

	Drug	Concentration	Dose	Calculation* (using a 60kg sheep)	Withdrawal period	Complications, Contraindications/ Comments
Premedication	Penstrep (antibiotic)	200,000 IU/ml	40,000 IU/kg	$V = (60\text{kg} \times 20,000 \text{ IU/kg}) \div 200,000 \text{ IU/ml} = 6 \text{ mls}$	30 Days	
	Tetanus antitoxin	15000 IU/ml	5000 IU /kg	$V = (60\text{kg} \times 5,000 \text{ IU/kg}) \div 15,000 \text{ IU/ml} = 20 \text{ mls}$	21 Days	
	Bupivacaine/Ketamine (epidural)	(B) 5mg/ml (K) 100mg/ml	(B) 0.25mg/kg (K) 1.25mg/kg	(B) $V = (60\text{kg} \times 0.25\text{mg/kg}) \div 5\text{mg/kg} = 3\text{mls}$ (K) $V = (60\text{kg} \times 1.25\text{mg/kg}) \div 100\text{mg/kg} = 0.75\text{mls}$	(B) None (K) 3 days for meat and 24 hrs milk	
Induction	Ketamine	100mg/ml	5mg/kg	$V = (60\text{kg} \times 5\text{mg/kg}) \div 100\text{mg/ml} = 3\text{mls}$	3 days for meat and 24 hrs milk	
	Lidocaine	20mg/ml	1.0 mg/kg	$V = (60\text{kg} \times 1\text{mg/kg}) \div 20\text{mg/ml} = 3\text{mls}$	1 Day for meat and 24 Hours milk	
Maintenance	Lidocaine CRI	20mg/ml	1.0 mg/kg/hr	$M = \frac{DV}{IR} \quad \& \quad V = \frac{M}{C}$ $V = \frac{1 \times 1000}{5}$ $= 200\text{mg} \quad .200/20 = 10\text{mls}$	1 Day for meat and 24 hours for milk	

	Ketamine CRI	100mg/ml	5mg/kg/hr	$V = \frac{5 \times 1000}{5}$ = 1000mg1000/100 = 10mls	3 Days for meat and 24 Hours for milk	Continuous analgesia for the 2 hours of surgery
	Xylazine (Anaesthetic) CRI	20 mg/ml	0.05 mg/kg/hr	$V = \frac{0.05 \times 1000}{5}$ = 10mg 10/20 = 0.5 mls	14 Days for meat and 48 Hours for milk	
Recovery	Flunixin Tetanus antitoxin	50mg/ml	2.2mg/kg	$V = (60\text{kg} \times 2.2\text{mg/kg}) \div$ 50mg/ml = 2.64ml	4 Days	Pre-emptive analgesia and post-op for three days
Reversal Agent	Tolazoline	100mg/ml	4× xylazine dose (0.2 mg/kg)	$V = (60\text{kg} \times 0.2\text{mg/kg}) \div$ 100mg/ml = 0.12mls	None	xylazine reversal