

Progestin or Progesterone difference-there is no difference?

Different targets

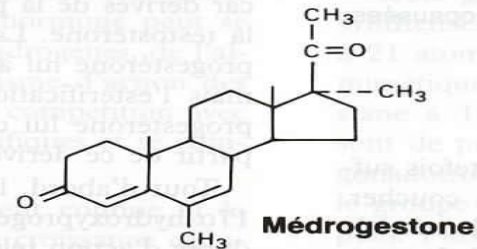
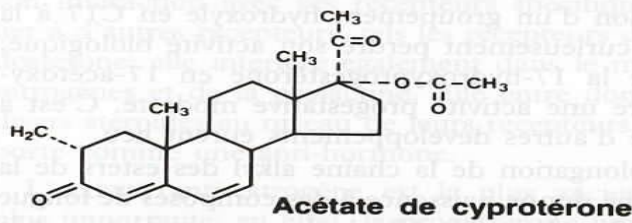
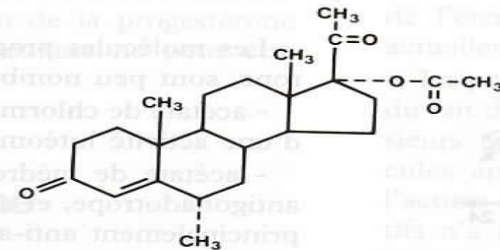
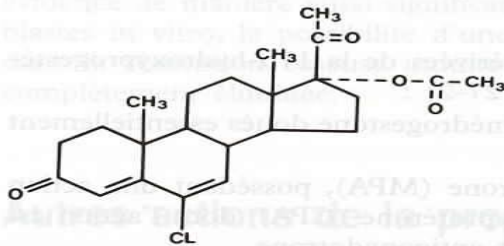
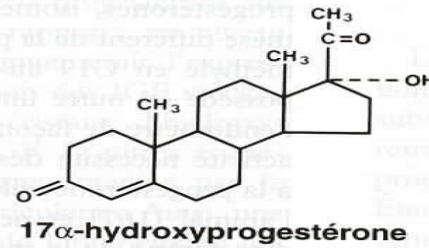
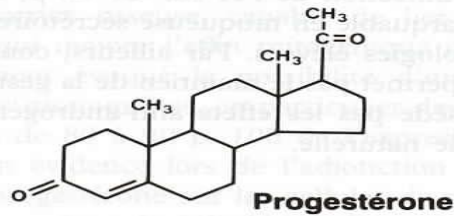
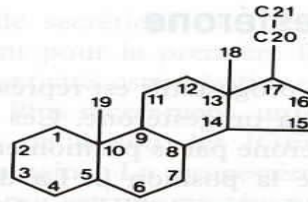
- Cardio-vascular
- breast

A difficult issue

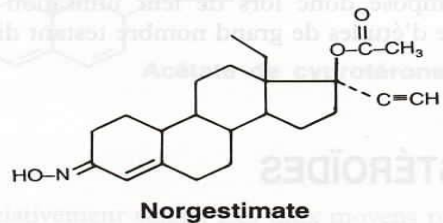
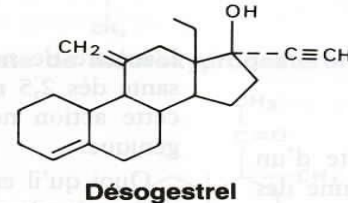
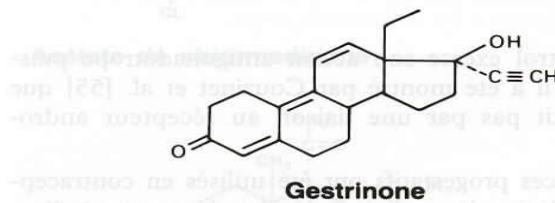
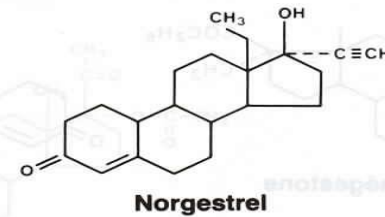
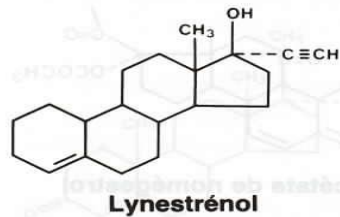
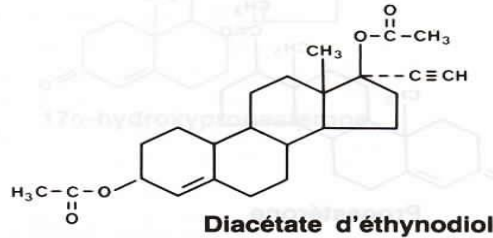
- Effects of progestin on the breast is probably the **most controversial** area in the literature
- Because:
 - **no relevant animal model** for the human breast
 - Limitation of in vitro models:
 - Type of cells used: breast cancer cell lines
 - Absence of the environment: cross-talk between epithelial cells and stromal cells, adipocytes, role of ECM...
 - Influence of the liver, ISR, metabolism of the steroids...
 - Limitations of clinical trials

- Different molecules.....
- Different properties...
- Different indications....

Pregnanes



Norméthyltestostérone



Non-selectivity of progestins

Progesterone: PR, AR(-), GR (in vitro), MR(-)

Normethyltestosterone derivatives:

PR, AR(+), ER, GR \pm

Pregnanes: PR, \pm AR, \pm GR

Spironolactone, drospirinone PR, MR(-), AR(-)