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January Digital Issue 2020

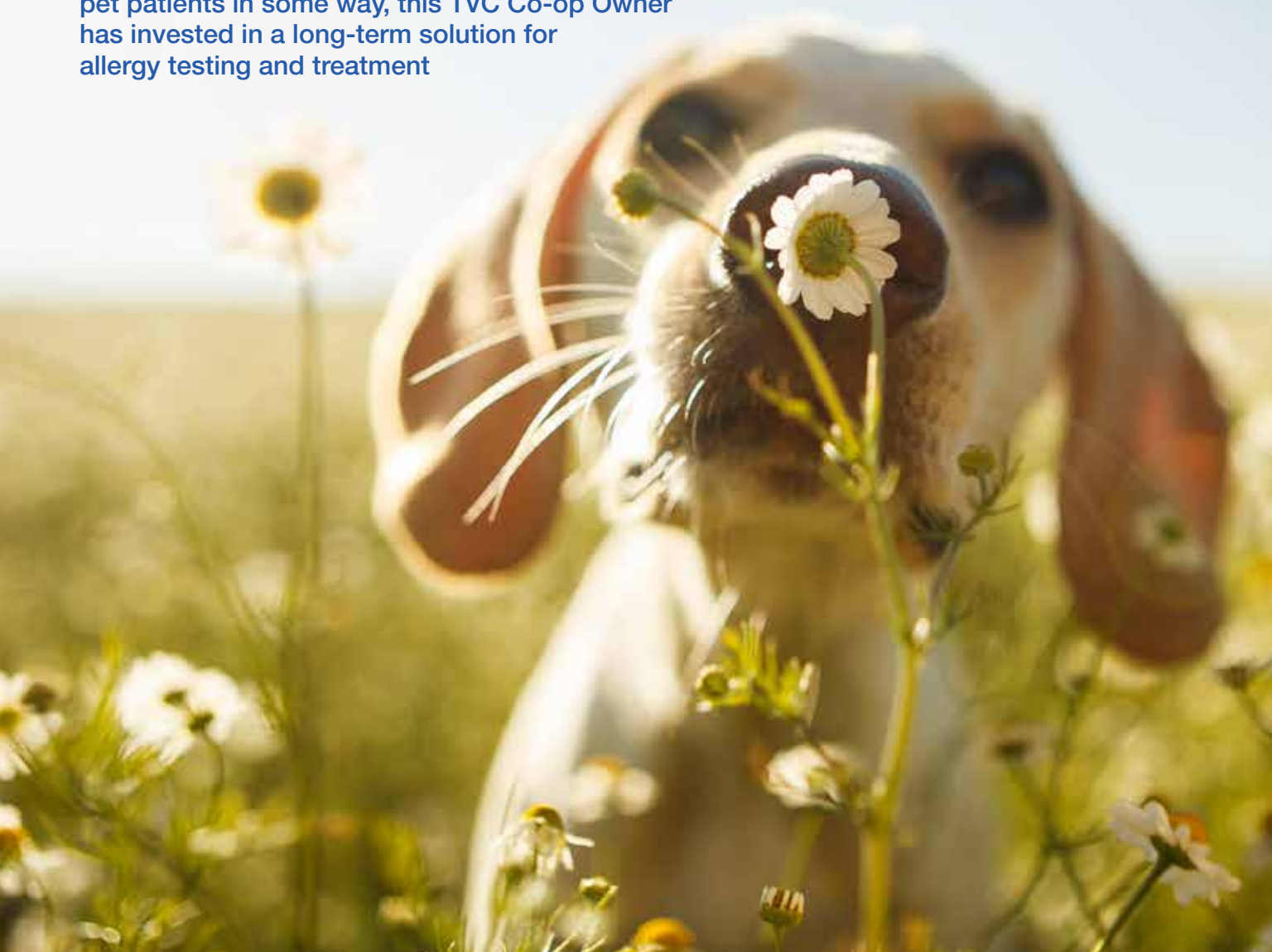
TVC

Digital magazine

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Reframing the Allergy Discussion

With allergies affecting most of its pet patients in some way, this TVC Co-op Owner has invested in a long-term solution for allergy testing and treatment



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Reduce her anxiety with protection that lasts twice as long.

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¹ Lavan RP et al. *Parasites & Vectors*. 2017;10:284.

² Lavan RP et al. *Parasites & Vectors*. 2018;11:581.

³ Brakke Consulting. *The US Flea Control and Heartworm Markets*. 2018:6-7.

IMPORTANT SAFETY INFORMATION: The most commonly reported adverse reactions include vomiting, hair loss, itching, diarrhea, lethargy, dry skin, elevated ALT, and hypersalivation. BRAVECTO PLUS has not been shown to be effective for 2 months duration in kittens less than 6 months of age. For topical use only. Avoid oral ingestion. The safety of BRAVECTO PLUS has not been established in breeding, pregnant and lactating cats. Fluralaner is a member of the isoxazoline class. This class has been associated with neurologic adverse reactions including tremors, ataxia, and seizures. Neurologic adverse reactions have been reported in cats receiving isoxazoline class drugs, even in cats without a history of neurologic disorders. Use with caution in cats with a history of neurologic disorders. Use with caution in cats that are heartworm positive. The effectiveness of BRAVECTO PLUS to prevent heartworm disease after bathing or water immersion has not been evaluated.

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State of the Cooperative

By Carol Henry, President

January marks a new beginning, for me professionally as well as for TVC. As of Jan. 1, 2020, I assumed the role of president of the cooperative. I'm incredibly excited about the opportunity to work with and for the TVC Co-op Owners.

First, a little about my background. I am bringing a wide range of education and experience to my role. I'm a data-driven marketer with 20 years of experience driving double-digit revenue growth for Fortune 500 companies in travel and hospitality, technology and retail spaces. Most recently, I led marketing efforts as the Chief Marketing Officer at National Veterinary Associates for over 4 years. I have 2 engineering degrees from MIT and University of Texas at Austin and an MBA from Kellogg. I've been in a lot of different customer-facing environments, whether in technology, gaming, or leading marketing for another set of veterinary practices.

All of these experiences feed together to get a wide set of perspectives that I believe will be beneficial in leading efforts to help independent veterinarians be better-positioned in their local markets for a very dynamic future.

TVC Co-op Owners have a sense of solidarity. I've seen them in action, working together to make things better for their individual practices, another member, and the cooperative

as a whole. That sort of mentality is special, and rare, in this industry. It's a mentality that can help ingratiate ourselves with the TVC vendor partners who provide industry-leading products and services.

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We've got big things in store for 2020. For instance, we'll be adding two conferences that are run independently by TVC alone. TVC East has been going on for several years. In 2020, we'll launch TVC Central and TVC West – expanding the opportunity for TVC Co-op Owners to access education and networking with fellow members and TVC partners.

It's a way for Co-op Owners to get more CE credits, fulfilling TVC requirements, along with developing deeper relationships with TVC partners, without having to worry about running their practice.

TVC has been known in the industry as a new startup. This year will be more about taking a leadership role in keeping the independent veterinarian

forefront in the minds of veterinary medicine stakeholders. We'll accomplish this through looking at ways to expand educational offerings, developing new relationships that touch on areas requested by Co-op Owners, and thinking about the future – together – on how the cooperative can expand the assistance it provides the independent veterinarian. ■

CLARO®

(florfenicol, terbinafine, mometasone furoate)
Otic Solution



READY. AIM. CLARO®

Fight canine otitis externa with one big dose of love. Claro® (florfenicol, terbinafine, mometasone furoate) Otic Solution is the only FDA-approved, single-dose treatment administered by you with guaranteed compliance and no at-home treatments.



SPREAD THE LOVE IN YOUR CLINIC.

USE CLARO® FOR YOUR MOST COMMON OTITIS CASES.

Claro® is indicated for the treatment of otitis externa in dogs associated with susceptible strains of yeast (*Malassezia pachydermatis*) and bacteria (*Staphylococcus pseudintermedius*).

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian. CONTRAINDICATIONS: Do not use in dogs with known tympanic membrane perforation. CLARO® is contraindicated in dogs with known or suspected hypersensitivity to florfenicol, terbinafine hydrochloride, or mometasone furoate.

BayerDVM.com/Claro

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TVC News

An exciting addition to TVC's Vendor Line-up: Ellie Diagnostics

TVC has filled a needed reference laboratory vendor space with Ellie Diagnostics, and we are excited to see the benefit they will bring to TVC and our partnered hospitals. Ellie believes wellness bloodwork is essential, and should be standard and attainable for every pet, every year. With a focus on prevention and early detection, Ellie lives out its mission of "transforming animal health" with affordable, high-quality diagnostics. With Ellie, our vets can enjoy extra-mile service with no contracts, minimums or unexpected price increases. The result? Healthier pets, and healthier profits. TVC hospitals will receive a 15% discount on services, plus a tiered rebate paid out in our twice yearly TVC rebate checks. View the full program information on the Ellie Diagnostics page of the [TVC Owner's Only Site](#).

TVC adds Scratchpay as a client payment solution for TVC hospitals

Over the years our clinics have asked TVC to vet an affordable client payment solution that offers flexible options for the clinic and pet parent. Scratchpay is a leader in the payment solution industry, and we are thrilled to add them as a vendor in TVC's line-up. Scratchpay is an online payment plan for veterinary costs that can be used for any species. It is not a credit card or a line of credit, so it doesn't rely on your credit score or affect your credit score, and more pet parents get approved. TVC hospitals will be incentivized with a \$100 rebate when they sign-up with Scratchpay, and an additional \$50 rebate when the first Scratchpay loan is initiated. With Scratchpay, there are no sign-up fees so getting started is easy! [Sign-up or book a demo meeting here.](#)

TVC announces Petriage as its telemedicine solution

Petriage will be joining us as a TVC vendor partner in 2020, and we are excited with the addition to our ever-increasing portfolio of partners aimed at your bettering your business. Petriage is a telemedicine solution with the vet in mind, and is co-founded by a past TVC Co-op Owner! Petriage is a cloud-based B2B telehealth company that allows veterinarians to service their clients and engage them in the remote care of their patients. Read more about the partnership specifics and TVC program at the [TVC Owner's Only Site](#).

Vetstoria joins TVC as an innovative solution to appointment scheduling

Adding to the momentum of new cooperative vendors for 2020, TVC is pleased to announce it has partnered with the innovative client scheduling program, Vetstoria. Vetstoria is the world's leading veterinary scheduling platform, used by practices to acquire more clients, provide better service, and increase productivity. Benefits that TVC hospitals will enjoy include:

- **Improve client satisfaction:** Offer your clients the convenience of 24/7 online scheduling. Free-up time for your team to provide a better in-house service.
- **Boost business growth:** Cater to the 70% of pet owners who prefer to schedule appointments online. Attract clients from multiple sources, including Google and Facebook.
- **Increase team productivity:** Reduce the time and effort spent by your team scheduling appointments over the phone and manually confirming requests.

Head to the TVC Owner's Only Site to gain additional insights into this new partnership.

Vendor News

ASPCA Pet Health Insurance Educational Opportunities

ASPCA invites you to participate in several free CE opportunities offered on-demand. These webinars detail the importance of pet health insurance as part of a full picture of wellness and veterinary care, which in-turn can lead to enhanced hospital performance. Check them out on the [ASPCA Pet Health Insurance page](#) under 'Pet Insurance Resources.'

PAWS (Pet and Worker Safety) Bulletin from ProVetLogic

What is the best way to clean and sanitize pet dishes? Read this month's [PAWS \(Pet and Worker Safety\) Bulletin](#) from ProVetLogic to learn more about the best and safest methods for both pets and your employees.

Royal Canin launches Urinary SO Aging 7+

Royal Canin announced the launch of Urinary SO Aging 7+, a diet tailored to target specific urinary issues in aging pets and to manage Lower Urinary Tract Disease and signs of aging in cats and dogs.

Vendor News

Bayer: Purchase 2 boxes of Claro to qualify for a payout of \$250 (10 consumer rebates of \$25). Or purchase 4 boxes to qualify for a payout of \$750 (30 consumer rebates of \$25). Must complete consumer rebate tracking forms at www.tvc.coop/bayer to qualify. [Click here for details.](#) **TVC Exclusive Offer**

Hill's Pet Nutrition: The popular 2019 Hill's PurrrchasePoints™ incentive is back for 2020. Earn PurrrchasePoints™ when you send Hill's direct to the pet with any vet sponsored home delivery platform. [Click here for details.](#) **TVC Exclusive Offer**

Securos: Buy 5 boxes of select dental suture and get a FREE Ryder Needle Holder! [Click here for details.](#)

Vetoquinol: Buy 1 get 1 free on select Vetoquinol Dental

products when your reference BGSMILE2020 (exclusive to MWI and First Vet Supply orders only) [Click here for details.](#)

TVC Exclusive Offer

Vetsource: The \$500 Vetsource enrollment promotion is back by popular demand! Looking to check out a vet sponsored home deliver platform but haven't taken the first step toward setting it up? Now is the perfect opportunity! Let our partners at Vetsource walk you through the set-up and receive \$500 when you complete a qualified number of Scriptright orders. [Click here for details.](#) **TVC Exclusive Offer**

Eko is your partner in providing the highest standard of veterinary care

TVC members can claim a **20% rebate** with code 'TVC2020' at ekohealth.com



New

Digitize the Stethoscope You Already Own.

Eko CORE
Digital Attachment
\$199 MSRP



New

Highest Quality Acoustic & Digital Stethoscope.

Eko CORE
Digital Stethoscope
\$249 MSRP



New

Gain Unprecedented Insight Into Cardiac Function.

Eko DUO
ECG + Digital Stethoscope
\$349 MSRP



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Reframing the Allergy Discussion

With allergies affecting most of its pet patients in some way, this TVC Co-op Owner has invested in a long-term solution for allergy testing and treatment

As a nonprofit serving the Long Island City, New York community of pet owners, the team at Astoria Animal Society is used to finding solutions to deliver the best care for financially strapped pet parents. Indeed, cost is almost always a critical factor in treatment discussions.

For instance, clients may hesitate to order bloodwork on medications because of the price involved. But because Astoria Animal Society is a 501c3 and able to receive donations, the veterinarians can look at what funds are available to either provide the product at a lower cost, or free as a charitable gift, said Justin De Sola, CEO of the veterinary clinic.

“Because we’re nonprofit, we can give back to the community, and help clients use better products,” he said. His client base is also able to see that the products recommended to them are the same ones that shelters and rescue organizations partnering with Astoria Animal Society are using. “It helps our clients understand that if a rescuer can afford it and it works, then their pets can enjoy the product also and it should help them with their symptoms.”

As a TVC Co-op Owner, the competitive prices offered by TVC vendor programs and rebates mean that De Sola has an even broader array of

products and services he can bring to his clients. That includes allergy testing, which in the past may have seemed too expensive for clients.

Long-term solution to allergies

Spectrum Veterinary’s allergy testing and treatment has given Astoria Animal Society a long-term solution to managing allergies for its patients. Allergies affect most of the pets that come through the doors of Astoria Animal Society, De Sola said. About 70% of clients would benefit from allergy testing and a plan to treat allergies.

“Anybody that comes in complaining about continuing issues such as dry skin, or ear infections, etc., we’re talking with them about taking the allergy tests before we discuss any medication,” De Sola said. “You want to find the cause – then treat the cause – instead of just attacking the symptoms and not knowing what is truly going to be effective.”

Spectrum’s allergy testing and treatment offers plenty of clinical benefits. Its assay measures the allergen-specific IgE, and patients don’t need to be taken off relief medications prior to testing. By partnering a very sensitive assay with the industry’s most comprehensive treatment protocol, Spectrum Veterinary has achieved the highest improvement rates possible: up to 90%, according to the company.

A big part of the program involves getting the client comfortable with the treatment plan and better understanding the results of the allergy testing. “Spectrum goes all out to make the client feel comfortable,” De Sola said. Spectrum creates a Client Specific Allergy Booklet with the results of the testing. It provides information, support, and recommendations to ensure they receive the greatest value out of the testing.

“Spectrum makes it easier on the veterinarians to explain the results vs. other companies out there that just print out the results and give them to you,” De Sola said. “This cuts down on our time trying to explain everything, which is good. It’s basically straight to the point.” ■

Researchers hope to protect against deadly cat virus



A new vaccine could help protect cats from feline infectious peritonitis, a dangerous and fatal disease.

The vaccine, in development at Colorado State University, wouldn't address FIP directly. Rather, it would protect cats against feline enteric coronavirus, a much more common virus that can mutate into FIP.

If successful, the vaccine can control the contagious coronavirus in shelters and other multi-cat environments while also protecting individual cats against FIP, according to an announcement from Morris Animal Foundation, which is funding the research.

"For years, we have tried, unsuccessfully, to vaccinate against FIP, but we may have been targeting the wrong

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HIGHLY PALATABLE PRODUCTS

Help support the poor appetites of aging cats and dogs.



URINARY SECURITY

Relative supersaturation (RSS) methodology predicts the crystallization potential of urine. RSS is used to develop diets that lower the concentration of ions contributing to struvite and calcium oxalate urolithiasis.



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*Houston DM, et al. *Can Vet J* 2016; 57: 196–201.

*Houston DM, et al. *Can Vet J* 2017; 58: 45–50.

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point in time,” said Dr. Gregg Dean, a professor in CSU’s College of Veterinary Medicine and Biomedical Sciences. “Our strategy now is to eliminate [feline enteric coronavirus], the mild-mannered Dr. Jekyll form, if you will, before it can become the deadly Mr. Hyde.”

Feline enteric coronavirus is a common intestinal virus that most cats are exposed to and infected by at some point in their life, according to Morris Animal Foundation. It’s highly contagious and spreads easily through saliva or feces. Very few cats show any symptoms, and most recover easily.

But the virus can randomly mutate and cause FIP, a deadly infectious disease that affects multiple organs. Symptoms include fever, weight loss and lethargy, and inflammation of the blood vessels. While only an estimated 5-10% of infected cats

Feline enteric coronavirus is a common intestinal virus that most cats are exposed to and infected by at some point in their life.

develop FIP, it’s 100% fatal, difficult to diagnose, and has no currently available treatments.

“We’ve had remarkable success in addressing many other infectious diseases in cats, but FIP is one notable exception and it can be particularly devastating as it claims them so young,” Dr. Janet Patterson-Kane, chief scientific officer at Morris, said in the announcement. “If we can control the disease in large groups of cats, that would be a wonderful thing.”

The research team’s vaccine design will include the bacteria *Lactobacillus acidophilus*, a probiotic found in foods like yogurt and cheese and present in many animals’ gastrointestinal tracts. It will deliver specific coronavirus proteins to naturally stimulate cats’ immune systems to protect against infection by the virus. ■



Veraflox® (pradofloxacin)
Oral Suspension for Cats



Engineered for cats.
Without compromise.



Oral Suspension for Cats

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S a f e t y

E a s e - o f - u s e

Find out more at VerafloxOS.com

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits the extra label use of this drug in food-producing animals. **WARNINGS:** For use in cats only. **PRECAUTIONS:** The safety of pradofloxacin in cats younger than 12 weeks of age has not been evaluated.

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Canine rehab is growing in popularity

Pet owners are increasingly turning to rehab for their dogs. The treatment is routinely recommended for dogs after debilitating surgery and injuries, and it's also more often being used as an alternative to surgery and as a method to stimulate elderly dogs' brains and give them a sense of renewed purpose, Karen Angel [writes](#) in *USA Today*. Veterinary colleges are emphasizing rehab training more in their programming, and stand-alone rehab facilities are sprouting up throughout the country. A growing body of research shows many similarities between humans' and animals' ability to recover, including the benefits of early treatment and patients' ability to make gains over a sustained period of time. Human stroke victims' recovery was once thought to peak within the first six months after the stroke, but recent research has shown that with intensive rehabilitation, stroke patients can continue to progress for decades; the same is true of dogs, Angel writes.

55% of clients visit independent practices, pet marketers should focus more on baby boomers, reports show

Fifty-five percent of dog or cat owners who sought veterinary care within the past year went to local, independent clinics, although these clinics are increasingly facing competition, according to market research firm Packaged Facts. Three-fourths of baby boomers (ages 55 to 74) favored traditional practices, compared with about 4 in 10 millennials or members of Generation Z (ages 18 to 39).

Independent practices are competing with "alternative veterinary care formats," according to the report, featured in an [article](#) by *Today's Veterinary Business*. These alternative care formats include specialty and emergency clinics,

large networks such as Banfield and VCA, smaller in-store chains like Thrive and PetIQ, and telemedicine providers. And in other marketing news: Millennials are a popular target for marketing, but pet retailers should focus on baby boomers too.

"Over the past decade, the 55- to 74-year-old age group (baby boomers) is the only segment to have experienced an increase in the pet ownership rate," according to another new report from Packaged Facts, [highlighted](#) by *Pet Product News*. "Between 2008 and 2018 the percent of boomers owning a pet grew from 50% to 54%. At the same time, the pet ownership rate among 18- to 39-year-olds declined from 63% to 61%, and the percent of 40- to 54-year-olds owning pets remained the same (64% versus 64%)."

AAVMC, MSD Animal Health announce antimicrobial resistance grant project

The Association of American Veterinary Medical Colleges and MSD Animal Health (Merck) are partnering on an international grant program to help mitigate global antimicrobial resistance, according to the AAVMC. Administered through the AAVMC's Council on International Veterinary Medical Education, the MSD Animal Health CIVME Antimicrobial Stewardship Grant program seeks to improve instruction related to antimicrobial resistance in educational institutions around the world.

The program will focus on antibiotic stewardship and emphasize disease prevention through improved vaccination protocols. Administrators hope to encourage multi-university collaboration, according to the [announcement](#). Total project budgets shouldn't exceed \$10,000 and will be awarded for a maximum period of 24 months. The deadline for grant submission is January 30, 2020.

It's no fun for anyone when
dogs have bad breath.



new **ZEN** for everyday stress and **FLEX** for joint health

CLARO(bortecic acid, terbutaline, mometasone furoate)
Otic SolutionAntibacterial, antifungal, and anti-inflammatory
For Otic Use in Dogs Only**CAUTION:** Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.**DESCRIPTION:**CLARO[®] contains 16.6 mg/mL boric acid, 14.8 mg/mL terbutaline (equivalent to 16.6 mg/mL terbutaline hydrochloride) and 2.2 mg/mL mometasone furoate. Inactive ingredients include purified water, propylene carbonate, propylene glycol, ethyl alcohol, and polyethylene glycol.**INDICATIONS:**CLARO[®] is indicated for the treatment of otitis externa in dogs associated with susceptible strains of yeast (*Malassezia pachydermatis*) and bacteria (*Staphylococcus pseudintermedius*).**DOSEAGE AND ADMINISTRATION:**

Shake before use.

CLARO[®] should be administered by veterinary personnel.

Administer one dose (1 dropperful) per affected ear. The duration of effect should last 30 days.

1. Clean and dry the external ear canal before administering the product.
2. Verify the tympanic membrane is intact prior to administration.
3. Remove single dose dropperfuls from the package.
4. While holding the dropperful in an upright position, remove the cap from the dropperful.
5. Turn the cap over and push the other end of the cap onto the tip of the dropperful.
6. Twist the cap to break the seal and then remove cap from the dropperful.
7. Screw the applicator nozzle onto the dropperful.
8. Insert the tapered tip of the dropperful into the affected external ear canal and squeeze to instill the entire contents (1 mL) into the affected ear.
9. Gently massage the base of the ear to allow distribution of the solution.
10. Repeat with other ear as prescribed.

Cleaning the ear after dosing may affect product effectiveness.

CONTRAINDICATIONS:Do not use in dogs with known tympanic membrane perforation (see PRECAUTIONS). CLARO[®] is contraindicated in dogs with known or suspected hypersensitivity to boric acid, terbutaline hydrochloride, or mometasone furoate.**WARNINGS:****Human Warnings:** Not for use in humans. Keep this and all drugs out of reach of children. In case of accidental ingestion by humans, contact a physician immediately. In case of accidental skin contact, wash area thoroughly with water. Avoid contact with eyes. Humans with known hypersensitivity to boric acid, terbutaline hydrochloride, or mometasone furoate should not handle this product.**PRECAUTIONS:**

Do not administer orally.

The use of CLARO[®] in dogs with perforated tympanic membranes has not been evaluated. The integrity of the tympanic membrane should be confirmed before administering the product. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Use of topical oral corticosteroids has been associated with adrenocortical suppression and iatrogenic hypoadrenocorticism in dogs (see **ANIMAL SAFETY**).Use with caution in dogs with impaired hepatic function (see **ANIMAL SAFETY**).The safe use of CLARO[®] in dogs used for breeding purposes, during pregnancy or in lactating bitches has not been evaluated.**ADVERSE REACTIONS:**In a field study conducted in the United States (see **EFFECTIVENESS**), there were no directly attributable adverse reactions in 146 dogs administered CLARO[®].

To report suspected adverse drug events and/or obtain a copy of the Safety Data Sheet (SDS) or for technical assistance, contact Bayer HealthCare at 1-800-422-9674.

For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VEHS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.**PHARMACOLOGY:**CLARO[®] Otic Solution is a fixed combination of three active substances: boric acid (antibacterial), terbutaline (antifungal), and mometasone furoate (steroidal anti-inflammatory). Boric acid is a bacterostatic antibiotic which acts by inhibiting protein synthesis. Terbutaline is an anticholinergic which selectively inhibits the early synthesis of endotoxin. Mometasone furoate is a glucocorticosteroid with anti-inflammatory activity.**MICROBIOLOGY:**The compatibility and additive effect of each of the components in CLARO[®] solution was demonstrated in a component effectiveness and non-interference study. An *in vitro* study of organisms collected from clinical cases of otitis externa in dogs enrolled in the clinical effectiveness study determined that boric acid and terbutaline hydrochloride inhibit the growth of bacteria and yeast commonly associated with otitis externa in dogs. No consistent synergistic or antagonistic effect of the two antibiotics was demonstrated. The addition of mometasone furoate to the combination did not impair antimicrobial activity to any clinically significant extent. In a field study (see **EFFECTIVENESS**), at least 13 isolates from successfully treated cases were obtained for *S. pseudintermedius* and *M. pachydermatis*.**EFFECTIVENESS:**In a well-controlled, double-masked field study, CLARO[®] was evaluated against a vehicle control in 221 dogs with otitis externa. One hundred and forty six dogs were treated with CLARO[®] and 75 dogs were treated with the vehicle control. All dogs were evaluated for safety. Treatment (1 mL) was administered once on Day 0 to the affected ear(s). Prior to treatment, the ear(s) was cleaned with saline. The dogs were evaluated on Days 0, 7, 14, and 30. Blood work and urinalysis were obtained on Day 0 pre-treatment and Day 30 at study completion. Four clinical signs associated with otitis externa were evaluated: erythema, exudate, swelling, and ulceration. Success was based on clinical improvement at Day 30. Of the 183 dogs included in the effectiveness evaluation, 72.5% of dogs administered CLARO[®] solution were successfully treated, compared to 11.7% of the dogs in the vehicle control group (p<0.0001).**ANIMAL SAFETY:**In a target animal safety study, CLARO[®] was administered orally to 12-week-old Beagle puppies (4 dogs/group) at 0X, 1X, 3X, and 5X the recommended dose once every 2 weeks for a total dosing period of 26 days (3 times the treatment duration). No clinically relevant treatment-related findings were noted in hearing tests, body weight, weight gain, or food consumption. CLARO[®] administration was associated with post-treatment ear redness or clear aural exudate, increased absolute neutrophil count, decreased absolute lymphocyte and monocyte counts, suppression of the adrenal cortical response to ACTH stimulation, decreased adrenal weight and atrophy of the adrenal cortex, increased liver weight with hepatocellular enlargement/cytoplasmic change, and decreased thymus weight. Other potentially treatment-related effects included mild changes to AST, total protein, inorganic phosphorus, creatinine, and calcium.**STORAGE INFORMATION:**

Store between 29°C - 25°C (86°F - 77°F); excursions are permitted 15°C - 30°C (59°F - 86°F).

HOW SUPPLIED:CLARO[®] solution is supplied in a single-use dropperful in a blister. Each dropperful contains one 1 mL dose.CLARO[®] is available in cartons of two, ten, or twenty dropperfuls.Manufactured for:
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NADA 141-440, Approved by FDA
LVP1802**Bayer****Veraflox[®]**
(pradofloxacin)**Oral Suspension for Cats****Veraflox (pradofloxacin) Oral Suspension for Cats**
25 mg/mLFor the treatment of skin infections (wounds and abscesses) in cats.
Do not use in dogs.**BRIEF SUMMARY:**

Before using Veraflox Oral Suspension for Cats, please consult the product insert, a summary of which follows:

CAUTION:

Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits the extra-label use of this drug in food-producing animals.

PRODUCT DESCRIPTION:

Pradofloxacin is a fluoroquinolone antibiotic and belongs to the class of quinolone carboxylic acid derivatives. Each mL of Veraflox Oral Suspension provides 25 mg of pradofloxacin.

INDICATIONS:Veraflox is indicated for the treatment of skin infections (wound and abscesses) in cats caused by susceptible strains of *Pasteurella multocida*, *Streptococcus canis*, *Staphylococcus aureus*, *Staphylococcus felis*, and *Staphylococcus pseudintermedius*.**CONTRAINDICATIONS:****DO NOT USE IN DOGS.** Pradofloxacin has been shown to cause bone marrow suppression in dogs. Dogs may be particularly sensitive to this effect, potentially resulting in severe thrombocytopenia and neutropenia. Quinolone-class drugs have been shown to cause arthropathy in immature animals of most species tested, the dog being particularly sensitive to this side effect. Pradofloxacin is contraindicated in cats with a known hypersensitivity to quinolones.**HUMAN WARNINGS:****Not for human use. Keep out of reach of children.** Individuals with a history of quinolone hypersensitivity should avoid this product. Avoid contact with eyes and skin. In case of ocular contact, immediately flush eyes with copious amounts of water. In case of dermal contact, wash skin with soap and water for at least 20 seconds. Consult a physician if irritation persists following ocular or dermal exposure or in case of accidental ingestion. In humans, there is a risk of photosensitization within a few hours after exposure to quinolones. If excessive accidental exposure occurs, avoid direct sunlight. Do not eat, drink or smoke while handling this product. For customer service or to obtain product information, including a Material Safety Data Sheet, call 1-800-633-3796. For medical emergencies or to report adverse reactions, call 1-800-422-9674.**ANIMAL WARNINGS:****For use in cats only.** The administration of pradofloxacin for longer than 7 days induced reversible leukocyte, neutrophil, and lymphocyte decreases in healthy, 12-week-old kittens.**PRECAUTIONS:**

The use of fluoroquinolones in cats has been associated with the development of retinopathy and/or blindness. Such products should be used with caution in cats. Quinolones have been shown to produce erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species. The safety of pradofloxacin in cats younger than 12 weeks of age has not been evaluated. The safety of pradofloxacin in immune-compromised cats (i.e., cats infected with feline leukemia virus and/or feline immunodeficiency virus) has not been evaluated. Quinolones should be used with caution in animals with known or suspected central nervous system (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation that may lead to convulsive seizures. The safety of pradofloxacin in cats that are used for breeding or that are pregnant and/or lactating has not been evaluated.

ADVERSE REACTIONS:

In a multi-site field study, the most common adverse reactions seen in cats treated with Veraflox were diarrhea/loose stools, leukocytosis with neutrophilia, elevated CPK levels, and sneezing.

ANIMAL SAFETY:

In a target animal safety study in 32, 12-week-old kittens dosed at 0, 1, 3, and 5 times the recommended dose for 21 consecutive days. One 3X cat and three 5X cats had absolute neutrophil counts below the reference range. The most frequent abnormal clinical finding was soft feces. While this was seen in both treatment and control groups, it was observed more frequently in the 3X and 5X kittens.

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Made in Germany

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BayerBayer HealthCare LLC
Animal Health Division

Shawnee Mission, Kansas 66201, U.S.A.



(fluralaner and moxidectin topical solution) for Cats

Caution:
Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

Description:
Each tube is formulated to provide a minimum dose of 18.2 mg/lb (40 mg/kg) fluralaner and 0.9 mg/lb (2 mg/kg) moxidectin. Each milliliter contains 280 mg of fluralaner and 14 mg of moxidectin.

The chemical name of fluralaner is (±)-4-[5-[(3,5-dichlorophenyl)-5-(trifluoromethyl)-4,5-dihydroisoxazol-3-yl]-2-methyl-N-[2-oxo-2-(2,2,2-trifluoroethylamino)ethyl]benzamide. The chemical name of moxidectin is (2aE,4E,5R,6R,6S,8E,11R,13S,15S,17aR,20R,20aR,20bS)-6-[(E)-1,3-Dimethyl-1-butenyl]-5',6',6'',7,10,11,14,15,17a,20,20a,20b-dodecahydro-20,20b-dihydroxy-5',6,8,19-tetramethylspiro[11,15-methano-2H,13H,17H-furo[4,3,2-pg][2,6]benzodioxacyclooctadecine-13,2-[2H]pyran]-4,17(3H)-dione 4'-[E]-[O-methylloxime]. Inactive ingredients: dimethylacetamide, glycolfuro, diethyltoluamide, acetone, butylhydroxytoluene

Indications:
Bravecto Plus is indicated for the prevention of heartworm disease caused by *Dirofilaria immitis* and for the treatment of infections with intestinal roundworm (*Toxocara cati*; 4th stage larvae, immature adults and adults) and hookworm (*Ancylostoma tubaeforme*; 4th stage larvae, immature adults and adults). Bravecto Plus kills adult fleas and is indicated for the treatment and prevention of flea infestations (*Ctenocephalides felis*) and the treatment and control of tick infestations [*Ixodes scapularis* (black-legged tick) and *Dermacentor variabilis* (American dog tick)] for 2 months in cats and kittens 6 months of age and older and weighing 2.6 lb or greater.

Dosage and Administration:
Bravecto Plus should be administered topically as a single dose every 2 months according to the **Dosage Schedule** below to provide a minimum dose of 18.2 mg/lb (40 mg/kg) fluralaner and 0.9 mg/lb (2 mg/kg) moxidectin.

For prevention of heartworm disease, Bravecto Plus should be administered at 2-month intervals. Bravecto Plus may be administered year-round without interruption or at a minimum should be administered at 2-month intervals beginning at the cat's first seasonal exposure to mosquitoes and continuing until the cat's last seasonal exposure to mosquitoes. If a dose is missed and a 2-month interval between doses is exceeded, administer Bravecto Plus immediately and resume the dosing every 2 months.

When replacing a monthly heartworm preventative product, the first dose of Bravecto Plus should be given within one month of the last dose of the former medication.

Dosing Schedule:

Body Weight Ranges (lb)	Fluralaner content (mg/tube)	Moxidectin content (mg/tube)	Tubes Administered
2.6 – 6.2	112.5	5.6	One
>6.2 – 13.8	250	12.5	One
>13.8 – 27.5*	500	25	One

* Cats over 27.5 lb should be administered the appropriate combination of tubes.

A veterinarian or veterinary technician should demonstrate or instruct the pet owner regarding the appropriate technique for applying Bravecto Plus topically to cats prior to first use.

Step 1: Immediately before use, open the pouch and remove the tube. Put on gloves. Hold the tube at the crimped end with the cap in an upright position (tip up). The cap should be rotated clockwise or counter clockwise one full turn. The cap is designed to stay on the tube for dosing and should not be removed. The tube is open and ready for application when a breaking of the seal is felt.



Step 2: The cat should be standing or lying with its back horizontal during application. Part the fur at the administration site. Place the tube tip vertically against the skin at the base of the skull of the cat.

Step 3: Squeeze the tube and gently apply the entire contents of Bravecto Plus directly to the skin at the base of the skull of the cat. Avoid applying an excessive amount of solution that could cause some of the solution to run and drip off of the cat. If a second spot is needed to avoid run off, then apply the second spot slightly behind the first spot.



Greasy, oily, or wet appearance may occur at the application site in some cats.

Contraindications:
There are no known contraindications for the use of the product.

WARNINGS:

Human Warnings:
Not for human use. Keep this and all drugs out of the reach of children.

Do not contact or allow children to contact the application site until 2 hours post application.

Keep the product in the original packaging until use in order to prevent children from getting direct access to the product. Do not eat, drink or smoke while handling the product. Avoid contact with skin and eyes. If contact with eyes occurs, then flush eyes slowly and gently with water. If wearing contact lenses, eyes should be rinsed first, then remove contact lenses and continue rinsing. Then seek medical advice immediately. Wash hands and contacted skin thoroughly with soap and water immediately after use of the product. If the product accidentally contacts skin and a sticky residue persists after washing, rubbing alcohol (70% isopropyl alcohol) can be applied to the area to remove the residue.

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

Precautions:
For topical use only. Avoid oral ingestion (see **Animal Safety**).

Fluralaner, one of the ingredients in Bravecto Plus, is a member of the isoxazoline class. This class has been associated with neurologic adverse reactions including tremors, ataxia, and seizures. Neurologic adverse reactions have been reported in cats receiving isoxazoline class drugs, even in cats without a history of neurologic disorders. Use with caution in cats with a history of neurologic disorders.

Use with caution in cats that are heartworm positive (see **Animal Safety**).

Bravecto Plus has not been shown to be effective in kittens less than 6 months of age.

The safety of Bravecto Plus has not been established in breeding, pregnant, and lactating cats.

The effectiveness of Bravecto Plus to prevent heartworm disease after bathing or water immersion has not been evaluated.

Adverse Reactions:
In a well-controlled U.S. field study, which included a total of 176 treated cats (135 with Bravecto Plus and 41 with a monthly topical active control), there were no serious adverse reactions.

Percentage of Cats with Adverse Reactions (AR) in the Field Study

Adverse Reaction	Bravecto Plus Group: Percent of Cats with the AR During the 120-Day Study (n=135 cats)	Active Control Group: Percent of Cats with the AR During the 120-Day Study (n=41 cats)
Vomiting	5.9%	12.2%
Alopecia (not at application site)	5.2%	2.4%
Pruritus	4.4%	12.2%
Application site pruritus	4.4%	4.9%
Diarrhea	3.7%	7.3%
Lethargy	3.7%	9.8%
Dry Skin	3.0%	0.0%
Elevated alanine aminotransferase (ALT)*	3.0%	0.0%
Hypersalivation	1.5%	1.5%
Application site alopecia	0.7%	0.0%

*ALT was greater than twice the upper reference range of 100 IU/L. These cats also had mild elevations of aspartate aminotransferase (AST) (less than twice the upper reference range of 100 IU/L). No clinical signs associated with liver disease were noted in these cats.

In well-controlled laboratory effectiveness studies, the following adverse reactions were seen after application of Bravecto Plus: pyrexia, tachypnea, mydriasis, pruritus, scabbing, and bloody stool.

Foreign Market Experience: The following adverse events were reported voluntarily during post-approval use of the product in cats in foreign markets: polydipsia, swelling of chin and lips, periorbital swelling, blepharospasm, pruritus, erythema, aggression, agitation, pyrexia, mydriasis, hypersalivation, hyperactivity, alopecia, and excessive grooming. These adverse events occurred within 48 hours of administration.

In a European field study for fluralaner topical solution for cats, there were three reports of facial dermatitis in humans after close contact with the application site which occurred within 4 days of application. In foreign market experience reports for Bravecto Plus, one veterinarian experienced tingling and numbness of the fingers, hand, and arm, and swelling of the hand and arm after getting Bravecto Plus on her fingers. Additional signs, including blurred vision and disorientation, occurred after taking an antihistamine.

To report suspected adverse events, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Merck Animal Health at 1-800-224-5318. Additional information can be found at www.bravecto.com. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VEIS or online at <http://www.fda.gov/reportanimalae>.

Clinical Pharmacology:
Peak fluralaner concentrations are achieved between 3 and 21 days following topical administration and the elimination half-life ranges between 11 and 18 days. Peak moxidectin concentrations are achieved between 1 and 5 days following topical administration and the elimination half-life ranges between 20 and 30 days.

Mode of Action:
Fluralaner is for systemic use and belongs to the class of isoxazoline-substituted benzamide derivatives. Fluralaner is an inhibitor of the arthropod nervous system. The mode of action of fluralaner is the antagonism of the ligand-gated chloride channels (gamma-aminobutyric acid (GABA)-receptor and glutamate-receptor).

Moxidectin is for systemic use and is a semisynthetic derivative of nemadectin, belonging to the milbemycin group of macrocyclic lactones. It binds to gamma-aminobutyric acid (GABA) and glutamate-gated chloride channels of the nerves and muscles of the parasite resulting in hyperpolarization, paralysis and death.

Effectiveness:
In two well-controlled laboratory studies, Bravecto Plus was 100% effective against induced heartworm infections when administered 2 months prior to infection. Bravecto Plus was not effective when administered more than 2 months prior to infection.

In well-controlled laboratory studies, Bravecto Plus was effective against naturally and experimentally induced adult and experimentally induced 4th stage larval and immature adult *Toxocara cati* and *Ancylostoma tubaeforme* infections in cats.

In a well-controlled laboratory study, Bravecto Plus killed 100% of fleas within 12 hours after treatment and reduced the numbers of live fleas on cats by >99% within 12 hours after treatment or infestation for 2 months. In well-controlled laboratory studies, Bravecto Plus demonstrated >90% effectiveness against *Dermacentor variabilis* 48 hours after treatment or infestation for 2 months but failed to demonstrate ≥ 90% effectiveness beyond 2 months. In well-controlled laboratory studies, Bravecto Plus demonstrated ≥ 98.1% effectiveness against *Ixodes scapularis* 48 hours after treatment or infestation for 2 months.

Animal Safety:

Margin of Safety Study: In a margin of safety study, Bravecto Plus was administered topically to 9- to 13-week-old (mean age 12 weeks) kittens on cats by 1X, 3X, and 5X the maximum labeled dose of 93.0 mg fluralaner/kg and 4.7 mg moxidectin/kg at three, 8-week intervals (10 kittens per group). The kittens in the control group (0X) were treated with mineral oil. There were no clinically-relevant, treatment-related effects on physical examination, body weights, food consumption, clinical pathology (hematology, clinical chemistry, coagulation tests, serum amyloid A, and urinalysis), gross pathology, histopathology, or organ weights. Single incidences of self-limiting hypersalivation in three kittens (one kitten in the 1X group and two kittens in the 3X group) and pruritus at the administration site in one kitten in the 3X group were observed on the day of dose administration. Cosmetic changes at the application site included matting/clumping/spiking of hair, wetness, or a greasy appearance.

Oral Safety Studies: In an oral safety study, one dose of Bravecto Plus was administered orally to 4- to 9-month-old kittens at the maximum labeled dose of 93.0 mg fluralaner/kg and 4.7 mg moxidectin/kg. The kittens in the control group were administered saline orally. There were no clinically-relevant, treatment-related effects on physical examination, body weights, food consumption, or clinical pathology (hematology, clinical chemistry, coagulation tests, serum amyloid A, and urinalysis). Five of six treated kittens experienced hypersalivation. One treated kitten experienced vomiting 2 hours after administration and another 8 hours after treatment. Treated kittens had reduced food consumption on the day of treatment.

In an oral safety study for fluralaner topical solution for cats, four out of six cats experienced coughing immediately after oral administration of the maximum labeled dose of 93.0 mg fluralaner/kg.

In a pilot oral safety study, adult cats orally administered 0.5X or 1X the maximum labeled dose of Bravecto Plus had foaming hypersalivation for up to five minutes and reduced food consumption on the day of dosing. One cat exhibited transient lacrimation from one eye during the first 15 minutes after dosing.

Safety in cats infected with adult heartworm (*Dirofilaria immitis*): Bravecto Plus was administered topically to cats infected with adult heartworm at 1X or 3X the maximum labeled dose of 93.0 mg fluralaner/kg and 4.7 mg moxidectin/kg (8 cats per group). The cats in the control group (0X) received mineral oil topically. Two untreated cats were found dead prior to dosing. There were no clinically-relevant, treatment-related effects on body weights, clinical pathology (hematology, clinical chemistry, and coagulation profile), gross pathology or histopathology. Self-limiting hypersalivation due to grooming was observed on the day of treatment in both treatment groups (6/8 cats in the 1X group and 7/8 cats in the 3X group). In addition, three treated cats (2/8 cats in the 1X group and 1/8 cats in the 3X group) developed adverse neurologic signs during the study and were euthanized due to quality-of-life concerns. Clinical signs in one cat in the 1X group included vomiting, depression, vocalization, and ataxia 38 days that included ataxia, paresis, and muscle tremors 25 days after dosing. A cat in the 3X group exhibited depression, dehydration, a hunched position, and inability to stand 22 days after dosing. Heartworms were found in the epidural space in the second cat of the 1X group and the cat in the 3X group.

Field Safety Study: In a well-controlled field study, Bravecto Plus was used concurrently with other medications, such as vaccines, anthelmintics, antibiotics and steroids. No adverse reactions were observed from the concurrent use of Bravecto Plus with other medications.

Storage Conditions:
Do not store above 77°F (25°C). Store in the original package in order to protect from moisture. The pouch should only be opened immediately prior to use.

How Supplied:
Bravecto Plus is available in three tube sizes to treat cats ranging in weight from 2.6 lb – 27.5 lb (1.2 kg to 12.5 kg). Each tube is packaged individually in a pouch. Product may be supplied in 1 or 2 tubes per carton.

Approved by FDA under NADA # 141-518

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