|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Drugs | Classification | Trade-name | Route of Administration | Indications | Contra-Indications | Withdrawal Time | Major drugInteraction | Dosage |
| Propofol | Gen anaesthetic(sedative-hypnotic) | Propavan | IV | -induction and maintenance of gen anaesthesia-sedation of surgical and diagnostic procedures | -drug hypersensitivity | None indicated | -Propofol w/ preanaesthetics eg. Acepromazine, opiates may lead to increased vasodilation + -ve cardiac inotropy-use with Opiate premedicant-increased bradycardia | Dogs and cats 4-8 mg/kg IV |
|  Thiopental sodium | Gen anaesthetic(barbiturate) | Thiopental(thiopentone 1g) Injection B.P. | IV | -induction of general anaesthesia | -absence of suitable veins for IV admin-drug hypersensitivity-status asthmaticus-severe cardiovascular disease/preexisting ventricular arrhythmias, shock-increased intracranial pressure, myasthenia gravis | -increased intracranial pressure, myasthenia gravis, asthma, conditions where hypnotic effects may be prolonged | Concurrent use of barbiturates and benzodiazepines may result in additive respiratory depression. | Dogs 13-26 mg/kg bwCats 17.5-26 mg/kg bwEquines-w/ pre-anaesthetic , 6-13mg/kg bww/o preanaesthetic 9-15.5mg/kg (note larger dose for smaller healthier animals, smallest dose for larger, debilitated animals)Bovines 136 kg and over: 8.2-15.4 mg/kg |
| Ketamine | Gen Anaesthetic (fast-acting dissociative) | Ketamin 10% (100mg) | IV, parenteral administration in dogs, cats, horses, cattle, goats and swine  | -for induction of anaesthesia in combination w/ alpha2-agonists, bendodiazepines, neuroteptics | -drug hypersensitivity | Meat, milk and offal=0 hrs | Chloramphenicol-may prolong anesthetic effectsCNS depressants: May prolong anaesthetic recovery timeNeuromuscular blockers: May cause enhanced/prolonged resp depression | Dogs: 0.1-1mg/kg |
| Xylazine | Sedative, analgesic, muscle relaxant (α2-agonist) | Xylazin 2% | IV, parenteral administration in dogs, cats, horses, cattle, goats and swine  | -dose-dependent sedation and analgesia-premedication for surgery | Shock, cardiac incompetence, late pregnancy-may cause premature parturition, severe resp depression, animals receiving epinephrine/ having ventricular arrythmias | Meat, milk and offal=0 hrs | -Used with Acepromazine-generally safe, potential for hypnotic effect-Chloramphenicol-prolonged sedation and GI stasis-CNS depressant agent may lead to additive CNS depression  | Dogs: 1.1mg/kg IVCats: 1.1mg/kg IVHorses 1.1 mg/kg IVSheep and goats: 0.01mg/kg IV |
| Xylazine | Sedative, analgesic, muscle relaxant (α2-agonist) | Xylaze 100 | IM/IV | -analgesic, sedative and muscle relaxant for use in horses and deer | Shock, cardiac incompetence, late pregnancy, severe resp depression | 3 days | Used with Acepromazine-generally safe, potential for hypnotic effect-Chloramphenicol-prolonged sedation and GI stasis-CNS depressant agent may lead to additive CNS depression | Horse- 0.65-1.1ml/ 100kg Slow IVDeer-0.1-1.6ml/40kg IM or IV depending on species and route. Anterior half of neck in food animals |
| Lidocaine | Local anaesthetic  | Lidocaina (over) 2% | IM, epidural | -Infiltration anaesthesia or nervous blockade-Epidural anaesthesia (large animals)- lower part 3-20ml according to size, upper part 20-120ml according to sizeSmall anmals- 1ml every 2.5 k.l.w. | -drug hypersensitivity-serious hepatic/ cardiac damage-Drug hypersensitivity | 36hrs | Antiarrythmias- may cause additive or antagonistic cardiac effects and enhanced toxicity |  |
| Bupivacaine | Local Anaesthetic (Amino amide) | Bupivacaine 0.5% | Epidural, intraarticular | -nerve block, caudal and cranial epidural anaesthesia | Iinflamed/infected tissue, damaged skin | None Indicated |  |  |
| N-Butylscopalammonium | Quaternary Ammonium antispasmodic and anticholinergic | Buscopan compositum 100ml |  | Control of abdominal pain associated w/ spasmodic colic, flatulent colic, and simple impactions in horses, aid in performing rectal exams | -horses with impaction colic associated with ileus/ those w/ glaucoma-DO NOT use in horses intended for food | None indicated | Atropine-additive effectMetaclopramide- counteract action on GI smooth muscle | 0.3mg/kg horses |
| Morphine sulphate  | Opiate agonist | Morphine sulphate injection 15mg | IM, IV, SC | Treatment of acute pain in dogs, cats, horses, bovine, sheep and goats-Preanaesthetic in dogs-antitussive, antidiarrheal + adjunctive therapy for some cardiac abnormalities in dogs | -drug hypersensitivity-Diarrhoea caused by toxic ingestion | Not indicated | CNS depressants-may cause increased CNS and resp depression-w/ muscle relaxant may lead to increased muscular blockade | Dose dependent on desired effect |
| Natrium Pentobarbital | Barbiturate | Natrium Pentobarbital 20% (Nembutal) | IV, IP, IM | -Induction of anaesthesia followed by inhalation anaesthesia and general anaesthesia in dogs-Euthanasia | -drug hypersensitivity-hypovolaemic, anemic, cardiac and resp disease, nephritis, severe resp disease, severe liver disease | Not indicated | -Acetaminophen increases risk of hepatotoxicity | Induction of anaesthesia- 30mg/kg b.w., IV, or IPProlong narcosis- 5mg/kg bw IV every hrWhen premedicated with sedative, reduce dose 50% or moreEuthanasia-Dogs: 6ml/10kg fast IV or intracardiacCats: 3ml intraperitoneal/ intracardiac |
| Diazepam | Anti-anxiety anticonvulsant (Benzodiazepine) | Valium | IV | Anxiolytic, muscle relaxant, hypnotic, appetite stimulants, anticonvulsant activities-Preanaesthetia protocol for neuroleptoanalgesia-treatment of status epilepticus and cluster seizures in dogs | -drug hypersensitivity-cats exposed to chlorpyrifos, may potentiate organophosphate toxicityAnimals that have ingested human sleep aidsPrecaution: Administer slowly, binds to plastic | None indicated | Antacids may decrease oral drug absorption-Antifungals, azole-may increase diazepam levels-cimetidine may decrease metabolism | Vary with species and indications |

.