

# ARTHRAMID<sup>®</sup>



2.5% iPAAG  
Hydrogel



HEALTHY SYNOVIUM - HEALTHY JOINT

## Canine Technical Data



# ELBOW OSTEOARTHRITIS: A PILOT STUDY<sup>1</sup>

- **Design:** Non-blinded prospective observational clinical study
- **Method:** 20 client-owned Labrador Retriever dogs with evidence of moderate to severe elbow OA (using radiography, computer tomography and arthroscopy) and clinically lame were enrolled
- **Treatment:** 1 ml of 2.5% iPAAG was injected into the worst elbow joint via intra-articular injection
- **Response to treatment was evaluated by the following at 4 weeks:**
  - Gait4Dog gait analysis
  - HALO goniometry
  - AimOA
  - Clinical findings

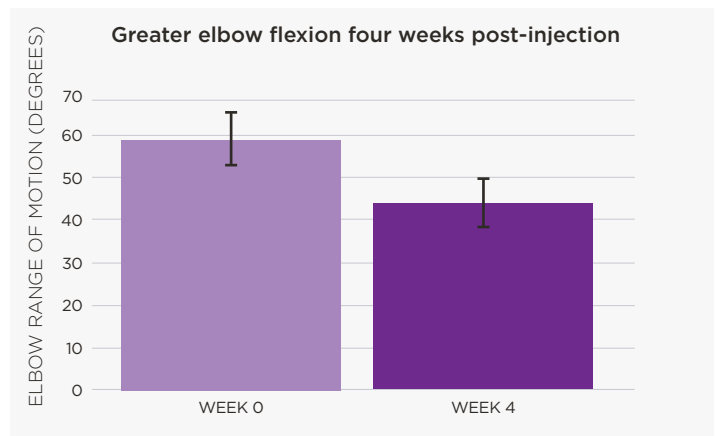
## RESULTS

- In 75% of patients 2.5% iPAAG significantly improved lameness during the first 4 weeks
  - Gait Analysis showed significant improvement in weight-bearing pressure between baseline and week 4 ( $p = 0.007$ )
  - Elbow Flexion - HALO ( $p = 0.04$ )
  - Pain Parameters - AIM OA Sys ( $p = 0.02$ )
  - Limb Function - AIM OA Sys ( $p = 0.001$ )\*

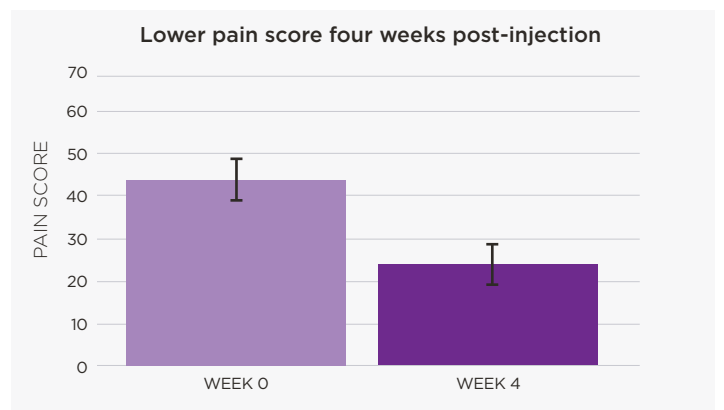
## CONCLUSIONS

A 1mL injection of 2.5% iPAAG into a moderate to severe arthritic elbow does have a statistically significant positive effect on physical improvement in elbow osteoarthritis, including reducing degree of lameness, reduced pain scores and improvement in elbow flexion.

\*A  $p$  value of less than 0.05 is considered clinically significant



Error bars represent +/- 1 SEM



Pain Score as assessed by AIM OA  
Error bars represent +/- 1 SEM



## SAFETY & EFFICACY OF 2.5% POLYACRYLAMIDE HYDROGEL<sup>2</sup>

- **Design:** Evaluation of safety and efficacy of 2.5% polyacrylamide hydrogel (2.5% iPAAG) intra-articular injections in dogs diagnosed with osteoarthritis (OA)
- **Method:** Data was collected through an anonymous online survey distributed by 4 veterinary practices to owners whose dogs were treated with 2.5% iPAAG. The survey collected responses from 100 owners, reflecting their experience with a total of 150 individual injections across various joints. Dosing in most cases was 0.5–1.0mL

### Distribution of injected joints across 150 individual procedures

JOINT	NUMBER OF CASES
Elbow	79
Stifle	28
Shoulder	21
Hip	17
Other (Tarsus/Carpus)	5

*Multiple joint injections in 23% of cases*

## RESULTS

- 85% experienced symptom relief post-injection
- 63% reduced or discontinued use of other medications
- 44% reduced or discontinued use of NSAIDs
- 10% experienced short-term side effects of which transient injection site soreness was most reported
- 90% of respondents indicated they would use 2.5% iPAAG again if recommended by a veterinarian

## CONCLUSIONS

2.5% iPAAG injections are generally effective and well tolerated for managing canine OA, providing significant symptom relief and reducing reliance on other pain medications and therapies. The treatment has shown versatility in being used successfully across various joint types and combinations.

## OBSERVATIONAL ASSESSMENT: AFTER INJECTION WITH 2.5% iPAAG<sup>3</sup>

- **Design:** Prospective observational clinical study
- **Method:** 50 dogs with 102 individual procedures took part in the study
- **Parameters:** Measurements included:
  - Lameness at a walk
  - Lameness at a trot
  - Pain on manipulation
  - Range of motion
  - General functional disability
- **Measurements:** were taken on days: 0, 30, 60, 90, 180, 360 and 390

### Net change frequencies indicating an improvement in the Veterinary Orthopedic Exam Parameters

PARAMETER MEASURED	% OF CASES IMPROVED
Lameness at walk	82.5%
Lameness at trot	75.8%
Pain on manipulation	80.1%
Range of motion	80.6%
General function disability	88.7%

## CONCLUSIONS

- Majority of cases showed 75% or more improvement in the Veterinary Orthopedic Examination
- There was a progressive improvement in the results through Day 30, Day 60 and Day 90 examinations, indicating that treatment outcomes improve with time, up to 90 days before stabilizing.
- 67% of the dogs treated were able to reduce or discontinue systemic analgesics





## Case Selection & Management

Arthramid® is indicated for the management of non-infectious causes of joint disease in horses and dogs, including both early and late stages of osteoarthritis.

Cases suitable for Arthramid® treatment are those in which synovitis or osteoarthritis (OA) has been diagnosed and localized to a specific synovial joint(s). It is essential to rule out any confounding cause of lameness, such as bone fragments, fractures, or other unknown factors, such as local or systemic infection. Once these pathologies are resolved, treatment may be considered appropriate.



## Storage

Arthramid® must be stored protected from direct sunlight. Do not freeze. Do not store unsealed syringes for later use. Arthramid® has a 3-year shelf life; always check package expiration date before use.



# ARTHRAMID®

For further information, including our White Paper, scan the QR code above or visit [www.OAEd.pet](http://www.OAEd.pet)

## Dose & Administration

Arthramid® is for intra-articular injection by a veterinarian. Strict aseptic technique is essential to prevent contamination of the injection site.

The dose injected into a joint is at the discretion of the veterinarian and may vary depending on the volume of the joint and/or the severity or duration of the disease.

### CANINE DOSING RECOMMENDATIONS

<b>LARGE JOINT:</b> Shoulder, elbow, hip, and stifle	1.0 - 2.0 mL
<b>MEDIUM JOINT:</b> Carpus and Tarsus	0.5 - 1.0 mL
<b>SMALL JOINT:</b> Inter-phalangeal joint	0.25 - 0.5 mL

Arthramid® is supplied in a pre-filled 1mL syringe sealed via a Leur lock fitting. Arthramid® is for intra-articular injection only by a veterinarian.

Arthramid® should be administered via a sterile 20-23g needle using aseptic injection technique protocols to prevent contamination of the injection site.

Caution: Federal law restricts this prescription device to sale by or on the order of a licensed veterinarian and it must be used under the supervision of a licensed veterinarian for the application of intra-articular administration.

### References

1. Data on File. Harkin, C. L., & Mansbridge, S. C. (2017-2018) An observational assessment of Arthramid®: A novel intra-articular injection and its relationship with veterinary physiotherapy on patient outcomes in Labrador Retrievers with elbow osteoarthritis. Harper Adams University, Shropshire, United Kingdom.
2. Data on File. Barnhard, J. A., Webb, K. R., Tringali, A. A., Levine, D., Green, M. M., & Brunke, M. W. (2024). Owner-reported safety and efficacy of 2.5% polyacrylamide hydrogel (iPAAG) intraarticular injections in dogs with osteoarthritis.
3. Data on File. Gaynor J. Observational study assessing the results from veterinary orthopedic examination of 50 dogs after injection with 2.5% polyacrylamide hydrogel.