**Theriogenology**

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| Drug | Active Ingredient | Dosage & Administration | Uses | Contraindications& withdrawal times |
| Lutalyse (dinoprost) | -Dinoprost tromethamine  -Prostaglandin F2 alpha | Cattle: 25mg IM once/twice a day at 10-12 day intervals  Horses: 1mg/45kg | Control and manipulation of estrus cycles in  mares (controlling time of estrus and assisting in inducing estrus),  cattle (estrus synchronization, silent estrus and as an abortifacient) | Do not use in pregnant animals unless abortion is the end goal  Do not use in animals with acute/subacute vascular, reproductive, respiratory or GI disorders |
| Fertiline | Gonadorelin acetate | 86-100 micrograms IM or IV | Acts as a synthetic hypothalamic luteinizing hormone-releasing hormone  Treatment of follicular cysts, decreasing number of days to first estrus | Food animals should not be slaughtered until 7 days after the last dose |

**Anti- inflammatory**

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| Drug | Active Ingredient | Dosage & administration | Uses | Contraindications &withdrawal times |
| Dexakel | Dexamethasone sodium phosphate | IV IM or SC  Cattle and horses: 5-10 ml/ 400kg  Sheep, goat and calves:1-2ml/5kg | Metabolic disorders, non-infectious inflammatory processes, allergic conditions, stress and shock conditions  Aids in acute infectious diseases  Induction of parturition in ruminants during the last stage of pregnancy | Wait 14 days before slaughter and 2 days before milking |
| Phenylbutakel (liquid and boluses) | Phenylbutazone | Horses: 1ml/50 kg IV  Cattle: 1ml/25kg initially then 1ml/50-70kg/day IC or IM | Control of inflammation and associated pain of the musculoskeletal system and soft tissues | 4 days withdrawal time for milk  Cattle & pigs for slaughter: 15 days  Horses: 7 days |
| Banamine | Flunixin meglumine | IV in cattle:1.1-2.2mg/kg  IV and IM in horses: 1.1mg/kg | Cattle: control of pyrexia due to bovine respiratory disease and endotoxemia  Horses: alleviation of pain due to musculoskeletal disorders, and visceral pain associated with colic | Beef and dairy cattle only; not for use in dairy cows and veal calves  4 days withdrawal period for meat, 36 hours for milk |

**Ectoparasitic an endoparasitic**

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| Drug | Active Ingredient | Dosage & administration | Uses | Contraindications & Withdrawal times |
| Doramec L.A. | Doramectin | 200 micrograms/kg SC or IM in cattle  0.2mg/kg SC in horses | Roundworms, lungworms, eyeworms, grubs, lice and mange in cattle  Strongyle infestation control in equine | - |
| Babex | Imidocarb diproprionate | Horses: 2.2-4.4mg/kg IM  Cattle: 0.85mg/kg SC | Antiprotozoal against Babesia and related parasites | Do not give IV  Do not give to animals exposed to cholinesterase inhibiting drugs, pesticides or chemicals |
| Vetrimec | Ivermectin | Cattle: 1ml per 100 pounds  Swine: 1ml per 75 pounds  SC ONLY | Cattle: treatment of gastrointestinal roundworms, lungworms, grubs, sucking lice and mange mites  Swine: treatment of gastrointestinal roundworms, lungworms, sucking lice and mange mites | Do not use in foals less than 4 months old (recommended)  Do not give IM or IV |

**Vitamins and supplements**

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| Drug | Active Ingredient | Dosage& Administration | Uses | Contraindications & withdrawal times |
| Vit-plex | Cobalt (Cobalt Gluconate)  Copper (Copper Gluconate)  Ferrous Ammonium Citrate  Liver Extract Soluble  Vitamin B1 (Thiamine Hydrochloride)  Vitamin B12  Vitamin B2  Vitamin B3 (Nicotinamide)  Vitamin B5 (Dexpanthenol)  Vitamin B6 (Pyridoxine Hydrochloride) | Horse, cattle and swine: 4-8ml per day  Foals, sheep and calves: 2-3 ml per day | Prevention and correction of vitamin and mineral deficiencies | - |
| Vitamin B complex | Thiamine hydrochloride (B1)  Niacinamide  Pyridoxine Hydrochloride (B6)  d-Panthenol  Riboflavin(B2)  Cyanocobalamin(B12) | IM suggested, can be given SC or IV  Cattle: 1-2ml/100lbs  Calves, swine and sheep:5ml/100 lbs | Supplemental source of B vitamins in cattle, swine and sheep | - |
| Iron dextran | ferric hydroxide and dextran | Swine: 100mg at 2-4 days IM | Treatment and prophylaxis of iron deficiency anemias, primarily in neonatal food producing animals | Do not give IV or SC |
| Multivit | Vitamin A  Vitamin D3  Vitamin E  Vitamin B2, riboflavine sodium phosphate  Vitamin B6  Nicotinamide  Pantothenol  Vitamin B12  Chlorocresol | Cow, horse, pig, sheep, goat: 0.5ml/10kg  Calf, foal, piglet, lamb: 1ml/10kg  Pregnant/lactating sow: 10ml/100kg | Prevention and treatment of hypovitaminosis | - |
| Cal-Plus | Calcium borogluconate, magnesium chloride hexahydrate, phosphorous (sodium hypophosphite) and dextrose monohydrate | Adult cattle & horses: 250-500 ml  Adult sheep & swine: 50-125 ml  Strictly IV in horses  IM,IP or SC in sheep, cattle and swine | Treatment of milk fever and other calcium, magnesium, phosphorous and glucose deficiencies of cattle, sheep, horses and swine | - |
| Dextrose | Dextrose monohydrate | Adult cattle and horses: 250-500 ml  Adult sheep and swine: 50-150ml  IV in horses  IV/IP in cattle, sheep and swine | Treatment of glucose deficiencies in cattle, swine, horses and sheep  Treatment of ketosis in cattle and pregnancy disease in sheep | Can cause severe phlebitis if administered ant full strength |
| Aminolean | Dextrose  calcium chloride dihydrate  potassium chloride  magnesium sulfate trihydrate  sodium acetate trihydrate  thiamine HCl  nicotinamide  pyridoxine HCl  vitamin B12  riboflavin 5-phosphate sodium  d-panthenol  casein hydrolysate | IV or IP in cattle and swine, IV ONLY in horses  Mature cattle, horses and swine: 2ml/kg  Calves, foals and piglets: 5ml/kg | Supportive treatment of debilitated animals  Supportive treatment of severe diarrhea in cattle, swine and horses | Nausea and distress may occur if administered too rapidly |
| PCE-glycol | Propylene glycol  Choline chloride  Potassium iodide  Ethylenediamine dihydroiodide  Cobalt sulfate | Orally (in drinking water/grain ration or as a drench) 250ml twice a day in cattle  50 ml twice a day in sheep | Treatment and prevention of acetonemia in cattle and sheep | - |

**Antigas**

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| Drug | Active Ingredient | Dosage & administration | Uses | Contraindications & withdrawal times |
| Anti-gaz | Dioctyl sodium sulfosuccinate | Adult cattle: 300ml via stomach tube/as a drench  Young cattle, sheep and goats: 150ml via stomach tube/ as a drench | Treatment of tympanism, frothy bloat and constipation in cattle, sheep and goats | - |

**Anaesthetic, sedative, euthanizing**

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| Drug | Active Ingredient | Dosage & administration | Uses | Contraindications & withdrawal times |
| Xylazine | - | Horses: 1.1mg/kg IV, 2.2mg/kg IM  Cattle: 7.5-50 micrograms IV, 15-100 micrograms IM | To produce a state of sedation with a shorter period of analgesia, and as a preanesthetic before local and general anesthesia | Do not use in animals receiving epinephrine or having active ventricular arrythmias  Do not use in the last trimester of cattle pregnancy  Do not give to ruminants that are debilitated, dehydrated or have a urinary obstruction |
| Ketamine | - | Horses: 2.2mg/kg IV  Cattle: 0.3-0.5mg/kg | Dissociative general anesthetic | Prior hypersensitivity reactions  3 day meat and milk withdrawal period |
| Lidocaine | - | Horses & cattle: Epidural-5-15ml, Nerve block- 5-20 ml | Local anesthetic  Infiltration, nerve block and epidural anesthesia  IV as an antiarrhythmic drug, analgesic and prokinetic | Hypersensitivity reactions may occur in some patients |
| Combistress | Acepromazine maleate | 2-4mg/100 pounds | Sedative/Tranquilizer  “an aid in controlling fractious animals”  Preanesthetic agent in horses | Potentiates the toxicity of organophosphates and procaine hydrochloride |
| Thiopental | Thiopental sodium | Cattle: 8.14-15.4 mg/kg IV  Horses: 6-12 mg/kg | Ultra-short acting thiobarbiturate | Severe cardiovascular disease or preexisting ventricular arrythmias |
| Atropine sulfate | - | Cattle: 0.1-0.2mg/kg  Horses: 0.01-0.02mg/kg IV or 0.03-0.06mg/kg SC for treatment of bradyarrythmias  5-7mg IV as a bronchodilator  0.2mg/kg (1/4 IV and the rest SC) for organophosphate poisoning | Antocholinergic; antidote to organophosphate, carbamate, muscarinic mushroom and blue-green algae intoxication | Do not use in patients with glaucoma cardiac and GI disease, nor myasthenia gravis |

**Miscellaneous**

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| Drug | Active Ingredient | Dosage& administration | Uses | Contraindications & withdrawal times |
| NICH UAA GEL | Activated hardwood charcoal  Kaolin | 1-3 ml per kg for large animals, use a stomach tube if necessary  Horses- 300 ml (one tube) | Treating poisoning by organic chemicals in large and small animals | Ineffective with heavy metal poisoning |

**Antibiotics**

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| Drug | Active Ingredient | Dosage & administration | Uses | Contraindications & withdrawal times |
| Amoxycillin 150 LA | Amoxicillin | Cattle, sheep and pigs:15mg/kg | Bactericidal aminopenicillin | Do not use in patients displaying hypersensitivity to penicillins  Meat- 14 days withdrawal period  Milk- 60 hours withdrawal period |
| Oxytet LA-10% | Oxytetracycline | 1ml/10kg | Broad spectrum (gram + and – bacteria) antibiotic | Meat- 28 days withdrawal period  Milk- 7 days withdrawal period |
| Tylosin | Tylosin | IM ONLY  Cattle: 8mg/pound  Swine: 4mg/pound | Treatment of bovine respiratory complex (shipping fever, pneumonia), foot-rot, calf diphtheria and metritis  In swine-treatment of swine arthritis, swine pneumonia, swine erysipelas and acute swine dysentery | Hypersensitivity to macrolide antibiotics  Most clinicians believe it is contraindicated in horses |
| Trisulkel | Sulfamethoxazole | 75 mg/kg PO in horses | Respiratory and dermatological infections in horses | Hypersensitivity, severe renal or hepatic impairments  Withdrawal period for slaughter: 3 days  Milk: 2 days |
| Cefokel | Ceftiofur HCl | Swine: 3-5mg/kg IM  Cattle: 1.1-2.2 mg/kg IM or SC  Infuse one syringe into each affected quarter (of the udder) at the time of dry-off | 3rd generation cephalosporin, approved as intramammary tubes for dairy cattle  Treatment of swine bacterial respiratory diseases  Subclinical mastitis, respiratory diseases and foot rot in dairy cattle | Reduce dosage in renal insufficiency |
| Gentamycin 100 | Gentamycin | Swine: 5mg PO or IM in neonates for colibacillosis  1.1-2.2mg/kg in other swine orally | Predominantly used against gram negative bacteria as well as Stapylococci | Hypersensitivity, monitor patients with renal insufficiency  Warm and administer slowly if given to horses IV |
| Nitrofurazone | - | Topical administration | Treatment and prevention of superficial infections | Not for use in food animals |
| Dufafloxacin | Enrofloxacin | 10mg/kg daily orally in drinking water | Prevention of GI and respiratory infections in swine and poultry | Animals with impaired renal and liver function |
| Kelacyl | Marbofloxacin | 2mg/kg IM or SC | Treatment of respiratory infections and clinical mastitis in cattle, treatment of respiratory and Metritis-mastitis-agalactia (MMA) in swine | Hypersensitivity  Cattle withdrawal period: meat-6 days; milk-36 hours  Pigs- meat:4 days |
| Scourban | Sulphaguanidine  sulphadimidine  sulphadiazine  kaolin  hyoscine hydrobromide  electrolytes  glycine  pectin | 2 ml/kg orally first, then 1 ml/kg twice daily | Treatment of gastrointestinal infections, restoration of electrolytes and elimination of toxins | 14 days withdrawal period for meat, 35 days for milk |