



Frequently asked questions about Adequan[®] Canine (polysulfated glycosaminoglycan)

ABOUT ADEQUAN[®] CANINE

What is Adequan[®] Canine?

Adequan[®] Canine is the only FDA-approved disease-modifying osteoarthritis drug (DMOAD) for dogs. It is recommended for intramuscular injection for the control of signs associated with non-infectious degenerative and/or traumatic arthritis of canine synovial joints.

Adequan Canine Solution is a prescription formulation of polysulfated glycosaminoglycan (PSGAG). It is a DMOAD which inhibits cartilage loss in a dog's joints.

Are there age or breed restrictions for Adequan Canine?

No age or breed restrictions; use in pregnant, breeding or lactating animals has not been evaluated.

How is Adequan Canine packaged?

Adequan Canine is a solution that is colorless to slightly yellow; 100 mg/mL in a 5 mL preserved multiple-dose vial, packaged 2 vials per box.

What is the dosage and administration?

2 mg/lb (.02 mL/lb or 1 mL/50 lb) by intramuscular injection only, twice weekly for up to 4 weeks (maximum of 8 injections).

How fast does Adequan Canine work?

It begins to work in the joint within 2 hours and stays in the joint for approximately 3 days.¹

What is the pharmacology of Adequan Canine?

- Low molecular weight allows the distribution of PSGAG from the bloodstream to the synovial fluid.
- Distribution from the synovial fluid to the cartilage takes place by diffusion.
- In the articular cartilage, the drug is deposited into the cartilage matrix.
- PSGAG reaches synovial fluid within 2 hours of injection.¹
- Detectable levels are maintained in synovial fluid and articular cartilage for up to 72 hours.¹
- The specific mechanism of action of Adequan Canine in canine joints is not known.

MODE OF ACTION & EFFICACY

What is the Mechanism of Action for Adequan Canine?

The specific mechanism of action of Adequan Canine in joints is not known. *In vitro* research suggests PSGAG:

- Inhibits certain catabolic enzymes which have increased activity in inflamed joints.
- Enhances the activity of anabolic enzymes.
- Stimulates the synthesis of protein, collagen, proteoglycans and hyaluronic acid by chondrocytes and synoviocytes.
- Potentiates hyaluronic acid synthesis by synovial membrane cells.
- In the articular cartilage the drug is deposited into cartilage matrix and may help shield against further degradation.

What is the proof of efficacy for Adequan Canine?

Efficacy demonstrated in two studies, radiolabeled and clinical field trials.

- A study was conducted of the distribution of radiolabeled PSGAG into canine serum, synovial fluid and articular cartilage following a single IM injection of 2 mg/lb. Synovial fluid protein (an indicator of synovial inflammation) was significantly reduced in the shoulder joint.¹
- Field trial: Dogs with radiographically detectable degenerative joint disease in one or two limbs were administered IM injections twice weekly for 4 weeks (total of 8 injections). Dogs treated with Adequan Canine had statistically significant improvement in range of motion and orthopedic scores compared with placebo-treated control dogs.¹

For additional Pharmacology and Efficacy information, see the Full Prescribing Label on page 4.

HOW TO USE: PROTOCOL

Can I give Adequan Canine to a dog already taking an NSAID?

Luitpold Animal Health (LAH) has not completed any trials or studies identifying the combination use of NSAIDs and Adequan Canine.

What is the treatment protocol for a new patient starting with Adequan[®] Canine?

The approved label dose of Adequan Canine is 2 mg/lb body weight (.02 mL/lb or 1 mL/50 lb), by intramuscular injection only, twice weekly for up to 4 weeks (maximum of 8 injections).

Do not exceed the recommended dose or therapeutic regimen. Do not mix Adequan[®] Canine with other drugs or solvents. Be sure to practice aseptic techniques in withdrawing each dose to decrease the possibility of post-injection bacterial infections. Adequately clean and disinfect the stopper prior to entry with a sterile needle and syringe. Use only sterile needles and use each needle only once.

What is the treatment protocol after the first 8 injections?

The approved label dose of Adequan Canine is 2 mg/lb body weight (.02 mL/lb or 1 mL per 50 lb), by intramuscular injection only, twice weekly for up to 4 weeks (maximum of 8 injections). We have no further studies or technical data supporting a use protocol beyond the approved label dosing.

Do I have to keep Adequan Canine refrigerated?

No, Adequan Canine needs to be stored at 68° to 77° F (20° to 25° C) with excursions permitted to 59° to 86° F (15° to 30° C). You need to avoid prolonged exposure to temperatures greater or equal to 104° F (40° C).

Can I give Adequan Canine subcutaneously instead of by intramuscular injection?

Adequan Canine is approved only for intramuscular injection.

Is Adequan Canine in a multiple-use vial?

Yes, Adequan Canine contains a preservative, which allows for multiple punctures of an individual vial. A product vial must be used within 28 days of first puncture and is limited to a maximum puncture of 10 times. Please properly dispose of spent needles in accordance with all federal, state and local environmental laws.

HOW DOES ADEQUAN CANINE COMPARE?

What is the difference between FDA-approved prescription Adequan Canine and other over-the-counter products?

There are many supplements and over-the-counter products making similar claims to Adequan Canine. However, these products are only supported by statements and do not have the structured and qualified product testing and trials Adequan Canine completed to obtain FDA-approval.

Adequan Canine is the only FDA-approved disease-modifying osteoarthritis drug for use in dogs and is recommended for the control of signs associated with non-infectious degenerative and/or traumatic arthritis of canine synovial joints.

SAFETY INFORMATION

Are there any Contraindications?

Do not use in dogs showing a hypersensitivity to PSGAG. PSGAG is a synthetic heparinoid; do not use in dogs with known or suspected bleeding disorders.

Any Precautions?

The safe use of Adequan Canine used in breeding, pregnant, or lactating dogs has not been evaluated. Use with caution in dogs with renal or hepatic impairment.

What is the current ISI (Important Safety Information) statement?

Adequan Canine should not be used in dogs who are hypersensitive to PSGAG or who have a known or suspected bleeding disorder. It should be used with caution in dogs with renal or hepatic impairment. Adverse reactions in clinical studies (transient pain at injection site, transient diarrhea, and abnormal bleeding) were mild and self-limiting. In post approval experience, death has been reported in some cases; vomiting, anorexia, depression/lethargy and diarrhea have also been reported. The safe use of PSGAG in breeding, pregnant or lactating dogs has not been evaluated. For additional safety information, please [Click Here](#) for Full Prescribing Information.

For additional Protocol and Safety information, see the Full Prescribing Label on page 4.

ABOUT LUITPOLD ANIMAL HEALTH The manufacturer of Adequan® Canine

Why is this change with Adequan® Canine occurring?

Adequan® Canine, a product you've trusted for more than 20 years is now being distributed by its manufacturer, Luitpold Pharmaceuticals, Inc., Luitpold Animal Health. Working with distribution partners, we're now able to distribute the product and provide technical and customer support as well, to help advance joint health in dogs.

When does this change take place?

April 1, 2018

Will there be any delay in obtaining product in transition?

We do not anticipate any supply issues during the transition.

HOW TO PURCHASE

How can I order Adequan Canine?

Your Adequan Canine needs will still be serviced through a wide network of authorized veterinary distributors. Please go to the LAH website or call LAH at 800-458-0163.

Will the veterinary pricing change?

While we do not anticipate any pricing changes, please check with your distributor. LAH does not set the pricing structure to veterinarians from our distribution partners.

Can veterinarians or pet owners purchase Adequan Canine directly from Luitpold Animal Health?

We have established a wide network of distributors that make purchase easy. If you want to buy directly from LAH, we can have our National Key Accounts Manager reach out to you to discuss options. And since this is a prescription-only product, pet owners must purchase through a licensed, practicing veterinarian, not directly through LAH.

When is Adequan Canine available for sale from Luitpold Animal Health's distribution partners?

The transition of LAH becoming the official marketing distributor of Adequan Canine will be April 1, 2018, however the product availability through your distributor should be a seamless transition and uninterrupted.

What happens to my pending orders for Adequan Canine prior to the April 1 transition?

Please contact the local distributor where you placed your order. They will be the best source of information on your current and pending orders.

How do I return expired product after March 31?

Short-dated or expired Adequan Canine product should be returned to the distributor that originally supplied the product, per the established return policies. Contact your distributor or Luitpold Animal Health at 800-458-0163.

Will I have an LAH sales representative I can call?

Yes, you can contact LAH direct at 800-458-0163 if you would like to connect with your LAH sales representative or contact your local distributor if you need to place an order.

Which distributors will initially be carrying Adequan Canine?

- Patterson Vet — 800-225-7911
- MWI — 800-824-3703
- Henry Schein Vet — 855-724-3461
- Midwest Vet — 800-643-9378
- Penn Vet — 800-233-0210
- Victor Medical — 800-888-8908

ABOUT REBATES

Will client rebates offered before the April 1, 2018 transition still be redeemable?

Yes, the rebates provided prior to the April 1, 2018 transition will be honored for purchases completed on or before 3/31/2018 and requests must be received on or before 6/1/2018. LAH is evaluating the program, look for more details later.

FOR MORE INFORMATION

Where can I get a pet owner brochure?

We are working through the transition of all support materials needed to assist your continued use of Adequan Canine, including pet owner brochures. To learn more, please visit adequancanine.com or contact LAH at 800-458-0163.

Where can I get a scientific paper, more information, a publication or a monograph?

Visit adequancanine.com to learn more on the latest available technical information or call Medical Affairs at 888-354-4855.

Will this transition affect my clients or their dogs that are already on Adequan Canine?

The availability of Adequan Canine should experience no delays or interruptions with this transition.

Who can I call with questions about Adequan Canine?

To speak to a customer service representative, please call 800-458-0163 Monday-Friday, 8 a.m. to 6 p.m. ET or email cs@luitpold.com. For Technical questions, call Medical Affairs at 888-354-4855 Monday-Friday, 9 a.m. to 5 p.m. ET. To report an adverse event, call 800-734-9236 or email pv@luitpold.com.

Is there a website?

Yes, you can learn more at adequancanine.com.

