

16. Minerva Ginecol. 2018 Oct;70(5):497-515. doi: 10.23736/S0026-4784.18.04316-2. Epub 2018 Sep 26.

Gonadotropin-releasing hormone analog therapeutics.

Newton CL, Riekert C, Millar RP.

Abstract

Dysregulation at any level of the hypothalamic-pituitary-gonadal (HPG) axis results in, or aggravates, a number of hormone-dependent diseases such as delayed or precocious puberty, infertility, prostatic and ovarian cancer, benign prostatic hyperplasia, polycystic ovarian syndrome, endometriosis, uterine fibroids, lean body mass, as well as metabolism and cognitive impairment. As gonadotropin-releasing-hormone (GnRH) is an essential regulator of the HPG axis, agonist and antagonist analogs are efficacious in the treatment of these conditions. GnRH analogs also play an important role in assisted reproductive therapies. This review highlights the current and future therapeutic potential of GnRH analogs and upstream regulators of GnRH secretion.