

Weight of bull = 221kg.

| Drug | Concentration | Dose rate | Calculations | Indications for use | Contraindications | Withdrawal Times |
|---------------------|---------------|--|---|---------------------|---|------------------|
| Xylazine 2% | 20mg/ml | 0.025mg/kg But used 0.05mg/kg (for this lab). | $V = \text{dose} \times \text{wt} / [\text{conc}]$ $= 0.05 \times 221 / 20$ $= 0.56$ Note: was given twice in this lab. | Sedative | <p>Do not use in animals with oesophageal obstruction, and torsion of the stomach, as the muscle relaxant properties of the drug appear to accentuate the effects of the obstruction and because of possible vomiting.</p> <p>Do not use in animals with renal or hepatic failure, respiratory dysfunction, cardiac abnormalities, hypotension and/or shock. Do not use in diabetic animals.</p> <p>Do not use in animals suffering of an urethral obstruction or a rupture of the bladder</p> <p>Do not use in calves <2wks</p> | Meat 48hours |
| Ketamine 10% | 100mg/ml | 20mg/ml | $20 \times 221 / 100$ $= 2.2 \text{ml}$ | Sedative | Its use is contraindicated in | Meat-3days |

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| | | | Note was given twice in thi slab. | | chronic renal disease .It may have a role in"resetting"of the central nervous system in maladaptive pain states. | |
| Lidocaine 2% | 20mg/ml | *Toxic dose = 10mg/kg* | 5 mls was used at each site. Toxic dose calc. = 10 x 221/20 = 110.5ml Note: was given 3times in this lab | Local anesthetic | Do not administer intravenously. Convulsions and shock may occur in sensitive animals if large doses of the drug are given intravenously (inadvertently) or intrathecally. This may be treated by injecting a short acting barbiturate intravenously to control central nervous system stimulation and immediately administering artificial respiration or oxygen. | Meat -1day |
| Flunixin Meglumine (Banamine) | 50mg/ml | 1.1mg/kg | V= dose x wt/[] = 1.1 x 221/50 =4.8ml | Analgesic (pre-emptive) and post-op for 3 days | Do not administer intra-arterially. Inadvertent intra-arterial injection may cause adverse reactions. Do not use in cattle showing hypersensitivity to flunixin meglumine. The | Meat=4days |

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| | | | | | drug is contraindicated in animals with hepatic disease, renal and cardiovascular impairment, gastro-intestinal ulceration and/or platelet disorders. It is also contraindicated in dehydrated animals. | |
| Penstrep | 200,000 IU/ml | 20,000 IU/kg | $V = \text{dose} \times \text{wt} / [\]$ $= 20,000 \times 221 / 200,000$ $= 22.1 \text{ml}$ | Antibiotics | Contraindicated in known cases of hypersensitivity to penicillins. | Meat=30days |
| EMERGENCY DRUGS: | | | | | | |
| Tolazoline | 100mg/ml | 4mg/kg | $V = \text{dose} \times \text{wt} / \text{conc} [\]$ $= 4 \times 221 / 100$ $= 8.84 \text{ml}$ | Xylazine reversal | | None for food animals |
| Atropine | 0.54mg/ml | 0.04mg/kg | $V = \text{dose} \times \text{wt} / [\text{conc} \]$ $= 0.04 \times 221 / 0.54$ $= 8.84 \text{ml}$ | Use for severe bradycardia | Do not use in animals with glaucoma. | Meat =14days |
| Epinephrine | 1mg/ml | 0.02mg/kg | $V = \text{dose} \times \text{wt} / [\text{conc} \]$ $= 0.02 \times 221 / 1$ $= 4.42 \text{ml}$ | Anaphylactic reactions | | No WDT |
| Fluid loss | 10mg/kg | | $1 \text{kg} = 10 \text{ml}$ $221 \text{kg} = 221 \times 10$ $= 2210 \text{ml blood}$ | | | |