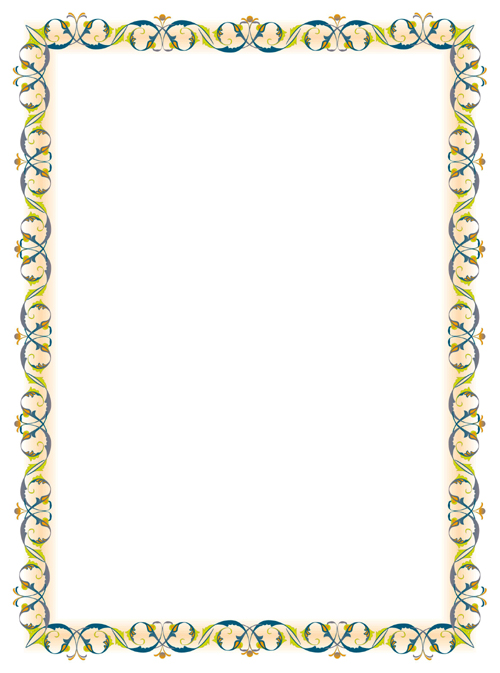
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**Hormonal control of reproduction**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Hormone** | **Therapeutic uses and indications** | | | | | **Dose** | | | **Commercial form (s)** | |
| **Animal** | **Application** | | | |
| **FSH** | cattle | Smooth inactive ovary | | | | 1500-3000 IU | | | Folligone  Fostim  Anterion  Prolan-A  Gystyl | |
| Super-ovulation for embryo transfer | | | |
| Sheep and goat | Synchronization of estrous after sponge removal | | | | 500-800 IU | | |
| Saw | Induction of estrous after farrowing | | | | 1000 IU | | |
| Dog | Induction of estrous during physiological anestrum | | | | 50-100 IU | | |
|  |  |  | | | |  | | |  | |
| **LH** | Cattle | Delayed ovulation | | | | 1500-3000 IU | | | Prolan  Pregnyl  Chorulon  Premognyl  Cystovet  Profassi  Novarel  Humagon | |
| Anovulation | | | |
| Cystic ovary (follicular cyst) | | | |
| Prolonged estrus | | | |
| Repeat breeder | | | |
| Early embryonic death | | | |
| In bull: improve the libido | | | |
| Mare | Induce or hasten ovulation | | | | 1500-3000 IU | | |
| Saw | Stimulate the onset of estrus after farrowing | | | | 500-1000 IU | | |
| Sheep and goat | In male: Improve libido | | | | 100-500 IU | | |
| Dog | Improve estrus | | | | 100-500 IU | | |
| Cat | Induce ovulation | | | | 100-200 IU | | |
|  |  |  | | | |  | | |  | |
| **Oxytocin** | Uterine inertia | | | | | cattle | | 40-60 IU | Syntocinon  Hypophysin  Oxytocin  Pitocin | |
| Weak birth pain | | | | | Mare | | 30-60 IU |
| Sub-involution of uterus | | | |  | Sheep | | 5-10 IU |
| Uterine prolapse | | | |  | Saw | | 5-10 IU |
| Retention of placenta | | | |  | Dog | | 3-5 IU |
| Opened pyometra | | | |  | Rabbit | 0.2-3 IU | |
| Assist milk letdown | | | |  |  | | |
| **GnRH** | 1- Induce ovulation in anestrus or transitional mares  2- Hasten ovulation in mares exhibit estrus.  3- Treatment of ovarian inactivity in large animals.  4- Estrus synchronization.  5- Superovulation.  6- Treatment of cystic ovaries in dairy cattle  7- Reduce the time interval from calving to first ovulation.  8- GnRH challenge to test pituitary sufficiency or testicular steroidogenesis in dogs and human. | | | | | *Follow the instruction of the manufacturer* e.g.  Fol. cyst: 5.0 ml.  Anestrum: 5.0 ml  Delayed Ovul.: 2.5 ml  Improvement of pregnancy rate of cows: 2.5ml  Synchronization of oestrus: 2.5 ml. | | | Fertagyl  Cystorelin  Factrel  Ovuplant (mare)  Gonazon (fish)  Gonasyn  Coneptal  Receptal  Gonadorelin  Gonabred | |
|  |  | | | |  |  | | |  | |
| **Estrogen** | Induction of abortion | | | In undesirable pregnancy, mummified fetus | | Large animals (L.A.) | | 5-20 mg | Estradiol benzoate  Folon-5  Cyren-B  Diethyl stilbesterol | |
| Open cervix | | | In closed pyometra, retained placenta, mummified fetus | |
| Weak and/or silent heat | | | | |
| Incomplete enucleation of CL | | | To antagonize P4 release | | Small animals (S.A.) | | 3-10 mg |
| Priming of uterine contractility to action of oxytocin | | | | |
| Induction of lactation | | | E2 plus P4 | |
| Initiation of estrous | | | | |
| Osteoporosis in aged females | | | | |
| Hormonal castration and fattening | | | | | S.A.: 20 mg; L.A.: 50 mg | | |
| Prostatic hyperplasia and urinary incontinence in dog | | | | | 1 mg/day for 3 days | | |
|  |  |  | | | |  | | |  | |
| **Progesterone** | Habitual abortion | | | | | L.A.: 50 mg  S.A.: 10-20 mg | | | MPA | Medroxyprogesterone acetate |
| Synchronization of estrous | | | | | CAP | Chlormadione acetate |
| Nymphomania | | | | | MAP | Methoxy acetoxy progesterone |
| Vaginal prolapse | | | | | FAIS | Fluorogestrone acetate Intravaginal sponge |
| MAIS | Medroxyprogesterone acetate Intravaginal sponge |
| PRID | Progesterone releasing Intravaginal device |
| Lutone | |
| Prontogest  Regu-mate | |
|  |  | | | | |  | | |  | |
| **Testosterone** | In cow and steer | | Androgeniztion of male that | | | *Follow the instruction of the manufacturer* | | | Testone-H  Primotestone  Sustanon | |
|  |  | |  | | |
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|  |  | | | | |  | | |  | |
| **Prostaglandins** | * Synchronization of estrus in farm animals. * Treatment of persistent corpus luteum. * Evacuation of abnormal uterine contents. * Induction of abortion. * Treatment of open pyometra. | | | | | **- Large animals**  Natural PGF2α (Lutylase®): 25-35 mg….5-7 ml  Synthetic PGF2α  (Estrumate®): 500 µg….2 ml  Synthetic PGF2α  (Prosolvin®): 15 mg…….2ml  **- Sheep & Goats:** 62.5 - 125 µg | | | Lutylase (Natural PGF2α)  Estrumate (Synthetic PGF2α)  estroPLAN (Synthetic PGF2α)  ProstaMate(Synthetic PGF2α)  Hemabate (Synthetic PGF2α)  Juramate (Synthetic PGF2α)  Sincrocio (Synthetic PGF2α)  PRELOBAN(Synthetic PGF2α)  Ciosin (Synthetic PGF2α)  SincroProst (Synthetic PGF2α)  Prostal (Synthetic PGF2α)  Enzaprost (Synthetic PGF2α)  Luteosyl (Synthetic PGF2α)  Prosolvin (Synthetic PGF2α) | |