PRN®
PHARMACAL

It's always there...

looming, unpredictable, yet certain.

But seizures associated with idiopathic epilepsy in dogs can be safely and reliably controlled.

KBroVet®
(potassium bromide chewable tablets)

FDA-approved KBroVet® (potassium bromide chewable tablets) are indicated for the control of seizures associated with idiopathic epilespy in dogs.

What is Idiopathic Epilepsy?

Idiopathic epilepsy is recognized as a potentially life-threatening condition—the owner's impression of the impact on the household, including emotional stress, psychosocial challenges, and economic burden may influence the decision to treat or euthanize.[1] The lifelong control of idiopathic epilepsy requires a significant commitment from the pet owner, the burden of which can become a looming cloud.[2]

Idiopathic epilepsy is the **most common chronic neurological disorde**r seen in dogs,[3,4] affecting approximately 0.5% to 6% of the canine population, depending on breed.[5] While the exact cause is usually unknown, genetics may play a role making it more common in some purebred breeds.[6]

Precipitating Factors

Although the underlying cause of IE may never be identified, many dogs appear to be influenced by the same external factors. In a study of 50 dogs diagnosed with idiopathic epilepsy, 74% had at least one owner identified seizure-precipitating factor.[7]

- **24%** Unfamiliar Places
- **27%** Change in Life Situation
- **24%** Sleep Deprivation
- **21%** Stress-Related Situations
- **22%** Weather (Hot)
- **21%** Excitement
- **24%** Change in Daily Routine
- **30%** *Hormonal Factors
  *Of intact males exposed to female in estrus
- **30%** Vistors in the Home

How to Assess Dogs for Idiopathic Epilepsy

Idiopathic epilepsy is a diagnosis of exclusion done by following a step-by-step process to rule out other causes and confirm that the dog fits typical patterns for this condition.[8]

Confirm Seizures
- History and video
- Physical examination

Consider Age & Breed
- Onset usually between 6 months – 6 years[9]

Perform a Neurologic Exam
- Normal between seizures

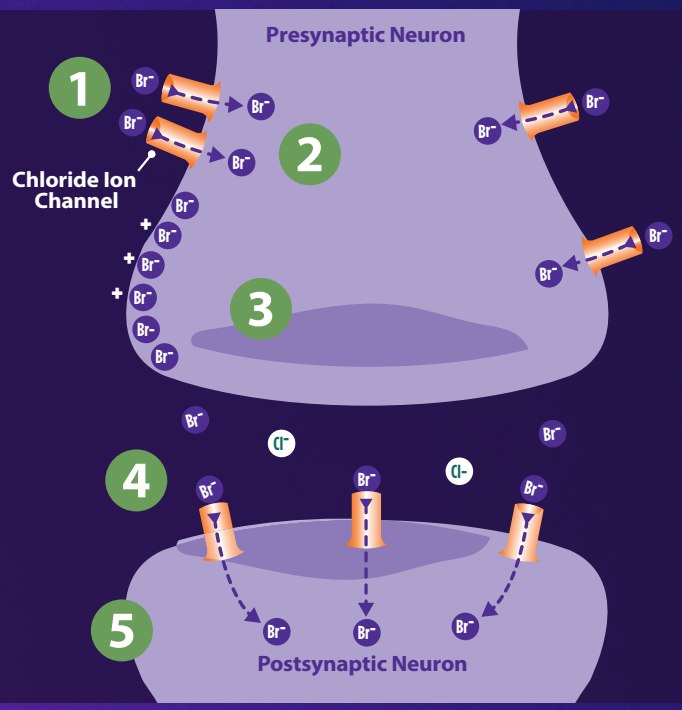
Rule Out Other Medical Causes
- CBC
- Urinalysis
- Serum chemistry tests
- Hepatic function tests

Advanced Testing When Needed
- MRI
- CSF analysis

Initiate Therapy
- Initiate a safe, long-term therapy with KBroVet® (potassium bromide chewable tablets)

KBr Mode of Action

1. Bromide (Br^-) enters neuron through chloride (Cl^-) ion channels
2. Br^- replaces Cl^- inside the cell
3. Neuron becomes more negatively charged (hyperpolarized)
4. Decreases action potential firing across the synapse and increases seizure threshold
5. Decreases neuronal excitability = fewer seizures



Potassium Bromide in Clinical Practice

Potassium bromide (KBr), a halide salt, is a well-known choice for long-term control of seizures associated with idiopathic epilepsy in dogs.[10] Once steady-state is achieved, it has the longest mean elimination half-life of any anti-epileptic drug of 21 days, minimizing the chances of a seizure if owners miss a dose.[11] Once daily dosing may allow for a simple, consistent schedule improving long-term compliance.

KBr is renally excreted. By avoiding hepatic metabolism, elimination, and enzyme induction, it offers a safe alternative for dogs with liver disease.[10,5] Use of KBr is not recommended in patients with existing renal disease due to risk of bromide toxicosis.

KBroVet® (potassium bromide chewable tablets) Efficacy Studies

Seizure frequency and severity strongly influence how owners assess their dog's quality of life.[12] In two **retrospective*** studies, KBroVet used as monotherapy was associated with reductions in seizure frequency and severity.

Study 1[13]

Success Metrics

In order to determine the success of treatment with KBr, Study 1 compared the 30-day period before initial treatment and the 30-day period of steady state KBr dosing. To consider an individual case a success, the following criteria were necessary:

1. Seizure counts decreased by at least 50%
2. Seizure event days per month decreased by at least 50%
3. Seizure severity scores decreased or unchanged

Treatment success required that more than 50% of cases were successful in all three measures.

PATIENT RESULTS

70% Experienced a decrease of ≥50% in **seizure count**

67% Experienced a decrease of ≥50% in **seizure event days per month**

93% Experienced a decrease or no change in **seizure severity score**

>67% of all cases achieved 'success' score for all three criteria

Study 2[13]

Success Metrics

≥ 50% reduction in seizure frequency per 30-day period compared with baseline

Results

40 out of 46 patients experienced at least a 50% reduction in seizure frequency

*Neither study contained a control group, thus the response observed in these studies was compared to a published placebo response rate in dogs with idiopathic epilepsy of 29%.

Safety

In a retrospective field study of 51 dogs diagnosed with idiopathic epilepsy, clinical findings of dogs treated with KBr were documented for the initial 60 days of treatment. The most common clinical abnormalities documented in the 60-day period following the initiation of KBr therapy included increased appetite, weight gain, vomiting/ regurgitation, sedation and neurologic signs.[13]

Practitioners should tailor therapeutic regimens and clinical monitoring to each dog.

Availability of an appropriately FDA-labeled, approved KBr product could provide better assurance to veterinarians and their clients of the quality, safety, and effectiveness of a product for veterinary use.

Precautions

Dogs receiving KBr should be carefully monitored when changing diets, administering chloride-containing intravenous fluids, and administering concurrent medications. Careful monitoring is important in dogs that have a condition that may cause difficulty maintaining electrolyte balance.

- Animals with decreased renal function may be predisposed to bromide toxicosis.
- Some dogs may experience epileptic episodes that are unresponsive or refractory to KBr monotherapy and KBr alone may not be adequate for control of seizures for every dog with idiopathic epilepsy.
- The safe use of KBroVet® (potassium bromide chewable tablets) has not been evaluated in dogs that are intended for breeding, or that are pregnant or lactating. The safe use of KBr in neonates and young animals has not been established.
- Reproductive effects of KBr have been reported in other species.
- In dogs, ataxia, diarrhea, hematochezia, excessive salivation, shivering, skin lesions, stupor progressing to coma, and death have been reported with a dose of 200 to 500 mg/kg a day for 4 to 26 weeks.

Dosage & Administration

The total recommended daily dosage range of KBroVet® (potassium bromide chewable tablets) is 25–68 mg/kg (11–31 mg/lb) of body weight. Dosage should be adjusted based on monitoring of clinical response of the individual patient. KBroVet may be dosed with or without food.[14] An initial loading dose regimen may be considered on an individual patient basis to balance the time required to achieve a therapeutic response while minimizing side effects. The recommended loading dose is 115 (+/- 41) mg/kg/day over 2 to 7 days.

Pill size is approximately the diameter of a dime

KBroVet Product Features

Convenient dosing options
Available in 60-ct. and 180-ct. bottles

Longest half-life of any antiepileptic drug (approx. 21 days)[11]
Helps reduce the risk of seizures if a dose is missed (once steady state is achieved)

French vanilla chewable tablet
An alternative option for dogs with dietary sensitivities

KBROVET®
(potassium bromide chewable tablets)

1x per day
Supports a simple regimen that may improve long-term compliance

Renal excretion
Reduces reliance on liver metabolism, making it a suitable option for dogs with compromised liver function [3,15]

First fully FDA-approved
Specifically formulated for dogs, with substantial evidence supporting efficacy, safety and reliability in patient care

KBroVet® (potassium bromide chewable tablets)

Anti-epileptic for use in dogs only.

Approved by FDA under NADA #141-615.

CAUTION:
Federal law restricts this drug to use by or on the order of a licensed veterinarian. Use only as directed.

DESCRIPTION:
KBroVet are flavored chewable tablets that contain potassium bromide (KBr). KBr is an odorless, colorless crystal or white crystalline powder or white granular solid with a pungent bitter saline taste. The molar mass of KBr is 119.002 g/mol, with high solubility in water, glycerol and ethanol.

INDICATION:
KBroVet (potassium bromide chewable tablets) are indicated for the control of seizures associated with idiopathic epilepsy in dogs.

DOSAGE AND ADMINISTRATION:
The total recommended daily dosage range for oral administration is 25 - 68 mg/kg (11-31 mg/lb) of body weight. The dosage of KBroVet should be adjusted based on monitoring of clinical response of the individual patient. KBroVet may be dosed with or without food. Use of an initial loading dosage regimen may be considered on an individual patient basis, balancing the time required to achieve a therapeutic response while minimizing side effects. Tablets should not be split.

CONTRAINDICATIONS:
KBroVet should not be used in animals with a history of sensitivity to bromide.

WARNINGS:
User Safety Warnings
Not for human use. Keep out of reach of children. Contact a physician in case of accidental ingestion by humans.

Animal Safety Warnings
Not for use in cats.

Keep KBroVet in a secured location out of reach of dogs, cats, and other animals to prevent accidental ingestion or overdose.

PRECAUTIONS:
Dogs receiving KBr should be carefully monitored when changing diets, administering chloride-containing IV fluids, and administering concurrent medications. Careful monitoring is important in dogs that have a condition that may cause difficulty maintaining electrolyte balance.

Dogs with decreased renal function may be predisposed to bromide toxicosis.

Some dogs may experience epileptic episodes that are unresponsive or refractory to KBr monotherapy and KBr alone may not be adequate treatment for every dog with idiopathic epilepsy (IE).

The safe use of KBroVet has not been evaluated in dogs that are intended for breeding, or that are pregnant or lactating. Reproductive effects of KBr have been reported in other species. The safe use of KBr in neonates and puppies has not been established.

ADVERSE REACTIONS:
In a retrospective study of 51 dogs diagnosed with IE and receiving KBr monotherapy to control seizures associated with IE, adverse reactions were documented for the initial 60 days of treatment (Table 1). Increased appetite, weight gain, vomiting/regurgitation and sedation were the most common clinical abnormalities documented in the 60-day period after start of KBr therapy.

Table 1. Adverse Reactions Reported During Initial Dosing Phase (60-Day Period After Start of KBr Therapy)

Adverse Reaction	Number of Dogs with the Adverse Reaction
Increased Appetite	11
Weight Gain	8
Vomiting	5
Regurgitation	4
Sedation	3
Decreased Activity	3
Polydipsia	2
Ataxia	2
Polyuria	2
Weakness	2
Diarrhea	1
Disorientation	1
Partial Lack of Effectiveness	1
Petit Mal Epilepsy	1
Seizure	1
Tremors	1

Adverse reactions were also documented for 30 days when KBr was at steady state (Table 2). Weight gain, weakness, ataxia, and increased appetite were the most common adverse reactions documented during this time period.

Table 2. Adverse Reactions Reported During Dosing Phase (KBr at Steady State)

Adverse Reaction	Number of Dogs with the Adverse Reaction
Weight Gain	7
Weakness	5
Ataxia	4
Increased Appetite	4
Polydipsia	3
Sedation	3
Diarrhea	2
Polyuria	2
Regurgitation	2
Vomiting	2
Decreased Appetite	1
Disorientation	1
Loose Stool	1
Panting	1
Tremors	1

In a second retrospective study, in which 46 dogs received KBr, safety data was collected for 60 days. There was a total of 33 adverse reactions considered related to KBr affecting 26/46 dogs. The most common adverse reactions were weight gain, vomiting, and sedation, and the other reported adverse reactions included polyuria, polydipsia, polyphagia, ataxia, and lethargy.

Adverse events associated with concurrent use of KBr with other antiepileptic drugs, such as phenobarbital, have been reported in literature. Neurologic signs were the most common adverse event, and other reported adverse events included sedation, irritability, restlessness, depression, behavioral changes, ataxia, hind limb paresis, mydriasis, stupor, and coma. The neurologic signs were reported to be reversible if treatment was stopped.

CONTACT INFORMATION:
For a copy of the Safety Data Sheet (SDS) or to report suspected adverse drug events, contact Pegasus Laboratories at 1-800-874-9764. For additional information reporting adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or www.fda.gov/reportanimalae.

CLINICAL PHARMACOLOGY:

Mechanism of action: KBr is a halide salt that is thought to exert its antiepileptic activity by passing through neuronal chloride ion channels, thereby hyperpolarizing neuronal membranes, raising the seizure threshold, and stabilizing neurons against excitatory input from epileptic foci.

Pharmacokinetics: The pharmacokinetics of a multi-dose regimen of administration in normal dogs have been evaluated as described in a comprehensive literature review. In one study, KBr was administered at 30 mg/kg orally every 12 hrs for a period of 115 days. Serum, urine, and cerebrospinal fluid (CSF) bromide concentrations were measured at the onset of dosing, during the accumulation phase, at steady-state, and after a subsequent dose adjustment.

Median elimination half-life and steady-state serum concentration were 15.2 days and 245 mg/dL (2.45 mg/mL), respectively. Apparent total body clearance was 16.4 mL/day/kg and volume of distribution was 0.40 L/kg. The CSF:serum bromide ratio at steady state was 0.77.

Bromide distributes into the CSF and interstitial tissues of the brain and is actively transported out of the CNS via the choroid plexus. At pharmacological doses, the active transport mechanism is overwhelmed and bromide accumulates in the brain and CSF. Bromide is not metabolized by the liver and is eliminated unchanged, primarily by renal clearance. Increased dietary consumption of chloride can promote loss of bromide in the urine, leading to a lowering of serum bromide concentrations. Decreased chloride consumption will promote increased renal reabsorption of bromide, causing an increase in bromide elimination half-life in dogs.

EFFECTIVENESS:

A retrospective study involving review of case records of 51 client-owned dogs was conducted to evaluate the effectiveness of KBr in dogs. This study evaluated case records of dogs 0.5 to 5 years of age administered KBr monotherapy to control seizures associated with IE and for which blood samples had been analyzed to quantify serum bromide concentrations for the purpose of therapeutic drug monitoring.

Seizure counts, seizure count changes, seizure event days per month and seizure severity scores were tabulated for eligible cases, comparing the 30-day period before initial treatment with KBr to a 30-day period of steady state KBr dosing. Seizure count for an individual case was required to decrease by 50% or greater in order for the case to be classified as a seizure count success. Similarly, reduction in the number of seizure event days per month by ≥50% was required for the case to be classified as a seizure event day count success. Of the 51 evaluable cases, 27 were included in the effectiveness evaluation and all 51 were included for safety.

Of the 27 cases evaluated for effectiveness, 19 (70%) met the success criteria and 8 (30%) were failures based on seizure count results. Eighteen (67%) met the success criteria and 9 (33%) were failures based on seizure event day results. Seizure severity score decreased or did not change in 25 of the 27 cases evaluated for effectiveness. Overall, of the 27 dogs included in the effectiveness analysis, 18 (67%) were considered treatment successes and 9 (33%) were considered treatment failures.

In a second retrospective study, a total of 287 candidate cases were identified, 46 of which were evaluated for effectiveness. This study evaluated case records of dogs 0.5 to 5 years of age administered KBr monotherapy at a dose between 25 and 68 mg/kg/day to control seizures associated with IE. The majority of dogs were female (52%) with a mean body weight of 20.2 (standard deviation (SD) 12.8) kg and a range of 3 to 44 kg. The median age at IE diagnosis and start of KBr therapy were 3 (0.7, 5.3), and 3.2 (0.7, 5.6) years, respectively. Mixed breed (22%) and Labrador Retriever (11%) were the most common breeds. Effectiveness was based on seizure frequency during the 30-day baseline and treatmentresponse periods. Seizure frequency was expressed as the number of seizures occurring in a 30-day period. Between baseline and the 30-day post treatment evaluation, 40 of the 46 cases experienced at least a 50% reduction in seizure frequency.

Because of their retrospective nature, neither of the studies described above were controlled. A placebo response rate in dogs with IE has been reported to be 29%.[1]

The overall evidence, based on the results of the two retrospective studies, four decades of reported use for management in veterinary medicine, as well as published literature supports the conclusion that KBroVet is effective for the control of seizures associated with IE in dogs.

TARGET ANIMAL SAFETY:

Safety was assessed in a systematic review of literature and two retrospective field studies. Reversible neurologic signs were the most consistently reported adverse effect and were generally associated with add-on KBr treatment or high serum bromide concentrations. Adverse effects were also seen in some dogs with low serum bromide concentrations. Dermatologic and respiratory abnormalities were rare in dogs. Evidence suggests that administration of KBr with food may alleviate gastrointestinal irritation and that monitoring for polyphagia, thyroid hormone abnormalities, and high serum bromide concentrations may be beneficial.

In dogs, ataxia, diarrhea, hematochezia, excessive salivation, shivering, skin lesions, stupor progressing to coma and death have been reported with a dose of 200 to 500 mg/kg a day for 4 to 26 weeks.

HOW SUPPLIED:

KBroVet (potassium bromide chewable tablets) are flavored, non-scored tablets containing 250 mg or 500 mg of potassium bromide per tablet. KBroVet is packaged in bottles containing 60 or 180 tablets.

500 mg Tablet (60 ct) bottle
NDC 49427-398-48
250 mg Tablet (60 ct) bottle
NDC 49427-397-48
500 mg Tablet (180 ct) bottle
NDC 49427-398-50
250 mg Tablet (180 ct) bottle
NDC 49427-397-50

STORAGE CONDITIONS:

Store at controlled room temperature 20-25°C (68-77°F).

Keep out of reach of children and animals.

[1] Muñana KR, Zhang D, Patterson EE. Placebo effect in canine epilepsy trials. J Vet Intern Med. 2010 Jan-Feb;24(1):166-70.

Approved by FDA under NADA # 141-615.

12-2025

PRN®
PHARMACAL

Manufactured By:
Pegasus Laboratories, Inc
Employee-Owned
PENSACOLA, FL 32514, USA

References

1. Podell M, Volk HA, Berendt M, et al. 2015 ACVIM small animal consensus statement on seizure management in dogs. J Vet Intern Med. 2016;30:477-90.
2. Nettifee JA, Munana KR, Griffith EH. Evaluation of the impacts of epilepsy in dogs on their caregivers. J Am Anim Hosp Assoc. 2017;53(3):143-149.
3. Chandler K. Treatment and monitoring of epilepsy in dogs. In Pract. 2011;33:98-104.
4. Charalambous M, Brodbelt D, Volk HA. Treatment in canine epilepsy – a systemic review. BMC Vet Res. 2014;10:257.
5. Patterson EE. Canine epilepsy: An underutilized model. ILAR Journal. 2014;55(1):1-3.
6. De Risio L, Platt S. Canine and Feline Epilepsy: Diagnosis and Management. 1st ed. CABI; 2014.
7. Forsgard JA, Metsahonkala L, Kiviranta AM, et al. Seizure-precipitating factors in dogs with idiopathic epilepsy. J Vet Intern Med. 2019;33:701-7.
8. De Risio L, Bhatti S, Muñana K, et al. International veterinary epilepsy task force consensus proposal: diagnostic approach to epilepsy in dogs. BMC Veterinary Research. 2015 Aug;11:148. DOI: 10.1186/s12917-015-0462-1. PMID: 26316175; PMCID: PMC4552251.
9. Podell M, Fenner WR, Powers JD. Seizure classification in dogs from a nonreferral-based population. JAVMA.1995;206(11):1721-8.
10. Baird-Heinz HE, Van Schoick ANL, Pelsor FR, et al. A systematic review of the safety of potassium bromide in dogs. JAVMA. 2012;240(6):705-15.
11. Boothe, D, Dewey C, Carpenter D. Comparison of phenobarbital with bromide as a first-choice antiepileptic drug for treatment of epilepsy in dogs. JAVMA. 2012; Vol 240, No 9. 1073-1083.
12. Wessmann A, Volk HA, Packer MA, et al. Quality-of-life aspects in idiopathic epilepsy in dogs. Vet Rec. 2016;179(9):229.
13. Pegasus Laboratories, Inc. (2026). Freedom of Information (FOI) Summary for KBROVET® (potassium bromide chewable tablets) Dogs: U.S., (NADA 141-615). Center for Veterinary Medicine (CVM).
14. Podell M, Fenner WR. Bromide therapy in refractory canine idiopathic epilepsy. J Vet Intern Med. 1993; 7(5): 318-27.
15. Trepanier LA. Use of bromide as an anticonvulsant for dogs with epilepsy. JAVMA. 1993;207(2):163-6.

Steady the storm with KBroVet®

(potassium bromide chewable tablets)

LEARN MORE AT
KBROVET.COM

Once-A-Day-Dosage | Available in 60 ct. & 180 ct. bottles

PRN® PHARMACAL

PRN® Pharmacal, an employee-owned company, has been dedicated to developing specialized therapeutics that address the unmet, underserved and overlooked needs of the veterinary medicine community since 1978.

Our commitment: quality solutions — as needed, when needed.

PP-PRN-012B