

Sterydy

cholesterol → hormony płciowe

Sterydowe hormony płciowe - związki produkowane przez gonady (jajniki, jądra) i korę nadnerczy z cholesterolu

pod wpływem gonadotropin (h. glikoproteinowych)

Podział:

androgeny – **męskie** (gr. *andros* = mężczyzna)

ginogeny – **żeńskie** (gr. *gyne* = kobieta)

estrogeny (hormony pęcherzykowe)

gestageny (hormony luteinizujące czyli ciążowe)

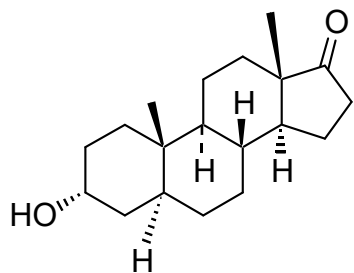
Sterydy - hormony płciowe, androgeny

Androgeny -

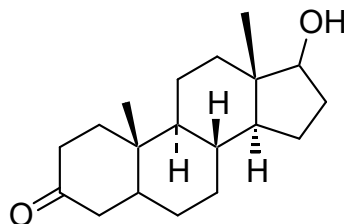
Androsteron (ADT) -

Testosteron –

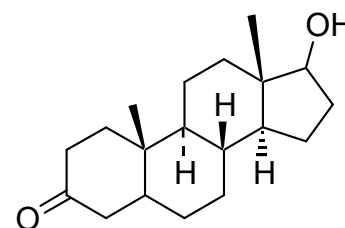
Androstanolon (dihydrotestosteron , stanolon)



androsteron



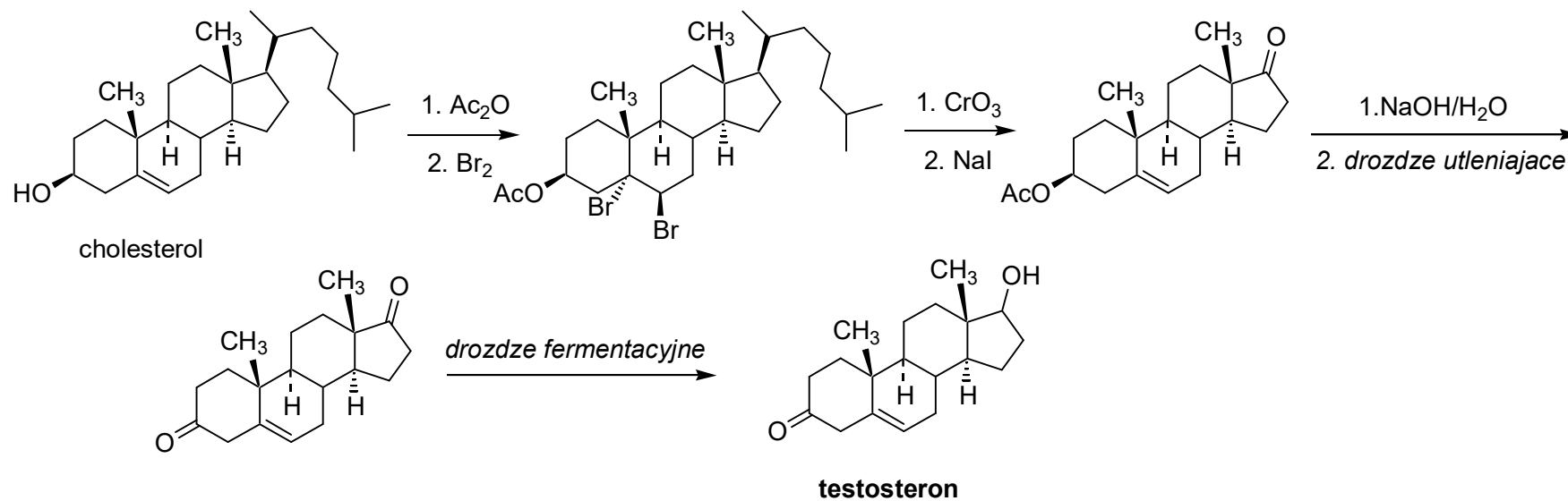
testosteron
17 β -hydroksyandrost-4-en-3-on



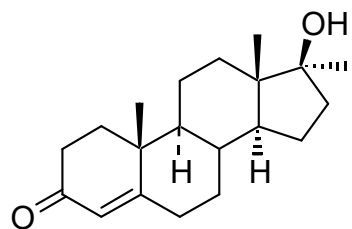
androstanolon
3 α -hydroksy-5 α -androstan-17-on

Sterydy - Testosteron

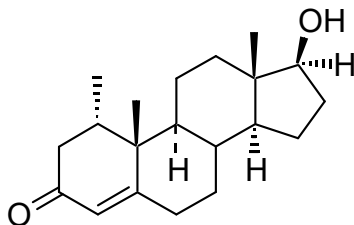
Testosteron – W przemyśle wytwarzany jest z cholesterolu



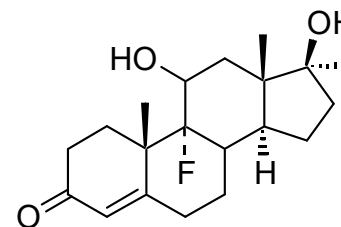
Sterydy – Analogi Testosteronu



metylotestosteron



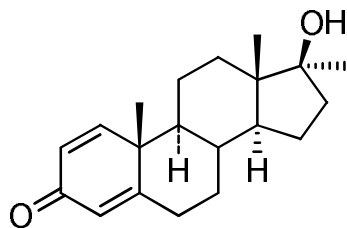
mesterolone



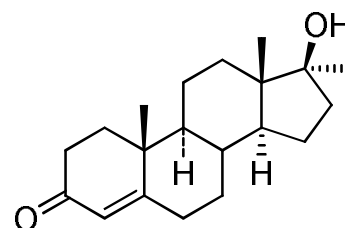
fluksymesteron

Sterydy – Testosteron, doping

Testosteron – „siła napędowa faceta”



metandienon



oksymetolon

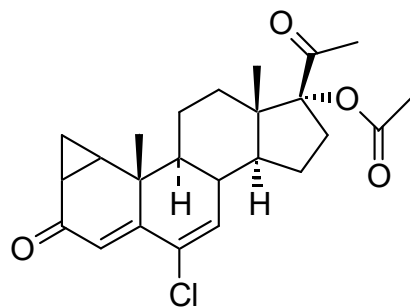
Anaboliki
Anaboliki steroidowe

Nadużywanie anabolików prowadzi do

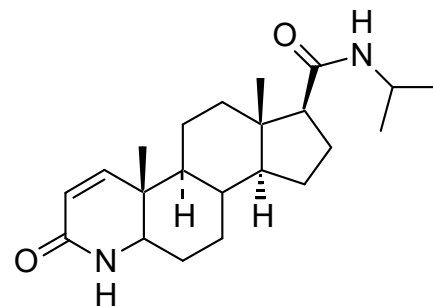
Sterydy - Antyandrogeny

Antyandrogeny stosowane są **w leczeniu**

- *ginogeny* =
- **octan cyproteronu**
- **finasteryd**
- **Flutamid**



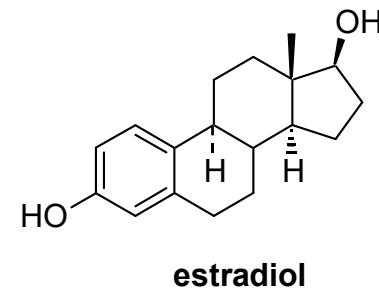
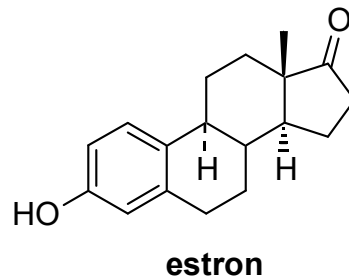
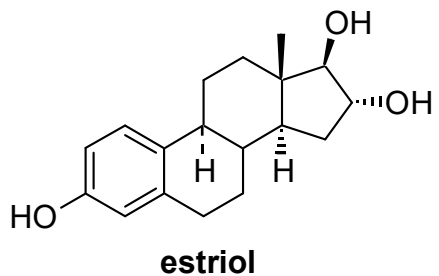
octan cyproteronu



finasteryd

Sterydy – żeńskie hormony płciowe

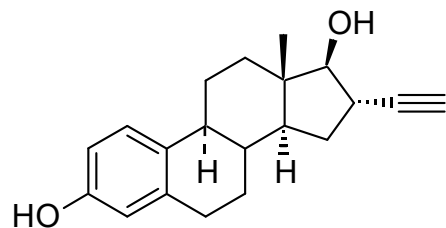
Ginogeny, Estrogeny - żeńskie hormony płciowe ,



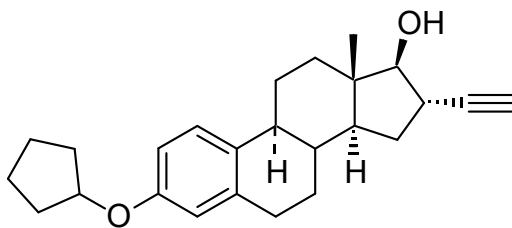
Estrogeny w zastosowaniu klinicznym

- **Estriol**
- **Estron**
- **Estradiol**

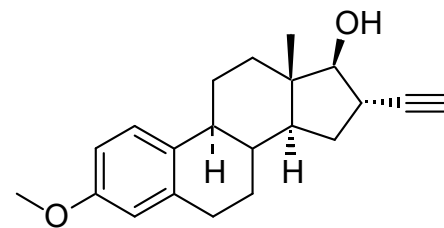
Sterydy – terapia hormonalna



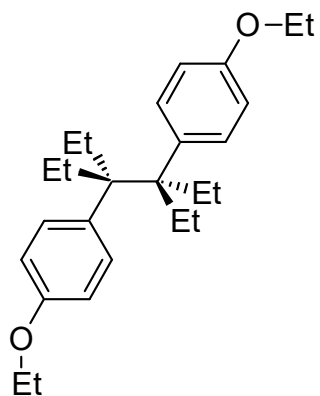
etynyloestradiol



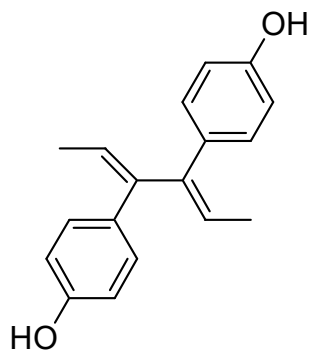
chinestrol



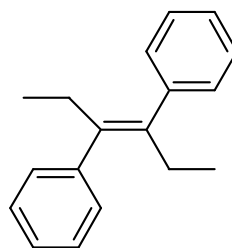
mestranol



heksaestrol



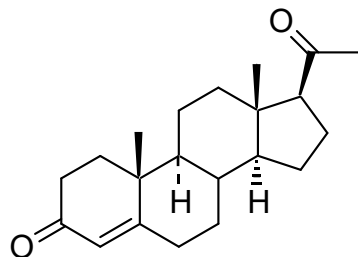
dienestrol



stilbestrol

Pochodne *trans*-stilbenu wykazują powinowactwo do receptorów estrogennych z uwagi na zbliżony kształt do estradiolu.

Sterydy – hormony ciążowe, progesteny



progesteron

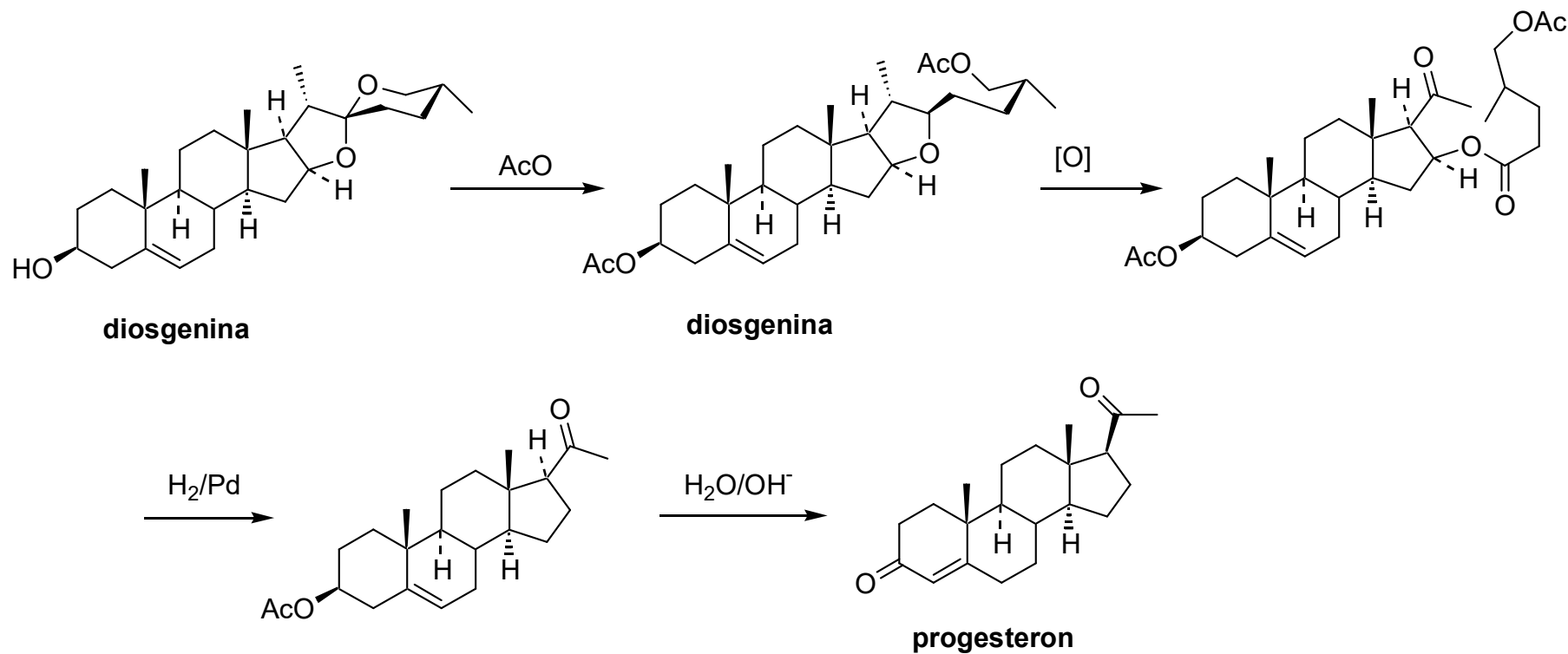
Progesteron rola:

- .

Progesteron klinicznie stosowany jest :

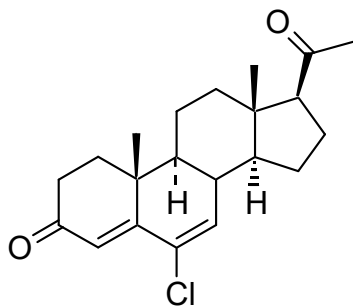
Sterydy – synteza progesteronu

Otrzymywany z **diosgeniny** (*sapogeniny*)

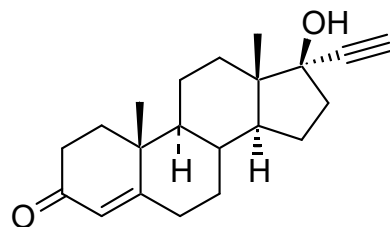


Sterydy – Progesteny

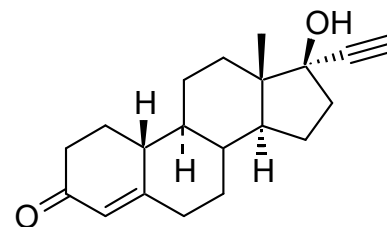
Środki przeciwciażowe



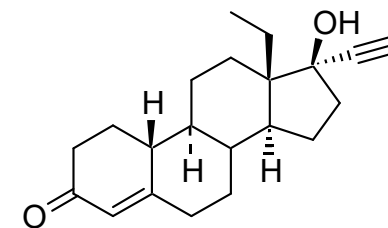
chlormadinon



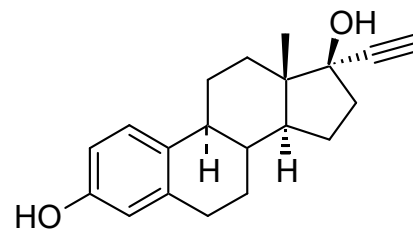
etysteron



noretysteron

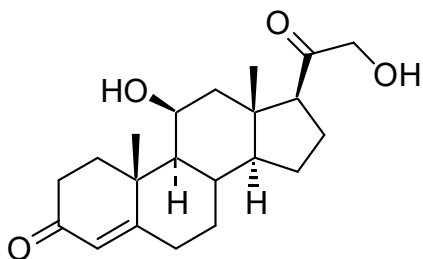


norgestrel

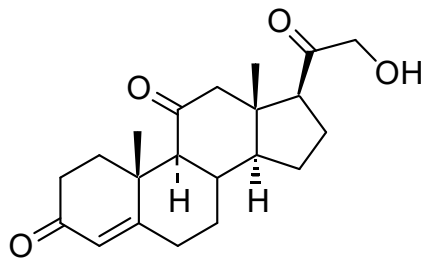


etynyloestradiol

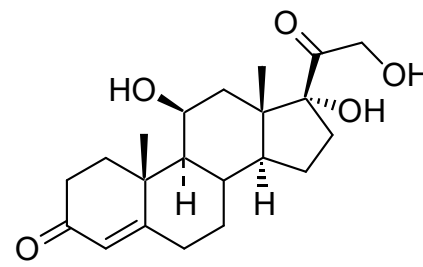
Sterydy – Kortykosteroidy



kortykosteron



kortyzon



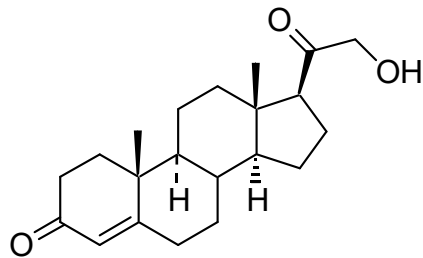
kortyzol
(hydrokortyzon)

Kortykosteroidy –

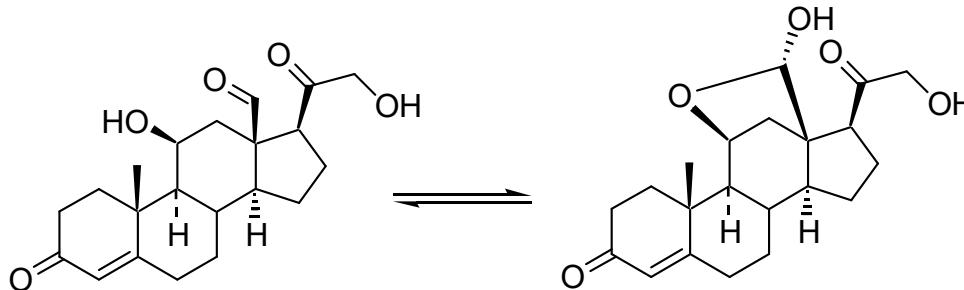
Kortyzon

Hydrokortyzon -

Sterydy – Kortykosteroidy



11-deoksykortykosteron



aldosteron

11-deoksykortykosteron –

aldosteron - właściwy *hormon mineralokortykosteroidowy*

Mineralokortykosteroidy regulują stężenie elektrolitów w organizmie; nie zawierają one atomu tlenu przy **C11**.