Erlotin®

Erlotinib INN

Presentation

Erlotin® 100 mg tablet: Each film-coated tablet contains Erlotinib Hydrochloride INN 109.30 mg equivalent to Erlotinib 100 mg.
Erlotin® 150 mg tablet: Each film-coated tablet contains Erlotinib Hydrochloride INN 163.90 mg equivalent to Erlotinib 150 mg.

Description

Erlotinib, a tyrosin kinase inhibitor, is a quinazolinamine with the chemical name N-(3-ethynylphenyl)-6,7-bis(2-methoxyethoxy)4-quinazolinamine. Erlotinib hydrochloride has the molecular formula C22H23N3O4.HCL and a molecular weight of 429.90. The molecule has a pka of 5.42 at 25 c.

Indication

- First-line treatment of patients with metastatic Non-Small Cell Lung cancer (NSCLC) whose tumors have Epidermal Growth Factor Receptor (EGFR) exon 19 deletions or exon 21 substitution mutations as detected.
- Maintenance treatment of patients with locally advanced or metastatic NSCLC whose disease has not progressed after four cycles of platinum based first-line chemotherapy.
- Treatment of locally advanced or metastatic NSCLC after failure of at least one prior chemotherapy regimen.
- First-line treatment of patients with locally advanced, unresectable or metastatic pancreatic cancer, in combination with gemcitabine.

Dosage and administration

Recommended Dose - NSCLC

The recommended daily dose of Erlotinib for NSCLC is 150 mg taken on an empty stomach, i.e., at least one hour before or two hours after the ingestion of food. Treatment should continue until disease progression or unacceptable toxicity occurs.

Recommended Dose - Pancreatic Cancer

The recommended daily dose of Erlotinib for pancreatic cancer is 100 mg taken once daily in combination with gemcitabine. Take Erlotinib on an empty stomach, i.e., at least one hour before or two hours after the ingestion of food. Treatment should continue until disease progression or unacceptable toxicity occurs .

Dose Modifications

Reduce Erlotinib by 50 mg decrements:

If severe reactions occur with concomitant use of strong CYP3A4 inhibitors (such as atazanavir, Clarithromycin, Indinavir, Itraconazole, Ketoconazole, Nefazodone, Nelfinavir, Ritonavir, Saquinavir, Telithromycin, Voriconazole or grapefruit or grapefruit juice) or when using concomitantly with an inhibitor of both CYP3A4 and CYP1A2 (e.g., Ciprofloxacin).

Increase Erlotinib by 50 mg increments as tolerated for: Concomitant use with CYP3A4 inducers, such as rifampin, rifabutin, rifapentine, phenytoin, carbamazepine, phenobarbital, or St. John's Wort. Increase doses by 50 mg increments at 2 week intervals to a maximum of 450 mg. Avoid concomitant use, if possible.

Concurrent cigarette smoking: Increase by 50 mg increments at 2 week intervals to a maximum of 300 mg. Immediately reduce the dose of Erlotinib to the recommended dose (150 mg or 100 mg daily) upon cessation of smoking.

Contraindications

None.

Use in specific populations

Pregnancy: Pregnancy category D.
Based on its mechanism of action, Erlotinib can cause fetal harm when administered to a pregnant woman.

Nursing mothers

It is not known whether Erlotinib is present in human milk. Because many drugs are present in human milk and because of the potential for serious adverse reactions in nursing infants from Erlotinib, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric use

The safety and effectiveness of Erlotinib in pediatric patients have not been established.

Geriatric use

No overall differences in safety or efficacy were observed between subjects 65 years and older and those younger than 65.

Warnings and precautions

- Interstitial Lung Disease (ILD): Occurs in 1.1% of patients.Withhold Erlotinib for acute onset of new or progressive unexplained pulmonary symptoms, such as dyspnea, cough and fever. Discontinue Erlotinib if ILD is diagnosed.
- Renal Failure: Monitor renal function and electrolytes, particularly in patients at risk of dehydration.Withhold Erlotinib for severe renal toxicity.
- Hepatotoxicity with or without hepatic impairment including hepatic failure and hepatorenal syndrome: Monitor periodic liver testing. Withhold or discontinue Erlotinib for severe or worsening liver tests.
- Gastrointestinal perforations-discontinue Erlotinib.
- Bullous and exfoliative skin disorders-discontinue Erlotinib.
- Myocardial infarction (MI)/ischemia: The risk of MI is increased in patients with pancreatic cancer.

Adverse reactions

The most common adverse reactions (20%) with Erlotinib from a pooled analysis of studies were rash, diarrhea, anorexia, fatigue, dyspnea, cough, nausea, and vomiting.
The following serious adverse reactions, which may include fatalities.

- Interstitial Lung Disease (ILD)
- Renal Failure
- Hepatotoxicity with or without Hepatic Impairment
- Gastrointestinal Perforation
- Bullous and Exfoliative Skin Disorders
- Myocardial Infarction/Ischemia
- Cerebrovascular Accident
- Microangiopathic Hemolytic Anemia with Thrombocytopenia
- Ocular Disorders
- Hemorrhage in Patients Taking Warfarin

Drug interation

Anticoagulants

Interaction with coumarin-derived anticoagulants, including warfarin, leading to increased International Normalized Ratio (INR) and bleeding adverse reactions.

CYP3A4 inhibitors

Erlotinib is metabolized predominantly by CYP3A4. Co-treatment with the potent CYP3A4 inhibitor ketoconazole increased Erlotinib AUC by 67%. When Erlotinib was co-administered with Ciprofloxacin, an inhibitor of both CYP3A4 and CYP1A2, the Erlotinib exposure [AUC] and maximum concentration [Cmax] increased by 39% and 17%, respectively.

CYP3A4 inducers

Pre-treatment with the CYP3A4 inducer Rifampicin for 7-11 days prior to Erlotinib decreased Erlotinib AUC by 58% to 80%. Dose modifications are recommended.

Drugs affecting gastric pH

Co-administration of Erlotinib with omeprazole decreased Erlotinib AUC by 46% and co-administration of Erlotinib with Ranitidine 300 mg decreased Erlotinib AUC by 33%.

Overdosage

Single oral doses of Erlotinib up to 1,000 mg in healthy subjects and weekly doses up to 1,600 mg in cancer patients have been tolerated. Repeated twice-daily doses of 200 mg single-agent Erlotinib in healthy subjects were poorly tolerated after only a few days of dosing. Based on the data from these studies, an unacceptable incidence of severe adverse reactions, such as diarrhea, rash, and liver transaminase elevation, may occur above the recommended dose. In case of suspected overdose, Erlotinib should be withheld and symptomatic treatment instituted.

Storage

Store at temperature not exceeding 30 ℃ in a dry place. Protect from light and moisture.

Packaging

Erlotin® 100 tablet: Each commercial box contains 30 tablets in Alu-Alu blister pack.
Erlotin® 150 tablet: Each commercial box contains 30 tablets in Alu-Alu blister pack.

Medicine: Keep out of reach of children

For further information, please contact: 01977 158 926
(9.00 am - 5.00 pm)

Healthcare

Manufactured by
Healthcare Pharmaceuticals Ltd.
Rajendrapur, Gazipur, Bangladesh

HP 52343