



HOW TO INTEGRATE GALLIPRANT INTO AN EXPERT-RECOMMENDED,
STAGED APPROACH TO TREATMENT

INDICATION:

Galliprant controls pain and inflammation associated with osteoarthritis in dogs.





SKIP THE FLAMES AND GO STRAIGHT TO RELIEF WITH GALLIPRANT

Doesn't just mask pain; controls inflammation and pain at the source by targeting the EP4 receptor of PGE,

Unique mode of action reduces the impact on organ health^{1,2}

Proven effective at improving pain interference, pain severity, quality of life and veterinary assessments¹

Safety of label dose supported by laboratory study in healthy dogs receiving ~15x the dose continuously for 9 months*

*No adverse event was serious enough to require removal from study. Treatment was associated with mild GI signs (soft stools with mucus and/or blood, vomiting) and mild, reversible decreases in total protein and albumin. There were no clinically significant changes in liver, kidney or coagulation parameters, or pathologic changes within the kidneys, liver or stomach

IMPORTANT SAFETY INFORMATION: For use in dogs only. Keep this and all medications out of reach of children and pets to prevent accidental ingestion or overdose. Galliprant is a non-COX inhibiting NSAID. As a class, NSAIDs may be associated with gastrointestinal, kidney and liver side effects. Evaluation for pre-existing conditions and regular monitoring are recommended. Do not use in dogs that have a hypersensitivity to grapiprant. Concomitant use of Galliprant with other NSAIDs or corticosteroids should be avoided. Concurrent use with other anti-inflammatory drugs or protein-bound drugs has not been studied. The safe use of Galliprant has not been evaluated in dogs younger than 9 months of age and less than 8 lbs (3.6 kg), dogs used for breeding, pregnant or lactating dogs, or dogs with cardiac disease. Owners should be advised to observe for signs of potential drug toxicity. Adverse reactions may include vomiting, diarrhea, decreased appetite, watery or bloody stools, and decreases in serum albumin and total protein. Please see product label or visit my.elanco.com/us/galliprant for full prescribing information.

RETHINK CANINE **OSTEOARTHRITIS TREATMENT**

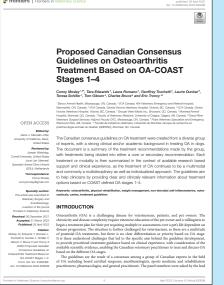
PUBLISHED EXPERT TREATMENT GUIDELINES BY STAGE OF DISEASE^{3,4}

The first treatment guidelines specific to canine OA are now available.

Proposed Canadian consensus auidelines on osteoarthritis treatment based on **OA-COAST stages 1-4.**

Mosley C, Edwards T, Romano L, et al. Front Vet Sci. 2022:9:446.









COAST Development Group international consensus guidelines for the treatment of canine osteoarthritis.

Cachon T. Frykman O. Innes JF, et al. Front Vet Sci. 2023:10:1137888.

CORE TREATMENTS: UNANIMOUS EXPERT CONSENSUS

STAGE 1 **ASYMPTOMATIC**

STAGE 2 MILD OA

STAGE 3 MODERATE

STAGE 4 SEVERE OA

OWNER EDUCATION

LIFESTYLE MODIFICATIONS

- Weight optimization
- Exercise/rehab appropriate for patient stage
- Administration of EPA-rich supplement or diet: minimum daily dose of 100mg/kg DHA/EPA

TREATMENT OPTIONS

Consider individual patient needs and response to therapy

FIRST-LINE

NSAID:

TREATS JOINT INFLAMMATION AND PAIN

- Beginning with stage 2, administer NSAID daily for 1-3 months before considering tapering dose
 - Dogs in stages 3 and 4 are likely to require lifelong daily treatment supplement or diet: minimum daily dose of 100mg/kg DHA/EPA

ANTI-NGF MAB:

PRIMARILY TREATS PAIN

- Consider in stage 2 if refractory pain suggests neurogenic component
- Unknown if can be safely used with NSAIDs long-term

SECONDARY TREATMENTS^{3,4}

- Amantadine, gabapentin and cannabinoids should be reserved as secondary options after the recommended core treatments
- Due to limited evidence of beneficial effects and some quality and safety concerns, other joint supplements did not receive unanimous expert support

NSAID USE IN CANINE OSTEOARTHRITIS:

WHAT DO THE EXPERTS SAY?



MINIMUM OF THREE MONTHS OF DAILY NSAID THERAPY IS RECOMMENDED AT FIRST DIAGNOSIS

MONTH 1 MONTH 2 MONTH 3

NSAID THERAPY

Even in mild stages of OA, a minimum of three months of daily NSAID therapy is recommended before determining if the dose can be tapered.

Dogs with moderate to severe OA are likely to require ongoing daily dosing for the long term.



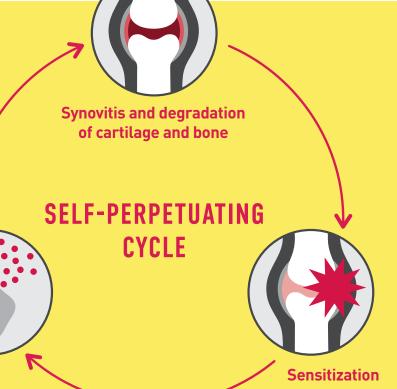
"It's important to use NSAIDs long-term in dogs with OA, not just for 2 weeks or as needed. The goal isn't intermittent pain relief. It's to control pain and inflammation for a prolonged period."

DENIS MARCELLIN-LITTLE, DEDV, DACVS, DECVS, ACVSMR

INFLAMMATORY MEDIATORS
PLAY A PIVOTAL ROLE IN OA
PATHOGENESIS.5-7

INCREASED PGE2 IN THE JOINT LEADS TO:

Stimulation of immune cells produces more proinflammatory mediators



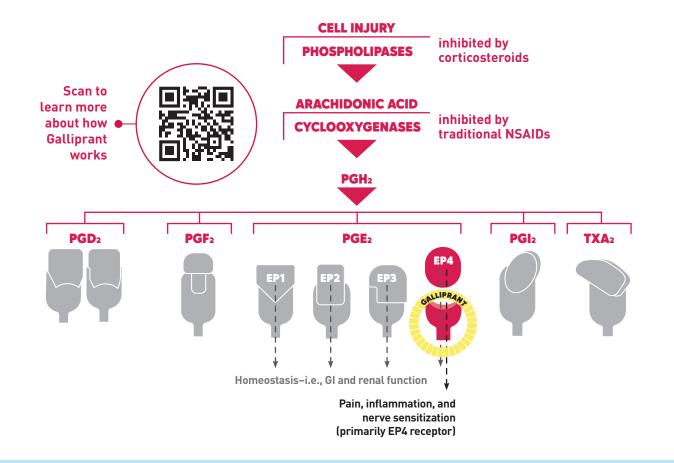
GALLIPRANT IS AN IDEAL CHOICE FOR LONG-TERM TREATMENT

BECAUSE IT WORKS DIFFERENTLY FROM OTHER NSAIDS

"In our practice, Galliprant is a first-line, long-term NSAID because it doesn't interfere with production of prostaglandins, and our considerable experience reflects its impressive safety data."



MARK EPSTEIN. DVM. DABVP CANINE. DABVP FELINE. CVPP. DAAPM





"I think we're lucky Galliprant came to the market because it has a different mode of action than previously available NSAIDs. It blocks OA pain and inflammation without disrupting production of prostaglandins."

CAROLINA MEDINA, DVM, DACVSMR, CVA, CVPP

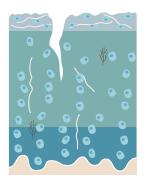
NSAIDS TREAT PAIN AND INFLAMMATION

WHILE ANTI-NGF MABS PRIMARILY TREAT PAIN



"We diagnose dogs with OA after joint pathology has occurred, so there is already a moderate to highly inflammatory state in the joint. This should be addressed with NSAIDs first before considering adjunctive therapies such as blocking nerve growth factor, which targets pain sensation but is not directly anti-inflammatory so is reserved for later stages of OA."

DAVID DYCUS, DVM, MS, CCRP, DACVS



OA BEGINS WITH CARTILAGE DAMAGE⁶



JOINT INFLAMMATION

TREATMENT:
• NSAIDs



NERVE SENSITIZATION

- TREATMENT:
- NSAIDs
- Anti-NGF mAbs



ANTI-NGF MABS ARE NOT UNANIMOUSLY SUPPORTED BY EXPERTS UNTIL STAGES 3 AND 4 BECAUSE THEY TARGET PERIPHERAL SENSITIZATION BUT NOT THE UNDERLYING DRIVER, JOINT INFLAMMATION.^{3,4}

Despite effective analgesia, anti-NGF mAbs have been shown in multiple species to have a negative impact on cartilage, synovium and subchondral bone that may accelerate joint degeneration.^{8,9}



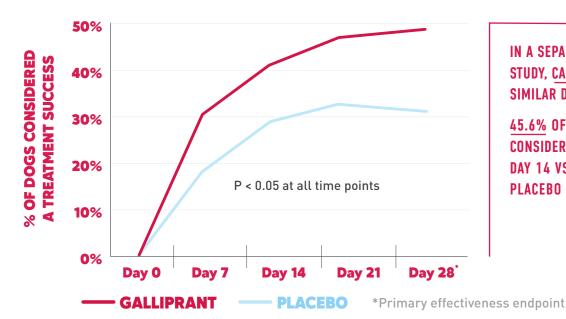
Although I am excited to have a new treatment targeting peripheral nerves, anti-NGF monoclonal antibodies won't replace NSAIDs in my practice because physiologically we know fluctuations in joint inflammation continue even in later stages of OA."

DENIS MARCELLIN-LITTLE, DEDV, DACVS, DECVS, ACVSMR

GALLIPRANT: LONG-TERM RELIABILITY AND SAFETY

GALLIPRANT FEATURES A UNIQUE MODE OF ACTION THAT EFFECTIVELY ADDRESSES INFLAMMATION AND PAIN WHILE REDUCING THE IMPACT ON ORGAN HEALTH.

Masked, randomized, placebo-controlled, multicenter field trial in 285 client-owned dogs1



IN A SEPARATE BUT SIMILAR
STUDY, CARPROFEN SHOWED A
SIMILAR DEGREE OF EFFICACY¹⁰:

45.6% OF TREATED DOGS CONSIDERED A SUCCESS AT DAY 14 VS 23.7% IN THE PLACEBO GROUP

Treatment Success = Improvement in pain severity score of 1 or more + Improvement in pain interference score of 2 or more + Overall assessment same or better

IN AN EARLY INTERVENTION STUDY¹¹, YOUNG DOGS* TREATED WITH GALLIPRANT CONTINUOUSLY FOR 4 MONTHS SHOWED SIGNIFICANT IMPROVEMENTS IN:











GAIT ANALYSIS[†]

MOBILITY

COMFORT

OUALITY OF LIFE

SLEEP QUALITY

EARLY INTERVENTION WITH GALLIPRANT AS PART OF A CORE TREATMENT PROTOCOL*

RESULTED IN SIGNIFICANT IMPROVEMENTS IN YOUNG DOGS WITH OA.

^{*}Young dogs: 9-48 months

[†]Meaningful improvements in peak vertical force (force plate).

^{*}Study used three core treatments, unanimously recommended by experts: NSAIDs (Galliprant) to control joint pain and inflammation, an EPA-rich diet, and exercise.

EFFECTIVELY CONTROL CANINE OA INFLAMMATION AND PAIN AT THE SOURCE WITH GALLIPRANT _____

	Gallípránt®	RIMADYL® (carprofen)	PREVICOX® (firocoxib)	LIBRELA® (bedinvetmab)
FDA approved to control pain associated with canine OA	\$	•	•	•
FDA approved to control inflammation associated with canine OA	\$	•	•	
Does not disrupt production of prostaglandins important for organ health ^{1,2}	\$			•
Safety of the label dose supported by a laboratory study in healthy dogs receiving up to ~15x the dose daily for 9 months*	\$			
Stocked by more veterinary clinics in the U.S. than any other brand name NSAID ¹²	\$			

^{*}No adverse event was serious enough to require removal from study. Treatment was associated with mild GI signs (soft stools with mucus and/or blood, vomiting) and mild, reversible decreases in total protein and albumin. There were no clinically significant changes in liver, kidney or coagulation parameters, or pathologic changes within the kidneys, liver or stomach.



TREATING CANINE OA SHOULDN'T BE A PAIN

- Galliprant is safe, effective, and easily given from the comfort of home without injections.
- It's a once-a-day, flavored chewable tablet that fits into your clients' daily routines.

See how a targeted approach to treating canine OA works. Visit my.elanco.com/us/galliprant or contact your Elanco sales representative at (800) 633-3796.

REFERENCES

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2Kirby Shaw K, Rausch-Derra LC, Rhodes L. Grapiprant: an EP4 prostaglandin receptor antagonist and novel therapy for pain and inflammation. Vet Med Sci. 2016;2(1):3-9.

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¹²Elanco Animal Health. Data on file.

