

DEXDOMITOR®

(dexmedetomidine hydrochloride 0.5 mg/mL)

DEXDOMITOR® 0.1

(dexmedetomidine hydrochloride 0.1 mg/mL)



What to expect?

- **Introduction to Dexdomitor (dexmedetomidine)**
 - Mode of action and physiological effects
 - Use in premedication vs. sedation
 - Human use
- **Dexdomitor 0,1 mg/ml**
 - Summary of Product Characteristics
 - Indications
 - Dosing charts
 - Unmet need in the market
 - Orion survey 2011
 - Micro dosing in premedication
 - Post-op use
 - Marketing messages
- **Antisedan**

Orion and innovation

DOMOSEDAN

was the first alpha-2 agonist that Orion developed. It got its MA for horses in 1983. It was further developed to have also an oromucosal gel formulation known as

DOMOSEDAN GEL® 

Dexdomitor 0,1 mg/ml is the new link in the chain of the original sedatives.

Dexdomitor D,1®

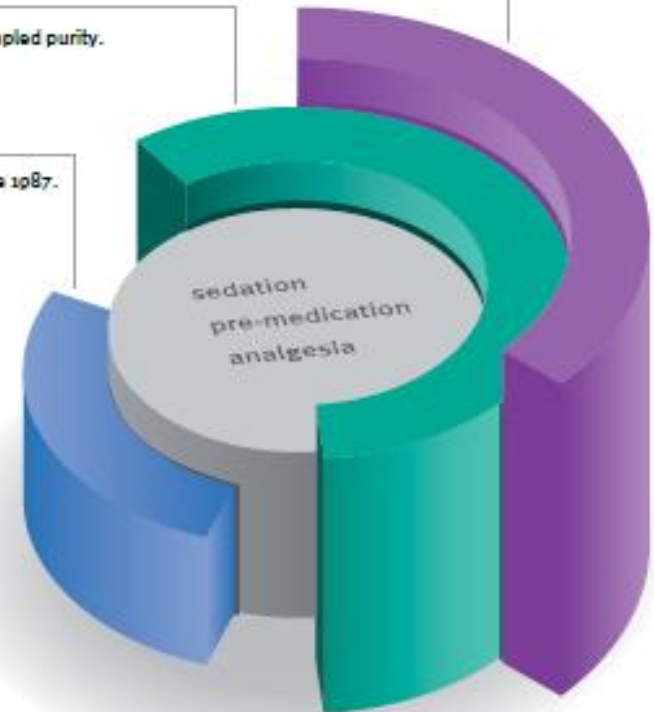
Taking precision to the next level.

Dexdomitor®

The new generation with unexampled purity.

Domitor®

Benchmarking the standard since 1987.



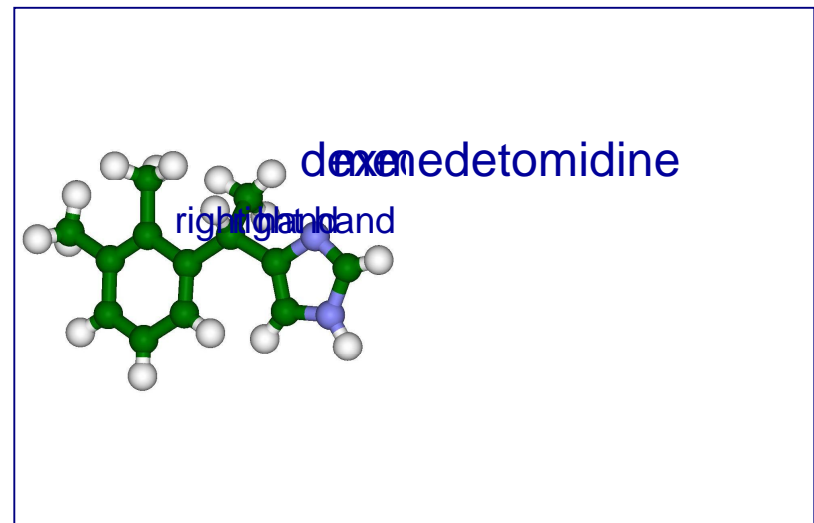
Development of Dexdomitor®

- **Dexdomitor** is the **most specific and selective** new generation α_2 -adrenoceptor agonist available to veterinarians for use in dogs and cats:
 - sedation
 - analgesia
 - preanesthesia



Dexdomitor: your *'right-hand man'*

- Domitor[®] (racemic medetomidine) has been on the market since 1987 and has 'right- and left-handed' **enantiomers**
- **Dexmedetomidine**, the **right-handed enantiomer**, is entirely responsible for the sedative/analgesic and dose-sparing effects of the molecule

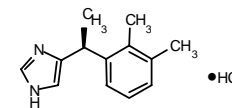


Adrenergic receptors

- Adrenergic receptors mediate the actions of the neurotransmitter norepinephrine, the hormone adrenaline and a variety of synthetic adrenergic agonists.
- The adrenoceptors are divided into three pharmacological types:
 α_1 -, α_2 - and β -adrenoceptors.
- Based on these molecular studies, α_2 -adrenoceptors can be divided into at least three subtypes: α_{2A} , α_{2B} and α_{2C}

Receptor subtype	Effects
α_{2A}	Analgesia Sedation C/V depression
α_{2B}	Vasoconstriction
α_{2C}	Spinal antinociception Opioid synergy

Dexmedetomidine at the adrenoceptor



	$\alpha_2 : \alpha_1$ selectivity	α_1 affinity
Dexmedetomidine	1300	692
Medetomidine	1200	1318
Clonidine	220	713
Xylazine	160	30300
Levomedetomidine	23	2239

- Dexmedetomidine acts as a full agonist on all α_2 -adrenoceptor subtypes
 - high selectivity for α_2 -adrenoceptors¹
 - very low affinity for α_1 -adrenoceptors
- Levomedetomidine can act as a partial or inverse α_2 -agonist (negative antagonist)³
 - activation of central α_1 -adrenoceptors antagonises hypnosis of an α_2 -adrenoceptor agonist⁴

¹ Aantaa R, Kallio A, Virtanen R. 1993. Dexmedetomidine, a novel alpha-2 adrenergic agonist. A review of its pharmacodynamic characteristics. *Drugs of the Future*. 18: 49-56.

² Schwinn DA, Correa-Sales C, Page SO, et al. 1991. Functional effect of activation of alpha-1 adrenoceptors by dexmedetomidine: in vivo and in vitro studies. *J Pharmacol Exp Therap*. 259:1147-1152.

³ Jansson CC, Kukkonen JP, Näsman J et al. 1998. Protean agonism at alpha2A-adrenoceptors. *Mol Pharmacol*. 53:963-968.

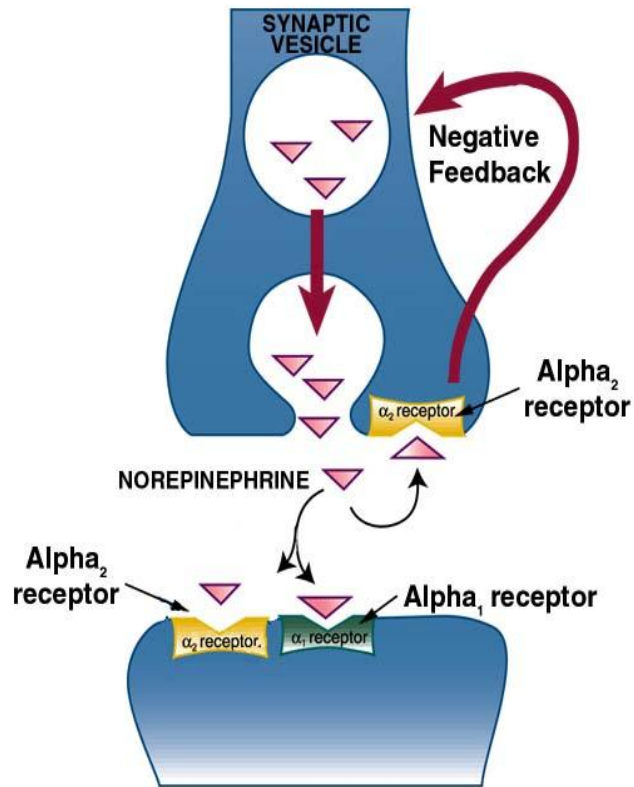
⁴ Guo TZ, Tinklenberg J, Olikier R, et al. 1991. Central alpha-1 adrenoceptor stimulation functionally antagonizes the hypnotic response to dexmedetomidine, an alpha-2 adrenoceptor agonist. *Anesthesiol*. 75:252-256.

Alpha-1 receptors, what do they do?

- Activation of alpha-1 receptors produces
 - arousal
 - excitement
 - increased locomotor activity in animals
- all in contrast to the physiological effects mediated through alpha-2 receptors
- less selective alpha-2 agonists may produce these paradoxical effects when administered excessively
 - e.g. Xylazine

THE HIGHER THE SELECTIVITY TO ALPHA-2 RECEPTORS, THE MORE RELIABLE IS THE SEDATIVE EFFECT

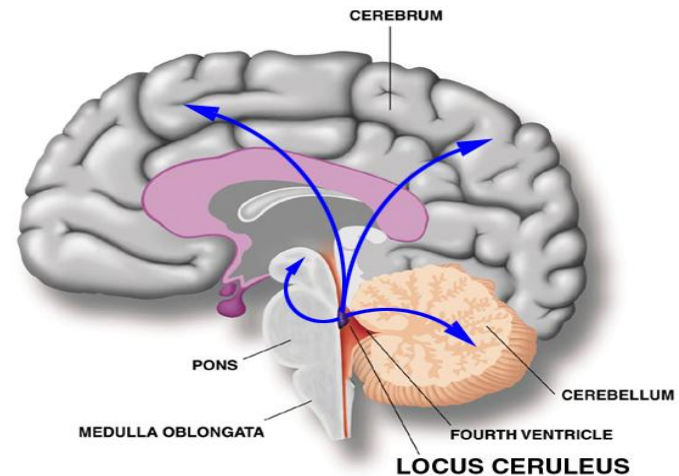
Alpha-2 receptors



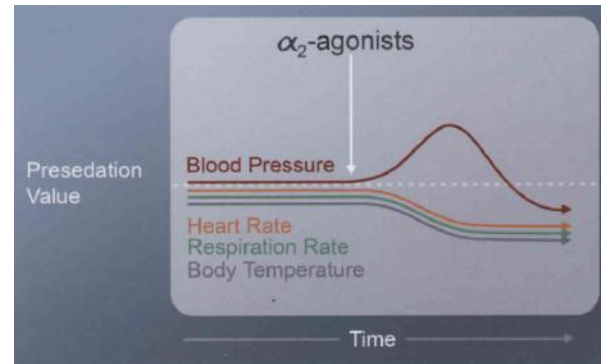
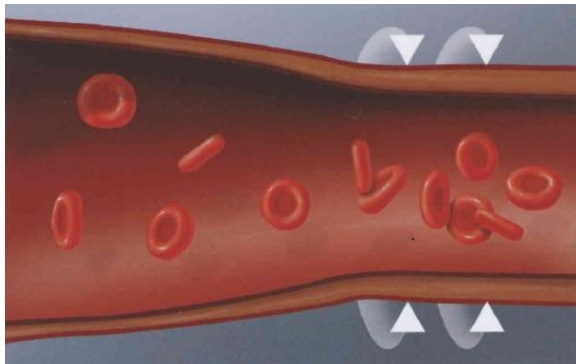
- Alpha-2 receptors are located throughout the body
- Norepinephrine is the endogenous ligand for the receptors
- Sympathetic neurotransmission is prevented and the level of consciousness decreases
- Other alpha-2 adrenoceptor mediated effects:
 - piloerection
 - depression of motor and secretory functions of the gastrointestinal tract
 - diuresis
 - hyperglycaemia
 - Cats!

The action

- The sedative and anxiolytic effects of alpha-2 agonists are mediated by **Locus Ceruleus** receptor activation
- Specifically in brain center controlling anxiety, attentiveness, and sleep
- The analgesic effects are mediated by activation of the receptors located in spinal cord
- In addition, supraspinal alpha-2 receptors are involved in the modulation of nociceptive input



Physiological effects of Dexdomitor

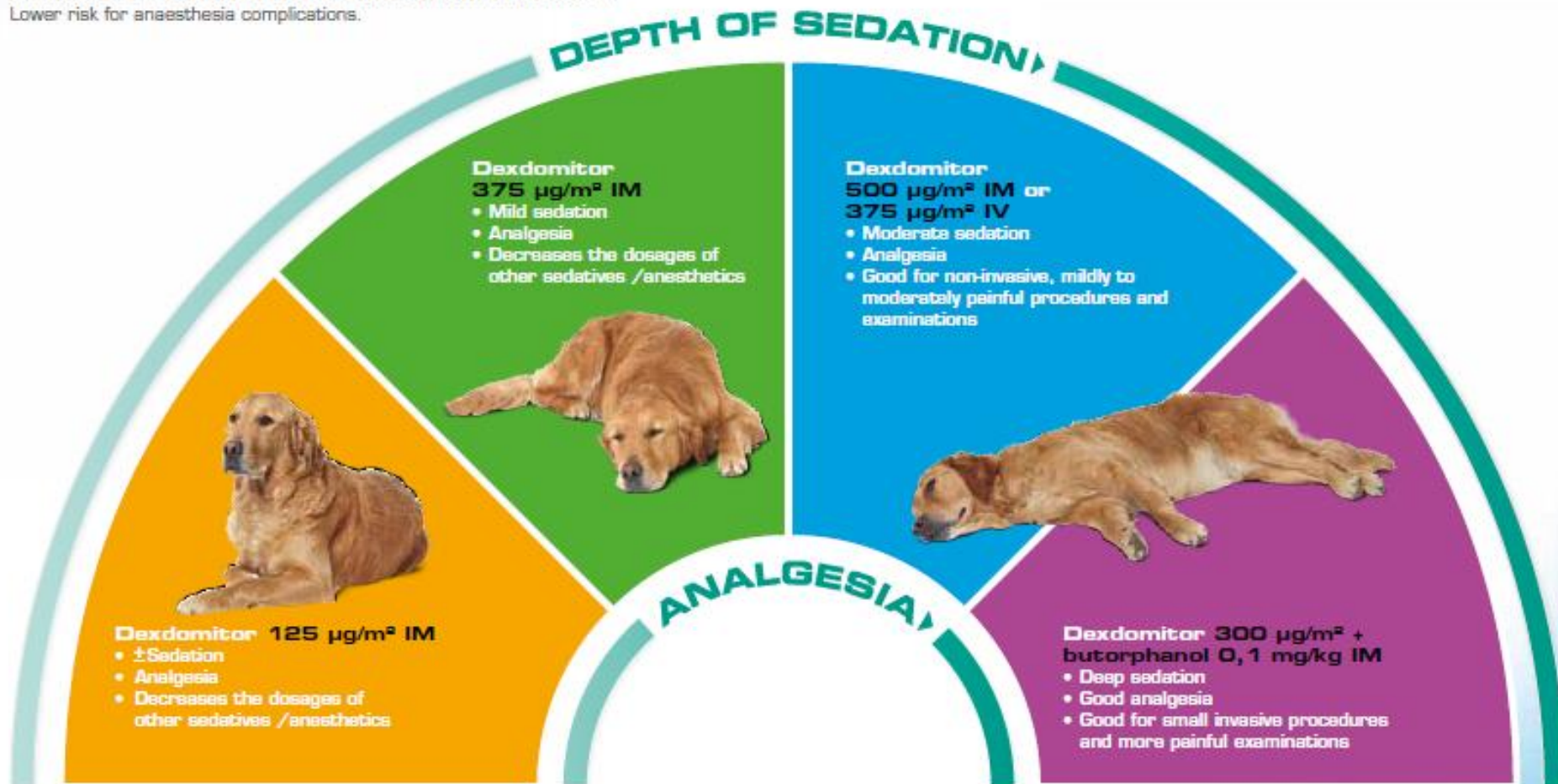




- peripheral vasoconstriction
- initial hypertension followed by normo- or slight hypotension
- compensatory reduction in heart rate
- decreases in body temperature and respiratory rate (transient)
- absence of corneal reflex
- occasional muscle twitching
- occasional vomiting (esp. cats)

The clinical response is dose dependent!

DECREASES THE DOSAGES OF ANESTHETIC AGENTS FOR INDUCTION AND MAINTENANCE

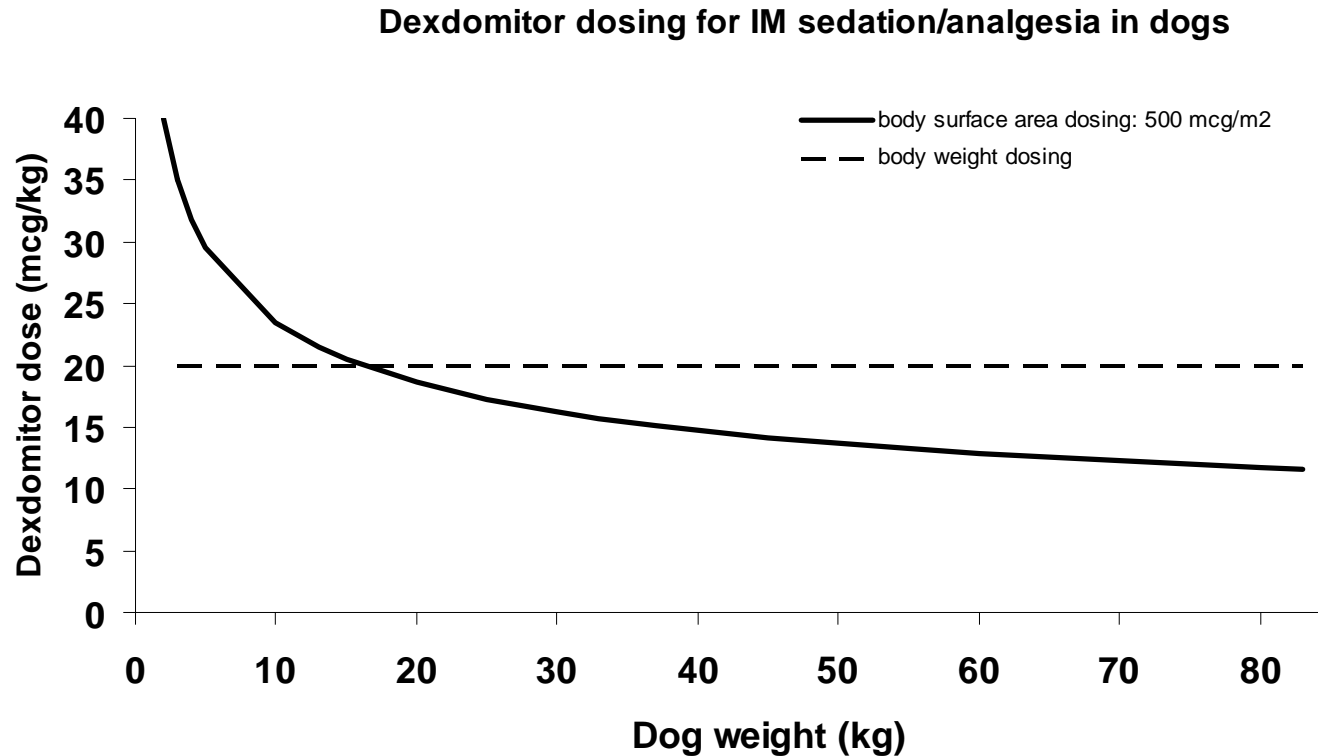
Lower risk for anaesthesia complications.



Species	Indication	Dosage	
		Body surface area	Body weight*)
	Sedative and analgesic to facilitate clinical examinations or procedures, and minor surgical or dental procedures	500 mcg/m ² IM 375 mcg/m ² IV	20 mcg/kg IM 15 mcg/kg IV
	Deep sedation/analgesia in concomitant use with butorphanol for medical and minor surgical procedures	300 mcg/m ² IM + 0.1 mg/kg IM	11 mcg/kg IM + 0.1 mg/kg IM
	Premedication prior to general anaesthesia	375 mcg/m ² IM 125 mcg/m ² IM	15 mcg/kg IM 5 mcg/kg IM
	Sedative and analgesic to facilitate clinical examinations or procedures, and minor surgical or dental procedures	-	40 mcg/kg IM
	Premedication before induction and maintenance of general anaesthesia with ketamine	-	40 mcg/kg IM + 5 mg/kg IM
	Premedication prior to general anaesthesia	-	40 mcg/kg IM

*)Dog dosages in mcg/kg are for comparison purposes only for an average **15-20 kg** animal (1 mcg/kg = 25 mcg/m²)
Best results are obtained by body surface area dosing.

Dosing by body surface area vs. body weight¹



¹see Kilgore et al. 1990

Premedication

What it does:

- Produces anxiolysis and reduces catecholamine release
- Provides analgesia
- Promotes immobility through hyporeflexia and muscle relaxation

What that means in practice:

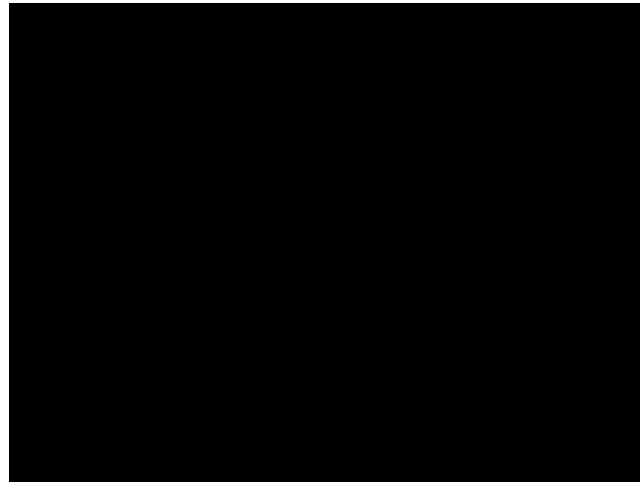
- Smooths the induction, maintenance of and recovery from anesthesia
- Decreases the dosages of anesthetic agents for induction and maintenance

Premedication is not the same thing as full sedation!!

This effect is ok for premedication!



A Pit Bull- mix “Arthur”, a premedication case of 125 µg/m² i.m.



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Sedation

What it is:

- Sedation is a state of relaxation characterized by reduced vigilance/alertness and depression of central nervous system functions without loss of consciousness

What that means in practice:

- Animals are immobilized and do not respond to normal stimulus
- However there is no total loss of consciousness and if there is sufficient stimulation (e.g. pain, noise, light) animals can be roused from sedation

Sedation has more effect than premedication but it is not the same thing as anesthesia!!

Sedated animals lay still if not heavily stimulated



Evaluation of the clinical efficacy and safety of intramuscular and intravenous doses of dexmedetomidine and medetomidine in dogs and their reversal with atipamezole

M. GRANHOLM, B. C. MCKUSICK, F. C. WESTERHOLM, J. C. ASPEGRÉN

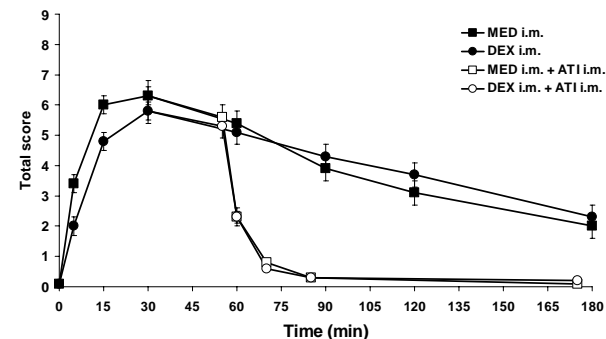
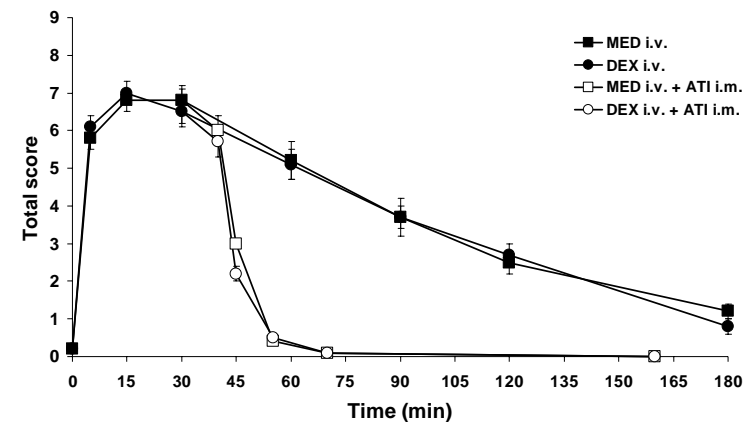
Veterinary Record (2007)
160, 891-897



Canine sedation

	Dexdomitor 375 mcg/m ² IV	Dexdomitor 500 mcg/m ² IM
Clinical onset	5 min	15-30 min
Procedure	10-30 min	20-45 min
Recovery		
spontaneous	180 min	~ 180 min
w/ Antisedan	within 5-15 min	Within 5-15 min

- Nervous or excited animals may exhibit a reduced pharmacological response to alpha-2 agonists.
 - onset of effect could be slowed
 - depth and duration of effect may be shortened
- Allow animals to rest quietly for 10 to 15 minutes after administration



RESEARCH PAPER

Evaluation of the clinical efficacy and safety of dexmedetomidine or medetomidine in cats and their reversal with atipamezole

Mikael Granholm* DVM, Brett C McKusick* MS, PhD, DVM, Fia C Westerholm* DVM & John C Aspegrén† MS

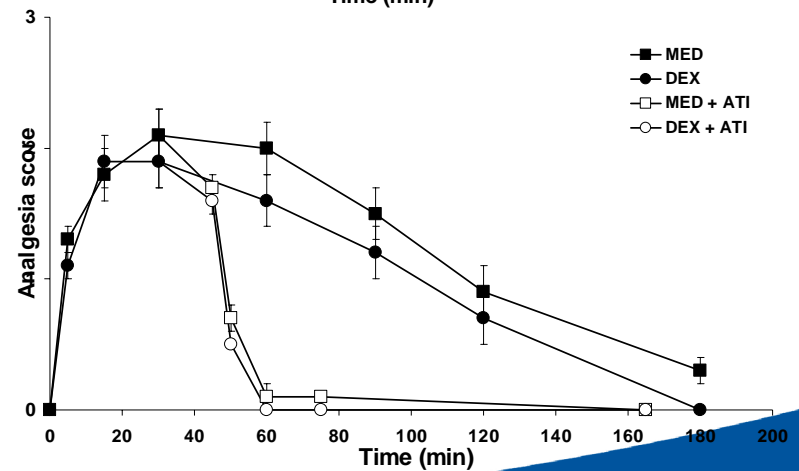
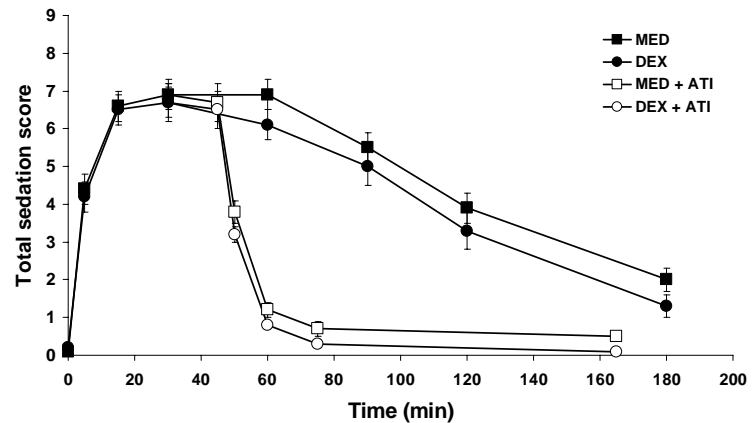
*Orion Corporation, Orion Pharma Animal Health, Turku, Finland

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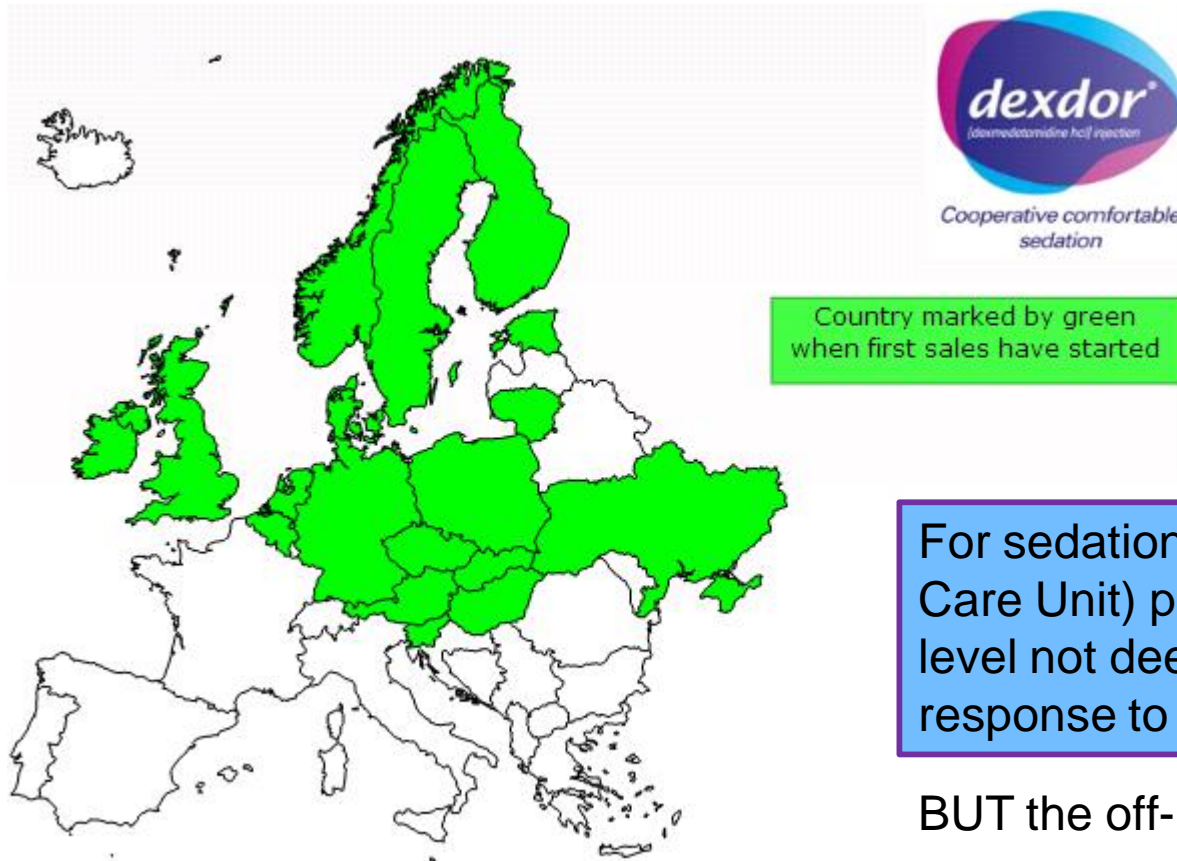
Feline sedation/analgesia

Dexdomitor 40 mcg/kg IM	
Clinical onset	within 15 min
Procedure	15 to 60 min
Recovery	
spontaneous	180 min
w/ Antisedan	within 5-15 min



Human use

- dexdor® got centralized license 21 Sep 2011 in Europe



For sedation of adult ICU (Intensive Care Unit) patients requiring a sedation level not deeper than arousal in response to verbal stimulation

BUT the off-label usage is big...

dexdor® dosing in humans

- Patients already intubated and sedated may switch to dexmedetomidine with an initial infusion rate of **0.7 micrograms/kg/h** which may then be adjusted stepwise within the dose range **0.2 to 1.4 micrograms/kg/h** in order to achieve the desired level of sedation, depending on the patient's response.
- There is no experience in the use of Dexdor for more than 14 days. The use of Dexdor for longer than this period should be regularly reassessed.

→ **Minimal cardiovascular effects, co-operative sedation**

End of introduction part, questions?

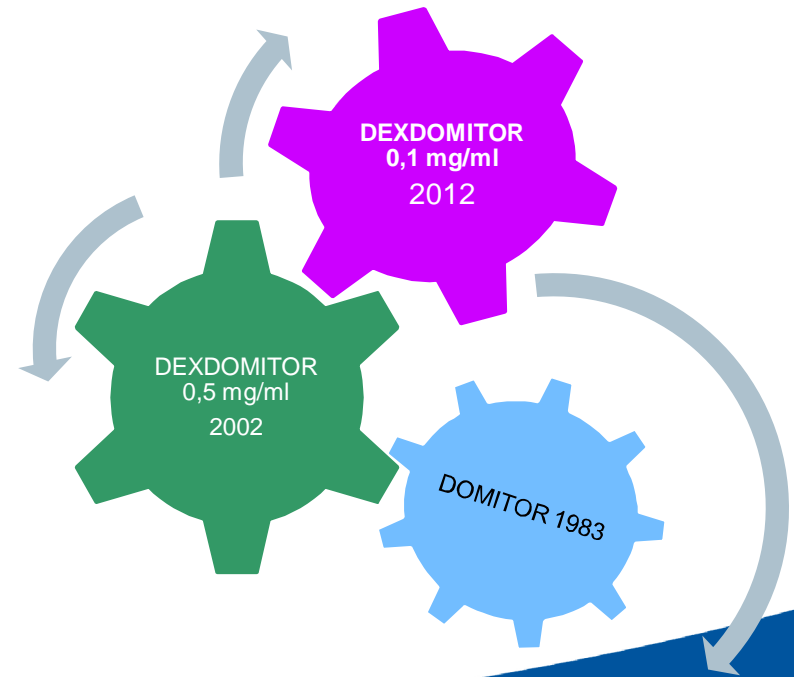




What? Why? For who?

New strength: Dexdomitor 0,1 mg/ml

- Customer focused idea: unmet need from the field
 - Allows for **accurate** dosing in small dogs and cats as well as in microdosing
- Indications as with Dexdomitor 0,5 mg/ml
 - supports especially premedication use with lower dose (125 µg/m²)



Weight of dog	Premedication Low Dose (125 µg/m ² im)		Sedation (375 µg/m ² im / iv)	
	0,5mg/ml	0,1mg/ml	0,5mg/ml	0,1mg/ml
Dexdomitor volumes				
2-3 kg (4-7 lbs)	0,04 ml	0,20 ml	0,12 ml	0,6 ml
3,1-4 kg (7-9 lbs)	0,05 ml	0,25 ml	0,15 ml	0,85 ml
4,1-5 kg (9-11 lbs)	0,07 ml	0,35 ml	0,2 ml	1,0 ml
5,1-10 kg (11-22 lbs)	0,10 ml	0,50 ml	0,29 ml	1,45 ml
10,1-13 kg (22-29 lbs)	0,13 ml	0,65 ml	0,38 ml	1,9 ml
13,1-15 kg (29-33 lbs)	0,15 ml	0,75 ml	0,44 ml	-
15,1-20 kg (33-44 lbs)	0,17 ml	0,85 ml	0,51 ml	-

Product characteristics

- 20 ml vial with 15 ml content, purple brand color
 - Shelf life is 3 years
 - Shelf life after opening is by the EU directive 28 days
- 15 ml volume adequate for (low dose, 125 µg/m²) premedication for i.e.:
 - 10 x dog of 3 kg´s
 - 10 x dog of 5 kg´s
 - 5 x dog of 10 kg´s
 - 5 x dog of 15 kg´s





What is in our SPC?

SPC: Indications for use

- Non-invasive, mildly to moderately painful, procedures and examinations which require restraint, sedation and analgesia in dogs and cats.
- Deep sedation and analgesia in dogs in concomitant use with butorphanol for medical and minor surgical procedures.
- Premedication **in dogs and cats** before induction and maintenance of general anaesthesia.

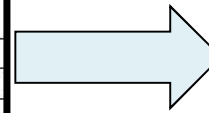
NOTE!

Indications are the same with both Dexdomitor strengths



SPC: Dosing tables for Dexdomitor 0,1 mg/ml

Dog Weight (kg)	Dexmedetomidine 125 micrograms/m ²		Dexmedetomidine 375 micrograms/m ²		Dexmedetomidine 500 micrograms/m ²	
	(mcg/kg)	(ml)	(mcg/kg)	(ml)	(mcg/kg)	(ml)
2-3	9.4	0.2	28.1	0.6	40	0.75
3.1-4	8.3	0.25	25	0.85	35	1
4.1-5	7.7	0.35	23	1	30	1.5
5.1-10	6.5	0.5	19.6	1.45	25	2
10.1-13	5.6	0.65	16.8	1.9		
13.1-15	5.2	0.75				
15.1-20	4.9	0.85				



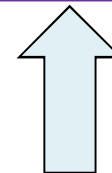
Target patient **dog** is

- < 5 kg in sedation
- < 20 kg in premedication

For deep sedation and analgesia with butorphanol		
Dog Weight (kg)	Dexmedetomidine 300 micrograms/m ² intramuscularly	
	(mcg/kg)	(ml)
2-3	24	0.6
3.1-4	23	0.8
4.1-5	22.2	1
5.1-10	16.7	1.25
10.1-13	13	1.5
13.1-15	12.5	1.75

Target patient **cat** is

- < 3 kg in sedation or premedication



Cat Weight (kg)	Dexmedetomidine 40 micrograms/kg intramuscularly	
	(mcg/kg)	(ml)
1-2	40	0.5
2.1-3	40	1

For higher weight ranges, use DEXDOMITOR 0.5 mg/ml and its dosing tables.

For higher weight ranges, use DEXDOMITOR 0.5 mg/ml and its dosing table.

Unmet need in the market, is there one

??



Summary of 2011 survey on Dexdomitor use as premedication and post op



Microsoft Office
rd 97 - 2003 Docum

- **80%** of respondents (n=42) use Dexdomitor for **premedication**, doses varied a lot (between 0,25 µg/kg-20 µg/kg), majority of the use is in low dose range
- **39%** (n=41) use Dexdomitor **post operatively** (in some patients) and 65 % of them use 1-3 µg/kg dose range
 - Advantages: calms down an excited dog, peaceful recovery, relaxation, provides additional analgesia, reversible, if needed
 - Disadvantages: bradycardia, possible arrhythmia, sedation, hypothermia, hypovolemia
- The optimal injection volume is between **0,2 -1,0 ml**
 - 36% think than volumes under 0,2 ml cannot be dosed accurately, diluting is one option or using an insuline pen or drawing extra into syringe or injecting with the same needle

One of the free comments in the survey:

“It would be convenient if it was available as an 100mcg/ml solution as we are using low doses to premedicate”

Post– op use; pros and cons by the survey







advantages

- calms down an excited dog
- gives additional analgesia
- good peaceful recovery from the anesthesia
- good relaxation
- initial rise of blood pressure
- short duration
- reversible
- a good synergistic effect with opiates, ketamine and lidocain

disadvantages

- sedation can be very heavy and extend the need for monitoring and oxygen therapy
- cardiovascular side effects
 - may cause heart arrhythmias
 - relatively severe bradycardia
- hypothermia
- hypovolemia
- none if needed

Summary of 2012 survey on Dexdomitor 0,1

			
Dexdomitor use in sedation and premedication	In general, treatment number on same level.	Clearly more premedication than sedation	Clearly more sedation than premedication.
Interest in Dexdomitor 0,1	 Greater among Dexdomitor users	 Much greater among Dexdomitor users	 Greater among Dexdomitor users
Perceived <u>strengths</u> of Dexdomitor 0,1	<ol style="list-style-type: none"> 1. Accurate dosing 2. Ease of dosing 3. Flexibility of use 	<ol style="list-style-type: none"> 1. Accurate dosing 2. Ease of dosing 3. Safety (trust) 	<ol style="list-style-type: none"> 1. Accurate dosing 2. Ease of dosing / Flexibility of use 3. Safety (trust)
Perceived <u>weaknesses</u> of Dexdomitor 0,1	<ol style="list-style-type: none"> 1. Large volumes 2. Unnecessary 3. Confusing dosing / Effectiveness 	<ol style="list-style-type: none"> 1. Large volumes 2. Unnecessary 3. Confusing dosing 	<ol style="list-style-type: none"> 1. Large volumes 2. Unnecessary 3. Costs/ shelf life
Circumstances and indications of use	<ol style="list-style-type: none"> 1. Small pets/breeds 2. Small injuries (X-ray) 	<ol style="list-style-type: none"> 1. Small pets/breeds 2. Sensitive pets 	<ol style="list-style-type: none"> 1. Small pets/breeds 2. Sensitive pets / Premed.
Treatment strategy (market growth vs. cannibalization)	Indifferent	More vets would (partly) substitute their currently used products	Clearly more vets would use Dexdomitor 0,1 in addition.

Literature search of Dexdomitor in dogs and cats with doses $\leq 5 \mu\text{g}/\text{kg}$ or $125 \mu\text{g}/\text{m}^2$

- 52 hits (-17 April 2012)
- 'Basic research' and clinical investigations
- Interesting articles:
 - Gomez et al 2006
 - Dex used at $1 \mu\text{g}/\text{kg}$ and $2 \mu\text{g}/\text{kg}$
 - Kuusela E et al 2001
 - Dex used at $0,2 \mu\text{g}/\text{kg}$, $2,0 \mu\text{g}/\text{kg}$, $20 \mu\text{g}/\text{kg}$



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Document



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BUT all published articles on post-op use (mainly showing analgesia) are with **CRI (constant rate infusion)** use, not with bolus administration

Databases: Medline, Embal, Embase, DDFU, Biosis, Scisearch, hCAplus, Vetu, Caba

Keywords: dexmedetomidine, dog, canine, cat, feline, bitch, beagle, mongrel, husky, terrier, kg, m2, dose

J. vet. Pharmacol. Therap. **29**, 157–163, 2006.

Dexmedetomidine or medetomidine premedication before propofol–desflurane anaesthesia in dogs

- Cross-over study (no surgery) in 6 laboratory beagles
- **Intravenous** dexmedetomidine administered at **1 or 2 mcg/kg** (about 25 to 50 mcg/m²) to laboratory beagles 15 min prior to propofol induction and desflurane anaesthesia
- Medetomidine as a positive control
- Dexmedetomidine not different from medetomidine
 - Moderate sedation
 - Mean propofol requirements of 2.8-3.1 mg/kg for induction
 - Significant dose-dependent effect on end-tidal desflurane (8.1 and 7.5%)

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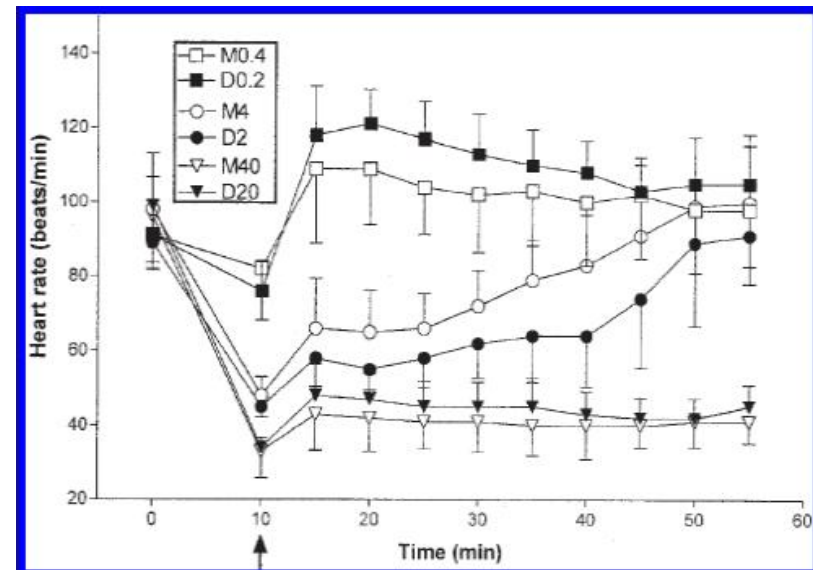
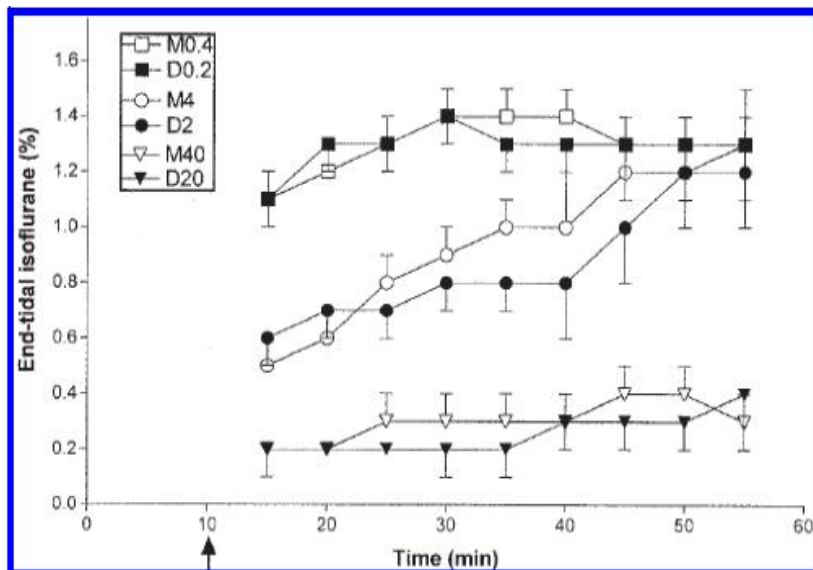
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Surgery, Faculty of Veterinary Medicine,
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Comparison of medetomidine and dexmedetomidine as premedicants in dogs undergoing propofol-isoflurane anesthesia

Am J Vet Res. 2001. 62:1073-1080.

Erja Kuusela, DVM; Marja Raekallio, DVM, PhD; Misse Väisänen, DVM; Katja Mykkänen, DVM; Hannu Ropponen, DVM; Outi Vainio, DVM, PhD

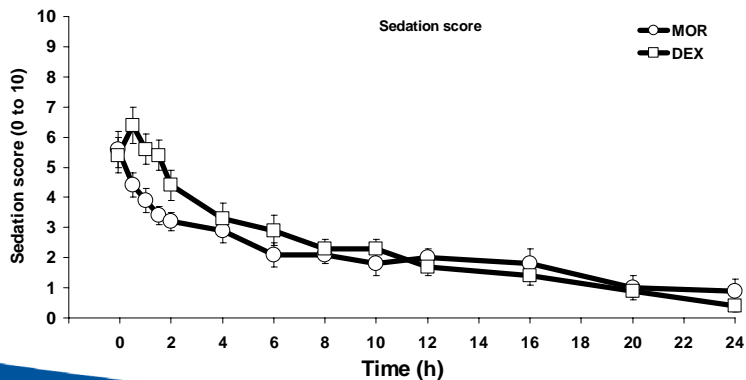
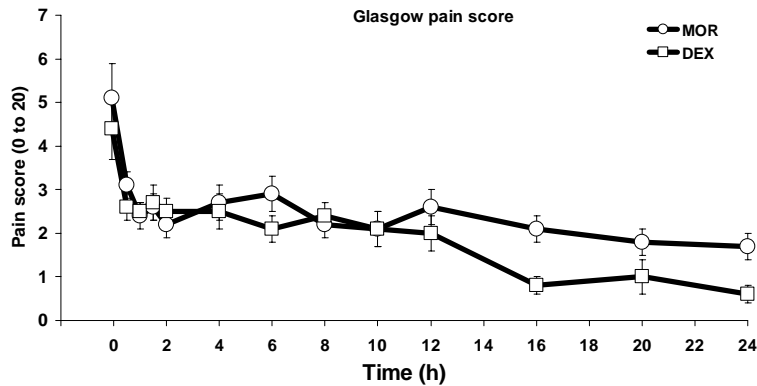
Dexdomitor at **2 mcg/kg** (about 50 mcg/m²) IV resulted in sufficient efficacy effects without further cardiovascular effects



Dexdomitor • CRI and post-operative pain management

Effect of Morphine during Dexmedetomidine or Morphine Constant Rate Infusion for Post-operative Pain Management in Dogs

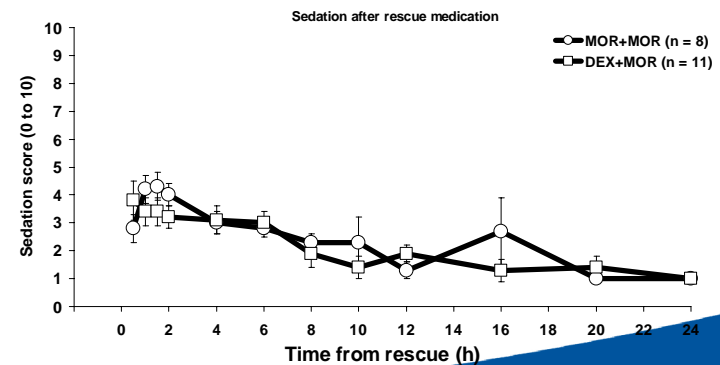
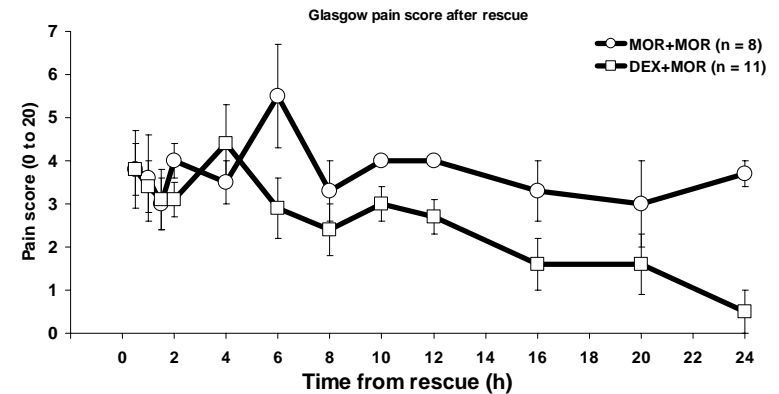
C Valtolina, J Robben, J Uilenreef, J Murrell, B McKusick, J Aspegren, L Hellebrekers
 Utrecht University, the Netherlands; Orion Corporation, Turku, Finland
 Proc. Assoc Vet Anaesth Fall Meeting, Leipzig, Germany. 2007.



- In the first 12 h there were no significant differences in pain scores between groups, while DEX dogs were less ($P=0.009$) painful during the last 12 h
- DEX caused more sedation and lower heart rate initially, but overall these were not significantly different between groups
- **DEX CRI was equally effective as MOR CRI** for providing post-operative analgesia and no adverse reactions resulted from either protocol

Dexdomitor CRI + opioid • post-operative pain management (cont.)

- Sedation was not different between treatments
- **The combination of Dexdomitor CRI and morphine** appears to offer better postoperative pain management without more profound sedation or clinically important cardiorespiratory changes than morphine alone.



IIS Study: Low concentration dexmedetomidine for use as premedication and in the immediate postoperative period in the dog by Bristol University (1)



- Dexdomitor 0,1 mg/ml used as the study drug
- In 40 dogs going for invasive surgery, aim to have also <2 kg dogs recruited
- Premedication with 125 $\mu\text{g}/\text{m}^2$ Dex +20 mcg/kg buprenorphine +NSAID (meloxicam)
- Propofol /alphaxalone induction, isoflurane maintenance
- 50% of the patients receive **62,5 $\mu\text{g}/\text{m}^2$** Dexdomitor as a bolus at extubation (half of the premed volume)

IIS Study: **Low concentration dexmedetomidine for use as premedication and in the immediate postoperative period in the dog** by Bristol University (2)



- All dogs will be administered Dexdomitor 0,1 mg/ml as part of their anaesthetic premedication prior to surgery to confirm that it **produces sedation** and also **to assess ease of administration** (i.e. how easy it was to accurately draw up the required dose and administer it).
- Half the dogs studied will be allocated to receive a second (half in volume) dose of the Dexdomitor 0,1 mg/ml at the end of their surgical procedure and the effect of this will be assessed on **the postoperative recovery characteristics** of these patients.

→ **manuscript ready for submission in Q4/2012**

Marketing messages

Your
decision with
precision
DEXDOMITOR® 0.1 



Critical success factors

Brand objective:

DEXDOMITOR 0,1 is the drug of choice for sedation, premedication and analgesia in small dogs and cats because it is accurate to dose and convenient to use

Efficient marketing to get the message for target customers

***DEXDOMITOR 0,1** as the trade name to differentiate from the Dexdomitor 0,5 mg/ml*

Veterinarians in favour of the product because of the accuracy and convenience

*Establish **DEXDOMITOR 0,1** as a custom made product for small dogs and low dose use*

Key Messages

- *Precision*

- Accurate dosing in small animals and low dose ranges with optimal volumes between 0,2 ml-1,0 ml
- Accurate dosing means safety and efficacy

- *Convenience*

- Vets don't have to use special tricks (insulin syringes, dilution etc.) to measure accurate doses when the volumes are between 0,2 ml-1,0 ml

- *Custom made*

- Toy sized dogs, micro dosing
- Request from the field to match the current way of using the product

Marketing material templates for launch

- Global Marketing Plan for launch
- Tool kit for own subsidiaries and partners
 - All materials as high res versions and as separate elements with full rights to use
 - Visuals (logo, colours)
 - 6 page detailer (cover can be used as a print ad)
 - Full page and ½ page ad
 - Photobank
- On-going Investigator Initiated Study (IIS) in Bristol University
 - **DEXDOMITOR 0,1** used at 125 µg/m² for premedication and at 62,5 µg/m² (equals about 1-5 µg/kg) for post op anxiety/pain
 - Study results expected late 2012, publication out possibly in late 2013



Microsoft Office
PowerPoint Presentation



Adobe Acrobat
Document

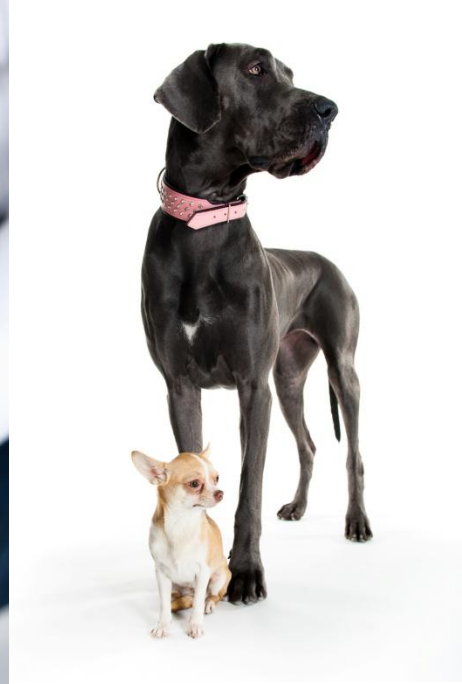


Adobe Acrobat
Document



03/10/2012

Strategic Marketing/C



WHO SWITCHED
ON THE LIGHTS?

ANTISEDAN 



WHO SWITCHED
ON THE LIGHTS?

ANTISEDAN 





Antisedan® (atipamezole hydrochloride)

- Indicated for the reversal of the sedative and other effects of Dexdomitor and Domitor
- Potent alpha-2 antagonist that selectively and competitively inhibits the alpha-2 adrenoceptor
- Longer elimination half-life than for dexmedetomidine
- Administered IM
 - in dogs, same dose volume as Dexdomitor 0,5 mg/ml but 1/5 volume as Dexdomitor 0,1
 - in cats, half the dose volume as Dexdomitor 0,5 mg/ml but 1/10 volume as Dexdomitor 0,1
- Reversal of Dexdomitor within 5 to 15 minutes
- Side effects are rare:
 - vomiting, hypersalivation, diarrhea, muscle tremors, and excitation



Dexdomitor 0,1 and Antisedan



Why not to have Antisedan new strength to match Dexdomitor 0,1?

- How much need there is for reversal after premedication?
 - Premed is a low dose → Dexdomitor's half-life is 40-50 min → by the end of operation Dexdomitor has most likely been eliminated → no need for reversal
- Micro dosing, e.g. post op dosing is normally not reversed

→ Any other use than reversal of sedation in very small dogs?


Remember to calculate the **1/5** volume of Antisedan in dogs and **1/10** volume in cats to reverse Dexdomitor 0,1

Take-home messages

Dexdomitor comes with two strengths (0,5 mg/ml and 0,1 mg/ml) to offer the veterinarian the **convenient** choice for **accurate** dosing according to the patient size and selected dose range



There is a great variety of possible dosing and combinations to use → **have a target and select the dose to meet the target**

A close-up photograph of a man with a beard and short hair, smiling warmly. He is holding a small, fluffy white dog, possibly a Maltese, which is looking towards the camera. The background is plain white.

Thank You!
Questions?

LICENSE ALREADY GRANTED, ARE YOU **READY TO ROCK?**

