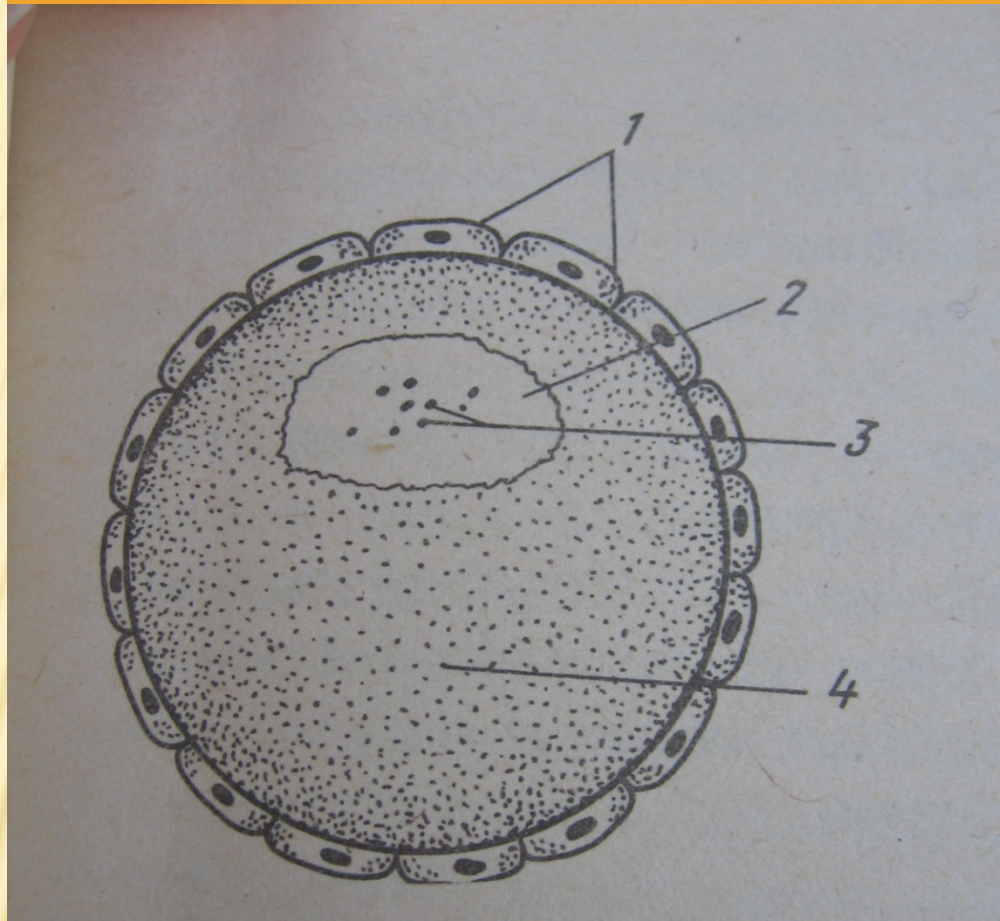


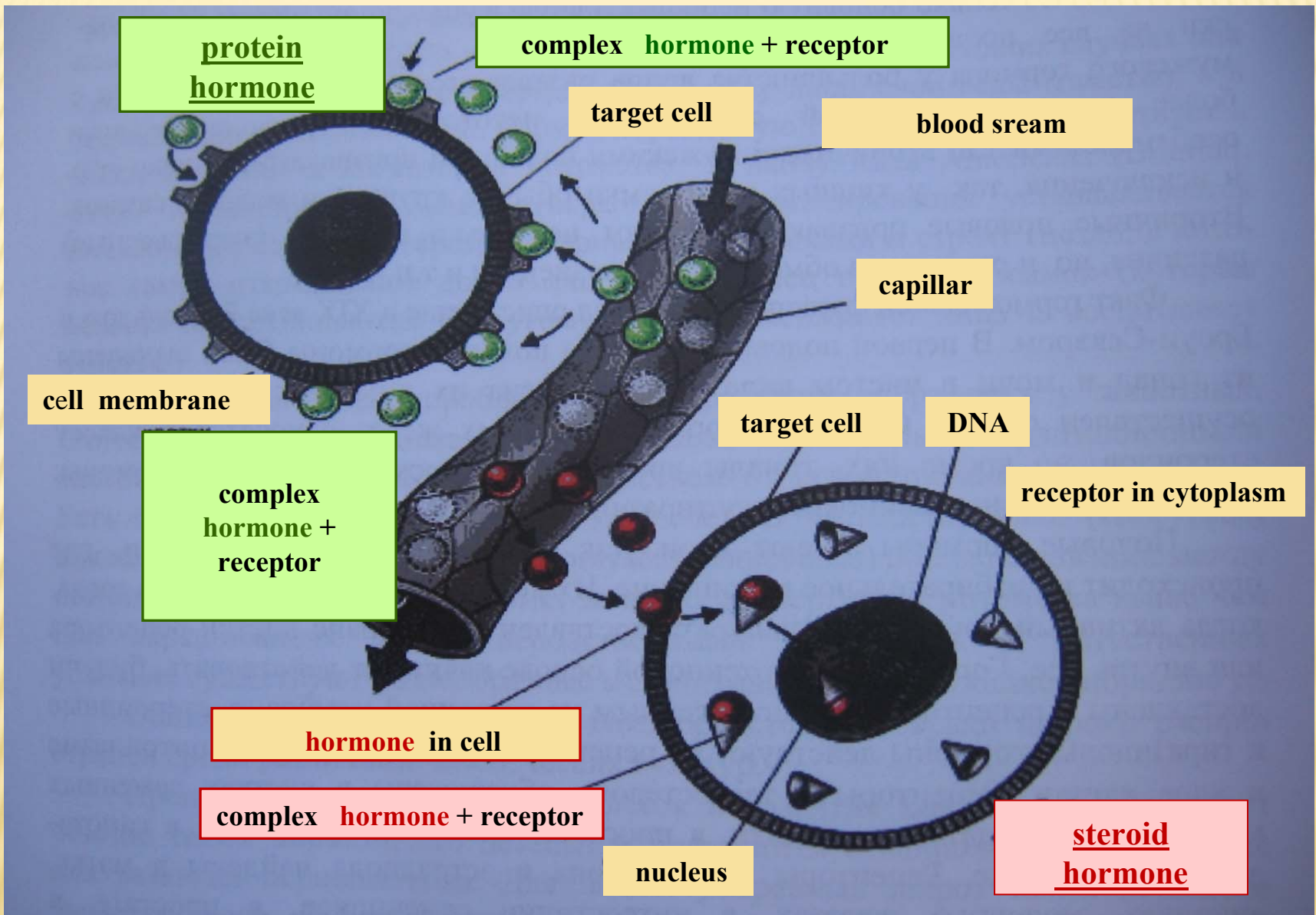
The LONG RANGE INTERACTIONS
of FISH OVARIAN FOLLICLES
IN VITRO

A.B. Burlakov, O.V. Burlakova, V.A. Golichenkov
Lomonosov Moscow State University, Moscow, Russia

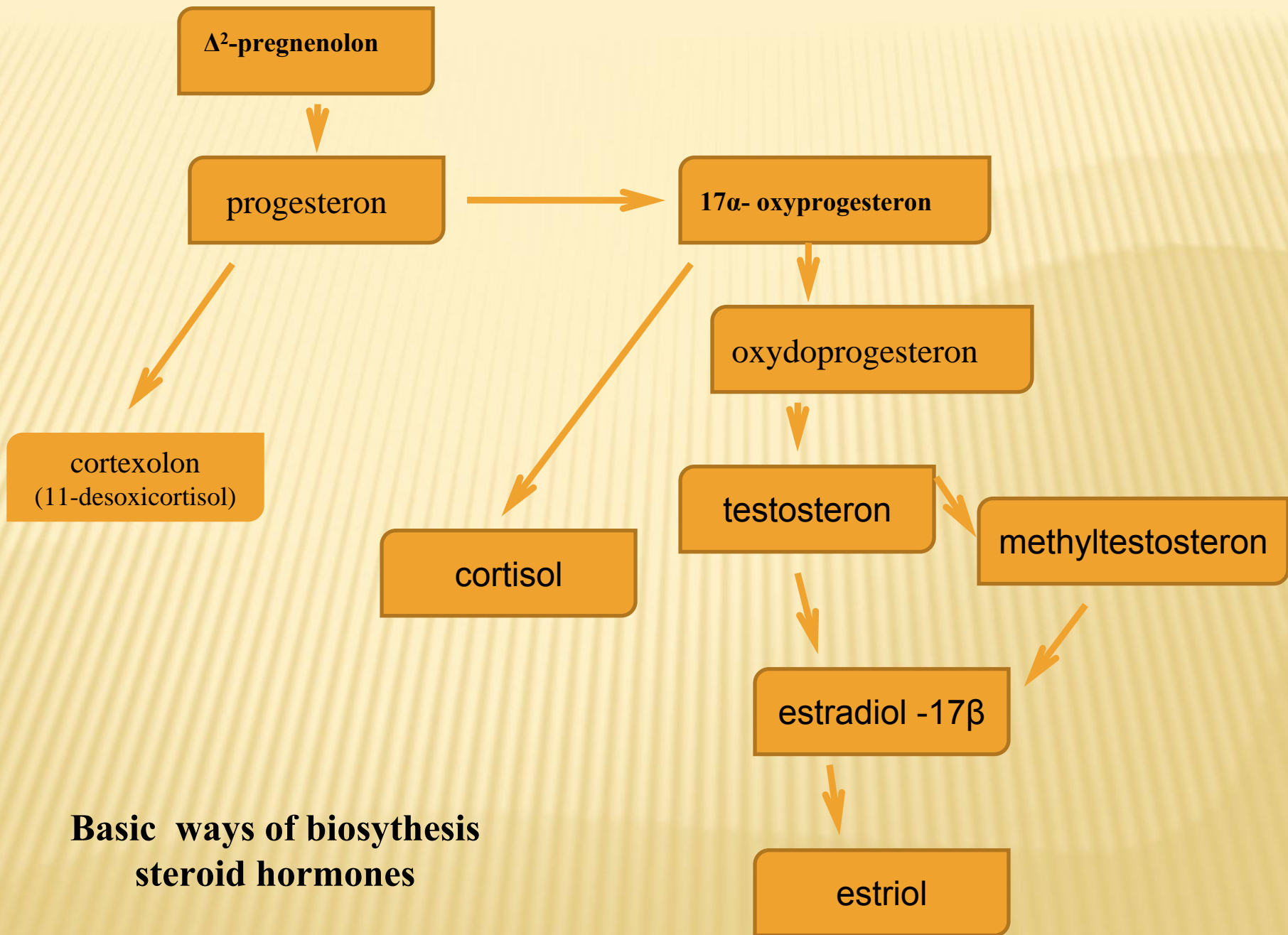
Ovarian follicle before maturation



- 1 – follicular cells;
- 2 - germinal vesicle (nucleus of oocyte);
- 3 – nucleolus;
- 4 - cytoplasm

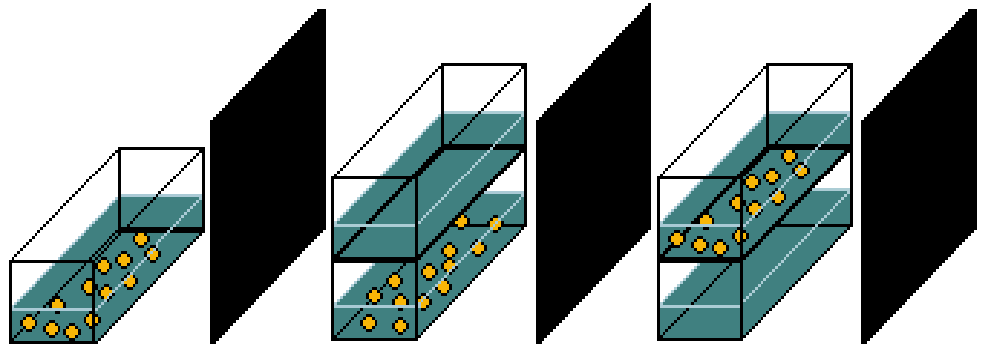


The hormone-receptor interactions in target cells

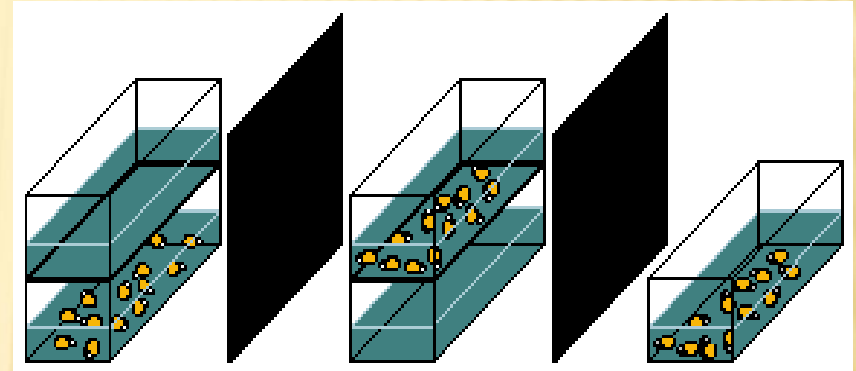


Control series

up-initial dose of hormone

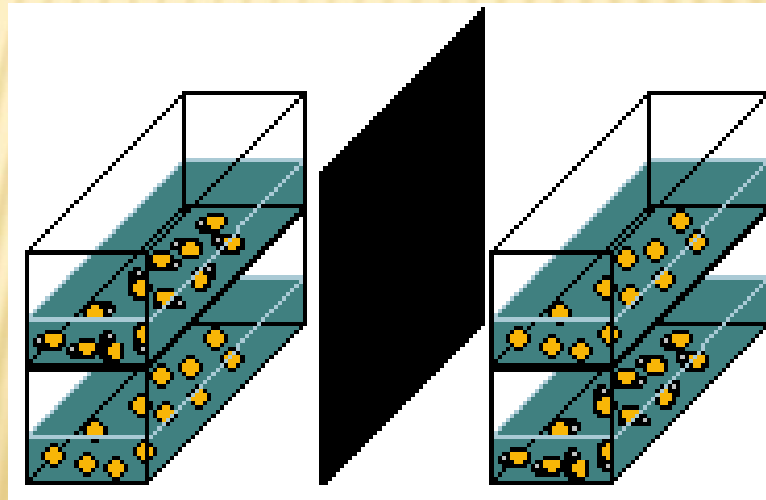


doun-initial dose of hormone



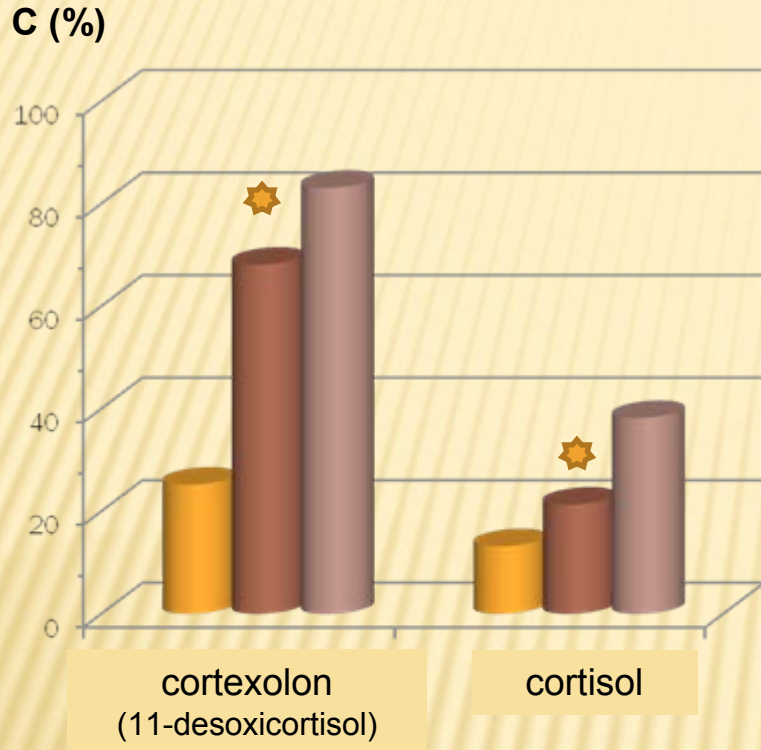
Experimental series

up-initial dose
doun-initial dose

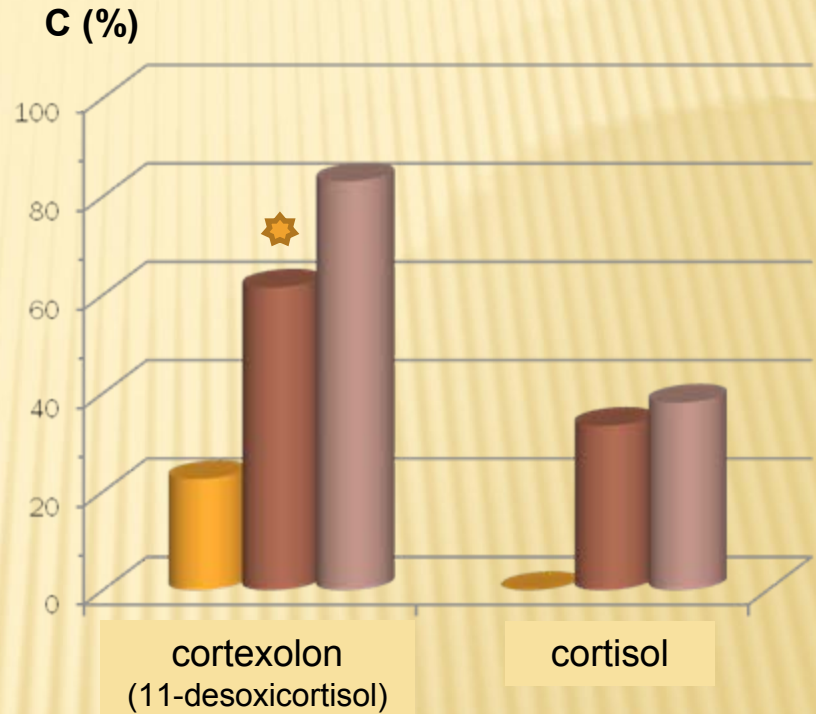


up-initial dose
without hormone

The long range interaction of ovarian follicles *in vitro* during maturation by corticosteroid hormones



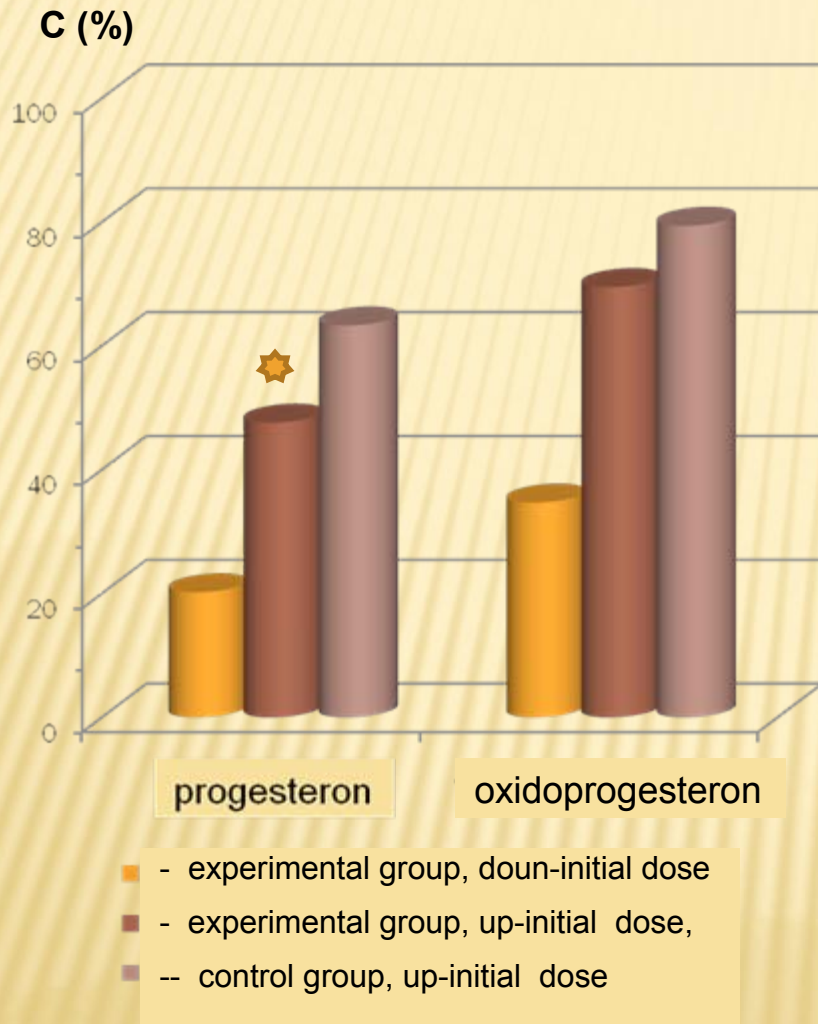
- - experimental group, down-initial dose
- - experimental group, up-initial dose,
- -- control group, up-initial dose



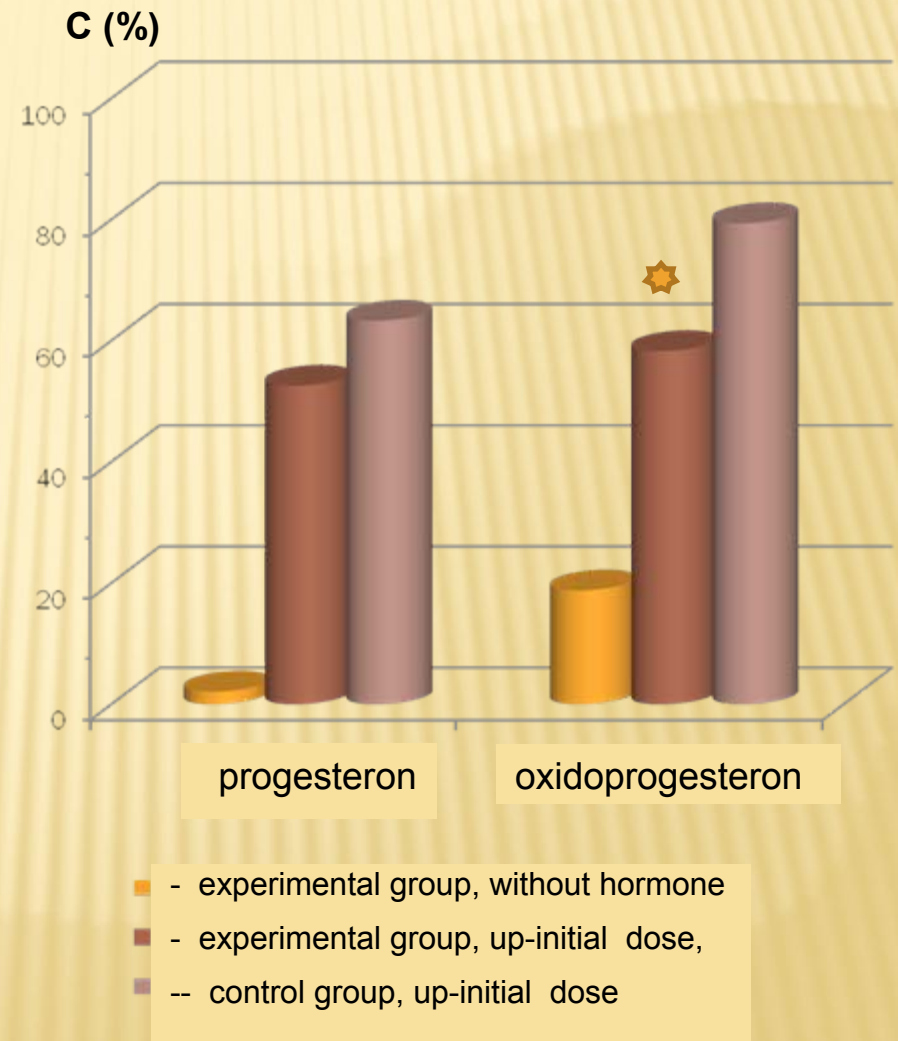
- - experimental group, without hormone
- - experimental group, up-initial dose,
- -- control group, up-initial dose

C – % of matural oocytes

The long range interaction of ovarian follicles *in vitro* during maturation by progestines

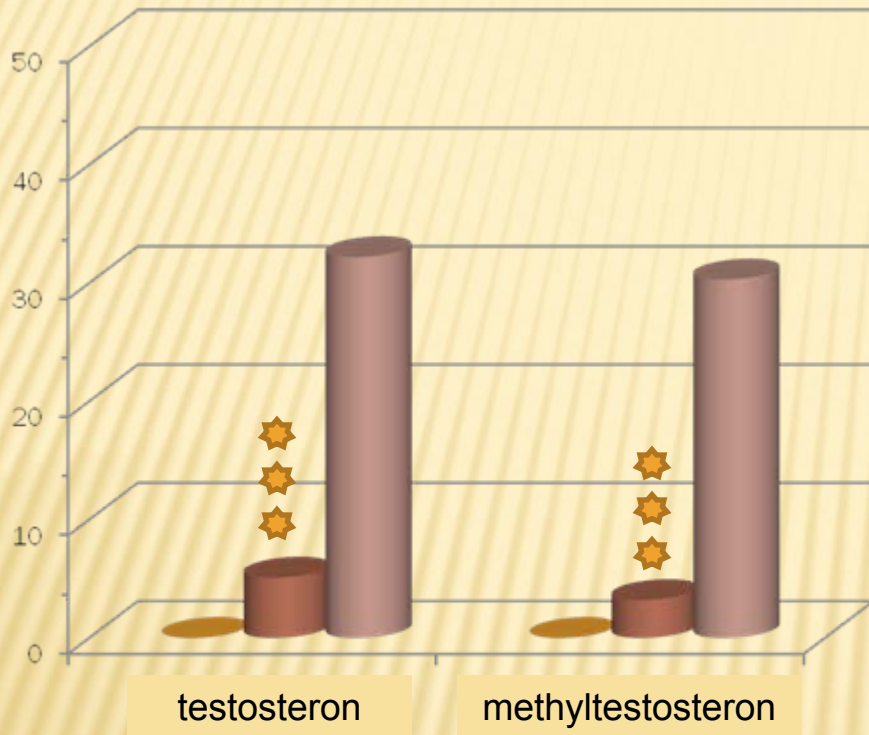


C – % of mature oocytes

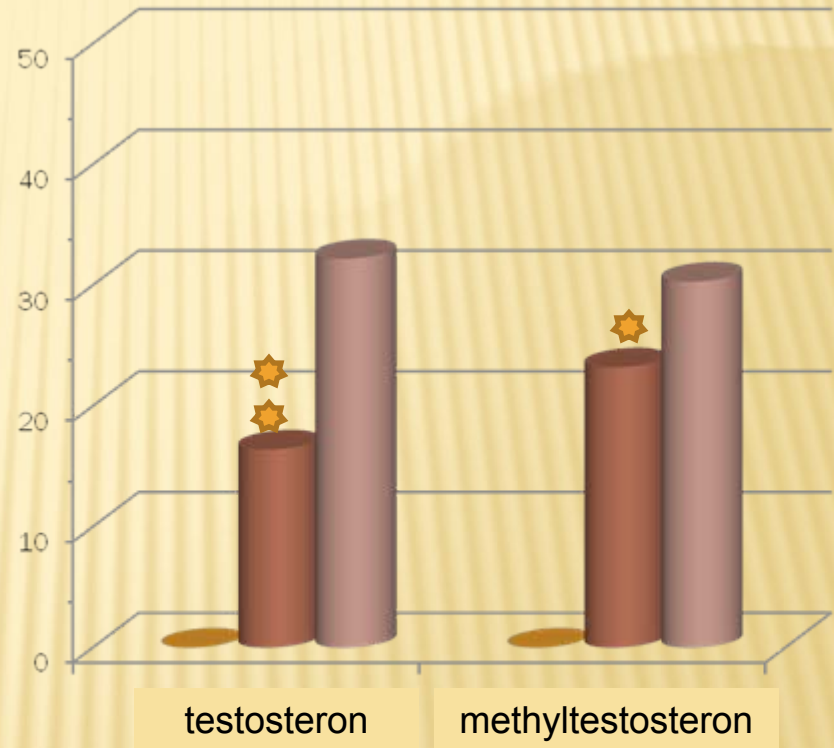


The long range interaction of ovarian follicles *in vitro* during maturation by androgens

C (%)



C (%)

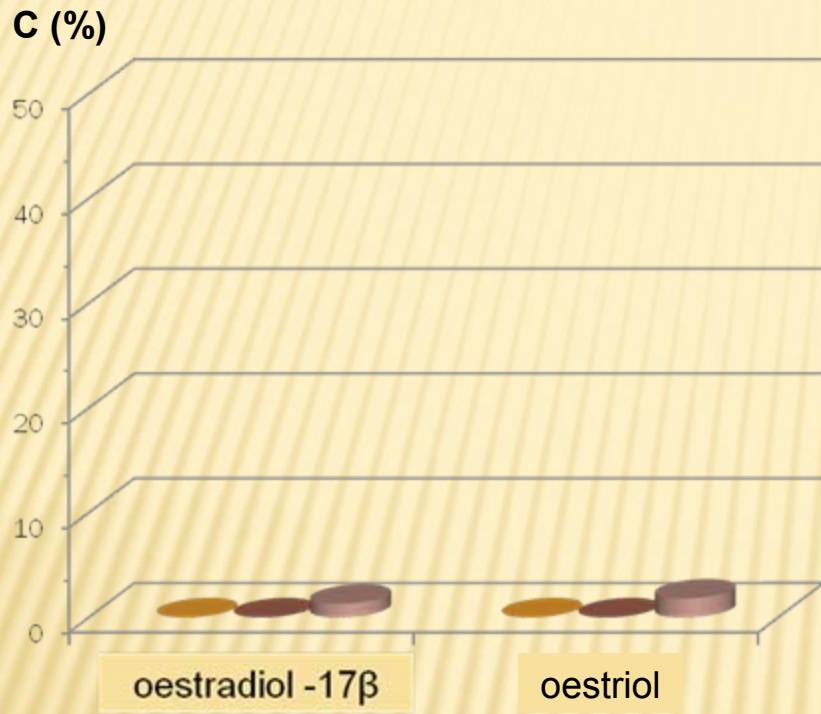


- - experimental group, down-initial dose
- - experimental group, up-initial dose,
- -- control group, up-initial dose

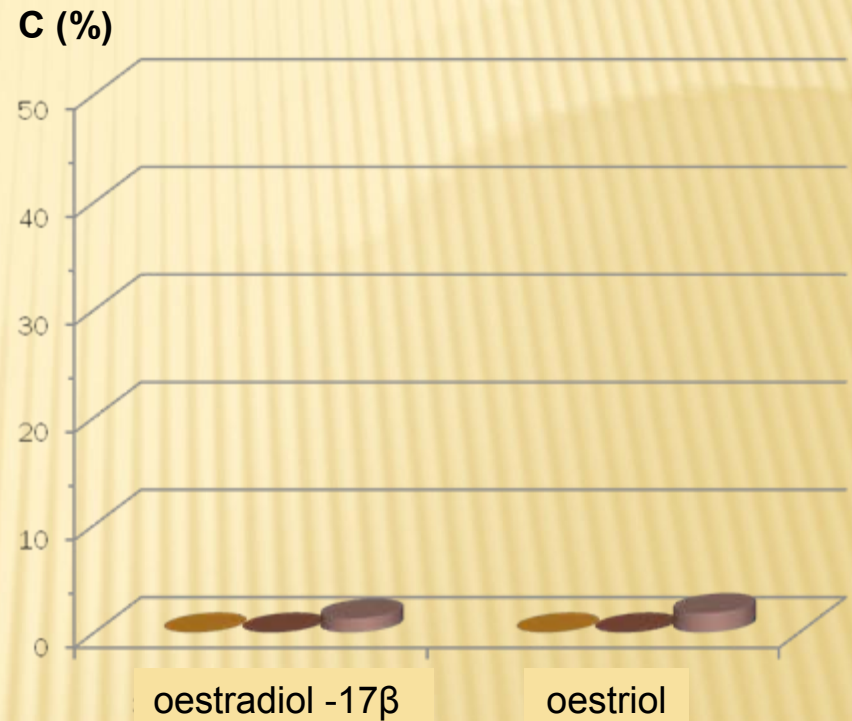
- - experimental group, without hormone
- - experimental group, up-initial dose,
- -- control group, up-initial dose

C – % of mature oocytes

The long range interaction of ovarian follicles *in vitro* during maturation by estrogens



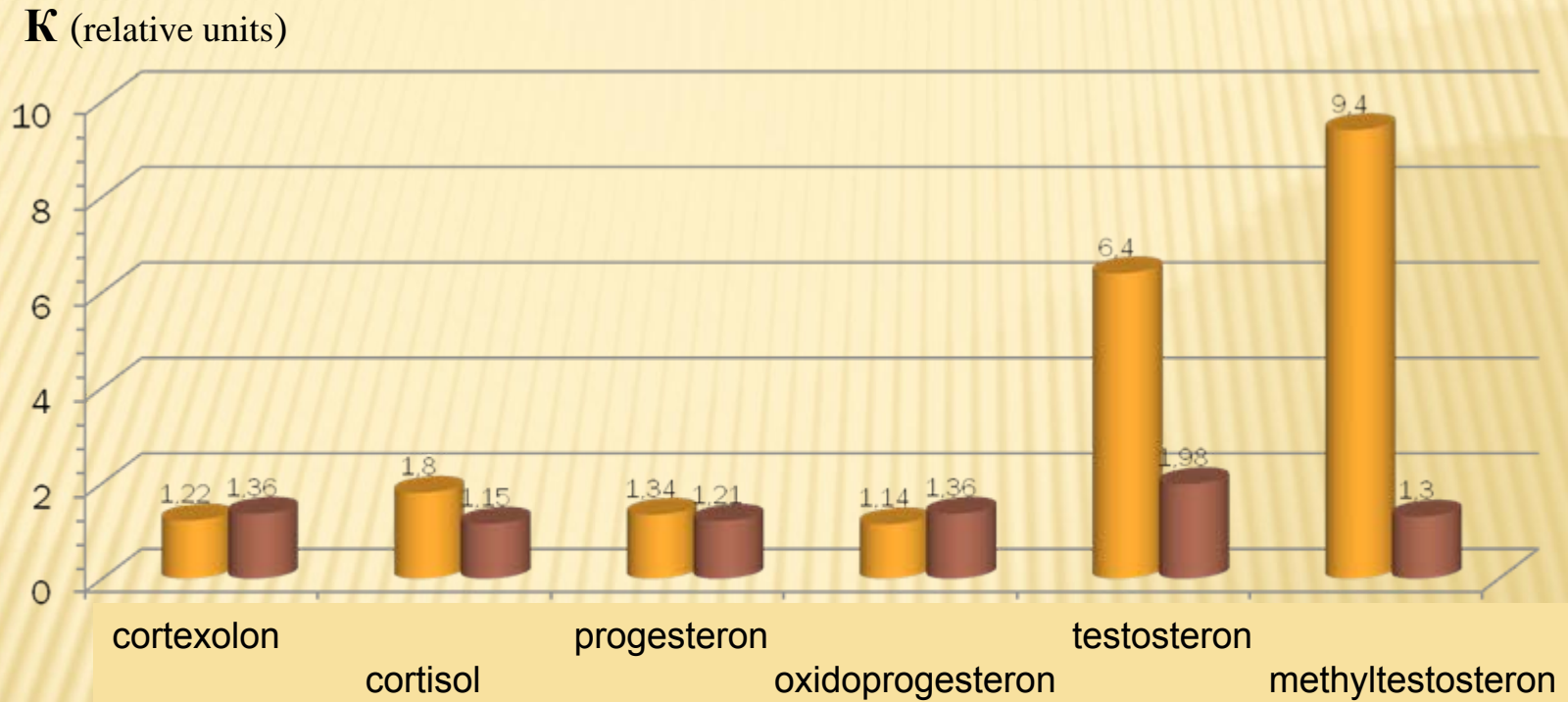
- - experimental group, down-initial dose
- - experimental group, up-initial dose.
- - control group, up-initial dose



- - experimental group, without hormone
- - experimental group, up-initial dose.
- - control group, up-initial dose

C – % of mature oocytes

The decrease of the effect of steroid's up-initial dose during the long range interaction



 - interaction with follicles in down-initial dose of steroid

 - interaction with follicles without steroid

$$K = C_{\text{contr, up-initial}} / C_{\text{exper, up-initial}}$$

