

DRUG LIST AND DRUG VOLUME CALCULATIONS

assuming that the average weight of a 6 month old Holstein calf is 191kgs [upper end of the scale]

AND

using the lower dose to decrease chances of drug toxicity from occurring while still allowing for greater volumes of drug to be administered

SEDATIVES

- Xylazine is typically used as a form of chemical restraint. When doing standing procedures in cattle, it is given together with butorphanol and ketamine (Dose: Butorphanol @ 0.01-0.025 mg/kg; Ketamine @ 0.04-0.1mg/kg and Xylazine @ 0.02-0.05 mg/kg IM). This drug combination also provides some analgesia.
- When opted to give Xylazine by itself, the dose is 0.02-0.2 mg/kg IM.



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{0.02 \times 191}{20}$$

$$= 0.2 \text{ mL}$$

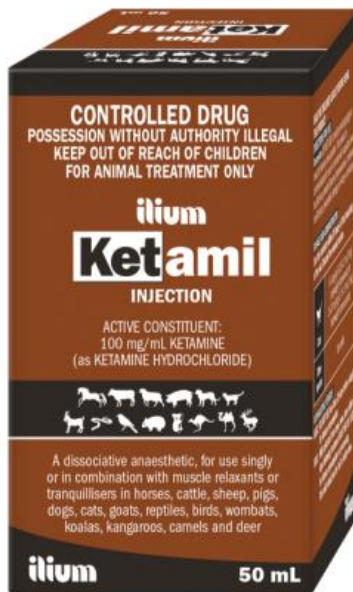
*NB: 2% xylazine is used for sedation without recumbency.



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{0.01 \times 191}{10}$$

$$= 0.2 \text{ mL}$$



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{0.04 \times 191}{100}$$

$$= 0.08 \text{ mL}$$

ANAESTHETICS

- Lidocaine is typically used for local anaesthesia of the corneal nerve. Generally, 5mL's of 2% Lidocaine are given.



ANALGESICS

- Only FDA approved NSAID analgesic for food animals is Flunixin meglumine (Dose: 1.1-2.2 mg/kg when used as an analgesic), though this may not provide adequate analgesic effects.
- Other noteworthy analgesics that have been used with success are Meloxicam (Dose: 1.0mg/kg PO) and Ketoprofen (Dose 3mg/kg IM).



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{1.1 \times 191}{50}$$

$$= 4.2 \text{ mL}$$



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{1.0 \times 191}{15}$$
$$= 12.7 \text{ mL}$$



$$\text{Volume (mL)} = \frac{\text{Dose (mg/Kg)} \times \text{Weight (Kg)}}{\text{Concentration (mg/mL)}}$$

$$= \frac{3 \times 191}{100}$$

$$= 5.73 \text{ mL}$$

ANTIBIOTICS/ANTI-MYIASIS DRUGS

- Post-operative topical antibiotics and anti-myiasis drugs are applied to prevent complications due to infection and/or fly strike.

Eg Nitrofurazone /Furazolidone topical powder and topical Ivermectin

