

Open Peer Review on Qeios

## Dienogest

National Cancer Institute

## Source

National Cancer Institute. <u>Dienogest</u>. NCI Thesaurus. Code C87238.

An orally-active, semisynthetic, fourth generation, nonethinylated progestogen with antiproliferative, antiandrogenic, anti-inflammatory and antiangiogenic activities that is used in hormone therapy and as a female contraceptive. Upon oral administration, dienogest binds intracellular progesterone receptors which then translocate to the nucleus where the drug-receptor complex interacts with progesterone response elements, thus altering the expression of target genes. Dienogest reduces the production of estradiol, prevents ovulation and alters the cervical mucus and endometrium. In addition, dienogest appears to suppress the expression of cell cycle regulator cyclin D1. Altogether, this may prevent the growth of endometrial epithelial cells and may reduce symptoms associated with leiomyoma.