

Theriogenology drugs

Drug and active ingredients	Treatments	Dosage and route of administration	Contra indications	Withdrawal time
Ventipulmin® (Clenbuterol HCl)	Bronchodilator, used to manage horses affected with airway obstruction, such as which occurs in chronic obstructive pulmonary disease. Used also as an adjunctive uterine relaxant for dystocia treatment.	<u>Horses:</u> As bronchodilator: $8 \times 10^{-4}$ mg/kg twice daily for 3 days orally  Dystocia adjunctive Tx: 0.3mg/500kg IV slowly. For emergency 10mls on arrival for treatment	In food producing animals.  Horses with cardiovascular impairment.	N/A
ECP® (Estradiol Cypionate)	Used to enhance estrus behavior and receptivity in mares and to treat estrogen – responsive incontinence. Was once used as an abortifacient in cattle but has since been made illegal	<u>Horses:</u> Enhance estrus behavior 5-10mg IM once  Estrogen responsive incontinence Tx: 0.004 - 0.01mg/kg IM daily, for 3 days	During pregnancy, may cause fetal malformation.  Food producing animals	N/A
Lutalyse® (Dinoprost Tromethamine Prostaglandin F <sub>2</sub> α)	Used in cattle as a luteolytic agent for estrous synching, unobserved estrous in lactating dairy cattle, pyometra and as an abortifacient in non - lactating dairy cattle. It can induce parturition in pigs and controls estrus time in mares and inducing estrus in “difficult to breed mares” (DTBM, however it is only approved for use in cattle	<u>Cattle:</u> ~ Estrus Synch: 1shot 25mg IM given twice, 11 days apart. ~ Silent estrous and Pyometra/Endometritis Tx: 25mg IM. ~ Abortifacient: 25-30mg IM at day 5-150 of gestation ~ Induce Parturition: 25-30mg IM  <u>Horses:</u> ~ DTBM & estrus control: 1mg/45kg IM. ~ Abortifacient: 5mg IM (< 12days), 1mg/45kg IM (> 4 months pregnant), 2.5mg q12, 4 times.  <u>Swine:</u> ~ Estrus synch: Day 15-55 of gestation, 15mg IM, then 10mg IM 12 hours	Pregnant animals not intended to abort. Animals with broncho-constrictive respiratory disease. Do not administer IV. Mares with acute or subacute disorders of the vascular system, GI tract or reproductive tract.	Meat and Milk: nil

		<p>later.</p> <p>~ Abortifacient: 5-10mg IM.</p> <p>~ Induce Parturition: 10-25mg IM 2-6 days before expected parturition</p>		
<p>Fertiline® (Gonadorelin acetate)</p>	<p>Treatment of ovarian follicular cysts in dairy cattle. Reduces time between calving to first ovulation and increase the number of ovulations within the first 3 months of calving. Used in cows with retained placentas to increase fertility.</p>	<p><u>Cattle:</u> 0.1mg IM or IV</p> <p><u>Sheep and Goats:</u> 0.1mg daily for 4-5 days o induce ovulation</p>	None specified	Meat and Milk: nil
<p>Receptal® (Buserelin acetate)</p>	<p>For infertility of ovarian origin and improvement of pregnancy rate in cows. For the synchronization of estrus in dairy cows and for reducing the calving to conception interval in these cows when used with a PGF 2<math>\alpha</math>. Synchronize ovulation more closely with mating in mares. Induces ovulation in gilts after estrus synchronization in order to facilitate a single fixed time artificial insemination program.</p>	<p><u>Cattle:</u> Oestrus Syching in dairy cows: Day 0 Receptal (2.5 ml). Day 7 Prostaglandin (at luteolytic dose). Day 9 Receptal (2.5ml)</p> <p><u>Horses:</u> Synchronize ovulation more closely with mating: 10 ml first day on which the follicle has reached its maximum size. Repeat if ovulation has not occurred within 24 hours.</p> <p><u>Pigs:</u> Estrus synching: 2.5ml/ pig</p>	None specified	Meat and Milk: nil
<p>Oxyvet® Inj (Oxytocin)</p>	<p>Stimulate uterine contractions: During parturition: partus induction in mares and uterine inertia in sows. Promote uterine involution (uterine atonia, after reposition of uterine prolapse, aid in the removal of retained placenta, for the reduction of retained placenta in cows). Aids in the treatment of endometritis (for removal of intrauterine fluid) in mares.</p>	<p><u>Cattle:</u> ~ Retained placenta: 2-3 ml IM q2h. ~ Metritis: 1ml IM, 3- 4 times per day. ~ Augment contractions: 1.5ml IM. ~ Obstetrics: 5ml ~ Milk let down: .5-1ml IV</p> <p><u>Horse:</u> ~ Initiate contractions: 0.125-.25ml IV every 20 minutes. ~ Prevent luteolysis:</p>	Animals with dystocia, that are hypersensitive to it, non- relaxed cervix	Meat and milk: nil

	Promotes milk letdown: (post-partum agalactia in heifers, maiden mares and as an adjunctive treatment of MMA in sows) and for the removal of residual milk (supportive therapy in case of mastitis).	<p>3ml IM at 7-14 days post-ovulation.  ~ Remove retained placenta: 1ml IV, IM every hour, 4 hours prior to foaling.  ~ Metritis: 1ml IM 3-4 times a day for 2-3 days.</p> <p><u>Pig:</u> ~ Agalactia Tx: 1.5-2mls IM  ~ Retained placenta: 1 - 1.5ml, q2-3h  ~ Augment contractions: 0.5ml IM every 30mins  ~ Milk let down: 0.25-1ml IV</p> <p>Sheep &amp; Goats:  Retained placenta Tx: 10-20 Units  Metritis Tx: 5-10 Un IM 3-4x/day for 3days</p>		
OxytokeI®  (Oxytocin)	Same as above	<p>By IM or SC:  <b>Obstetrics:</b> <u>Pigs:</u> 1-3ml.  <u>Cows and Mares:</u> 4-6ml.</p> <p><b>Agalactia:</b>  <u>Pigs:</u> 0.25-1ml</p> <p><u>Cows and Mares:</u> 1-2ml. If given IV its 1/3 to 1/2 of abovementioned dose.</p> <p><u>Ewes, goats:</u>  1ml/50kg IM</p>	Animals with dystocia, that are hypersensitive to it, non- relaxed cervix	Meat and Milk: nil
Progesterone 5%  (Progesterone)	Hormone for use in habitual abortion, threatened abortion, nymphomania, sterility, mammary underdevelopment and oestrous control in farm animals and mares	<p><u>Cows and Mares:</u>  50 - 100mg IM per animal daily</p> <p><u>Pigs:</u> 15 to 25mg IM per animal daily, as needed.</p> <p><u>Sheep and goats:</u> 10 to 15 mg per animal daily, as needed</p>	Liver or kidney dysfunction	Meat and Milk: nil

