

Open Peer Review on Qeios

## Galeterone

National Cancer Institute

## Source

National Cancer Institute. <u>Galeterone</u>. NCI Thesaurus. Code C84866.

An orally bioavailable small-molecule androgen receptor modulator and CYP17 lyase inhibitor with potential antiandrogen activity. Galeterone exhibits three distinct mechanisms of action: 1) as an androgen receptor antagonist, 2) as a CYP17 lyase inhibitor and 3) by decreasing overall androgen receptor levels in prostate cancer tumors, all of which may result in a decrease in androgen-dependent growth signaling. Localized to the endoplasmic reticulum (ER), the cytochrome P450 enzyme CYP17 (P450C17 or CYP17A1) exhibits both 17alpha-hydroxylase and 17,20-lyase activities, and plays a key role in the steroidogenic pathway that produces progestins, mineralocorticoids, glucocorticoids, androgens, and estrogens.