Pre-operative Castration

Weight of male calf = 130kg

Volume of drug to be administered = (weight of animal × dose of drug) ÷ concentration of drug

1) PenStrep (intramuscular) = (130kg x 20,000 IU/kg) ÷ 200,000 IU/ml
   = 13mls

2) Xylazine (intramuscular sedative) = (130kg x 0.025 mg/kg) ÷ 20mg/ml
   = 0.1625mls

3) Flunixin meglumine (intravascular for pain and inflammation) = (130kg x 1.1 mg/kg) ÷ 50 mg/ml
   = 2.86mls

4) Lidocaine (intratesticular/in the spermatic cord as a local anaesthetic) = (130kg x 0.8mg/kg) ÷ 20 mg/ml
   = 5mls

5) Toxic dose of lidocaine = (130kg x 5 mg/kg) ÷ 20 mg/ml
   = 32.5mls

Standby:

6) Tolazoline (intravascular to reverse the effects of xylazine) = (130kg x 0.05 mg/kg) ÷ 100 mg/ml
   = 0.065mls

7) Epinephrine (for any adverse drug reactions) = (130kg x 0.02 mg/kg) ÷ 1 mg/ml
   = 2.6mls