USES:
Emforiv® EF Tablets in combination with another drug are used in the treatment of HIV infection.

DOSAGE AND ADMINISTRATION:
The recommended dose is one tablet once daily taken orally with food.

Creatinine Clearance (ml/min)

	≥50	30 - 49	≤30
Recommended dosing interval	Every 24 hours	Every 48 hours	(including patients* requiring haemodialysis) Emforiv® should not be administered

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CONTRA-INDICATIONS AND WARNINGS:
Emforiv® EF tablets are contraindicated in patients with known hypersensitivity to emtricitabine or tenofovir or efavirenz. It should be given with caution to patients with hepatomegaly or other risk factors for liver disease. In particular, extreme caution should be exercised in patients with co-existing hepatitis B infection. In patients co-infected with hepatitis B, there is a risk of severe acute exacerbation of hepatitis when Emforiv® is stopped, and liver function should be monitored closely in such patients for at least several months.

Adverse Effects:
Emtricitabine: The most common adverse effects associated with antiretroviral regimens containing emtricitabine are headache, diarrhoea, and nausea; hyperpigmented skin discoloration is very common in children and common in adults. Other common adverse effects include abdominal pain, vomiting, dyspepsia, abnormal dreams, asthenia, dizziness, insomnia, pain, allergic skin reactions, pruritus, rashes, and urticaria. Abnormal laboratory test results associated with emtricitabine-containing regimens include hyperbilirubinaemia, increases in serum lipase and pancreatic amylase, and raised liver enzymes. There have also been reports of neutropenia and anaemia. Lactic acidosis, usually associated with severe hepatomegaly and steatosis, has been associated with treatment with NRTIs.
Tenofovir disoproxil fumarate: Adverse effects commonly associated with tenofovir disoproxil fumarate either as monotherapy for the treatment of chronic hepatitis B or with other antiretrovirals for the treatment of HIV are mild to moderate gastrointestinal events such as anorexia, abdominal pain, diarrhoea, dyspepsia, flatulence, nausea, and vomiting. Other commonly reported adverse effects are dizziness, fatigue, and headache. Skin rashes may occur.
Efavirenz: The most common adverse effects associated with antiretroviral regiments containing efavirenz are skin rashes and psychiatric or CNS disturbances.

Interactions:
Emtricitabine: Caution should be exercised when emtricitabine is given with other drugs eliminated by active tubular secretion as competition for the elimination pathway may increase the serum concentrations of either drug.
Tenofovir disoproxil fumarate: Use of tenofovir disoproxil fumarate with nephrotoxic drugs or with other drugs eliminated by active tubular secretion is not recommended; if such use is unavoidable, renal function should be monitored weekly. Tenofovir increases the plasma concentrations of didanosine. Once daily triple nucleoside regimens of tenofovir and lamivudine with either abacavir or didanosine are associated with a high level of treatment failure and of emergence of resistance, and should be avoided.
Efavirenz: Efavirenz must not be administered concurrently with terfenadine, astemizole, cisapride, midazolam, triazolam, pimozide, bepridil or ergot alkaloids since inhibition of their metabolism may lead to serious life threatening events.

PHARMACEUTICAL PRECAUTIONS:
Store in a dry place below 30°C. Protect from light. Keep all medicines out of the reach of children.

LEGAL CATEGORY:
Prescription Only Medicine (POM)

®Regd. TM

COSMOS
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