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# Ribociclib/Letrozole

National Cancer Institute

## Source

National Cancer Institute. *Ribociclib/Letrozole*. NCI Thesaurus. Code C154675.

An orally available co-packaged agent combination of ribociclib, a cyclin-dependent kinase (CDK) inhibitor targeting cyclin D1/CDK4 and cyclin D3/CDK6, and letrozole, a nonsteroidal inhibitor of estrogen synthesis, with antineoplastic activity. Ribociclib specifically inhibits CDK4 and CDK6, thereby inhibiting retinoblastoma (Rb) phosphorylation. Inhibition of Rb phosphorylation prevents CDK-mediated G1-S phase transition, thereby arresting the cell cycle in the G1 phase, suppressing DNA synthesis and inhibiting cancer cell growth. Letrozole selectively and reversibly inhibits aromatase, which may result in growth inhibition of estrogen-dependent cancer cells.