**WEIGHT OF DAIRY COW: 400kg**

**To calculate volume of drug (dose x weight)/concentration of drug**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal |
| Ketamine (IM) | 0.25mg/kg | 10% | 1ml | 3 days |
| Xylazine (IM) | 0.05mg/kg | 2% | 1ml | 14 days  |
| Butorphanol (IM) | 0.02mg/kg | 2% | 0.4ml | 4 days |

**Ketamine Stun**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal |
| Flunixin (Banamine) (Slow IV injection) | 1.1mg/kg | 5% | 8.8ml | 4 days  |

**Analgesia**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Drug | Use | Dose | Concentration | Volume | Withdrawal  |
| Atropine | Anticholinergic to treat bradycardia | 0.04mg/kg | 0.54mg/ml | 29.6ml | 28 days -meat 6days milkUK |
| Tolazoline | To reverse xylazine  | 4x xylazine dosage (0.2mg/kg) | 10% | 0.8ml | 10 days  |
| Epinephrine | To treat anaphylaxis | 0.02mg/kg | 1mg/ml | 8ml | 0 days  |

**Reversal Drugs**

**Prophylaxis**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal  |
| Long acting Penicillin Streptomycin (IM)  | 20,000 IU/kg | 200,000 IU/ml | 40mls | 30 days  |
| Tetanus antitoxin (subcut) | 10,000 to 50,0001 IU |  |  | 21days(before slaughter) |

1. **https://www.drugs.com/vet/tetanus-antitoxin.html**

**Local Anesthetic**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | ½ Toxic Dose | Concentration | Volume | Withdrawal  |
| Lidocaine ( ½ toxic dose) | 5ml/kg | 2% | 100ml | 1 day |

# Drugs

1. **Penicillin streptomycin**: is a combination of antimicrobials for injections containing procine penicillin and dihydrostreptomycin sulphate and it is used to treat systemic infections in cattle.
2. **Flunixin**: is a potent, non-narcotic, non-steroidal analgesic agent with anti-inflammatory and anti-pyretic activity