

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

			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

					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	$V = \text{dose} \times \text{wt} / [\text{conc}]$ $= 0.02 \times 150 / 1$ $= 3 \text{mls}$	Anaphylactic reactions		No WDT
Fluid loss	10mg/kg		$1 \text{kg} = 10 \text{ml}$ $221 \text{kg} = 221 \times 10$ $= 2210 \text{ml blood}$			