

# Palbolicib

Palbociclib INN 125 mg

## COMPOSITION

**Palbolicib 125 Capsule:** Each capsule contains Palbociclib INN 125 mg.

## CLINICAL PHARMACOLOGY

**Mechanism of action:** Palbociclib is an inhibitor of cyclin-dependent kinases (CDK) 4 and 6. Cyclin D1 and CDK4/6 are downstream of signaling pathways which lead to cellular proliferation. Palbociclib has been shown to reduced cellular proliferation of estrogen receptor (ER)-positive breast cancer by blocking progression of the cell from G1 into S phase of the cell cycle.

**Pharmacokinetics:** The mean maximum observed concentration (C<sub>max</sub>) of Palbociclib is generally observed between 6 to 12 hours (T<sub>max</sub>) following oral administration. The mean absolute bioavailability of Palbociclib after an oral 125 mg dose is 46%. Steady state is achieved within 8 days following repeated once daily dosing. Palbociclib undergoes hepatic metabolism in humans. Feces is the major route of excretion, with 74.1% and 17.5% of the dose recovered in feces and urine respectively. The majority of the material is excreted as metabolites.

## INDICATIONS

Palbociclib is indicated for the treatment of adult patients with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer in combination with:

- An aromatase inhibitor as initial endocrine-based therapy in postmenopausal women or in men; or
- Fulvestrant in patients with disease progression following endocrine therapy.

## DOSAGE AND ADMINISTRATION

Palbociclib capsules are taken orally with food in combination with an aromatase inhibitor or fulvestrant.

- Recommended starting dose: 125 mg once daily taken with food for 21 days followed by 7 days off treatment.
- Dosing interruption and/or dose reductions are recommended based on individual safety and tolerability.

## CONTRAINDICATIONS

None.

## ADVERSE EFFECTS

Most common adverse reactions (incidence  $\geq 10\%$ ) are neutropenia, infections, leukopenia, fatigue, nausea, stomatitis, anemia, alopecia, diarrhoea, thrombocytopenia, rash, vomiting, decreased appetite, asthenia, and pyrexia.

## PRECAUTIONS

**Pregnancy:** Palbociclib can cause fetal harm when administered to a pregnant woman. Females of reproductive potential should have a pregnancy test prior to starting treatment with Palbociclib, and should be advised to use effective contraception during treatment with Palbociclib and for at least 3 weeks after the last dose.

**Nursing mothers:** Women should be advised not to breastfeed during treatment with Palbociclib and for 3 weeks after the last dose.

**Pediatric use:** The safety and efficacy of Palbociclib in pediatric patients have not been studied.

**Geriatric use:** No overall differences in safety or effectiveness of Palbociclib were observed between geriatric patients ( $\geq 65$  years of age) and younger patients.

**Hepatic Impairment:** No dose adjustment is required in patients with mild or moderate hepatic impairment (Child-Pugh classes A and B). For patients with severe hepatic impairment (Child-Pugh class C), the recommended dose of Palbociclib is 75 mg once daily for 21 consecutive days followed by 7 days off treatment to comprise a complete cycle of 28 days.

**Renal Impairment:** No dose adjustment is required in patients with mild, moderate, or severe renal impairment (CrCl  $>15$  ml/min).

## DRUG INTERACTIONS

**CYP3A Inhibitors:** Avoid concurrent use of Palbociclib with strong CYP3A inhibitors (e.g. Itraconazole). If the strong inhibitor cannot be avoided, reduce the Palbociclib dose.

**CYP3A Inducers:** Avoid concurrent use of Palbociclib with strong CYP3A inducers (e. g. Ifampin, Modafinil).

**CYP3A Substrates:** The dose of sensitive CYP3A4 substrates (Midazolam) with narrow therapeutic indices may need to be reduced when given concurrently with Palbociclib.

## OVERDOSE

There is no known antidote for Palbociclib. The treatment of overdose of Palbociclib should consist of general supportive measures.

## STORAGE

Store below 30°C. Keep in a dry place away from light. Keep out of the reach of children.

## PRESENTATION

**Palbolicib 125 Capsule:** Each box contains 21 capsules in Alu-Alu blister pack.

Manufactured by:

 **ARISTOPHARMA LTD.**  
Shampur-Kadamtai I/A, Dhaka-Bangladesh

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