**DRUGS UTILIZED WITH EACH PROCEDURE:**

WEIGHT OF ANIMAL: 42.5kg

VOLUME (ML) = $\frac{WEIGHT OF ANIMAL \left(KG\right)x DOSAGE OF DRUG (\frac{MG}{KG})}{CONCENTRATION OF DRUG (\frac{MG}{ML})}$

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| --- | --- | --- | --- | --- | --- |
| **Drug** | **Concentration** | **Dose Rate and Route** | **Calculations & Amt Given** | **Withdrawal time** | **Indications** |
| Banamine (FlunixinMeglumine) | 50mg/ml | 1.1mg/kg | $$\frac{42.5x1.1}{50}=0.935ml $$Amount given: 0.9ml | Milk: 72 hoursMeat: 4 days | NSAID - analgesia |
| Xylazine 2% | 20mg/ml | 0.025mg/kg | $$\frac{42.5x0.025}{20}=0.053ml$$Amount given: 0.05ml | Milk - 14 daysMeat – 48 hours | Sedative |
|  |  |  |  |  |  |
| **Caudal Epidural Nerve Block** |
| Lidocaine 2% | 20mg/ml | 0.2mg/kg | $$\frac{42.5x0.2}{20}=0.425ml$$Amount given: 1ml + 2ml saline = 3mls | Milk: 24 hoursMeat: 1 day | Local anaesthetic |
|  |  |  |  |  |  |
| **Intravenous Regional Anaesthesia (IVRA)** |
| Lidocaine 2% | 20mg/ml | 2.5mls | Amount given: 2.5ml diluted to 5ml with saline | Milk: 24 hoursMeat: 1 day | Local anaesthetic |
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| **Proximal Paravertebral Nerve Block** |
| Lidocaine 2% | 20mg/ml | 5mg/kg(1/2 TD) | $$\frac{42.5x5}{20}=10.625ml$$Amount given: Total injections of 3 sites (Cranial & caudal L1, caudal L2) each site given total Lidocaine of 2.5ml diluted up to 5ml with salineTotal amount given for block: 7.5mls | Milk: 24 hoursMeat: 1 day | Local anaesthetic |
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NB: The toxic dose for Lidocaine 2% is 10mg/kg

Calculation for toxic dose of Lidocaine = $\frac{42.5 x 10}{20}=21.25ml$

Therefore, the total amount of Lidocaine that can be injected needs to be less than 21.25ml. We gave 11mls total for this lab.