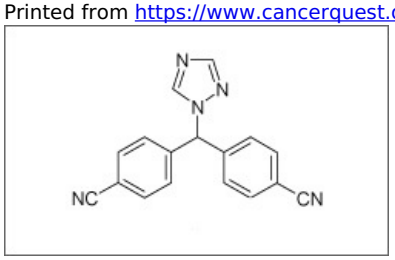
Letrozole

Printed from https://www.cancerquest.org/patients/drug-reference/letrozole on 11/19/2026



Brand name: Fermara®
IUPAC: 4-[(4-cyanophenyl)-(1,2,4-triazol-1-yl)methyl]benzonitrile
FDA approval: Yes
Manufacturer Link
Usage:

Letrozole is used to treat postmenopausal women with hormone receptor positive advanced or metastatic breast cancer. Letrozole is taken once daily in tablet form.1

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.

Mechanism:

Letrozole (Femara®) is an aromatase inhibitor that binds to the enzyme preventing its conversion of androgens (sex hormones) into estrogen. This action can prevent growth of hormonal dependent cancers.1

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

Stick Cross Sphere Rotate

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.

Side effects:

Common side effects include muscle and bone pain, hot flashes, back pain, difficulty breathing, coughing, fatigue, headache. Patients should not become pregnant while being treated with letrozole as it may cause harm to the unborn child.1

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.

Contraindications:

Letrozole is only indicated for use in postmenopausal women, as efficacy in premenopausal women has not been established. Caution should also be taken in patients with abnormal liver function.1

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.