

Guidance for neutering kittens

Keep healthy Younger animals have a juvenile immune system, so best to do earlier in the day, before other operations to reduce risk of infection.

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 during recovery, and reduce stress such as from noise, handling.

Keep accurate Weigh accurately and calculate doses based on body surface area.

Keep warm Don't clip or wet excessively when prepping. Maintain a warm ambient temperature, keep insulated throughout and express the bladder.

Anaesthetic considerations

We recommend that:

- female cats are intubated for neutering and maintained on oxygen
- at least 20 minutes should elapse after the initial intramuscular injection of medetomidine/ketamine before administering atipamezole
- perioperative analgesia should be administered
- post-operative analgesia should be given at the vet's discretion on a case-by-case basis.

Quad protocol A useful protocol is to use equal volumes of: medetomidine 1mg/ml, ketamine 100mg/ml, midazolam 5mg/ml and buprenorphine 0.3mg/ml, known as the kitten quad. These can be mixed in the same syringe and given together. Below are the dose rates.



Kitten quad: An app is available to help vets calculate drug dosages using the 'quad' combination. The app can be found by searching for 'Kitten Quad' in the Apple App Store. Please check other app providers for availability.



Bodyweight (kg)	Body surface area (m2)	Volume anaesthetic drugs* (ml)	Volume reversal agent 5mG/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

*Off-licence – obtain informed owner consent.

Cat-Kind is an initiative from Cats Protection and respective members of the Cat Population Control Group (CPCG) as detailed below:



Supporters of Cat-Kind: **LINNAEUS**