

## Composition:

BELINTA Tablet: Each film coated tablet contains Ticagrelor INN 90 mg.
BELINTA 60 Tablet: Each film coated tablet contains Ticagrelor INN 60 mg.

# Pharmacology:

Ticagrelor reversibly blocks ADP-receptors which are the subtype P2Y12 and thus prevents the signal transduction and platelet aggregation. Eventually thrombus formation is inhibited and thus thrombotic cardiovascular events are prevented.

#### Indication

Ticagrelor (P2Y12 platelet inhibitors) is indicated to reduce the rate of thrombotic cardiovascular events in patients with acute coronary syndrome ACS (unstable angina, non-ST elevation myocardial infarction).

Ticagrelor has been shown to reduce the rate of combined end point of cardiovascular death, myocardial infarction or stroke compared to clopidogrel. It also reduces the rate of 'stent thrombosis'.

## Dosage and administration:

Loading Dose: Treatment should be initiated with 180 mg (two 90 mg tablets) with initial dose of Aspirin (325 mg). Treatment of Ticagrelor should be continued with 90 mg twice daily.

Maintenance dose: Ticagrelor one tablet (90 mg) should be taken twice daily with the maintenance dose of Aspirin (75-100 mg). After one year administer 60 mg twice daily. Ticagrelor can be taken with or without food.

Patient with renal Impairment: No dosage adjustment is needed for the patient with renal impairment. Patient with Hepatic impairment: Ticagrelor has not been studied in patient with moderate hepatic impairment, risks and benefits should be considered for the treatment with Ticagrelor. In patients with severe hepatic impairment, Ticagrelor is contraindicated.

Pediatric patient: No such data has been established yet on the safety and effectiveness of Ticagrelor on pediatric patient.

### Side effects:

The most common side effects are shortness of breath (dyspnea), various types of bleeding such as; hematoma, nose bleed, gastrointestinal, subcutaneous or dermal bleeding. Ticagrelor should be administered with caution or avoided in patients with advanced sinoauricular disease. Allergic skin reactions such as rash and itching have been observed in less than 1% of patients.

## Overdosage:

Bleeding is the expected pharmacological effect of overdosing, which can be corrected with appropriate measures. Other effects of overdose may include nausea, vomiting, diarrhea, ventricular pause etc. which can be corrected accordingly.

## Specific population:

Pregnancy: Ticagrelor is Pregnancy category C drug. There is no adequate and well-controlled clinical data available on the exposure of Ticagrelor. But animal study showed that it caused structural abnormalities. Pregnant women should therefore use Ticagrelor with caution, unless the potential benefit outweighs the potential risk of the fetus.

Lactation: It is not known whether Ticagrelor or its active metabolites are excreted in human milk.

Smoking: Habitual smoking, increases population mean clearance of Ticagrelor by approximately 22% when compared to non-smokers. No dose adjustment is necessary for Ticagrelor, based on smoking status.

# Drug Interaction :

Inhibitors of the liver enzyme CYP3A4, such as Ketoconazole, Itraconazol, Voriconazol, Clarithromycin, Nefazodone, Ritonavir, Saquinavir, Nelfinavir, Atazanavir and Telithromycin increase blood plasma levels and consequently can lead to bleeding and other adverse effects. Simvastatin and Lovastatin drugs (over 40 mg) that are metabolized by CYP3A4, increase plasma levels and side effects if combined with Ticagrelor.

CYP3A4 inductors, for example Rifampicin, Dexamethasone, Phenytoin, Carbamazepine, Phenobarbital and possibly St. John's wort, can reduce the effectiveness of Ticagrelor .The drug also inhibits P-glycoprotein (P-gp), leading to increased plasma levels of Digoxin, Cyclosporin and other P-gp substrates. Ticagrelor and AR-C124910XX levels are not significantly influenced by P-gp inhibitors.

Other anti-platelet drug such as Aspirin may reduce the effectiveness of Ticagrelor when Ticagrelor is used with maintenance dose of Aspirin above 100 mg.

Digoxin inhibits the P-glycoprotein transporter, so level of Digoxin should be monitored during the initiation of or any change in Ticagrelor.

# Contraindication:

History of intracranial hemorrhage: Ticagrelor is contraindicated in patients with history of intracranial hemorrhage (ICH) because of a high risk of recurrent ICH in this population.

Active Bleeding: Ticagrelor is contraindicated in patients with active pathological bleeding such as peptic ulcer or intracranial hemorrhage.

Severe hepatic impairment: Ticagrelor is contraindicated in patients with severe hepatic impairment because it may reduce synthesis of coagulation proteins.

Hypersensitivity: Ticagrelor is contraindicated in patient with hypersensitivity to Ticagrelor or any component of the product.

# Storage:

**BELINTA** should be stored at 25  $^{0}$ C (77  $^{0}$  F).

# Packaging

BELINTA Tablet: Each box contains 1 X 10's tablet in blister pack.
BELINTA 60 Tablet: Each box contains 2 X 10's tablet in blister pack.

Manufactured by



Ziska Pharmaceuticals Ltd.

Kaliakoir, Gazipur, Bangladesh