



Metacam[®]

The Only NSAID Approved for Cats in the US

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Metacam[®]
(meloxicam)
Solution for Injection



Think easy. Think cat. Think METACAM.



Today's Agenda

- New pain management guidelines for cats
- Only NSAID approved for cats in the US
- Advantages of METACAM Solution for Injection in cats
- Dosage and administration
- Efficacy data



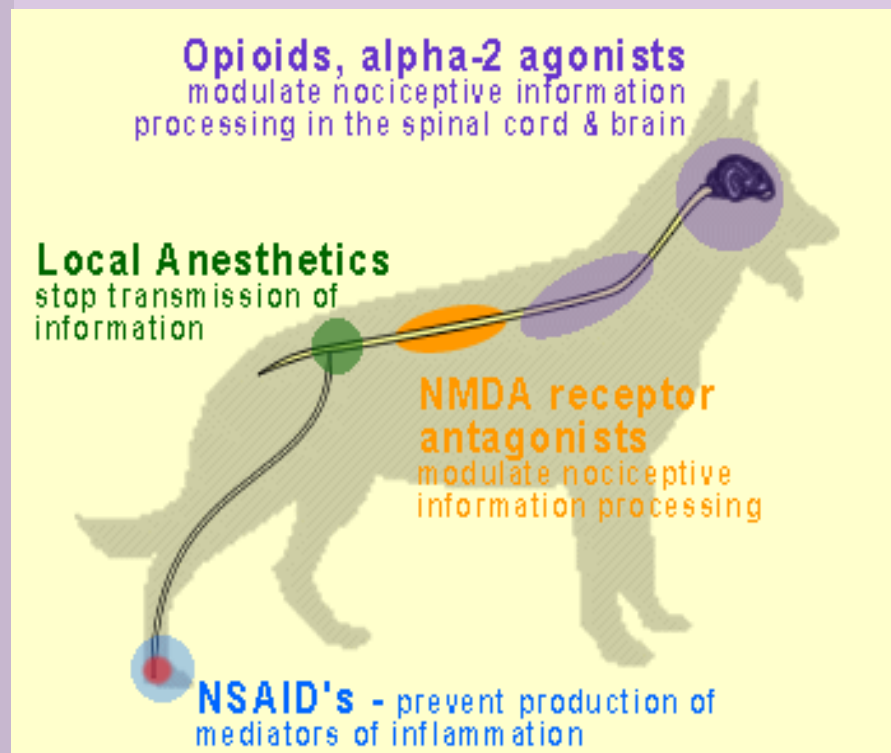
AAFP Pain Management Guidelines

- Guidelines focus on anticipation and prevention of pain

“Develop anesthetic protocols to include pain prevention, using appropriate agents at specific times.”¹

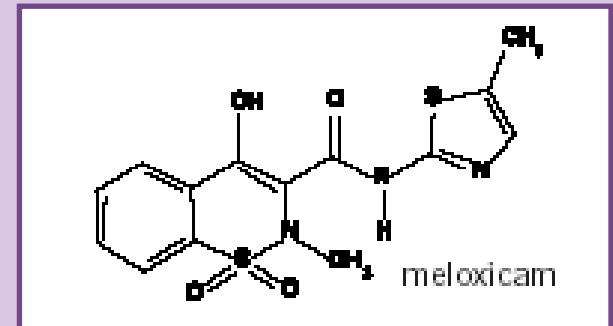
Multi-Modal Pharmaceuticals

- NSAIDs
- Local anesthetics
- Opioids
- Alpha₂ agonists
- NMDA antagonists



Pharmacological Facts — SQ in Feline

- Near 100% bioavailability
- $T_{1/2} = 15$ hours (24 hrs in dogs)
- $T_{max} = 1.5$ hours (2.5 hrs in dogs)
- 97% protein bound (same in dogs)
- Feline deficient in enzyme required for glucuronidation thus potential extended and erratic elimination
- More sensitive to NSAIDs





Guidelines Endorse Preemptive Analgesia

- Experts believe cats benefit from protocols that include preemptive perioperative analgesic and anti-inflammatory therapy
- Recovery from anesthesia may be better when pain relievers are used
- Until METACAM approval for cats, options for managing feline pain have been limited
- A single injection of METACAM provides 24 hours of analgesia vs 2–6 hours of analgesia when administering opioids alone



METACAM

- The *first and only* veterinary NSAID approved for control of postoperative pain and inflammation in cats in the US



Veterinarians Now Have Another Pain Management Option for Cats

Indication in cats:

- A single, preoperative injection effectively controls postoperative pain and inflammation
 - ▶ Orthopedic surgery
 - ▶ Ovariohysterectomy
 - ▶ Castration
- Administered as a one-time, Sub-Q injection



Advantages of METACAM Solution for Injection in Cats

- Pain control for 24 hours with one-time injection
- $T_{\max} = 1.5$ hours
- Convenient dosing based on 1-lb weight intervals
- Uses standard 1-mL syringe
- Quickly and easily drawn up into the syringe to ensure precise dosing
- Needles as small as 25 gauge can be used
- Less viscous than other injectable NSAIDs
- No refrigeration necessary — convenient storage at room temperature



Dosing and Administration in Cats

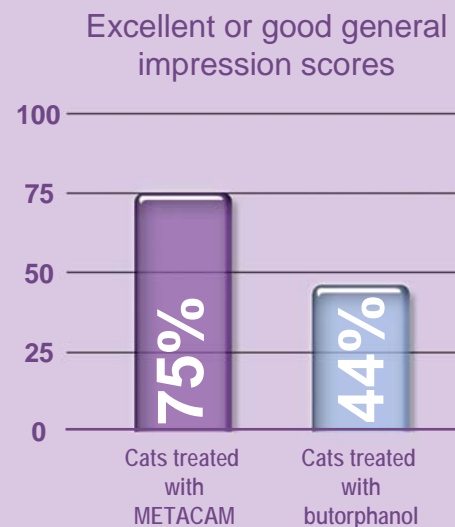
METACAM provides easy NSAID dosing specifically tailored to feline body weight

Body Weight (lbs)	mL METACAM Injection for Cats at 0.14 mg/lb (0.3 mg/kg)	Number of Doses in a 10 mL Vial at 0.14 mg/lb (0.3 mg/kg)
1	0.03	367
2	0.05	183
3	0.08	122
4	0.11	92
5	0.14	73
6	0.16	61
7	0.19	52
8	0.22	46
9	0.25	41
10	0.27	37

Efficacy Data Versus Butorphanol

METACAM provided extended analgesia after onychectomy or both onychectomy and neutering and was well tolerated¹

- Less lameness, lower pain scores, with METACAM
- Fewer METACAM-treated cats required rescue analgesia
- No clinically relevant adverse effects





When NSAIDs Are Not An Option

Gabapentin (Neurotin®)

- Analgesic/anti-convulsive properties- cats and dogs
- Prevent “wind-up”/ phantom pain
- Dose: 4-5mg/kg PO BID-TID, increase to 10mg/kg BID-TID PRN

Tramadol

- Synthetic codeine analogue
- No anti-inflammatory properties
- Dose: Up to 5mg/kg BID or TID (T $\frac{1}{2}$ life is 5-7 hours)
- Great compliment to NSAID therapy (“flare-up pain”)



When NSAIDs Are Not An Option

Buprenorphine (Buprenex®)

- Cats & small dogs?
 - ▶ pH of canine saliva- May interfere with sublingual absorption?
 - ▶ Expensive for large dogs
- Dose: 0.02 mg/kg orally/ sublingually
- Onset = 45-60 minutes
- Duration = 6-8 hours



Only METACAM Provides Relief of Inflammation as Well as Pain

Product Substance	Drug Class	Controlled	Relieves Inflammation
METACAM Solution for Injection	NSAID	NO	YES
Butorphanol	Opioid	YES	NO





Important Safety Information — Client Education

As a class, cyclo-oxygenase inhibitory NSAIDs may be associated with gastrointestinal, kidney, or liver side effects. Pets should be evaluated for pre-existing conditions and currently prescribed medications prior to treatment with METACAM. Anesthetic drugs may affect renal perfusion; approach concomitant use of anesthetics and NSAIDs cautiously. Use of parenteral fluids during surgery is recommended. Concurrent use of nephrotoxic medications should be carefully approached. Multiple injections or concurrent or follow up use with an NSAID (including METACAM) or corticosteroid should be avoided. **If side effects occur, pet owners should contact their veterinarian. Please refer to the package insert for complete product information or visit www.thinkmetacam.com.**



Summary

METACAM Solution for Injection —
the ONLY NSAID approved in the US for
use in cats

- Pain management compatible with new AAHA/AAFP guidelines
- A single, Sub-Q preoperative METACAM injection provides 24-hour pain relief
- Easy weight-based dosing using standard syringe
- Smooth syringability
- Low risk of side effects when used as directed



Questions

1.866.METACAM

www.thinkmetacam.com



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