Theriogenology Drugs							
DRUGS	TRADE NAME	ACTIVE INGREDIENT	INDICATIONS	DOSAGE/CONCENTRATION & ROUTES OF ADMIN.	TOXIC/LETHAL DOSE	WITHDRAWAL TIME	CONTRADICTIONS
Oxyto-Kel 10 I.U	Pitocin® Syntocinon®	Oxytocin	Hypothalamic hormone used for Induction or enhancement of uterine contractions at parturition (OB), Postpartum retained placenta (RP), acute postpartum metritis (M), milk let down (MLD)	DOGS: To augment or initiate uterine contractions during parturition: 0.5–3 Units SC or IM every 30–60 minutes For acute postpartum metritis: a) 0.5–1 unit/kg IM. May repeat in 1-2 hours CATS: To augment or initiate uterine contractions during parturition: 0.25-1 Units SC or IM every 30–60 minutes CATTLE:(IM, repeat NO sooner than 30 minutes if necessary For retained placenta in patients 40–60 Units oxytocin q2h (often used in conjunction with intravenous calcium therapy) as necessary. For acute post-partum metritis: a) 20 Units IM 3–4 times a day for 2–3 days For milk let-down in cows: 10–20 Units IV (Package Insert; Oxytocin Injection—Anthony Products) HORSES: To augment or initiate uterine contractions during parturition: 2.5–5 Units IV, every 15–20 minutes until foal is born For retained placenta in patients 20 Units IV or IM q1hr beginning 2-3 hours after foaling. For milk let-down in: 20 units IM 3-4 times a day for 2-3 days SWINE: For adjunctive treatment of agalactia syndrome (MMA) in sows: 30–40 Units per sow at 3–4 hours For retained placenta in patients with uterine atony: 20–30 Units oxytocin q2–3h as necessary (with broadspectrum antibiotics) To augment uterine contractions during parturition: 10 Units IM; repeat no sooner than 30 minutes if	Oral LD ₅₀ (rat): 20520 ug/kg Subcutaneous LD ₅₀ (rat): 20520 ug/kg Oral LD ₅₀ (mouse): 514 mg/kg Subcutaneous LD ₅₀ (mouse): 514 mg/kg	- IIME	Known hypersensitivity, dystocia due to abnormal presentation of fetus(es) unless correction is made When used prepartum, oxytocin should be used only when the cervix is relaxed naturally or by the prior administration of estrogens.

DRUGS	TRADE	ACTIVE	INDICATIONS	Dosage/Concentration & Routes	TOXIC/LETHAL		CONTRADICTIONS
	NAME	INGREDIENT		OF ADMIN.	Dose	ТІМЕ	
Progesterin Rep	Provera®	Medroxyprogesterone Acetate	Synthetic progestin used primarily to treat sexually dimorphic behavior problems such as roaming, inter-male aggressive behaviors, spraying, mounting, etc.; sometimes used to treat feline psychogenic dermatitis & alopecia	CATS & DOGS The low dose is 2 mg/kg every 3 months or 3 mg/kg every 4 months. The high dose is 5 to 10 mg/kg for dogs and 10 to 20 mg/kg for cats, with an interval of no less than one month between injections.	Oral LD ₅₀ - 10,000 mg/kg in the mouse. Intraperitoneal LD ₅₀ in the mouse was 6985 mg/kg		Do not use in pre- pubescent cats or dogs, diabetics, pregnancy, pseudopregnant bitches, females in diestrus or with prolonged heat, uterine hemorrhage or discharge
ECP 2mg/ml	ECP®	Estradiol Cypionate	The natural estrogen salt used primarily to induce estrus; has been used as an abortifacient (but rarely recommended today)	For pregnancy avoidance after mismating: (rarely used for this indication today) 0.02 mg/kg (ECP) IM within 72 hours of mating CATS For pregnancy avoidance after mismating: (rarely used for this indication today) 0.125 – 0.25 mg (ECP) IM within 40 hours of mating HORSES For induction of estrus during the non-breeding season: 10 mg estradiol cypionate will result in estrus 2 – 3 days after treatment For treatment of mares with estrogen-responsive incontinence: 4 – 10 mcg/kg estradiol cypionate IM daily for three days and then every other day. For induction of estrus in mares with "silent heat" during breeding season: 1 – 2 mg estradiol daily for 3 – 5 days	Mouse Subcutaneous LD ₅₀ > 1000 mg/kg	The FDA has stated that the use of ECP in food-producing animals is illegal.	Pregnancy (abortifacient, teratogen); the FDA has stated that the use of ECP in food animals is illegal

DRUGS	TRADE NAME	ACTIVE INGREDIENT	INDICATIONS	Dosage/Concentration & Routes of Admin.	Toxic/Lethal Dose	WITHDRAWAL TIME	CONTRADICTIONS
Lutalyse	Lutalyse®	Dinoprost Tromethamine Prostaglandin F2α Tromethamine	(THAM) salt of the naturally occurring prostaglandin F2alpha used as a luteolytic agent for estrous synchronization, pyometra treatment, & as an abortifacient	For estrus synchronization, inject 5 mL intramuscularly either once or twice at 10-to 12-day intervals. For treatment of unobserved estrus, inject a 5mL dose IM. If estrus has not been observed by 80 hours after injection, breed at 80 hours; if the cow returns to estrus, breed at the usual time relative to estrus. For postpartum treatment of pyometra, inject a dose of 5 mL IM at signs of pyometra	LD ₅₀ in the bitch has been reported to be > 5.13 mg/kg after SC injection	-	Pregnancy (when abortion or induced parturition not wanted); manufacturer lists several contraindications for horses
Fertiline solution injectable	Cystorelin® Fertagyl® Factrel®	Gonadorelin	Hypothalamic hormone used for reproductive management in cattle and to treat ovarian cysts & other reproductive disorders.	To aid in the descent of cryptorchid testes: 50 – 100 micrograms SC or IV; if no response give additional dose in 4 – 6 days To increase libido in male dogs: Anecdotally, 50 – 100 mcg IM weekly for 4 to 6 weeks For cystic ovarian disease in bitches: 3.3 mcg/kg IM once daily for 3 days CATS To stimulate ovulation after mating: 25 micrograms IM after mating For infertility, reduced libido, testis descent in male cats: 1mcg/kg every 2 – 3 days To detect ovarian remnants in queens after ovariohysterectomy: 25 mcg per cat. CATTLE To treat of ovarian cysts in cattle: 100 micrograms IM or IV	LD ₅₀ >3000 mg/kg (rat, oral)		None reported
Eazi-Breed CIDR:	Eazi-Breed TM CIDR®	Progesterone	Improve the effectiveness of reproduction programs by tightening estrus synchronization so groups of cows and heifers come into heat and can be bred in a narrow window. Groups of cows also can be synchronized to return to estrus after insemination for potential rebreeding in a desired time frame.	Each insert is impregnated with 1.38 grams of progesterone in elastic silicone molded over a nylon spine.	Acute Oral - Rat >5000mg/kg	-	-