INTRAMUSCULAR ALFAXALONE IN DOGS

Alfaxalone combination	Peak effect	Duration and recovery	Clinical notes	References
SEDATION The following information is based on recent literature and is not intended as an endorsement of specific protocols. The reader is advised to consult the full results described in each publication prior to selecting a combination				
Alfaxalone 2mg/kg + Butorphanol 0.4mg/kg + Dexmedetomidine 0.005mg/kg	≥10 mins	• Duration **up to180 mins** (if dexmedetomidine not antagonised before 180 minutes)	• Moderate to deep sedation • Loss of gag reflex & jaw tone • PaO_2 & $PaCO_2$ within normal range • Dexmedetomidine induced reduction in CO & SVR • Smooth recovery	Murdock et al., 2020
Alfaxalone 2mg/kg + Butorphanol 0.4mg/kg + Acepromazine 0.02mg/kg	≥10 mins	• Duration **up to170 mins**	• Moderate to deep sedation • Loss of gag reflex • PaO_2 & $PaCO_2$ within normal range • Smooth recovery	Murdock et al., 2020
Alfaxalone 1mg/kg + Methadone 0.5mg/kg	Onset ≤10 mins	• Duration of **at least 25 mins**	• Moderate to deep sedation • No clinically significant changes to HR, RR or SAP in healthy dogs	Micieli et al., 2019

IM ALFAXALONE FOLLOWED BY INDUCTION OF GENERAL ANAESTHESIA

*If general anaesthesia is required, and the dog has not achieved stage III anaesthesia following the initial IM alfaxalone protocols described above, a further **intravenous** dose of alfaxalone may be administered **slowly and to effect***

The dose of alfaxalone required to induce anaesthesia will be dependent on the existing degree of sedation
- Prepare **1-1.5mg/kg alfaxalone**
- Administer **0.5mg/kg** of this dose **intravenously**
- Flush the cannula with saline to ensure the 0.5mg/kg dose has been fully administered
- Wait approximately 20 seconds
- Assess depth of anaesthesia
- Should the dog require additional alfaxalone the 0.5mg/kg incremental process may be repeated until intubation is possible, or the full 1-1.5mg/kg dose has been administered

N.B. This dose of alfaxalone (1-1.5mg/kg) is less than described in the SPC for IV induction of anaesthesia in the dog. This is due to the dose-sparing effects of IM alfaxalone and concomitant sedative agents on the subsequent IV induction dose of alfaxalone (Lagos-Carvajal et al., 2020)

IM ALFAXALONE FOLLOWING "INEFFECTIVE" PREMEDICATION OR SEDATION

For dogs that have not achieved the desired level of sedation following the administration of premedicant or sedative drugs, IM alfaxalone may be an option to increase the level of sedation and permit IV access
- **Alfaxalone 0.5mg/kg IM**
- **Assess quality of sedation after 10-15 minutes**
- Repeat alfaxalone 0.5mg/kg IM if necessary

HEAVY SEDATION / GENERAL ANAESTHESIA
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Alfaxalone combination	Peak effect	Duration and recovery	Clinical notes	References
Butorphanol 0.3mg/kg + Medetomidine 0.005mg/kg 15 minutes later **Alfaxalone 1-2.5mg/kg**	**5 mins** (range 1-11)	• To intubation **7.5-8 mins** (range 4-13) after alfaxalone administration • Duration of lateral recumbency **89-105 mins** (range 61-130)	• Spontaneous respiration maintained • $ETCO_2$ maintained within normal limits • No hypotension • Medetomidine induced bradycardia • Smooth recovery	Kato et al., 2021
Alfaxalone 1.5mg/kg + Butorphanol 0.1mg/kg + Medetomidine 0.01mg/kg	No data	• To lateral recumbency **5.3 +/- 1.8 mins** • Duration of anaesthesia **89 +/- 17 mins**	• Deep sedation/reasonable quality general anaesthesia • No apnoea • $ETCO_2$ maintained within normal limits • No hypotension • Medetomidine induced bradycardia • Good recovery	Lee et al., 2016
Alfaxalone 2.5mg/kg + Butorphanol 0.25mg/kg + Medetomidine 0.0025mg/kg	10-30 mins	• To lateral recumbency **7 +/- 4.4 mins** • To intubation **16 +/- 6 mins** • Duration of intubation **60 +/- 24 mins** • Duration of lateral recumbency **100 +/- 48 mins**	• $PaCO_2$ maintained within normal limits • No clinically significant hypotension • Medetomidine induced bradycardia (<60 bpm) • Smooth recovery	Tamura et al., 2016

*For painful procedures replace butorphanol with buprenorphine or methadone

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