

[Open Peer Review on Qeios](#)

Apalutamide

National Cancer Institute

Source

National Cancer Institute. *Apalutamide*. NCI Thesaurus. Code C92574.

A small molecule and androgen receptor (AR) antagonist with potential antineoplastic activity. Apalutamide binds to AR in target tissues thereby preventing androgen-induced receptor activation and facilitating the formation of inactive complexes that cannot be translocated to the nucleus. This prevents binding to and transcription of AR-responsive genes. This ultimately inhibits the expression of genes that regulate prostate cancer cell proliferation and may lead to an inhibition of cell growth in AR-expressing tumor cells.