

Librela™

(bedinvetmab injection)

A New Era in OA Pain Management

Safe and effective pain relief for all stages of canine osteoarthritis (OA)¹⁻³



Enabled by AI

**More than 3 years of real-world clinical experience,
and over 21 million doses delivered*⁴**

Librela is broadly used in OA dogs over 1 year of age^{4,5}

- With mild, moderate and severe disease
- Newly and previously diagnosed dogs
- Many dogs with comorbidities at the start of treatment
- **55%** of veterinarians state they will start treatment earlier and **70%** will treat more dogs, now that Librela is available⁴

Librela has high levels of satisfaction on top product attributes^{4,6}

- Pain reduction
- Improved mobility
- Improved quality of life
- Safety/tolerability

With better performance than nonsteroidal anti-inflammatory drugs (NSAIDs) on top product attributes

40%
of vets

started using
Librela due to lack
of efficacy of
previous treatment⁷

28%
of vets

wanted to
improve
compliance⁷

*As of September 2024.

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Librela is expanding treatment options for canine OA pain

Librela is the first and only convenient monthly injectable anti-Nerve Growth Factor (NGF) monoclonal antibody (mAb) therapy for the control of canine OA pain

Librela[™]
(bedinvetmab injection)



Effectively controls OA pain for 1 month with a proven safety profile^{1,8,9}



Functions like naturally occurring antibodies with minimal involvement of liver or kidneys and minimal GI impact¹⁻³



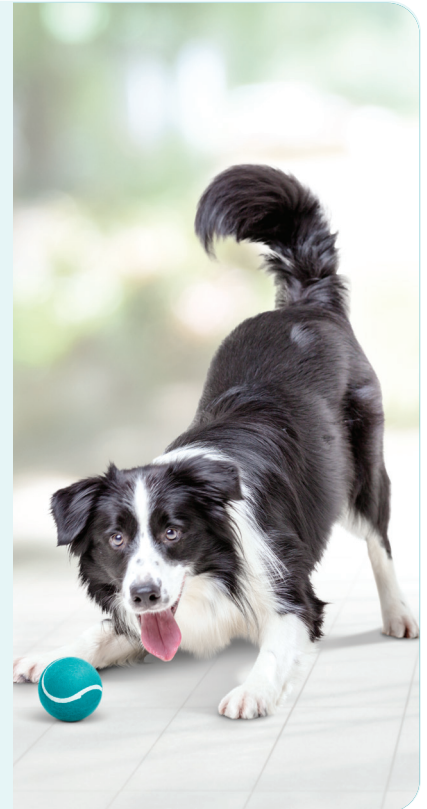
Works differently from NSAIDs by specifically targeting NGF, a key player in OA pain^{1,10-12}



Dogs experiencing reduced pain also had increased mobility as soon as after the first injection⁹



In a post-launch clinical study, Librela improved OA pain leading to increased quality of life (QoL) — restoring the patient's QoL to that of average healthy dogs¹³



High level of client satisfaction in real-world experience

93%

of pet owners rated
Librela as same or
better than previous
medications⁶



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Veterinarians can be confident with Librela based on its mode of action in OA

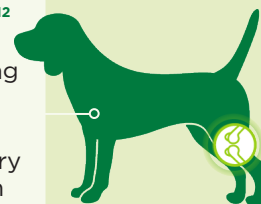
Librela[™]
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**NGF contributes both to the pain and inflammation of OA:
Librela interferes with the NGF cycle¹²**

Action	Pain	Inflammation
Initiates pain signal	✓	
Peripheral sensitization	✓	
Central sensitization	✓	
Neurogenic inflammation	✓	✓
Stimulates immune cells to release inflammatory mediators and more NGF	✓	✓
Causes angiogenesis		✓
Causes neuronal sprouting	✓	

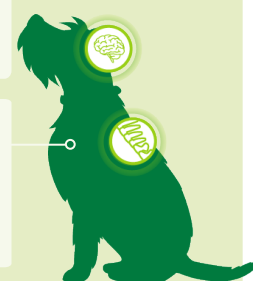
Peripheral sensitization^{1,12}

- Limits neurogenic inflammation by reducing release of substance P and CGRP
- Reduces proinflammatory mediators released from immune cells
- Decreases NGF-derived neuronal sprouting and angiogenesis



Central sensitization^{1,12}

- Reduces pain signals to the brain by inhibiting binding of NGF to its receptor



Librela and NSAIDs are both recommended for first-line management of chronic OA pain in the following expert guidelines.



AAHA 2022 Guidelines¹⁴



WSAVA 2022 Guidelines¹⁵



COAST 2023 Guidelines^{*16}

OA pain exists 365 days per year but NSAIDs on average result in:

60.5 DAYS
with treatment¹⁷

304.5 DAYS
without treatment⁵



Librela helps close the compliance gap with safe and effective monthly dosing for OA pain control.^{1,5,8,9}

* All members (100%) agreed on either NSAIDs or anti-Nerve Growth Factor (NGF) as first-line therapy for COAST Stage 3 or 4. Six of 9 members (67%) consider either anti-NGF monoclonal antibody (mAb) or NSAIDs as first-line therapy for COAST Stage 2.

Are you ready for the new era in OA pain management?



Product Description	Dosage	Label Color	Pack Quantity	Catalog #
	5 mg/mL	Orange	6 vials	10022788
	10 mg/mL	Blue	6 vials	10022807
	15 mg/mL	Green	6 vials	10022808
	20 mg/mL	Yellow	6 vials	10022809
	30 mg/mL	Purple	6 vials	10022810

View and download Librela dosing information from LibrelaVetTeam.com

LIBRELA IMPORTANT SAFETY INFORMATION: For use in dogs only. Women who are pregnant, trying to conceive or breastfeeding should take extreme care to avoid self-injection. Hypersensitivity reactions, including anaphylaxis, could potentially occur with self-injection. Librela should not be used in breeding, pregnant or lactating dogs. Librela should not be administered to dogs with known hypersensitivity to bedinvetmab. The most common adverse events reported in a clinical study were urinary tract infections, bacterial skin infections and dermatitis. See full Prescribing Information at LibrelaPI.com.

RIMADYL IMPORTANT SAFETY INFORMATION: As a class, NSAIDs may be associated with gastrointestinal, kidney and liver side effects. These are usually mild, but may be serious. Pet parents should discontinue therapy and contact their vet immediately if side effects occur. Evaluation for pre-existing conditions and regular monitoring are recommended for pets on any medication, including Rimadyl. Use with other NSAIDs or corticosteroids should be avoided. See full Prescribing Information at RimadylPI.com.

References: 1. Librela Prescribing Information. Zoetis Inc. March 2023. 2. Keizer RJ, Juieterma AD, Schellens JH, Beijnen JH. Clinical pharmacology of therapeutic monoclonal antibodies. *Clin Pharmacokinetic*. 2010;49(8):493-507. doi:10.2165/11531280 3. Olivry T, Bainbridge G. Advances in veterinary medicine: therapeutic monoclonal antibodies for companion animals. Zoetis. March 2015. 4. BIO'SAT Vet Market Research, Study Report Librela UK, November 2021. 5. FMR Global Health Report: Librela Patient Record Real Data. December 2021. 6. Foster Rosenblatt Market Research Report, February 2022. 7. Gildea E, et al. Use of bedinvetmab (Librela[™]) for canine osteoarthritis in France, Germany, Italy, Spain and the UK: quantitative analysis of veterinarian satisfaction and real-world treatment patterns. *Animals*. 2024;14:2231. 8. Michels GM, Honsberger NA, Walters RR, Tena JKS, Cleaver DM. A prospective, randomized, double-blind, placebo-controlled multisite, parallel-group field study in dogs with osteoarthritis conducted in the United States of America evaluating bedinvetmab, a canine anti-nerve growth factor monoclonal antibody. *Vet Anaesth Analg*. 2023;50(5):446-458. doi:10.1016/j.vaa.2023.06.003 9. Corral MJ, Moyaert H, Fernandes T, et al. A prospective, randomized, blinded, placebo-controlled multisite clinical study of bedinvetmab, a canine monoclonal antibody targeting nerve growth factor, in dogs with osteoarthritis. *Vet Anaesth Analg*. 2021;48(6):943-955. doi:10.1016/j.vaa.2021.08.001 10. Isola M, Ferrari V, Miolo A, et al. Nerve growth factor concentrations in the synovial fluid from healthy dogs and dogs with secondary osteoarthritis. *Vet Comp Orthop Traumatol*. 2011;24(4):279-284. doi:10.3415/VCOT-10-04-0051 11. Mantyh PW, Koltzenburg M, Mendell LM, Tive L, Shelton DL. Antagonism of nerve growth factor-TrkA signaling and the relief of pain. *Anesthesiology*. 2011;115(1):189-204. doi:10.1097/ALN.0b013e31821b1ac5 12. Enomoto M, Mantyh PW, Murrell J, Innes JF, Lascelles BDX. Anti-nerve growth factor monoclonal antibodies for the control of pain in dogs and cats. *Vet Rec*. 2019;184(1):23. doi:10.1136/vr.104590 13. Reid J, Bartram D, Thompson J, Scales-Theobald E, Gildea E. Measuring improvement in quality of life of dogs with osteoarthritis (OA) treated with bedinvetmab (Librela[®], Zoetis, Inc., Parsippany, NJ) using an app-based, validated, owner-reported, health-related quality of life (HRQL) outcome measure (VetMetrica[™]). British Small Animal Veterinary Association Congress. Poster presentation. Manchester, United Kingdom 2023. 14. Gruen ME, Lascelles BDX, Collieran E, et al. 2022 AAHA Pain Management Guidelines for Dogs and Cats. *J Am Anim Hosp Assoc*. 2022;58(2):55-76. 15. Monteiro BP, Lascelles BDX, Murrell J, et al. 2022 WSAVA guidelines for the recognition, assessment and treatment of pain. *J Small Anim Pract*. 2023;64(4):177-254. 16. Cachon T, Frykman O, Innes JF, et al. COAST Development Group's international consensus guidelines for the treatment of canine osteoarthritis. *Front Vet Sci*. 2023;10:1137888. 17. ZMR Kynetec PetTrak Data. GAH-539, July 2022.