ANESTHETICS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Drug Name** | **TradeName®** | **Indications for use** | **Contraindications** | **Withdrawal Time** | **Major drug interactions** |
| Lidocaine | Xylocaine | Used in Cows, sheep, goats and horses as a local anesthetic, nerve block and epidural anesthetic. | Used with caution is patients suffering from Hepatic or respiratory diseases as well as congestive heart failure or hypoxia. | 24hrs in food animals. |  When antiarrhythmic drugs such as propanolol or phenytoin are administered with lidocaine it may cause additive or antagonistic cardiac effects and toxicity may be enhanced |
| Bupivacaine | Marcaine | As a local anesthetic and preemptive analgesic in large animals. | Not to be administered via IV as it is extremely cardiotoxic. | None specified. | Buprenorphine potentiates the effects of bupivacaine when used concomitantly  |
| Sodium Thiopental | Pentothal | Ultra-short acting General anesthetic used for very short procedures (15 ins) and also as an induction drug for large animals | Used with caution in animals with cardiac or respiratory disease as it leads to depression of these systems. | 24 hrs for both meat and milk | Safely compatible with other anesthetics.  |
| Sodium Pentobarbital | Nembutal | Used as a sedative and anesthetic agent in horses, cattle, swine, sheep, and goats. | Contraindicated in animals with known hypersensitivity, severe liver disease, nephritis, or severe respiratory depression.Not to be used in animals for human consumption. | 4 days for both meat and milk | Incompatible with butorphanol.Increased risk for hepatotoxicity when large doses of barbiturates are given with acetaminophen.  |
| Ketamine | Vetalar, Ketaset. | Uses as an anesthetic and analgesic in brief surgical procedures | Ketamine on its own does not cause muscle relaxation and so it is contraindicated for use alone in major surgeries.-not to be used in animals meant for human consumption | 3 days for meat.48hrs for milk | Successfully combined with Xylazine, acepromazine, diazepam to enhance anesthetic and muscle relaxing qualities. |
| Xylazine | Xylaze, Rompun | Used as a short term sedative, analgesic and pre-anesthetic. | -Given at low doses to Ruminants as they are very sensitive to xylazine.-Not to be used in Animals in late gestation as it impairs blood flow to the uterus and may possibly induce premature partuition.-Used cautiously in animals with cardiac disease as it leads to cardiac depression. | No indicated meat and milk withdrawal times, therefore should be used cautiously in animals meant for consumption. | Combined with Ketamine |
| Propofol | PropoFlo | Used as an induction agent | Used with caution in animals with hypoproteinemia due to its affinity to bind proteins. | 2 days for meat. 24 hours for milk |  When propofol is used after medetomidine, hypoxemia may occur; dosage adjustments may be required alongwith adequate monitoringMidazolam mayay have synergistic effects with propofol. |
| N-butylscopol-ammonium bromide | Buscopan | Antispasmodic Indicated for use in Horses for the relief of abdominal pain (colic) associated with spasmodic colic, flatulent colic, and simple impactions in horses.  | Contraindicated in horses with impaction colic associated with ileus or those with glaucoma.Not to be used in pregnant/lactating mares or horses intended for food purposes. | 12 days for meat. | Atropine or other anticholinergic agents: May cause additive effectsif used with N-butylscopolammoniumMetroclopramide and N-butylscopolammonium maycounteract one another’s actions on GI smooth muscle |
| Morphine Sulphate | Oramorph, Astramorph | Opiod analgesic used to treat acute pain in animals including cattle horses, sheep, goats. | Should be used with caution in patients with hypothyroidism,severe renal insufficiency, adrenocortical insufficiency and in geriatric or severely debilitated patients.Morphine is contraindicated in cases where the patient is hypersensitiveto narcotic analgesics, or with diarrhea caused by a toxic ingestion until thetoxin is eliminated from the GI tract. | None indicated. | Increases CNS and respiratory depression when used in conjunction with CNS depressants.Morphine may enhance neuromuscularBlockade when used with muscle relaxants. |