

## DRUGS USED OR KEPT ON STANDBY FOR POSSIBLE USE DURING CALF CASTRATION LAB

Drug Used	Concentration	Dosage	Reason for utilizing drug	Withdrawal Period of Drug	Comments
Xylazine	20mg/ml or 2%	0.05mg/kg	To achieve standing sedation	14 days from meat	Drug is an alpha-2 agonist which causes respiratory depression so care must be taken when administering.
Flunixin Meglumine	50mg/ml or 5%	1.1mg/kg	Utilized for its analgesic properties	4 days from meat	
Lidocaine	20mg/ml or 2%	5mg/ml	To achieve local anaesthesia at the site of the procedure.	24hrs from meat.	The decreased volume of 16ml was split. 4ml was injected intratesticularly, 2mls into the spermatic cord and 2mls around the spermatic cord for each side.
Penn strep - Procaine benzylpenicillin + Dihydrostreptomycin sulphate.	200 000 IU/ml	20 000 IU/kg	Antibiotic drug therapy	30 days from meat.	Used as a prophylactic to prevent infection after the procedure.
Tolazoline	100mg/ml	0.1mg/ml	Reversal agent for alpha-2 agonists		In the case a large dose of Alpha-2-Agonist must be used, tolazoline can be used to antagonise the agonist resulting in alleviated respiratory depression.

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Atropine	150mg/ml	6mg/kg	Kept on standby if the heart needs assistance in returning to a normal manner of beating.	-	-
Epinephrine	10mg/ml	0.02mg/kg	Kept on standby in the occurrence of an anaphylactic reaction.	-	-

Consider the following sample calculation for finding volume of drug to be administered to a given animal.

$$\text{Volume Needed} = \frac{(\text{Weight of the animal} * \text{Dose Needed})}{\text{Concentration of Drug}}$$