Dose Calculation Chart for Dogs -Ketamine-Diazepam Induction

	PREMEDICATION		INDUCTION	ADDITIONAL MEDICATION			
Body wt (kg)	Xylazine 20mg/ml	Buprenorphine 0.3mg/ml	1:1 (equal) Ketamine (100mg/ml) Diazepam (5mg/ml) mixture in one syringe	Meloxicam 5mg/ml	Lidocaine* 2% or 20mg/ml	Amoxicillin 100mg/ml	lvermectin 1% or 10mg/ml
	1.5mg/kg IM	0.02mg/kg IM	1ml per 10kg	0.2mg/kg IV	1mg/kg IV	20mg/kg IV	0.2mg/kg SC
5	0.4	0.4	0.5	0.2	0.3	1.0	0.1
6	0.5	0.4	0.6	0.3	0.3	1.2	0.1
7	0.5	0.5	0.7	0.3	0.4	1.4	0.2
8	0.6	0.6	0.8	0.3	0.4	1.6	0.2
9	0.7	0.6	0.9	0.4	0.5	1.8	0.2
10	0.8	0.7	1.0	0.4	0.5	2.0	0.2
11	0.8	0.8	1.1	0.5	0.6	2.2	0.2
12	0.9	0.8	1.2	0.5	0.6	2.4	0.2
13	1.0	0.9	1.3	0.5	0.7	2.6	0.3
14	1.0	1.0	1.4	0.6	0.7	2.8	0.3
15	1.1	1.0	1.5	0.6	0.8	3.0	0.3
16	1.2	1.1	1.6	0.6	0.8	3.2	0.3
17	1.3	1.2	1.7	0.7	0.9	3.4	0.4
18	1.3	1.2	1.8	0.7	0.9	3.6	0.4
19	1.4	1.3	1.9	0.8	1.0	3.8	0.4
20	1.5	1.4	2.0	0.8	1.0	4.0	0.4
21	1.6	1.4	2.1	0.9	1.1	4.2	0.4
22	1.6	1.6	2.2	0.9	1.1	4.4	0.5
23	1.7	1.6	2.3	0.9	1.2	4.6	0.5
24	1.8	1.6	2.4	1.0	1.2	4.8	0.5
25	1.9	1.7	2.5	1.0	1.3	5.0	0.5

*Lidocaine-loading dose only. If used, must be maintained by constant rate infusion 10-50µg/kg/min (0.6-3.0mg/kg/hr)







WVS Spay-Neuter Protocols

Procedure for Premedication and Induction

- Firstly, administer xylazine and buprenorphine IM. Wait 10-20 minutes for the effects of sedation to become apparent.
- If adequate sedation is not achieved after 20 minutes, give 1/3rd of the initial dose of xylazine or you may want to give 0.5mg/kg ketamine IM, if necessary.
- Place an IV catheter.
- For induction, draw up a mixture of ketamine (100mg/ml) and diazepam (5mg/ml) in a 1:1 ratio. This will result in a final dose of 5mg/kg ketamine and 0.25mg/kg diazepam. Inject 1.0ml per 10 kg IV to induce the patient (Do not store the mixture in syringes as diazepam is inactivated when in contact with plastic for prolonged periods).
- Immediately intubate the patient and evaluate anaesthetic depth.
- For maintenance, draw up a mixture of ketamine and diazepam in a 2:1 ratio. Inject
 1.0ml per 10 kg IV, as required.

Please note:

- This chart should be used as a **guide only.** Drug doses **must always be calculated with regard to the status of patient and to the concentration of drugs available** and in use.
- When using amoxicillin-cloxacillin combination, always check the concentration your product has and count only amoxicillin as the effective drug.



