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TVC

January Digital Issue 2018



Digital magazine

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nutrition – early and often –
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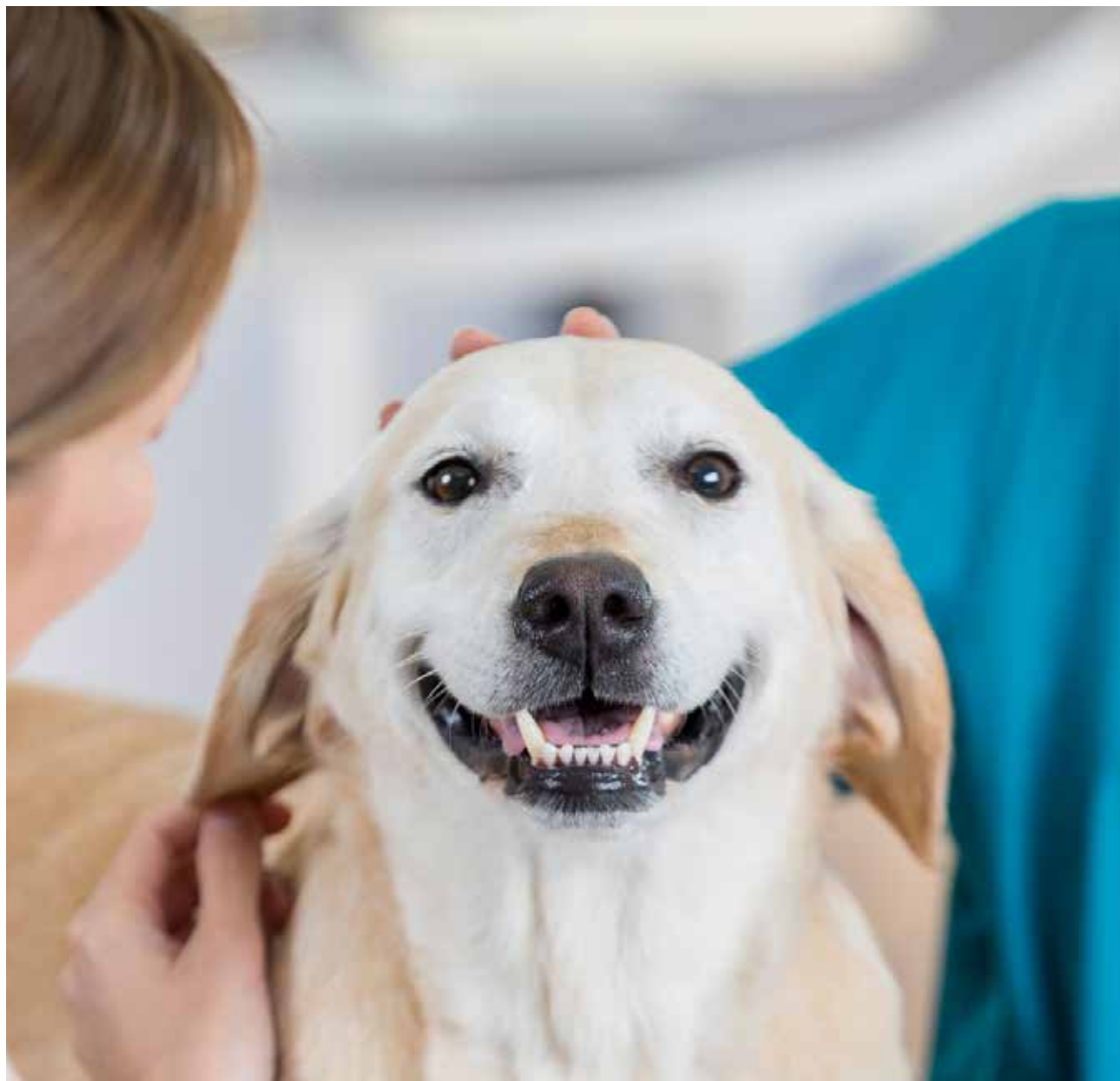
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A Collective Success

By Allison Morris, TVC President

The first veterinary conference we participated in as a Cooperative

was in New York in the fall of 2012. Rich Morris and I sat together in a booth and watched the show floor. Looking around, you could see vendors and hospital owners greeting each other and catching up, while eventually getting down to business.

I remember us discussing how rewarding it would be for TVC to grow into that kind of community, where owners and vendors could gather to discuss their lives and businesses.

I'm happy to say we've grown into that vision, with even bigger and brighter things in store for 2018 and beyond. With the growth comes change. One change that's been in the works for a while is for Rich to transition into doing what he

loves most – the educational portion. His new title will be Chief Education Officer. He will lead all education efforts at TVC – the launch of TVC University and the development of business tools the TVC clinics can use to increase clients, revenue and profit.

After numerous interviews, internally and outside our organization with several candidates, the TVC Board appointed me as president in late October.

I'm excited about the new role for several reasons. I've been with TVC since the beginning in 2012, and watched the membership grow to more than 2,500, and the TVC staff grow to more than a dozen. I have worked every

TVC staff position in some capacity, and handed off duties to new employees as they've come aboard, so I have a working knowledge of what each position does and what we need to do as a team to help our TVC Owners succeed.

In 2018, we want to show our Owners the value of what it means to be a part of a co-op. We want TVC to feel like a community for you. We also want to bring on vendors to fill any small gaps we have, and make sure we have the best vendor programs and partners. Our commitment to the co-op will prove to vendors that we are a partner worth having.

With TVC Owners and TVC staff working together, we can be a collective success in 2018. I'm looking forward to working with you! ■

I've been with TVC since the beginning in 2012, and watched the membership grow to more than 2,500, and the TVC staff grow to more than a dozen.

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IMPORTANT SAFETY INFORMATION: NexGard® (afoxolaner) is for use in dogs only. The most frequently reported adverse reactions included pruritus, vomiting, dry/flaky skin, diarrhea, lethargy, and lack of appetite. The safe use of NexGard in pregnant, breeding, or lactating dogs has not been evaluated. Use with caution in dogs with a history of seizures. For more information, see full prescribing information or visit www.NexGardForDogs.com.



NEWS

This Month at the Veterinary Cooperative

Join us at the VMX / NAVC
TVC members enjoy a 10% discount

[More info here](#)

Welcome to our new vendors!

Check out our new vendors [ASPCA Health Insurance](#), [Dentalaire](#), [Diamondback Drugs](#), [Jurox Alfaxan](#), [Merck](#), [MWI Animal Health](#), and [VitalRads](#).

Click on their names to follow the link to their TVC vendor landing page to see how they can be helpful in your clinic.

Webinars



[Register](#)

Dietary Management of Chronic Kidney Disease in Cats & Dogs

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Keep those renal cats & dogs eating. Please join Royal Canin with speaker Dr. Jenny Grither, Scientific Services Veterinarian, for a 1.5-hour long RACE-approved webinar presentation for 1.5 CE credit. Dr. Grither will discuss dietary management of chronic kidney disease in cats and dogs and the following:

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Starting on the Right Food

Driving home the importance of proper nutrition – early and often – will lead to healthier pets



Proper nutrition is the key ingredient to wellness. It's also the main driver of pet product sales in the United States. According to Petfoodindustry.com, the [outlook for the US pet food market](#) in 2018 remains solid, with Packaged Facts projecting 4.4 percent growth, such that the market reaches US\$27 billion.

However, the growth in pet food sales hasn't translated into healthier pets. According to Banfield Pet Hospital's 2017 State of Pet Health Report, which captured medical data from 2.5 million dogs and 505,000 cats, one out of three cats and dogs is overweight. In the past 10 years, diagnoses of overweight and obesity have increased 158 percent in dogs and 169 percent in cats seen in Banfield hospitals. The consequences to the health of these pets can be severe.

Veterinary practices are uniquely suited to help clients make the necessary improvements for the betterment of pets. The earlier in the pet's life, the better.

A nutritionally demanding time

Shannon Jensen, DVM, and TVC Owner at Perkins County Veterinary Hospital in southwest Nebraska, makes nutritional assessments a priority in her discussions with clients. Especially with puppies and kittens.

"I think nutrition is important for puppies and kittens since they are in a nutritionally demanding time in their life," she says. "Large breed puppies especially need a growth rate that promotes healthy bone and muscle growth ratios. Development of teeth and brain have also been associated with nutrition. Even dental disease in adult cats has been linked to poor nutrition in nursing age kittens."

Dr. Jensen says she finds it is easier to get clients to commit to a new diet with puppies and kittens versus older

pets. "New pet owners generally know they need a growth food and are looking for a recommendation at a new pet appointment," she says. "I find that owners of older pets have a routine and stick to that diet unless there is a valid reason to change foods. If the pet has weight issues, skin issues or organ function abnormalities, however, clients are often eager to feed the best food they can to help the pet live longer. They do however need to see results in a short amount of time. One or maybe two bags."

In a new puppy/kitten exam, Dr. Jensen generally opens with asking where they got the pet. A puppy from a reputable breeder often comes to the new home on a diet the breeder uses. "We talk about availability of that diet a lot in my practice, as we are very rural, and help decide on a diet and how to transition to it." Another segue to diet is if the new puppy/kitten has diarrhea. "We can offer support for GI upset too."

Food for thought

Despite the sensitivity of the subject with adult and senior pets, there are benefits of making nutritional assessments and recommendations for every pet that comes into your clinic. Dr. Jensen has a simple, straightforward approach to the topic.

"It's usually something that I ask, 'What do you feed your pet? He seems a little bit overweight. What are you feeding him/her now?'" she says. "We suggest that the pet has a problem that the pet owner may not have realized."

Dr. Jensen says they speak to around half of their clients about adjusting diet. "If it's for example a cat with kidney issues, then we have to discuss this every single time, because of their inability to eat well," she says. "However, if it's an animal who comes in twice a year for a checkup who is healthy, then it's just once a year."

Dr. Jensen says she likes to give clients brochures that the clinic has for the prescription diets, "but honestly we just listen," she says. "Whatever the specific diet means to their pet. I like to keep it simple, because if we overcomplicate it then they are less likely to comply."

The effects of pet obesity

In a recent article on pet obesity highlighted by the San Francisco Chronicle, Deborah Linder, Tufts University, recounted a lifespan study showing Labradors who were 10-20 percent overweight – not even obese, which is typically defined as greater than 20 percent – lived a median 1.8 years shorter than their trim ideal weight counterparts. "Another study shows that obesity indeed has emotional consequences for pets," Linder wrote. "Overweight pets have worse scores in vitality, quality of life, pain and emotional disturbance. However, the good news is those values can improve with weight loss."

WSAVA Global Nutrition Committee's Recommendations on Selecting Pet Foods

Factual information must be provided on pet food labels but it is

important to be aware that the label is also a promotional tool to attract pet owners. This means that much of the information provided - including the ingredient list and use of unregulated terms such as 'holistic'; 'premium' or 'human grade' - is of little practical value in assisting nutritional assessment. The veterinary team plays a vital role in helping pet owners make informed decisions based on two key pieces of information:

A. The manufacturer's name and contact information.

This allows a member of the veterinary team or the pet owner to contact the manufacturer to ask questions, such as the following:

- 1.** Do you employ a full time qualified nutritionist? Appropriate qualifications are either a PhD in animal nutrition or board-certification by the American College of Veterinary Nutrition (ACVN) or the European College of Veterinary Comparative Nutrition (ECVCN). What is this nutritionist's name and qualifications?
- 2.** Who formulates your foods and what are his/her credentials?
- 3.** Are your diets tested using AAFCO feeding trials or by formulation to meet AAFCO nutrient profiles? If the latter, do they meet AAFCO nutrient profiles by formulation or by analysis of the finished product?

B. In some countries, the AAFCO adequacy statement is included on the label. This statement confirms three important facts (the first is below):

- 1.** Whether the diet is complete and balanced. All over-the-counter foods should be complete and balanced. If the statement reads 'for intermittent or supplemental use only,' it is not complete and balanced. That may be acceptable if it is a veterinary therapeutic diet and is being used for a specific purpose - e.g. in a case of severe kidney disease - but should be avoided in over-the-counter pet foods.

To view a pdf of the full recommendations, visit: <https://www.wsava.org/sites/default/files/Recommendations%20on%20Selecting%20Pet%20Foods.pdf>

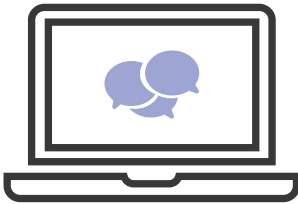
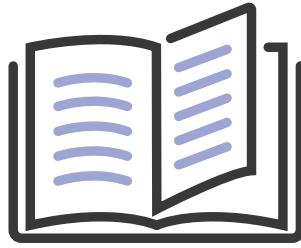
Educated about food

The nutritional conversation really boils down to getting educated about pet food, Dr. Jensen says. "Online isn't a great resource, but I've learned so much from my Hill's reps," she says. "I live in the middle of nowhere, but we still have a rep that comes fairly often. Hill's is very good at sending out packets that explain what exactly their new diet does. Sometimes having it available for clients to see brings up the topic."

Hill's, a TVC Vendor, has several initiatives related to nutritional education. Hill's offers a VNA (Veterinary Nutritional Advocate, online at www.hillsvet.com) and VTNC (Veterinary Technician Nutritional Counselor, full day, in-person training program), which both provide foundational education about nutrition. It has a Pet Nutrition Center, with in-person and virtual tours available. Hill's Nutritional Experts (Hill's Territory Managers) and Hill's professional consulting veterinarians travel to clinics to let vets know how to best make pet recommendations, free of charge.

With those resources in place, and with offering pet food at a competitive price in the marketplace, veterinarians can compete with retailers, grocery stores and online for the pet food spend.

"I think there is a place for veterinary practices in my area to carry premium dog foods," Dr. Jensen says. "The nearest pet store is 60 miles away and the nearest retailer with multiple foods is 20 miles from my town. Even in populated areas the veterinary clinic staff offers a unique and trusted resource for information pet owners seek. Like the fact that Hill's has never had any recalls." ■



Learn. Grow. Thrive.

TVC University is here! The TVC Team is celebrating with the launch of an incredible addition to the services we offer here at TVC.

TVC University is a place where you can expand your knowledge by taking free RACE-approved continuing education courses online and gaining access to educational tools that are designed to help make your clinic thrive.

Here at TVC, our goal is to provide you with the tools you need to run a successful clinic so you can focus on doing what you love; practicing great medicine. We have designed TVC University to equip you with the knowledge you need to stay competitive and succeed.

Check out TVC University on the TVC Coop Owners only website!



Wellness Plans

Better for the pet, the owner and the practice

By Mark Thill

A limp, a wound, a mass: Any of these is usually

enough to get an owner to bring his or her dog or cat to the vet. But what about a preventive, or wellness exam? Routine fecal test? Teeth cleaning? Urinalysis? Maybe not.

Some owners fail to grasp the importance of preventive or wellness care. But others no doubt avoid such care because of the cost.

"I think there are quite a few pet owners who would be more willing to bring their pets in [for preventive care] if the cost was spread out over 12 months," says Karen Felsted, CPA, MS, DVM, CVPM, CVA, PantheraT Veterinary Management Consulting.

Spending a couple of hundred dollars for a preventive exam is one thing. But deducting \$30 or \$40 per month from your credit card is another. And that is the theory behind wellness plans.

Flat monthly payment

Wellness plans were developed in the mid-1980s as a means of providing all the needed preventive care for dogs and cats, says Will Novak, DVM, CEO of Pet Medical Centers and former chief medical officer and senior vice president of operations for Banfield, which has a well-developed wellness plan offering. After leaving Banfield in 2008, he founded Pet Medical Centers, then developed PetMedWare practice management software and On Point Pet Health Plans (a patent-pending combination wellness/illness plan). He also has minority ownership in Prevent Plans, a wellness plan for solo practices.

"Prior to wellness plans, each component of preventive care was sold separately, e.g., rabies, distemper, heartworm tests, etc.," he says. "The total cost of all the preventive care needed on one visit is usually about double the average patient charge," says Novak. "As such, it has been shown that few clients will pay for all the needed preventive care on one visit."

"Wellness plans were a means of allowing the client to pay for all the needed preventive care in a flat rate monthly payment. This also simplified paying for booster vaccines and dentals that might occur on other visits. Other features were added, such as limited or unlimited, free or discounted office calls."

Studies have shown that wellness-plan clients spend more money annually – and visit the veterinarian's office more frequently – than non-wellness-plan clients, he says.



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“I was involved in a study comparing the frequency of dentals prophylaxis on pets that were on wellness plans versus those that were not,” says Novak. “Pets on wellness plans got dentals approximately 90 percent of the time versus non-wellness plan pets at 10 percent.”

“The greatest challenge to selling wellness plans to veterinarians is to have them understand that plans provide better pet healthcare,” he continues. “Pet owners understand the value of wellness plans once they understand the real healthcare needs of their pets.”

The veterinary staff can do their part by making sure the preventive care is provided either on the first visit or by having a good reminder system, he adds. “Clients

“Pet owners understand the value of wellness plans once they understand the real healthcare needs of their pets.”

– Will Novak

are much more willing to schedule follow-up appointments, such as a dental, when they know that the fees are covered under the plan. Clients value the plan the most when they use the included services.”

Challenges

Veterinary practices that attempt to set up and operate their own wellness plans may find some challenges.

“Wellness plans have a reputation for being difficult to set up and cumbersome to administer,” says Fraser. “In the past, they have been blamed for a fall in profitability, so veterinarians are understandably skeptical.” Some home-grown plans tend to focus on services and overcomplicate the offering, which confuses staff and pet owners, he adds.

Says Novak, “The most common mistake is designing the plan around what the doctor and hospital team want versus what the consumer wants. Extensive work has been done around plan design based on consumer price points, services included and number of plan types. I worked with a pet hospital recently that insisted on having seven different plans. That’s too many plans for the consumer to understand.

“The other common issue is trying to manage the plan without a plan administrator,” he continues. Prevent Plans calls the client the day that a credit card is declined. Hospitals that administer their own plans have to require the hospital team to do this task (daily), which means it frequently doesn’t happen. As such, payments are lost.”



The communication piece

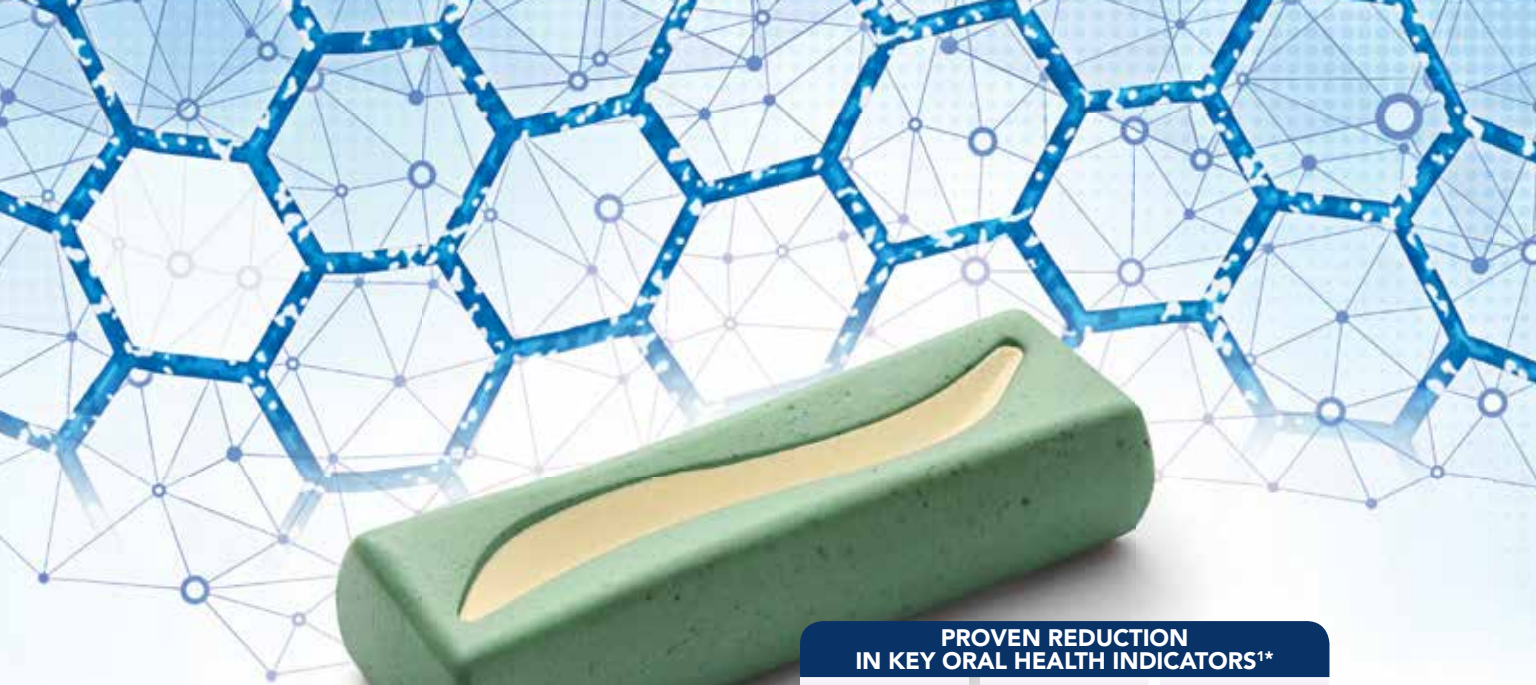
Says Felsted, “It’s the communication piece that I think is the most difficult part of operating a wellness plan. A lot of training has to take place within the practice, because the staff has to understand what’s included, why the plan is important, and how to talk about it with clients. That can take time.”

Practices with successful plans typically consider wellness a core part of their practice – not a “program for a day,” continues Felsted. “You really have to believe this is a core way in which you want to operate.”

Pet owners who re-up on wellness plans are those who use the services and see the plan’s value, she continues. For that reason, the practice should encourage people to use the services to which they are entitled. That may mean phoning clients who haven’t scheduled one of their free preventive exams, for example.

“Practices that have worked extensively on their wellness programs have found that they make money on ancillary services,” says Felsted. For example, if the owner brings in his or her dog for a basic dental – cleaning and polishing – the doctor may discover the pet needs an extraction.

“All the work I’ve seen shows that pet owners with wellness plans spend more with the practice,” she says. “Part of that is because of the services included in the plan, and part is because their pets are seen in the practice more frequently, more medical needs are identified. And because they are spreading out those costs over 12 months, they feel they can afford to do it.” ■



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*Compared with dry diet alone.

References: 1. Data on file. 2. Steinberg D, Beeman D, Bowen W. The effect of delmopinol on glucosyltransferase adsorbed on to saliva-coated hydroxyapatite. *Archs Oral Biol.* 1992;37:33-38. 3. Vassilakos N, Arnebrant T, Rundegren J. In vitro interactions of delmopinol hydrochloride with salivary films adsorbed at solid/liquid interfaces. *Caries Res.* 1993;27:176-182.



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Industry NEWS

Case of drug-resistant heartworm underscores need for monthly preventives

Louisiana-based *WGNO* highlighted a recent case of a Metairie yellow lab believed to be the first pet in the United States to be infected by a new drug-resistant strain of heartworms. According to a news release from veterinarian Dr. Cynthia Benbow's office, Madie the lab contracted heartworms in 2014 while on monthly heartworm prevention. It was only recently, however, that the case was published in a veterinary journal, *Parasites and Vectors*. Benbow's office sent a blood sample to a veterinarian at the Department of Infectious Diseases at University of Georgia's College of Veterinary Medicine for further testing. Dr. Ray Kaplan's lab confirmed that the heartworms were, in fact, drug-resistant, Dr. Benbow's office said. "It is crucial for pet owners to understand the importance of being on consistent, monthly heartworm prevention and a mosquito repellent" says Dr. Benbow. "Since this resistant strain was found in Metairie, the double-protection approach is the best way for owners to protect their pets from now on, no matter what time of the year."

MWI Animal Health acquires Northeast Veterinary Supply Company

MWI Animal Health, a part of AmerisourceBergen, announced the acquisition of Northeast Veterinary Supply Co. (NEVSCO), an independent, regional distributor of veterinary pharmaceuticals and medical supplies servicing primarily the northeast region of the U.S. The acquisition of NEVSCO continues to strengthen MWI's position to better support the viability of independent veterinary practices and provide even greater value and care to current and future animal health customers, the company said in a release.

Boehringer Ingelheim investing \$80 million in facilities

Boehringer Ingelheim announced investments totaling more than \$80 million to expand its existing facilities in Athens, Ga., and St. Joseph, Mo., to accommodate increased production of animal vaccines, according to a release. Boehringer Ingelheim's facility in Athens, Ga., will grow from its

current footprint of approximately 350,000 square feet to 400,000 square feet and will nearly double its filling capacity for companion animal and avian vaccines. Construction is slated to begin in the fourth quarter of 2017 and will continue through 2019, with commercial production anticipated to begin in the second half of 2019. The facility, which was established in 1989, currently employs approximately 400, including Research and Development operations also based there. It is expected that an additional 50 positions will be added over the next three years to support the expansion. Construction at the company's facility in St. Joseph, MO also will begin in the fourth quarter 2017 on a 13,000-square-foot expansion to accommodate increased production of livestock animal vaccines sold in the U.S. and globally.

AAVMC: Applicant pool for veterinary college up 6%

The number of applicants applying for admission to member institutions of the Association of American Veterinary Medical Colleges (AAVMC) continues to rise, according to final data compiled at the end of the annual application cycle. A total of 7,507 individuals applied through the AAVMC's [Veterinary Medical College Application Service \(VMCAS\)](#) for admission to the class which begins their studies in fall 2018. That compares to 7,077 applicants who applied during the prior year admissions cycle and represents an increase of about six percent. The total number of applications submitted was 36,638, which rose about seven percent over last year, when 34,134 applied. Each applicant applied to an average of 4.88 institutions, which also slightly increased. This marks the second straight year that the number of applicants has [increased](#) about six percent year-over-year.

NexGard® (afoxolaner) Chewables

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

Description:

NexGard® (afoxolaner) is available in four sizes of beef-flavored, soft chewables for oral administration to dogs and puppies according to their weight. Each chewable is formulated to provide a minimum afoxolaner dosage of 1.14 mg/lb (2.5 mg/kg). Afoxolaner has the chemical composition 1-Naphthalenecarboxamide, 4-[5-[3-chloro-5-(trifluoromethyl)-phenyl]-4,5-dihydro-5-(trifluoromethyl)-3-isoxazolyl]-N-[2,2,2-trifluoroethyl]aminoethyl.

Indications:

NexGard kills adult fleas and is indicated for the treatment and prevention of flea infestations (*Ctenocephalides felis*), and the treatment and control of Black-legged tick (*Ixodes scapularis*), American Dog tick (*Dermacentor variabilis*), Lone Star tick (*Amblyomma americanum*), and Brown dog tick (*Rhipicephalus sanguineus*) infestations in dogs and puppies 8 weeks of age and older, weighing 4 pounds of body weight or greater, for one month.

Dosage and Administration:

NexGard is given orally once a month, at the minimum dosage of 1.14 mg/lb (2.5 mg/kg).

Dosing Schedule:

Body Weight	Afoxolaner Per Chewable (mg)	Chewables Administered
4.0 to 10.0 lbs.	11.3	One
10.1 to 24.0 lbs.	28.3	One
24.1 to 60.0 lbs.	68	One
60.1 to 121.0 lbs.	136	One
Over 121.0 lbs.	Administer the appropriate combination of chewables	

NexGard can be administered with or without food. Care should be taken that the dog consumes the complete dose, and treated animals should be observed for a few minutes to ensure that part of the dose is not lost or refused. If it is suspected that any of the dose has been lost or if vomiting occurs within two hours of administration, redose with another full dose. If a dose is missed, administer NexGard and resume a monthly dosing schedule.

Flea Treatment and Prevention:

Treatment with NexGard may begin at any time of the year. In areas where fleas are common year-round, monthly treatment with NexGard should continue the entire year without interruption.

To minimize the likelihood of flea reinfestation, it is important to treat all animals within a household with an approved flea control product.

Tick Treatment and Control:

Treatment with NexGard may begin at any time of the year (see **Effectiveness**).

Contraindications:

There are no known contraindications for the use of NexGard.

Warnings:

Not for use in humans. Keep this and all drugs out of the reach of children. In case of accidental ingestion, contact a physician immediately.

Precautions:

The safe use of NexGard in breeding, pregnant or lactating dogs has not been evaluated. Use with caution in dogs with a history of seizures (see **Adverse Reactions**).

Adverse Reactions:

In a well-controlled US field study, which included a total of 333 households and 615 treated dogs (415 administered afoxolaner; 200 administered active control), no serious adverse reactions were observed with NexGard.

Over the 90-day study period, all observations of potential adverse reactions were recorded. The most frequent reactions reported at an incidence of > 1% within any of the three months of observations are presented in the following table. The most frequently reported adverse reaction was vomiting. The occurrence of vomiting was generally self-limiting and of short duration and tended to decrease with subsequent doses in both groups. Five treated dogs experienced anorexia during the study, and two of those dogs experienced anorexia with the first dose but not subsequent doses.

Table 1: Dogs With Adverse Reactions.

	Treatment Group			
	Afoxolaner		Oral active control	
	N ^a	% (n=415)	N ^a	% (n=200)
Vomiting (with and without blood)	17	4.1	25	12.5
Dry/Flaky Skin	13	3.1	2	1.0
Diarrhea (with and without blood)	13	3.1	7	3.5
Lethargy	7	1.7	4	2.0
Anorexia	5	1.2	9	4.5

^aNumber of dogs in the afoxolaner treatment group with the identified abnormality.

^bNumber of dogs in the control group with the identified abnormality.

In the US field study, one dog with a history of seizures experienced a seizure on the same day after receiving the first dose and on the same day after receiving the second dose of NexGard. This dog experienced a third seizure one week after receiving the third dose. The dog remained enrolled and completed the study. Another dog with a history of seizures had a seizure 19 days after the third dose of NexGard. The dog remained enrolled and completed the study. A third dog with a history of seizures received NexGard and experienced no seizures throughout the study.

To report suspected adverse events, for technical assistance or to obtain a copy of the MSDS, contact Merial at 1-888-637-4251 or www.merial.com/NexGard. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

Mode of Action:

Afoxolaner is a member of the isoxazoline family, shown to bind at a binding site to inhibit insect and acarine ligand-gated chloride channels, in particular those gated by the neurotransmitter gamma-aminobutyric acid (GABA), thereby blocking pre- and post-synaptic transfer of chloride ions across cell membranes. Prolonged afoxolaner-induced hyperexcitation results in uncontrolled activity of the central nervous system and death of insects and acarines. The selective toxicity of afoxolaner between insects and acarines and mammals may be inferred by the differential sensitivity of the insects and acarines' GABA receptors versus mammalian GABA receptors.

Effectiveness:

In a well-controlled laboratory study, NexGard began to kill fleas four hours after initial administration and demonstrated >99% effectiveness at eight hours. In a separate well-controlled laboratory study, NexGard demonstrated 100%

effectiveness against adult fleas 24 hours post-infestation for 35 days, and was > 95% effective at 12 hours post-infestation through Day 21, and on Day 35. On Day 28, NexGard was 81.1% effective 12 hours post-infestation. Dogs in both the treated and control groups that were infested with fleas on Day 1 generated flea eggs at 12- and 24-hours post-treatment (0-11 eggs and 1-17 eggs in the NexGard treated dogs, and 4-90 eggs and 0-118 eggs in the control dogs, at 12- and 24-hours, respectively). At subsequent evaluations post-infestation, fleas from dogs in the treated group were essentially unable to produce any eggs (0-1 eggs) while fleas from dogs in the control group continued to produce eggs (1-141 eggs).

In a 90-day US field study conducted in households with existing flea infestations of varying severity, the effectiveness of NexGard against fleas on the Day 30, 60 and 90 visits compared with baseline was 98.0%, 99.7%, and 99.9%, respectively. Collectively, the data from the three studies (two laboratory and one field) demonstrate that NexGard kills fleas before they can lay eggs, thus preventing subsequent flea infestations after the start of treatment of existing flea infestations.

In well-controlled laboratory studies, NexGard demonstrated >97% effectiveness against *Dermacentor variabilis*; >94% effectiveness against *Ixodes scapularis*; and >93% effectiveness against *Rhipicephalus sanguineus*, 48 hours post-infestation for 30 days. At 72 hours post-infestation, NexGard demonstrated >97% effectiveness against *Amblyomma americanum* for 30 days.

Animal Safety:

In a margin of safety study, NexGard was administered orally to 8 to 9-week-old Beagle puppies at 1, 3, and 5 times the maximum exposure dose (6.3 mg/kg) for three treatments every 28 days, followed by three treatments every 14 days, for a total of six treatments. Dogs in the control group were sham-dosed. There were no clinically-relevant effects related to treatment on physical examination, body weight, food consumption, clinical pathology (hematology, clinical chemistries, or coagulation tests), gross pathology, histopathology or organ weights. Vomiting occurred throughout the study, with a similar incidence in the treated and control groups, including one dog in the 5x group that vomited four hours after treatment.

In a well-controlled field study, NexGard was used concomitantly with other medications, such as vaccines, anthelmintics, antibiotics (including topicals), steroids, NSAIDs, anesthetics, and antihistamines. No adverse reactions were observed from the concomitant use of NexGard with other medications.

Storage Information:

Store at or below 30°C (86°F) with excursions permitted up to 40°C (104°F).

How Supplied:

NexGard is available in four sizes of beef-flavored soft chewables: 11.3, 28.3, 68 or 136 mg afoxolaner. Each chewable size is available in color-coded packages of 1, 3 or 6 beef-flavored chewables.

NADA 141-406, Approved by FDA

Marketed by: Frontline Vet Labs™, a Division of Merial, Inc.
Duluth, GA 30096-4640 USA

Made in Brazil.

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