



Earlier neutering principles



Kitten Quad
An app enabling UK vets to calculate doses of an unlicensed quad anaesthetic combination.

Available on the **App Store**

- Keep healthy:** Younger animals with juvenile immune system so best to do earlier in the day, before other operations
- Keep fed:** Withhold food for three hours only before surgery; do not withhold water. Offer food early in recovery
- Keep calm:** Keep littermates together, including recovery and reduce stress from noise, handling etc
- Keep accurate:** Weigh accurately and calculate doses based on BSA
- Keep warm:** Don't clip or wet excessively when prepping, warm ambient temp, keep insulated throughout and express bladder

Anaesthetic considerations:

CP recommends that female cats are intubated for neutering and maintained on O₂. Also, that at least 20 minutes elapses after initial i/m medetomidine/ketamine injection before administering atipamezole

Quad protocol:

Use equal volumes of: Medetomidine 1mg/ml, Ketamine 100mg/ml, Midazolam 5mg/ml and Buprenorphine 0.3mg/ml. Can mix in same syringe and give at same time.

Bodyweight (kg)	Body Surface Area (m ²)	Volume Anaesthetic Drugs* (ml)	Volume Reversal Agent 5ml/ml (ml)	Volume Meloxicam* 2mg/ml (ml)
0.50	0.07	0.04	0.020	0.05
0.60	0.07	0.04	0.020	0.06
0.70	0.08	0.05	0.025	0.07
0.80	0.09	0.05	0.025	0.08
0.90	0.10	0.05	0.025	0.09
1.00	0.10	0.06	0.030	0.10
1.10	0.11	0.06	0.030	0.11
1.20	0.12	0.06	0.030	0.12
1.30	0.12	0.07	0.035	0.13
1.40	0.13	0.07	0.035	0.14
1.50	0.14	0.08	0.040	0.15
1.60	0.14	0.08	0.040	0.16
1.70	0.15	0.08	0.040	0.17
1.80	0.15	0.09	0.045	0.18
1.90	0.16	0.09	0.045	0.19
2.00	0.17	0.10	0.050	0.20

