

	Drug	Concentration	Dose	Calculation* (using a 600kg cow)	Withdrawal period	Complications, Contraindications/ Comments
Premedication	Acepromazine	10mg/ml	0.1mg/kg (IM)	$(600\text{kg} \times 0.1\text{mg/kg}) \div 10\text{mg/ml} = 6\text{ml}$	7 days -meat 48 hours-milk	Extra-label use Sedation
	Meloxicam	5mg/ml	0.5mg/kg	$(600\text{kg} \times 0.5\text{mg/kg}) \div 5\text{mg/ml} = 60\text{ml}$	15 days- meat 120 hours- milk	Extra-label use Analgesic and NSAID
	Flunixin meglumine	50mg/ml	1-2.2mg/kg	$(600\text{kg} \times 2.2\text{mg/kg}) \div 50\text{mg/ml} = 26.4\text{ml}$	21 days- meat	Not for use in dairy cows Analgesic and NSAID
	Butorphanol	2mg/ml	0.04 mg/kg	$(600\text{kg} \times 0.04\text{mg/kg}) \div 2\text{mg/ml} = 12\text{ml}$	5 days- meat 3 days- milk	Extra-label use NSAID and analgesia
	Penstrep	200,000IU	22,000 IU/kg	$(500\text{kg} \times 200,000\text{IU}) \div 22,000\text{IU/kg} = 55\text{mls}$	21 days- meat 3 days- milk	Broad spectrum Antibiotics
Induction and Maintenance of General anaesthesia	Ketamine	100mg/ml	1.2 mg/kg	Loading dose= $(600\text{kg} \times 1.2\text{mg/kg}) \div 100\text{mg/ml} = 7.2\text{ml}$ CRI= $(1.2 \times 1000) \div 5 = 240\text{ml}$	3 days- milk 3 days- meat	Analgesia
	Lidocaine	20mg/ml	2mg/kg	Loading dose= $(600\text{kg} \times 2\text{mg/kg}) \div 20\text{mg/ml} = 60\text{ml}$ CRI= $(2 \times 1000) \div 5 = 400\text{ml}$		Analgesia
	Xylazine	20 mg/ml	0.01 mg/kg	Loading dose= $(600\text{kg} \times 0.01\text{mg/kg}) \div 20\text{mg/ml} = 0.3\text{ml}$ CRI= $(0.01 \times 1000) \div 5 = 2\text{ml}$	4 days- meat 24 hours- milk	Analgesia, muscle relaxant, sedative

Recovery / Post-Op	Flunixin meglumine	50mg/ml	1-2.2mg/kg	$(600\text{kg} \times 2.2\text{mg/kg}) \div 50\text{mg/ml} = 26.4\text{ml}$	21 days- meat	Not for use in dairy cows
Reversal Agent	Tolazoline	100mg/ml	4 × xylazine dose = 0.04mg/kg	$(600\text{kg} \times 0.04\text{mg/kg}) \div 100\text{mg/ml} = 0.24\text{ml}$	8 days- meat 48 hours- milk	xylazine reversal Analgesic and NSAID