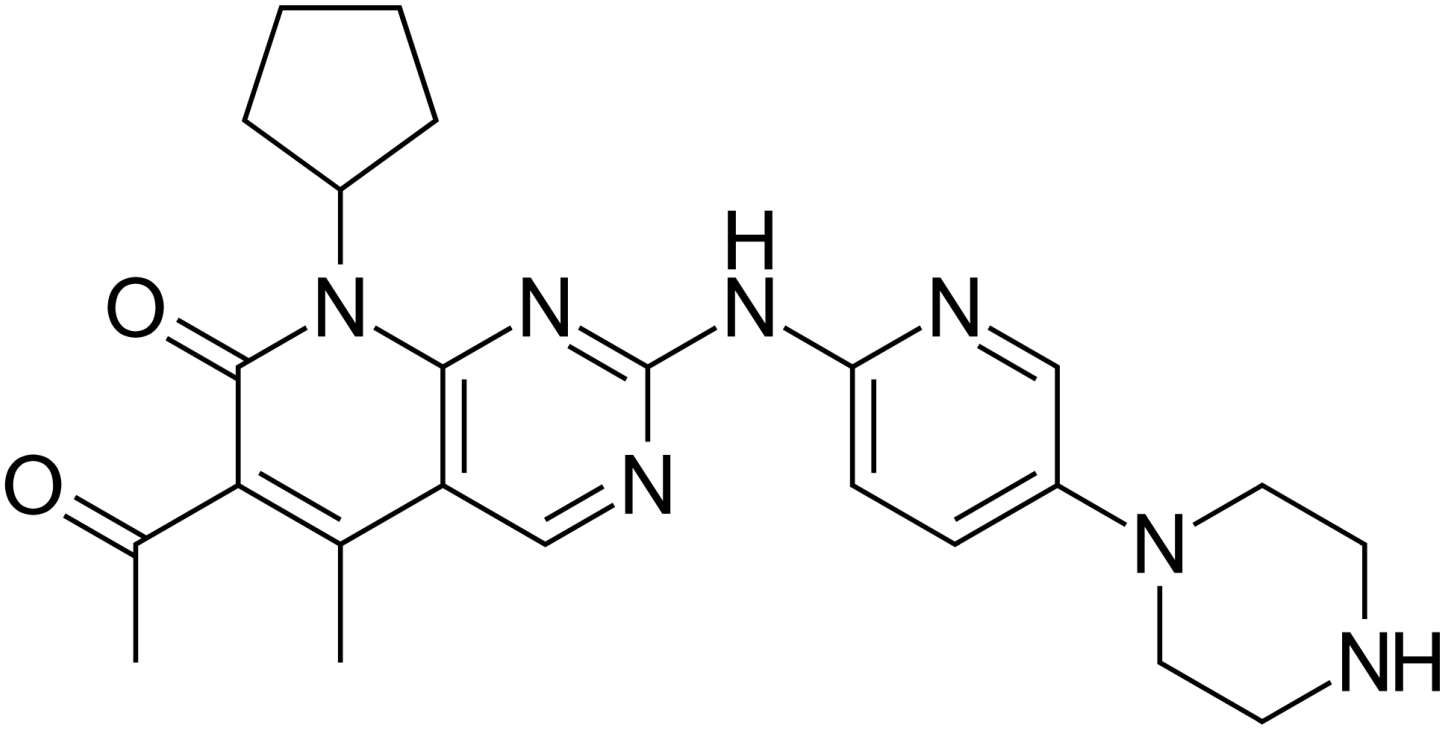
Palbociclib

Printed from https://www.cancerquest.org/node/6370 on 11/14/2026



Brand name: Ibrance
IUPAC: 6-acetyl-8-cyclopentyl-5-methyl-2-[(5-piperazin-1-ylpyridin-2-yl)amino]pyrido[2,3-d]pyrimidin-7-one
FDA approval: Yes
Enlace del fabricante
Usage:

Palbociclib is administered in pill form and is used in combination with hormonal therapy to treat HER2- metastatic breast cancer.1

Ibrance comes in a capsule form and is taken once a day with food.

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1 Taking IBRANCE. (n.d.). Retrieved June 27, 2017, from https://www.ibrance.com/taking-ibrance

Mechanism:

In conjunction with a hormonal therapy, Palbociclib works as a targeted CDK4/6 inhibitor, which controls cancerous cell growth by reducing a cell's progression through the cell cycle. This interruption in a cell's cycle keeps it from growing and keeps cancer from spreading.1

Ibrance works by inhibiting molecules, known as cyclin-dependent kinases (CDKs) 4 and 6, involved in promoting the growth of cancer cells. Ibrance is intended for postmenopausal women with estrogen receptor (ER)-positive, human epidermal growth factor receptor 2 (HER2)-negative metastatic breast cancer who have not yet received an endocrine-based therapy. It is to be used in combination with letrozole, another FDA-approved product used to treat certain kinds of breast cancer in postmenopausal women.

The diagram below shows the 3D molecular structure of Palbociclib.

Sphere | Stick | Line | Cross | Rotate

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1 Mechanism of Action. (n.d.). Retrieved June 27, 2017, from https://www.pfizerpro.com/product/ibrance/ibrance-letrozole/mechanism-action

Side effects:

Low white blood cell count is the most common side effect involved with palbociclib, which makes it especially important to have your medical team monitoring and testing counts. Other side effects include: low red blow cell count, infections, tiredness, nausea, sore mouth, abnormalities in liver blood tests, diarrhea, hair thinning or hair loss, vomiting, rash, and loss of appetite.[1]

1 Taking IBRANCE. (n.d.). Retrieved June 27, 2017, from https://www.ibrance.com/side-effects

Contraindications:

This medication can also inhibit the cycle and function of healthy cells, which can lead to a variety of side effects.[1]

1 Mechanism of Action. (n.d.). Retrieved June 27, 2017, from https://www.pfizerpro.com/product/ibrance/ibrance-letrozole/mechanism-action