

vettedTM

VetEc + VetMed, shaken not stirred



PET OWNER PSA
3 words:
**Call.
your.
Vet.** p 2



53% of dogs are
overweight.
Help them by overcoming
the awkwardness. p 20

GDV:
Don't get it
twisted
p 28

Boneheaded
student improved
teaching tools for
everyone p 4

PET MONITORS:
More than
"Fitbits
for dogs"?
p 8

No 
shame
in your ear game

**4 EXPERT ANSWERS TO
COMMON OTITIS QUESTIONS** p 16



EXCLUSIVE DATA:
Get an earful about how practitioners think
about otitis management



IN FLEA AND TICK CONTROL, REACH HIGHER



Longest lasting protection available in a chew

- Provides up to **12-week**^{1*} flea and tick control

Aids in pet owner compliance^{2,3}

- Eliminates the need for monthly application

Revolutionary technology

- No known flea resistance⁴

Vet exclusive

- Proven safety and efficacy

Order BRAVECTO today.

Contact your MERCK Animal Health
Representative or distributor.

BRAVECTO[®]
(FLURALANER)

BravectoVets.com

***Bravecto kills fleas, prevents flea infestations, and kills ticks (black-legged tick, American dog tick, and brown dog tick) for 12 weeks. Bravecto also kills lone star ticks for 8 weeks.**

IMPORTANT SAFETY INFORMATION: The most common adverse reactions recorded in clinical trials were vomiting, decreased appetite, diarrhea, lethargy, polydipsia, and flatulence. Bravecto has not been shown to be effective for 12-weeks' duration in puppies less than 6 months of age. Bravecto is not effective against lone star ticks beyond 8 weeks after dosing.

References: 1. Bravecto [prescribing information]. Summit, NJ: Merck Animal Health; 2014. 2. Beck S, Schein E, Baldermann C, von Samson-Himmelstjerna G, Kohn B. Tick infestation and tick prophylaxis in dogs in the area of Berlin/Brandenburg—results of a questionnaire study. *BerlMünch Tierärztl Wochenschr.* 2013;126(1-2):69-76. 3. Kidd L, Breitschwerdt EB. Transmission times and prevention of tick-borne diseases in dogs. *Compend Contin Educ Pract Vet.* 2003;25(10):742-751. 4. Gassel M, Wolf C, Noack S, Williams H, Ilg T. The novel isoxazoline ectoparasiticide fluralaner: Selective inhibition of arthropod γ -aminobutyric acid- and L-glutamate-gated chloride channels and insecticidal/acaricidal activity. *Insect Biochem Molec Biol.* 2014;45:111-124.

Please see Brief Summary on page.44.

THE GUIDE

March 2016

The picks

4

- > Tooth truths
- > Hey, bonehead!

More picks

- > ZOMG! CPR in the ER
- > Avoid cat-astrophes
- > The cult of veterinary personalities
- > Who's in control of pets' diets?

6

11

Life's a marathon



Weigh in:

4 reasons to talk obesity now

20

GLAUCOMA: Are you down with IOP?

24

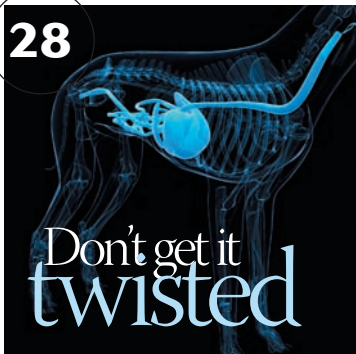
16

No shame in your ear game

From "that smell" to potential ear hematomas and canal ablations, otitis externa can be a clinical challenge for any veterinary practitioner to manage.

28

Don't get it twisted



32

New dental drills for old pets



+

8 Fitbits for dogs?

14 Data: Clients on the move

38 4 products to take a closer look

42 Hospital design: Colorful coordination

56 Matrix: Who should I listen to?

Tips & tools

- > Supplements for osteoarthritis pain
- > How can clients identify pain?
- > 10 steps when the unthinkable happens

40



Pet owner PSA: Three words: **Call. Your. Vet.**

Ever wish your friends, family and acquaintances didn't know you're a veterinary professional? You do all you can to make it easy for pet owners to connect with you, but then it backfires—especially when you're just trying to pick up some eggs and milk. The constant stream of questions can start to wear any veterinary professional down. And when your answers start to become a refrain (um, "call your vet," anyone?) your acquaintances might start getting craftier—and crazier—with the time and place they choose to ask you their random pet queries. But even though we know you've probably experienced any number of client ambushes, we promise, there's no need to stay in your house with the blinds shut tight and the door locked. Take a cue from our practitioner in the trenches, Dr. Sarah Wooten, whose handling of these persistent pet owners could teach us all a thing or two.

Check out this tongue-in-cheek PSA for pet owners at dvm360.com/callyourvet.

Vetted USPS 535170, ISSN print: 2469-3987 Online: 2469-3995 is published monthly by UBM Life Sciences, 131 West First St., Duluth, MN 55802-2065. One year subscription rates: \$60 in the United States and Possessions; \$72 in Canada and Mexico; \$97 in all other countries. Single issue orders: \$18 in the United States and Possessions; \$22 in Canada and Mexico; \$24 in all other countries. Periodicals postage paid at Duluth, MN 55806 and additional mailing offices. POSTMASTER: Please send address changes to Vetted, P.O. Box 6087, Duluth, MN 55806-6087. Canadian GST Number: R-124213133RT001. Publications Mail Agreement Number: 40612608. Return undeliverable Canadian addresses to: IMEX Global Solutions, P.O. Box 25542, London, ON N6C 6B2, Canada. Printed in the U.S.A. © 2016 UBM. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including by photocopy, recording, or information storage and retrieval without permission in writing from the publisher. Authorization to photocopy items for internal/educational or personal use, or the internal/educational or personal use of specific clients is granted by UBM for libraries and other users registered with the Copyright Clearance Center, 222 Rosewood Dr. Danvers, MA 01923, 978-750-8400 fax 978-646-8700 or visit <http://www.copyright.com> online. For uses beyond those listed above, please direct your written request to Permission Dept. fax 440-756-5255 or email: mcannon@advanstar.com. UBM Life Sciences provides certain customer contact data (such as customers' names, addresses, phone numbers, and e-mail addresses) to third parties who wish to promote relevant products, services, and other opportunities which may be of interest to you. If you do not want UBM Life Sciences to make your contact information available to third parties for marketing purposes, simply call toll-free (866) 529-2922 between the hours of 7:30 a.m. and 5 p.m. CST and a customer service representative will assist you in removing your name from UBM Life Sciences' lists. Outside the United States, please call (218) 740-6477. Vetted does not verify any claims or other information appearing in any of the advertisements contained in the publication, and cannot take responsibility for any losses or other damages incurred by readers in reliance on such content. Publisher assumes no responsibility for unsolicited manuscripts, photographs, art, and other material. Unsolicited material will not be returned. Address correspondence to Vetted, 8033 Flint, Lenexa, KS 66214; (913) 871-3800; e-mail dvm360@advanstar.com. To subscribe, call toll-free 888-527-7008. Outside the U.S. call 218-740-6477.

vetted™

Content

Editor/News Channel Director | Kristi Reimer
kristi.reimer@ubm.com

Editor/Team Channel Director | Portia Stewart
portia.stewart@ubm.com

Editor/Business Channel Director | Brendan Howard
913-871-3823 | brendan.howard@ubm.com

Editor/Medicine Channel Director | Mindy Valcarcel
mindy.valcarcel@ubm.com

Content Manager | Adrienne Wagner

Senior Content Specialist | Jennifer Gaumnitz

Content Specialist | Julie Scheidegger

Associate Content Specialist | Katie James

Clinical Content Manager | Heather Lewellen, DVM

Technical Editor | Jennifer Vossman, RVT

Digital Content Director | Jessica Zemler

Digital Design Director | Ryan Kramer

Digital Content Manager | Alison Fulton

Multimedia Producer | Troy Van Horn

Sales

Sales Director | David Doherty

913-871-3870 | david.doherty@ubm.com

Account Manager | Angie Homann

913-871-3917 | angie.homann@ubm.com

Account Manager | Angela Paulovcin

440-891-2629 | angela.paulovcin@ubm.com

Account Manager | Terry Reilly

913-871-3871 | terry.reilly@ubm.com

Account Manager | Heather Townsend

913-871-3874 | heather.townsend@ubm.com

Digital Data Analyst | Jenny Shaffstall

913-871-3854 | jenny.shaffstall@ubm.com

Sales Coordinator | Anne Belcher

913-871-3876 | anne.belcher@ubm.com

Books/Resource Guide Sales | Maureen Cannon

440-891-2742 | maureen.cannon@ubm.com

Marketing

Marketing Director | Brenda Andresen

brenda.andresen@ubm.com

Marketing Designer | Andrew Brown

Marketing Copywriter | Lori Kleiböhmer

UBM Life Sciences, Veterinary

Vice President & Managing Director | Becky Turner Chapman

913-871-3810 | becky.turnerchapman@ubm.com

Vice President, Digital Product Management | Mark Eisler

Group Content Director | Marnette Falley

Medical Director | Theresa Entriiken, DVM

CVC Director | Peggy Shandy Lane

Business Manager | Chris Holston

UBM Life Sciences

Executive Vice President &

Senior Managing Director | Tom Ehardt

Subscriber Services: Visit dvm360.com to request or change a subscription, or call our Customer Service Department toll-free at 888-527-7008. Reprints: Call 877-652-5295 ext. 121, or write to bkolb@wrightsmedia.com. Outside the US, UK, direct dial 281-419-5727 ext. 121. Books and Resource Guides: Visit industrymatter.com. List Rental Sales: Call Anne Belcher at 913-871-3876, or write anne.belcher@ubm.com. Editorial Offices: UBM Life Sciences, Veterinary, 8033 Flint, Lenexa, KS 66214; 913-871-3800. Websites: dvm360.com; TheCVC.com; UBMLifeSciences.com.



UBM

OVER
26
MILLION

*pet owners buy a
natural pet food**

*Nielsen Homescan Panel Q4 2012 to Q3 2014



No poultry
by-product meal



Formulated without
corn or wheat



No added artificial
colors or flavors

PURINA®
PRO PLAN®
VETERINARY
DIETS

EN GASTROENTERIC NATURALS™ WITH ADDED VITAMINS
AND MINERALS
HAS YOU COVERED.

It's formulated with the breakthrough science your patients need
for GI issues, and natural ingredients to put your clients at ease.

LEARN MORE AT PURINAPROPLANVETS.COM

Purina trademarks are owned by Société des Produits Nestlé S.A. Any other marks are property of their respective owners.
Printed in USA.

THE PICKS

(what we care about now)

Tooth truths

We double dog dare you to visit a human dentist's office and find one dentist who's cleaning teeth while the hygienists and assistants are doing clerical work, standing around the front desk or otherwise not using their dental hygiene skills. Oh, you're back already? Then consider this:

100% of technicians don't want their docs to steal their job responsibilities.

93% say they'd be willing to take on more responsibility at their practice.

59% of credentialed techs are primarily responsible for dental cleanings in practice.

20% of vets are still doing most, if not all, of the dental cleanings at their practice.

Well-Managed Practices generate \$260 to \$500 per periodontal scaling, depending on the pet's dental stage, according to Benchmarks 2015: A Study of Well-Managed Practices. If you're still not delegating these cleanings to your qualified technicians, why not? If you did, could you see more patients (and find more painful teeth)?



GETTY IMAGES

Sources: dvm360 Clinical Updates: Dental survey, conducted by dvm360.com, Firstline Career Path Study.

Hey, b



PAINTED SKULL PHOTOS COURTESY OF ASHLEY LYNCH

onehead!

Brightly painted skulls help University of Illinois veterinary anatomy students learn to identify difficult structures.

First-year students at the University of Illinois College of Veterinary Medicine are given a "bone box," which contains the full skeleton of a small dog, to help them study the bones outside of their anatomy classes. At the end of the year, Ashley Lynch, an instructional laboratory specialist, collects the boxes and catalogs each bone and checks for damage. After coming across "I HATE ANATOMY" scrawled in ink on the right zygomatic arch of one of the skulls, Lynch had to come up with a way to cover the graffiti. The result: color-coded models that the students love. When Lynch first found the graffiti, she tried several solutions to remove the marks. The words covered such a large area that Lynch says she didn't want the next student to have a skull that had a large part of the skull painted white. She then had an

idea: She'd use model paint to paint the entire skull and delineate the boundaries of each feature, instead of only painting over the part that had been defaced. "Our students struggle to see the boundaries of the individual bones because the suture lines aren't as obvious in adult skulls," she says.



Are you a veterinary anatomy genius?

Test your memory of anatomical features with the image quiz at dvm360.com/bonehead.



Osurnia®
(florfenicol-terbinafine-betamethasone acetate)

Otic gel

Antibacterial, antifungal, anti-inflammatory

For Otic Use in Dogs Only

Before using this product, please consult the product insert, a summary of which follows:

Caution:

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

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

Contraindications: Do not use in dogs with known tympanic perforation (see **Precautions**). Do not use in dogs with a hypersensitivity to florfenicol, terbinafine or corticosteroids.

Warnings: Not for use in humans. Keep this and all medications out of reach of children. Consult a physician in case of accidental ingestion by humans. In case of accidental skin contact, wash area thoroughly with water. Avoid contact to the eyes.

Precautions: Do not administer orally. The use of OSURNIA in dogs with perforated tympanic membranes has not been evaluated. The integrity of the tympanic membrane should be confirmed before administering this product. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Use of topical otic corticosteroids has been associated with adrenocortical suppression and iatrogenic hyperadrenocorticism in dogs. Use with caution in dogs with impaired hepatic function. The safe use of OSURNIA in dogs used for breeding purposes, during pregnancy, or in lactating bitches, has not been evaluated.

Adverse Reactions: The most common adverse reactions reported during the course of a US field study for treatment of otitis externa in dogs treated with OSURNIA with 1 tube per affected ear(s) and repeated after 7 days were Elevated Alkaline Phosphatase, Vomiting, and Elevated AST, ALT, ALP* *Aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP). Two dogs with pre-existing elevations in ALP were reported to have an increase in liver enzymes (ALP, ALT and/or AST) at study exit. Subsequent clinical chemistries returned to pre-treatment levels in one dog, while no follow up was performed for the second dog.

To report suspected adverse drug events, contact Elanco Animal Health at 1-800-332-2761. For additional information about adverse drug experience reporting for animal drugs, contact the FDA at 1-888-FDA-VETS or <http://www.fda.gov/AnimalVeterinary/SafetyHealth>. For technical assistance, contact Elanco Animal Health at 1-800-332-2761.

Effectiveness:

Effectiveness was evaluated in 235 dogs with otitis externa. The study was a double-masked field study with a placebo control (vehicle without the active ingredients). 159 dogs were treated with OSURNIA and 76 dogs were treated with the placebo control. All dogs were evaluated for safety. Treatment (1 mL) was administered to the affected ear(s) and repeated 7 days later. Prior to the first administration, the ear(s) were cleaned with saline but not prior to the Day 7 administration. Six clinical signs associated with otitis externa were evaluated: pain, erythema, exudate, swelling, odor and ulceration. Total clinical scores were assigned for a dog based on the severity of each clinical sign on Days 0, 7, 14, 30 and 45. Success was determined by clinical improvement at Day 45. The success rates of the two groups were significantly different ($p=0.0094$); 64.78% of dogs administered OSURNIA were successfully treated, compared to 43.42% of the dogs in the placebo control group.

NADA # 141-437, Approved by FDA
© 2013 Novartis Animal Health US, Inc.
OSURNIA is a registered trademark of Novartis AG

Manufactured for: Novartis Animal Health US, Inc., Greensboro, NC 27408 USA
Eli Lilly and Company has purchased the Novartis Animal Health business to be combined with Elanco, Lilly's animal health division.

Made in UK

NAH/OSU-GEL/BS/2

Avoid **cat-astrophes**

What's a low-stress approach to get cats to the vet?

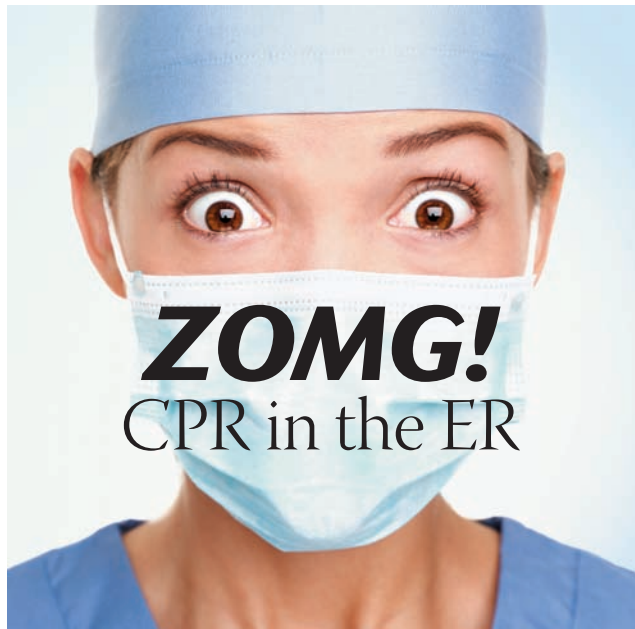
- Let the cat pick out her favorite toy at the pet store.
- Play the cat's favorite Taylor Swift album.
- Follow Dr. Andy Roark's advice here:

dvm360.com/coneofshame. P.S. You can totally embed this video on your own website and look like a genius with the instructions under the video.



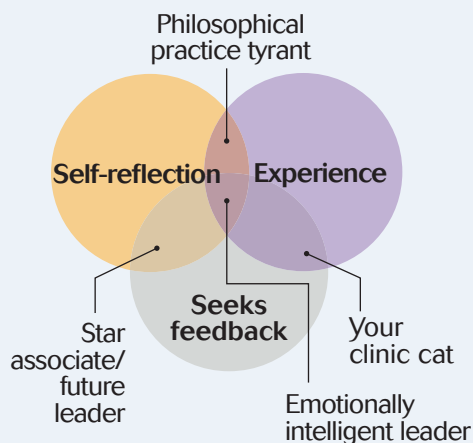
I can has **cheezburger?**

No meat? All meat? Neither, please, says veterinary nutritionist Sean Delaney, DVM, MS, DACVN. He sees all types of, well, *interesting* client preferences for their pets' diets and has to help pull them to a happy medium that's healthiest for the pets. But who really controls the pet's diet? That's where the struggle truly lies. Pets can train their owners to serve up the meals they want. They're smart like that.



Don't panic. Dr. Garret P's Guide to ER Life-Saving Procedures will provide answers to the ultimate question: How to perform CPR like a pro. Garret Pachtinger, VMD, DACVECC, shared these urgent tips on how to stay calm during CPR at CVC San Diego. It involves jazz hands, deep breaths and disco—no, really. Read it at dvm360.com/CPRpro.

THE CULT OF PRACTICE PERSONALITY



Learn more about emotional intelligence and rock your leadership skills with Shawn McVey's advice at dvm360.com/EQ.

Treating otitis externa just got easier.

Just two doses per affected ear,
dosed one week apart

done.

The simple treatment for otitis externa*, with easy application.

- Just two doses per affected ear, dosed one week apart
- Same dose for every dog
- Single-dose tube with soft, flexible tip is gentle on a dog's ears
- Easy application may lead to better compliance

Ask your Elanco sales representative
about OSURNIA today.



Osurnia[®] 
(florfenicol • terbinafine • betamethasone acetate)

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

Important Safety Information

OSURNIA (florfenicol/terbinafine/betamethasone acetate) is for otic use only under veterinary supervision. Do not use in dogs with known tympanic perforation or a hypersensitivity to florfenicol, terbinafine or corticosteroids. Adverse reactions observed during clinical trials include vomiting, increased liver enzymes and transient loss of hearing. Please see brief summary on page 05 for additional information.

PET MONITORS

Way *more* potential than “Fitbits for dogs”?



Today's reality

For about \$100, basic activity monitors—including such products as FitBark Dog Activity Monitor, Tractive Motion Pet Activity Tracker, Whistle Activity Monitor for Dogs, and more—give pet owners a peek at how much of the day their dog spends sleeping vs. active, with data delivered to their cell phones. At \$150 to \$200, more robust pet health monitor products like Voyce and PetPace provide such data as temperature, heart and respiratory rates, activity, calories burned and more.

The fears

Pet owners will misinterpret the data and call more often with time-waster questions.



The pluses

A pet owner who does call is demonstrating concern for his or her pet's health. This is likely to be an A+ client. Use their energy for good.

The promise

Today specialists use monitors in some critical cases to track ECGs and blood glucose. While blood glucose isn't part of the picture for more broadly targeted monitors yet, at the higher end pet monitors can deliver alerts for arrhythmia detection and heart rate variability for dogs (and even cats). And someday you could get much better information than pet owners' recollections about how much more water their dogs are drinking when you're treating their diabetic dogs. Huzzah.

Once-daily* 24-hour continuous surgical pain control for cats



Demonstrated safety and efficacy in more than 200 cats treated with SIMBADOL¹



Up to 3 once-daily subcutaneous doses for a total of 72 hours of pain control¹

Learn more at SIMBADOL.com



*Administered subcutaneously for up to 3 days.

¹SIMBADOL [package insert]. Florham Park, NY, Zoetis, 2014.

Indication: SIMBADOL is indicated for the control of postoperative pain associated with surgical procedures in cats.

IMPORTANT SAFETY INFORMATION

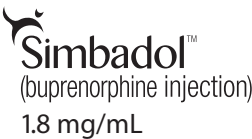
WARNINGS, PRECAUTIONS and CONTRAINDICATIONS: Due to serious human safety and abuse concerns, including physical or psychological dependence, life-threatening respiratory depression and additive CNS depressant effects, read the full prescribing information before using this drug, including the complete Boxed Warning. Not for use in humans. Hospital staff should be trained in the handling of potent opioids and should avoid accidental exposure. For subcutaneous (SQ) injectable use in cats. Opioid excitation has been observed up to 8 hours after anesthetic recovery. Use with caution in cats with impaired hepatic function. SIMBADOL has not been evaluated in breeding, pregnant, or lactating cats, in cats younger than 4 months of age or moribund cats. Do not use in cats with known hypersensitivity to buprenorphine hydrochloride or any of the components of SIMBADOL, or known intolerance to opioids.

ADVERSE REACTIONS: In two controlled field studies, the most frequent adverse reactions with SIMBADOL were hypotension, tachycardia, hypothermia, hyperthermia, hypertension, anorexia, and hyperactivity. Less frequent but serious adverse reactions included two deaths following apnea and two reports of presumptive post-anesthetic cortical blindness. See the full prescribing information for a complete list and additional details of adverse reactions for each field study.

See attached brief summary of Full Prescribing Information, including the complete Boxed Warning for human safety.

Brief Summary of Prescribing Information See package insert for full Prescribing Information.

For Use in Cats Only



For subcutaneous use in cats
Opioid Analgesic

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

HUMAN SAFETY WARNING

Abuse Potential
SIMBADOL contains buprenorphine (1.8 mg/mL), an opioid agonist and Schedule III controlled substance with an abuse potential similar to other Schedule III opioids. Buprenorphine has certain opioid properties that in humans may lead to dependence of the morphine type. Abuse of buprenorphine may lead to physical dependence or psychological dependence. The risk of abuse by humans should be considered when storing, administering, and disposing of SIMBADOL. Persons at increased risk for opioid abuse include those with a personal or family history of substance abuse (including drug or alcohol abuse or addiction) or mental illness (suicidal depression).

Life-Threatening Respiratory Depression
Respiratory depression, including fatal cases, may occur with abuse of SIMBADOL.

Additive CNS Depressant Effects
SIMBADOL has additive CNS depressant effects when used with alcohol, other opioids, or illicit drugs that cause central nervous system depression.

Accidental Exposure
Because of the potential for adverse reactions associated with accidental injection, SIMBADOL should only be administered by veterinarians or veterinary technicians who are trained in the handling of potent opioids.

See Human Safety for detailed information.

INDICATION:
SIMBADOL is indicated for the control of postoperative pain associated with surgical procedures in cats.

CONTRAINDICATIONS:
SIMBADOL is contraindicated in cats with known hypersensitivity to buprenorphine hydrochloride or any of the components of SIMBADOL, or known intolerance to opioids.

WARNINGS:
For subcutaneous (SQ) injectable use in cats.

Human Safety:
Not for use in humans. Keep out of reach of children.

Adult Human User Safety while handling SIMBADOL in the hospital:
Mucous membrane or eye contact during administration:
Direct contact of SIMBADOL with the eyes, oral or other mucous membranes could result in absorption of buprenorphine and the potential for adverse reactions. If accidental eye, oral or other mucous membrane contact is made during administration, flush the area with water and contact a physician.
Skin contact during administration:
If human skin is accidentally exposed to SIMBADOL, wash the exposed areas with soap and water and contact a physician. Accidental exposure could result in absorption of buprenorphine and the potential for adverse reactions.

Drug Abuse, Addiction, and Diversion of Opioids:
Controlled Substance:
SIMBADOL contains buprenorphine, a mu opioid partial agonist and Schedule III controlled substance with an abuse potential similar to other Schedule III opioids. SIMBADOL can be abused and is subject to misuse, abuse, addiction, and criminal diversion. SIMBADOL should be handled appropriately to minimize the risk of diversion, including restriction of access, the use of accounting procedures, and proper disposal methods, as appropriate to the clinical setting and as required by law.
Abuse:
Abuse of SIMBADOL poses a hazard of overdose and death. This risk is increased with concurrent abuse of alcohol and other substances including other opioids and benzodiazepines. Buprenorphine has been diverted for non-medical use into illicit channels of distribution. All people handling opioids require careful monitoring for signs of abuse. Drug abuse is the intentional non-therapeutic use of a prescription drug for its rewarding psychological or physiological effects. Abuse of opioids can occur in the absence of true addiction.

Storage and Discard:
SIMBADOL is a Class III opioid. Store in a locked, substantially constructed cabinet according to DEA and local controlled substance guidelines. Discard broached vials after 28 days. Any unused or expired vials must be destroyed by a DEA registered reverse distributor; for further information, contact your local DEA field office or call Zoetis Inc. at 1-888-963-8471.

Information for physician:
SIMBADOL injectable solution is a mu opioid partial agonist (1.8 mg buprenorphine/mL). In the case of an emergency, provide the physician with the package insert. Naloxone may not be effective in reversing respiratory depression produced by buprenorphine. The onset of naloxone effect may be delayed by 30 minutes or more. Doxapram hydrochloride has also been used as a respiratory stimulant.

PRECAUTIONS:
Hyperactivity (opioid excitation) has been observed up to 8 hours after anesthetic recovery (see ADVERSE REACTIONS).
Safety has not been evaluated in moribund cats (i.e., those not expected to live more than 24 hours with or without surgery). Use in such cases should be based on the risk-benefit assessment of the veterinarian.
Use with caution in cats with impaired hepatic function.
The use of SIMBADOL has not been evaluated in breeding, pregnant, or lactating cats, or in cats younger than 4 months of age.

ADVERSE REACTIONS:
In two controlled field studies, a total of 450 male and female cats 4 months to 16 years old, weighing between 2.6 – 20.0 lb were included in the field safety analysis. In one study, cats underwent a soft tissue surgical procedure (soft tissue). In the other study, cats underwent onychectomy, onychectomy and castration, or onychectomy and ovariohysterectomy (orthopedic). The following tables (one table for each study) show the number of cats exhibiting each observation.

| Adverse Reactions in the Soft Tissue Field Study | | | | |
|---|-----------------------------|---------------|-----------------------------|---------------|
| Adverse Reaction ^a | SIMBADOL (N = 109) | | Control (N = 112) | |
| | During Surgery ^b | After Surgery | During Surgery ^b | After Surgery |
| Hypotension ^c | 39 (35.8%) | 29 (26.6%) | 33 (29.5%) | 24 (21.4%) |
| Tachycardia ^d | 26 (23.9%) | 29 (26.6%) | 15 (13.4%) | 20 (17.9%) |
| Hypothermia (≤98.0°F) | 30 (27.5%) | 1 (0.9%) | 31 (27.7%) | 0 |
| Hyperthermia (≥103.0°F) | 0 | 40 (36.7%) | 0 | 19 (17.0%) |
| Hypertension ^e | 7 (6.4%) | 20 (18.3%) | 9 (8.0%) | 6 (5.4%) |
| Anorexia | 0 | 18 (16.5%) | 0 | 15 (13.4%) |
| Hyperactivity | 0 | 10 (9.2%) | 0 | 4 (3.6%) |
| Reduced Oxygen Saturation of Hemoglobin (pulse oximetry ≤90%) | 5 (4.6%) | 1 (0.9%) | 8 (7.1%) | 0 |
| Bradycardia (≤90 beats/min) | 2 (1.8%) | 1 (0.9%) | 1 (0.9%) | 0 |
| Tachypnea (≥72 breaths/min) | 0 | 3 (2.8%) | 0 | 2 (1.8%) |
| Arrhythmia | 1 (0.9%) | 0 | 1 (0.9%) | 0 |
| Hyperesthesia | 0 | 1 (0.9%) | 0 | 0 |
| Blindness | 0 | 1 (0.9%) | 0 | 0 |
| Apnea/Death | 0 | 1 (0.9%) | 0 | 0 |

- a. Cats may have experienced more than one type or occurrence of an adverse reaction. Cats experiencing the same reaction both during and after surgery are presented in both time periods.
b. During surgery is the time from the administration of the anesthetic induction agent until discontinuation of the gas anesthetic.
c. Hypotension is defined as a mean blood pressure of <60 mmHg during surgery and <90 mmHg after surgery.
d. Tachycardia is defined as a heart rate ≥180 beats per minute during surgery and ≥200 beats per minute after surgery.
e. Hypertension is defined as a mean blood pressure of ≥120 mmHg during surgery and ≥160 mmHg after surgery.

| Adverse Reactions in the Orthopedic Field Study | | | | |
|---|-----------------------------|---------------|-----------------------------|---------------|
| Adverse Reaction ^a | SIMBADOL (N = 115) | | Control (N = 114) | |
| | During Surgery ^b | After Surgery | During Surgery ^b | After Surgery |
| Tachycardia ^c | 29 (25.2%) | 44 (38.3%) | 15 (13.2%) | 24 (21.1%) |
| Hypotension ^d | 29 (25.2%) | 22 (19.1%) | 27 (23.7%) | 16 (14.0%) |
| Hyperthermia (≥103.0°F) | 1 (0.9%) | 51 (44.3%) | 0 | 14 (12.3%) |
| Anorexia | 0 | 22 (19.1%) | 0 | 20 (17.5%) |
| Hypertension ^e | 3 (2.6%) | 20 (17.4%) | 8 (7.0%) | 12 (10.5%) |
| Hypothermia (≤98.0°F) | 8 (7.0%) | 0 | 16 (14.0%) | 0 |
| Hyperactivity | 0 | 16 (13.9%) | 0 | 7 (6.1%) |
| Bradycardia (≤90 beats/min) | 3 (2.6%) | 0 | 3 (2.6%) | 1 (0.9%) |
| Tachypnea (≥72 breaths/min) | 0 | 2 (1.8%) | 1 (0.9%) | 4 (3.5%) |
| Reduced Oxygen Saturation of Hemoglobin (pulse oximetry ≤90%) | 3 (2.6%) | 0 | 3 (2.6%) | 0 |
| Arrhythmia | 0 | 1 (0.9%) | 1 (0.9%) | 0 |
| Blindness | 0 | 1 (0.9%) | 0 | 1 (0.9%) |
| Ataxia | 0 | 1 (0.9%) | 0 | 0 |
| Apnea/Death | 1 (0.9%) | 0 | 0 | 0 |

- a. Cats may have experienced more than one type or occurrence of an adverse reaction. Cats experiencing the same reaction both during and after surgery are presented in both time periods.
b. During surgery is the time from the administration of the anesthetic induction agent until discontinuation of the gas anesthetic.
c. Tachycardia is defined as a heart rate ≥180 beats per minute during surgery and ≥200 beats per minute after surgery.
d. Hypotension is defined as a mean blood pressure of <60 mmHg during surgery and <90 mmHg after surgery.
e. Hypertension is defined as a mean blood pressure of ≥120 mmHg during surgery and ≥160 mmHg after surgery.

The two cats with apnea in the SIMBADOL™ (buprenorphine injection) group died from the adverse reaction. The cat in the soft tissue study underwent a necropsy and a specific cause of death was not found, although other remarkable findings included metastatic neoplasia affecting multiple systems. The cat in the orthopedic study experienced apnea during endotracheal intubation. The cat was healthy and a specific cause of death was not found.

Two cats in the SIMBADOL group and one cat in the placebo control group were reported with presumptive post-anesthetic cortical blindness. Both cats in the SIMBADOL group received blood pressure intervention during surgery for low blood pressure. All cats regained vision within 7 to 84 days after surgery; however, one cat in the SIMBADOL group continued to have some visual and balance deficits.

One cat in the SIMBADOL group in the soft tissue study was euthanized after completion of the study due to pulmonary complications. The complications were considered likely related to the severity of the cat's injuries prior to surgery.

To report suspected adverse events, for technical assistance, or to obtain a copy of the MSDS, contact Zoetis Inc. at 1-888-963-8471.

For additional information about adverse drug experience reporting for animal drugs, contact the FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

STORAGE INFORMATION:
Store at temperatures up to 25°C (77°F). Protect from light and excessive heat (above 40°C or 104°F). Use within 28 days of first puncture.

HOW SUPPLIED:
SIMBADOL (buprenorphine injection) is supplied in a carton containing one 10 mL amber glass vial. Each multidosage vial contains 1.8 mg/mL of buprenorphine.
NADA 141-434, Approved by FDA

Distributed by:
Zoetis Inc.
Kalamazoo, MI 49007

Product of United Kingdom
Revised: August 2015

80560800B/S



Dr. Lisa Radosta and her daughter, Isabella.

Life's a marathon so bring your virtual hydration vest

By Lisa Radosta, DVM, DACVB

My life is hectic. I juggle motherhood, a marriage, practice ownership, lecture schedules and writing. To keep centered and disconnect, I run two, three, even four hours at a time. When I put on my hydration vest (a backpack with a fluid bladder), I feel strong and unstoppable. I've made this part of my life a priority so that I can stay healthy and sane.

Step it up

My good friend and mentor, Dr. Debra Horwitz, told me when I was a new mom that women can have it all, but we just can't have it all at once. I've learned to accept what I can't do and let that go. For example, there are about five things I cook well. I make those things and my husband and daughter take care of the rest.

Sprint ahead

Specializing in behavior was the most important decision of my career. I love it. And I can't imagine leaving my child to go somewhere each day if I didn't absolutely love it.

Watch everyone

Without fail, I learn from at least one person each day. Even if people annoy me, there's probably something I can learn about how to behave or not behave. Maybe it's the way they hold themselves or a phrase that touches me. I keep those lessons in my phone so I won't forget them.

Stay faster than your kids

Kids evolve. They're well-rested and don't have jobs, so they have lots of time to figure out how to outsmart you. While a hug worked to motivate my daughter when she was 2 years old, at 8 years it just doesn't work.

In another life ...

If you hadn't become a veterinarian, what would you have done?

Wedding planner



What's something most people don't know about you?

Back in college and into veterinary school, I worked as a makeup artist for a cosmetic company. Still love to sling blush!





NEW



A MAGNIFICENT COMBINATION

For over 45 years we've partnered with veterinarians who share our obsession for bringing out the best in cats and dogs. We discovered nearly 1 in every 2 pets suffers from multiple health conditions. That's why, through science and research, we developed a new precise MULTIFUNCTION line. When you prescribe Royal Canin you have the power to transform the health of each cat and dog.

Find out more at royalcanin.com/multifunction



Available in 3 formulas:

Urinary + Hydrolyzed Protein

Urinary + Satiety

Renal Support + Hydrolyzed Protein

Clients on the move

How do you reach pet owners who are new to your area?

An improving job market and high demand for homes in many communities across the country means that there are probably new pet owners in your practice's vicinity. But how do you make your practice stand out as the best animal hospital around? In a word (and yes, we know it's not the most popular one) ... marketing.

The bottom line is that new clients aren't going to know what you can do for the health and well-being of their pets if they don't know what you offer.

Recently we fielded The dvm360 Feline Care Study, in which we asked practice owners and associates what kind of marketing they do to raise awareness of their services with potential clients. Perhaps unsurprisingly, 60 percent answered that a strong practice website is their number one focus. But we thought these answers were interesting, too ...



What's it gonna take to get some decent help around here?

10% of survey respondents say they send



"New to the Neighborhood" mailings

31% of respondents say they distribute



New client incentives

It don't mean a thing if it ain't got that swing

We're talking about practices where the clinic doors are swinging all the time with new clients. Practice biz guru Mark Opperman, CVPM, has five ways to make it happen at dvm360.com/doorswing.



Delivering new beginnings for pets and the families who love them.

Our name not only means new beginning, it defines our approach to developing therapeutic solutions for unmet and underserved medical needs in pets. By taking advances from human science, Aratana Therapeutics is bringing innovative prescription medicines to veterinarians. We deliver solutions for medical conditions that currently have few, if any, treatment options. Aratana has multiple therapeutics in our development pipeline for pain, inappetence, cancer, viral diseases and allergy that may help to extend and improve the quality of lives for pets. And that's just the beginning.

Find out more at www.aratana.com

See us at these upcoming 2016 conferences to learn more:

WVC, March, Las Vegas ■ AAHA, March, Austin, TX ■ ACVIM, June, Denver
AVMA, August, San Antonio ■ CVC, August, Kansas City ■ IVECCS, September, Grapevine, TX
VCS/ACVR Annual Conference, October, Orlando ■ ACVS Surgery Summit, October, Seattle



A close-up photograph of a light-colored dog's head, focusing on the ear area. The dog has a skin condition on its ear, characterized by red, inflamed, and scaly patches. The dog's eyes are closed, and its expression is calm.

No shame

in your ear game

From “that smell” to potential ear hematomas and canal ablations, otitis externa can be a clinical challenge for any veterinary practitioner to manage. Wayne Rosenkrantz, DVM, DACVD, answers some of the most common questions about his approach to the management of this odorous condition.

We got an earful

New data looks at what's going on between *your* ears when it comes to otitis management.

Do you routinely recommend ear flushing to owners of dogs with no clinical signs of otitis?



When you diagnose otitis in a dog and prescribe topical therapy, does someone on your team demonstrate to clients how to apply the medication(s) *before* they leave the practice?

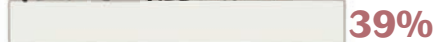


WHO ON YOUR PRACTICE TEAM MANAGES THIS CLIENT EDUCATION?

VETERINARIAN



TECH OR ASSISTANT



OTHER



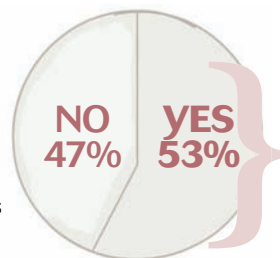
<<< Most of you who picked "other" said it was both the vet and the tech!

Hmm ... maybe it's time to delegate to your capable team members?

Do you typically ask clients about dogs' responses to sounds at home (doors, "come" commands, cars pulling up) and do a basic test of the dog's hearing before you treat for otitis?



Have you had clients whose dogs were treated with a topical ear product report vestibular signs or deafness in their pet?



82% of those who said YES reported problems were temporary. *Whew!*

The dvm360 Clinical Updates: Otitis study was sent by email to subscribers of dvm360 magazine, *Vetted* and *Firstline*. The survey generated 736 responses, creating a margin of error of about 3 percentage points (although sample sizes—and statistical reliability—on individual questions may be considerably lower). Respondents were able to download a free article titled "Canine otitis: Treatment advice from the ear tip to the tympanic membrane."

Q. To clean or not to clean ears in the clinic?

A. Cleaning ears is important, and most cases of otitis externa require some degree of ear cleaning or flushing before therapy. Excess debris and purulent material left in the ear prior to therapy can reduce the efficacy of your therapy. In addition, without cleaning you often are unable to perform a complete examination of the ear canal.

Q. What do you experience as the biggest obstacle for successful outcome of treating otitis externa?

A. Controlling the underlying primary cause for the otitis. If you identify and control the primary disease, then success is more common. Early identification and control of infection and underlying disease is critical to avoid more chronic proliferative changes.

Q. What are some common underlying causes of chronic otitis externa?

A. Both atopic dermatitis and adverse food reactions are common primary diseases for otitis externa. After looking at the history and physical examination findings, I may pursue one of these diseases more than the other. For example, adverse food reaction cases are more commonly year-round and may also have a concurrent history of gastrointestinal abnormalities.

Q. How important do you think it is to caution owners about the possibility of recurrence of otitis externa?

A. It is extremely important. This is particularly true when you are dealing with underlying primary diseases that are not well-controlled. Without proper control and management of the underlying disease, recurrences are highly likely. In clinical practice this is most commonly due to poorly controlled atopic dermatitis or adverse food reaction cases.

Dr. Rosenkrantz is a veterinary dermatologist at Animal Dermatology Clinic in Tustin, California.

Pssst! >>> Get more helpful Q&As from Dr. Rosenkrantz at dvm360.com/otitisQA.

The BEST way to
stop getting burned
by ear infections?

Your team

Without a team approach, otitis externa and ear infections can become chronic, continuously plaguing dogs and threatening your practice's bonds with clients—*no bueno*.

Our Team Meeting in a Box provides all the tools you need to educate your veterinary team members about your protocols for managing ear infections. You'll get trainers' scripts, meeting guides, activities and handouts for a thorough team training session. You'll find four meeting sections, each designed to take 15 minutes. This allows you to hold a series of shorter meetings or one hour-long meeting.

>>> **Get in the know, now. Visit dvm360.com/otitisteammeeting.**

What'd you say??

Hearing loss caused by chronic ear infection doesn't mean a dog can't live a happy life. If you have patients suffering from hearing loss and clients who need information, try using this handout. With it, pet owners learn effective and proper care for their hard-of-hearing pup.

>>> **dvm360.com/hearinghandout.**



Otitis cases getting you *down*? Here's what's UP

Paul Bloom, DVM, DACVD, DABVP, is here with genius tips that are both practical and clinical—and sure to help you with those frustrating otitis cases.

Quit plucking that hair.

In which Dr. Bloom warns against the rampant plucking of hair from dogs with normal, noninfected ears. Don't do it. This is why.



Get more audio tips from Dr. Bloom at **dvm360.com/shakeitoff**.

Dogs are liars.

We've all seen dogs who come to our practices for routine exams that have ear disease—which is why you have to make checking ears a priority, says Dr. Bloom, even when the client swears the dog isn't showing clinical signs. Listen to his tips in this clip.





JUST ONE MINUTE

Recent research showed that **T8 Keto® Flush** reduced *Malassezia* and *Pseudomonas* organisms to undetectable levels within one minute *in vitro*.¹

Fast-acting **T8 Keto® Flush** fights ear infections in dogs, cats and horses in three important ways.

- **Cleansing.** Mild surfactants to help penetrate waxy buildup.
- **Antifungal.** Effectively reduced *Malassezia pachydermatis* *in vitro*.¹
- **Antibacterial.** Tris-EDTA and a patented preservative base provide activity against bacteria, including *Pseudomonas*.^{2,3}

For more information contact your Bayer Sales Representative, contact your preferred distributor or call Bayer Customer Service at 1-800-633-3796.



We've Got You Covered
Since 1976

CAUTIONS: For topical use on dogs, cats and horses. Avoid contact with eyes. If eye contact occurs or skin irritation develops, rinse thoroughly with water, discontinue use and consult your veterinarian. Available through licensed veterinarians only.

¹ Reference on file. Bayer.

² Cole LK, Luu DH, Rajala-Schultz PJ, et al. (2006). *In vitro* activity of an ear rinse containing tromethamine, EDTA, and benzyl alcohol on bacterial pathogens from dogs with otitis. *Am J Vet Res*. 67:1040-1044.

³ Brunson EL, Weller PJ. (1994). Benzyl Alcohol. In: Wade, A. and Weller, PJ, eds. *Handbook of Pharmaceutical Excipients*. 2nd ed. Washington: American Pharmaceutical Association: 35-37.

©2016 Bayer Shawnee Mission, Kansas 66201

Bayer, the Bayer Cross, DVM & Design and T8 Keto are registered trademarks of Bayer. DVM16690



Well, this is awkward

Want to get awkward in the exam room? Tell a client her pet is fat. It's like saying a friend's baby is ugly. And, just like a proud new parent, 9 out of 10 owners of overweight pets just don't see it. So, let's be real. This isn't just about pets' weight, is it? According to the Centers for Disease Control and Prevention, about every third *client* you see is likely to be overweight or obese. And when you tell someone their pet is overweight, you might as well be rubbing their *own* weight problem in their face. Weight is personal. Yet when it comes to a pet's health, veterinarians are obligated to deliver the blow.

GETTY IMAGES/CYNDI MONAGHAN

53%
of U.S. dogs
are considered
overweight.

95%
of owners with
overweight dogs
identify their dog as
normal weight.

58%
of U.S. cats are
considered
overweight.

4 things to consider the next time you've got an obese pet and the owner in your exam room.

1 This is an intervention.

OK, so not as dramatic as reality TV, but perhaps just as uncomfortable. Establishing an appropriate dietary therapy regimen involves two important goals: The plan must be tailored to the individual animal, and caloric restriction must occur without concurrent protein starvation to prevent a loss of lean muscle tissue during weight loss. The ultimate weight loss goal should be based on the pet, the family's situation and goals, and the entire family's—including the pet's—ability to reach the goal.

2 Take things slow.

It's important to start an exercise program slowly and gradually increase the duration and intensity of the exercise. In some cases, exercise may be impossible because of preexisting conditions in the pet or because of the owners' inability to exercise. The parallel problem of excess weight in pets and their owners represents a unique opportunity to target weight loss and increase activity in both groups. Suggest low-impact walking, chasing a ball, tossing a Frisbee, swimming or using an underwater treadmill and socializing at a dog park.

3 Drugs aren't (always) the answer.

All pharmacologic weight-management aids should be considered short-term interventions, may have significant side effects and may be contraindicated in some patients. Only one drug, dirlotapide (Slentrol—Zoetis), is FDA-approved for weight loss in dogs. Weight loss will most likely be temporary if owner behaviors are not concurrently modified to promote a more healthful lifestyle. Explain that treats are similar to snacking between meals for people, and when giving treats is a well-established habit, it may require consciously and permanently adjusting what role treats play in the relationship (i.e. owners should consider bonding with their pets via a physical activity rather than through giving treats).

4 It's a shared responsibility, y'all.

Adherence is crucial for the success of any weight-loss plan. A pet's family is responsible for feeding the correct amount of food and treats, weighing the pet regularly, following through on adjustments, exercising the pet and controlling the dog's access to unmonitored food sources. The family must be committed to the weight-loss program for several months. A pet's family members must understand how long the weight-loss plan may take, and they should be encouraged to focus on the progress rather than on a quantitative end goal.

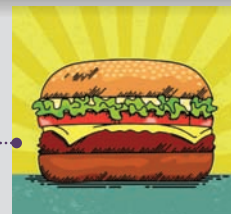


These weight loss nuggets are from Christopher G. Byers, DVM, DACVECC, DACVIM, and colleagues. Dr. Byers is an avid ballroom dancer and finds whirling around the dance floor to be a wonderful release from the stresses of daily clinical practice. #letsdance #putyourredshoes

If weight feels intensely personal, food is just as big of a deal. Many pets become overweight or obese because of the social bonding that occurs with owners during feeding. This human-animal-bond activity adds a strong behavioral component to the development of obesity. Food is such an important part of daily culture that it is critically important to recognize how owners view food. (We're getting deep here!) For more on a multimodal approach to pet weight loss, head to dvm360.com/multimodalweight.

90%
of owners with
overweight cats
identify their cat as
normal weight.

69%
of American
adults are
overweight
or obese.





Weigh in

3 ways to squeeze obesity into your exam-room chats.

1 Lay off the language.

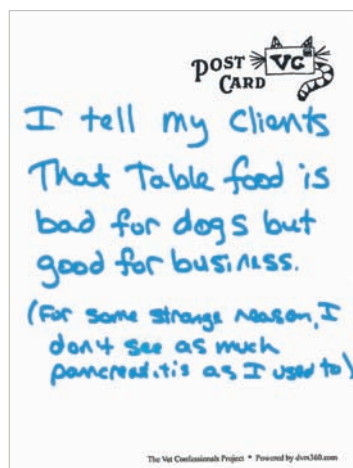
Although the weight conversation can be a tricky one, it's best to be honest—and clinical. Avoid possibly hurtful—or easily internalized—terms such as “fat” or “chubby,” even when you’re saying it in a friendly, “wink-wink” way. Instead, use the Body Condition Scoring system and medical terms.

2 Get their arms around the problem.

Invite clients to feel their pet’s ribs and belly. If the pet is overweight, it’s difficult to feel the ribs. If the pet is obese, clients may end up grabbing a handful of fat around their pet’s tummy. Also have them stand above their pet to see the lack of visible “waist” and the broad, flat back.

3 It's not fat, it's inflammation.

Weight loss talk is everywhere and many have gone numb to it. Other clients will dismiss pet weight loss as just one more way those “greedy veterinarians” are trying to scam them. So, Ernie Ward, DVM, says don’t talk weight: Talk inflammation. Adipokines—signal proteins produced by fat tissue—cause or contribute to hundreds of harmful inflammatory processes throughout the body. Go with that.



MAKE IT WORK

Pets packing on extra pounds can be vulnerable to a number of medical problems. Dr. Ernie Ward demonstrates both an articulate way and an offensive way to broach this sensitive topic in “Say this, not that!”

dvm360.com/saythisweight.

BATTLING THE BULGE

Get in-person tips and tricks to treat obesity in both dogs and cats from Cailin Heinze, MS, VMD, DACVN, on Friday, May 13 at CVC Virginia Beach. Get details and register for the conference now at thecvc.com.



**Want to fill empty
appointment slots
without spending a dime?**



Just scan the
QR code to
find out how.



**Medi-Dose®
EPS®**

Unit Dose,
Bar Coding,
Pharmacy &
Nursing Supply
Experts!

LiquiDose® Labels

Labels to suit all your needs...
from solids, liquids and syringes
to ampules, IV's and equipment!



Use Our Inexpensive MILT® Software to Print
Bar Codes, Graphics, Special Fonts, Tall Man
Lettering, Shapes, Logos and Symbols.

MediDose.com • 800.523.8966



FOR THE FIRST TIME, PETPACE PET HEALTH MONITOR PROVIDES VETERINARIANS WITH CONTINUOUS PATIENT VISIBILITY.

Wearable tech is now taking a pivotal role in veterinary care. It helps veterinarians and vet tech professionals care for their patients during and after scheduled office visits or procedures.

Today, technology plays a vital role in the monitoring of pet health, with the global companion animal "wearable" monitor market expected to grow by more than 65 percent in less than five years, reaching \$2.36 billion by 2022.

While this burgeoning category has many players, not all pet health monitoring systems are created equal. One new monitoring service, PetPace™, sets a new technological standard for tracking critical vitals and key indicators for dogs and cats.

PetPace offers veterinarians a viable new solution that delivers real-time pet health information to their offices, clinics and hospitals, as well as providing them with a supplemental revenue stream. This "smart" collar augments pet care and strengthens the relationship between veterinarians and their clients, arming professionals with valuable data and putting pet parents at ease. PetPace is at the forefront

of mobile technology as the only pet wearable that features real-time remote monitoring and analysis of pet vital signs and activities. It continuously observes a full range of physiological and behavioral indicators, including temperature, pulse, respiration, activity patterns, positions, calories, pain and more. The PetPace pet health monitoring system enhances preventive care in a way that, up to now, has not been possible. The collar can be used in-home for comprehensive monitoring, detailed follow-up and tracking a pet's progress, and to instantly identify adverse reactions or critical issues.

"The mobile health revolution, already making great strides in human medicine, is rapidly expanding into the veterinary world," said Asaf Dagan, DVM, DABVP and Chief Veterinarian for PetPace. "Veterinarians and their staff can now be connected to their pet patients in and out of their offices and clinics. This brings pet healthcare to an entirely new level. It measurably improves a pet's quality of life, while providing unprecedented peace of mind to its owner."

For more information on how to enhance your practice with pet wearable technology, visit PetPace.com.

- Sponsored Article



MEEP!

Beaker, the shy, long-suffering Muppet assistant to Dr. Bunsen Honeydew, is definitely a magnet for disaster. Not to mention—what do you suppose his IOP is? Use the advice on the next page to avoid diagnostic debacles in your glaucoma cases. Go to **dvm360.com/newinglaucoma** for more.

SHE BLINDED ME WITH SCIENCE



... IOP: You don't know me?

A normal IOP in any given patient depends on multiple variables, but IOPs in excess of 25 to 30 mmHg in dogs and cats are generally concerning.

Accurate evaluation of IOP can be difficult because of patient noncompliance or other factors. Causes of erroneous IOP estimation?

- Patient positioning
- Increased jugular pressure
- Type of tonometer used
- Excessive eyelid manipulation during measurements
- Corneal thickness
- Tonometer cleanliness

To shine further light on the diagnosis, assess vision by also performing a menace response, dazzle reflex, and visual tracking (cotton ball) testing. A maze and obstacle course are also helpful, as well as determining whether the patient is goniodysgenic with gonioscopy.

Micki Armour, DVM, DACVO, drops a bomb on how you're diagnosing glaucoma. Elevated intraocular pressure is now considered a risk factor for developing this common ocular disease, not the means of diagnosis. BOOM.

Glaucoma is a complicated and often frustrating cause of vision loss in small animals. The pathogenesis of glaucoma is only partially understood, but the end result is loss of retinal ganglion cell function, axonal destruction in the optic nerve and vision loss.

Because clinical signs of glaucoma have been described in people without overt increases in intraocular pressure (IOP), and because optic nerve microcirculation and retinal ganglion cell function impairment have been observed before elevations in IOP in beagles with hereditary glaucoma, elevated IOP is now considered a risk factor for glaucoma, not the primary cause.¹⁻⁴

Moreover, glaucoma is considered to be a group of many diseases, rather than one disease, with a common outcome. In fact, in people, glaucoma is considered a neurodegenerative disease and a brain disease and is affected by alterations in systolic blood pressure and intracranial pressure.

Normal aqueous humor production—and when it goes awry

Normal aqueous humor dynamics involve aqueous humor production by the nonpigmented epithelial cells of the ciliary body via active transport, passive diffusion and ultrafiltration, with concurrent drainage from the globe through multiple mechanisms. In dogs and cats, most aqueous humor exits the eye through the iridocorneal angle and trabecular meshwork (conventional outflow), with a smaller volume exiting the globe through uveoscleral vasculature (unconventional outflow).

To maintain a stable IOP, the rate of drainage must match the rate of aqueous humor formation. Diurnal variations in IOP have been observed in most species studied, and, in dogs, IOP tends to decrease mildly with age.

References

1. Omodaka K, Horri T, Takahashi S, et al. 3D evaluation of the lamina cribrosa with swept-source optical coherence tomography in normal tension glaucoma. *PLoS One* 2015;10(4):e0122347.
2. von Spiessen L, Karck J, Rohn K, et al. Clinical comparison of the TonoVet rebound tonometer and the Tono-Pen Vet applanation tonometer in dogs and cats with ocular disease: glaucoma or corneal pathology. *Vet Ophthalmol* 2015;18(1):20-27.
3. Bossuyt J, Vandekerckhove G, De Backer TL, et al. Vascular dysregulation in normal-tension glaucoma is not affected by structure and function of the microcirculation or macrocirculation at rest: a case-control study. *Medicine* 2015;94(2):e425.
4. Reinstein S, Rankin A, Allbaugh R. Canine glaucoma: pathophysiology and diagnosis. *Compend Contin Educ Vet* 2009;31(10):450-452.

Dr. Micki Armour is a veterinary ophthalmologist with Eye Care for Animals in Leesburg, Virginia, and Frederick, Maryland. She is also deathly afraid of spiders—probably because they have so many eyes.

#ophthalmologyjokes



The eyes have it

Glaucoma crisis: When to turn to surgery and when to refer

When intraocular pressures continue to elevate despite antiglaucoma medication, don't hesitate to refer for surgical intervention, says Dr. Micki Armour, as it can make the difference in saving your patient's sight. And the key to knowing when to refer is to check intraocular pressures regularly in at-risk breeds. Scan for more.



No more scary ophthalmic examinations

Dr. Armour says during ophthalmologic exams, you can get the owner involved to make the examination less stressful for the pet—and easier and more productive for you, too. Here's how.



I SPY ... KICK-A OPHTHALMOSCOPES**

These things are not mutually exclusive, as it turns out. Get the deets at **dvm360.com/scopes**. PLUS! The latest glaucoma techniques will be a hot topic at CVC this year—can't you just visualize yourself in sunny Virginia Beach on May 13-16? Looks good to us. Get more info by visiting **thecvc.com**.



unconventional

MAKE THE MOVE TO HIGH-QUALITY DIGITAL IMAGING



RadPRO®
OMNERA® 50

VETERINARY DIGITAL RADIOGRAPHIC SYSTEM

HIGH QUALITY IMAGING AND LOW X-RAY EXPOSURE WITH CANON DR TECHNOLOGY

The RadPRO OMNERA 50 Veterinary Digital Radiographic System delivers rich features designed specifically to help veterinarians diagnose quickly and confidently.

VIRTUAL IMAGING
A CANON COMPANY

Canon

RadPRO and OMNERA are registered trademarks of Virtual Imaging, Inc., A Canon Company, in the United States and may also be a registered trademark or trademarks in other countries. CANON is a registered trademark of Canon Inc. in the United States and may also be a registered trademark of other countries. © 2016 Virtual Imaging, Inc. All rights reserved.

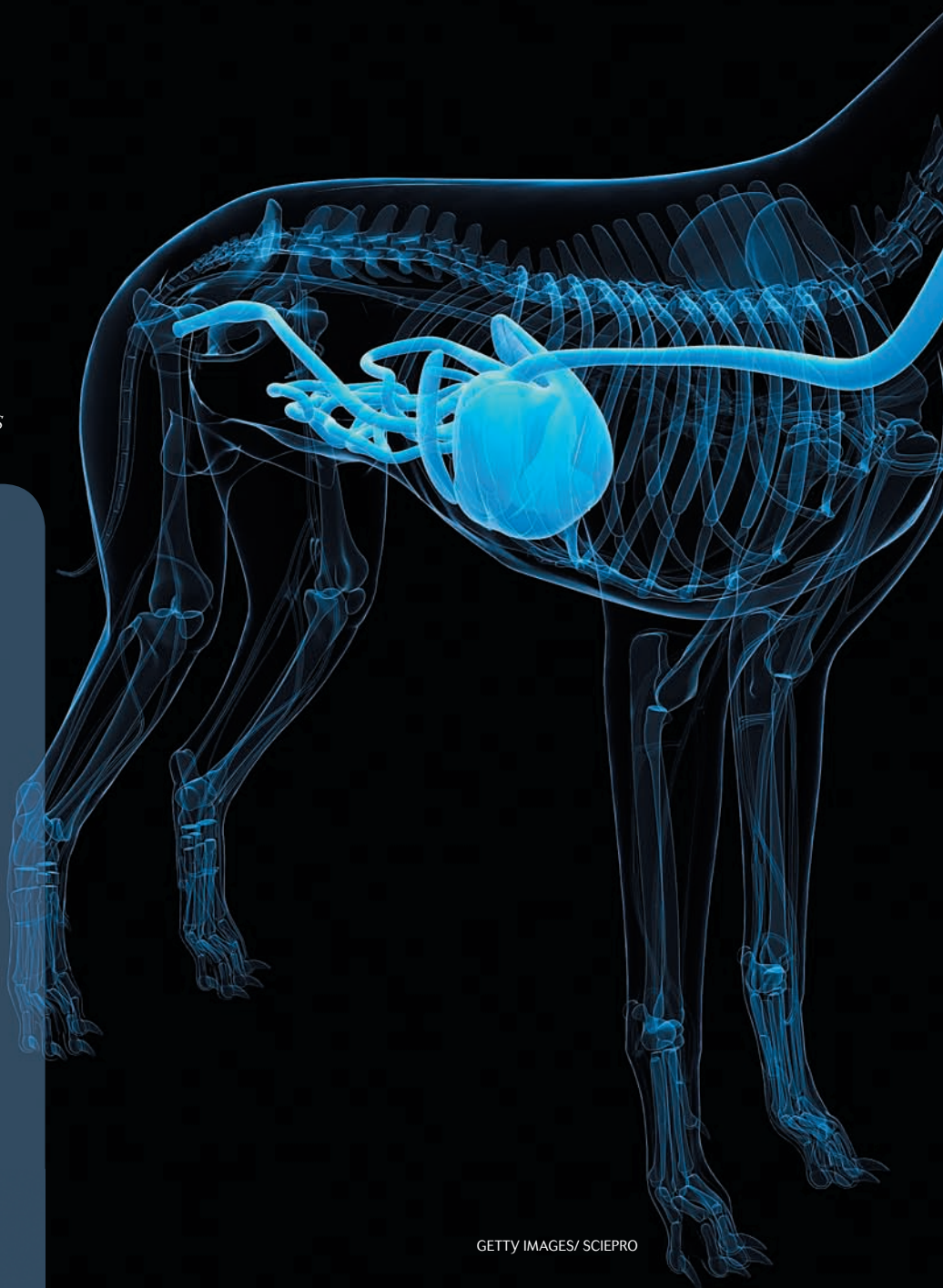
Don't get it twisted

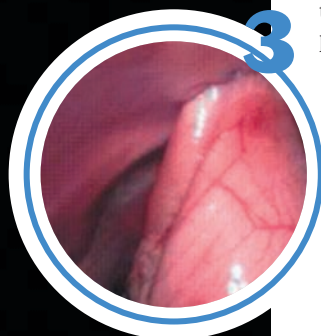
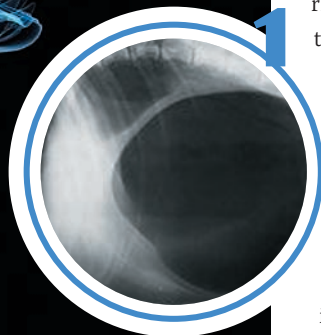
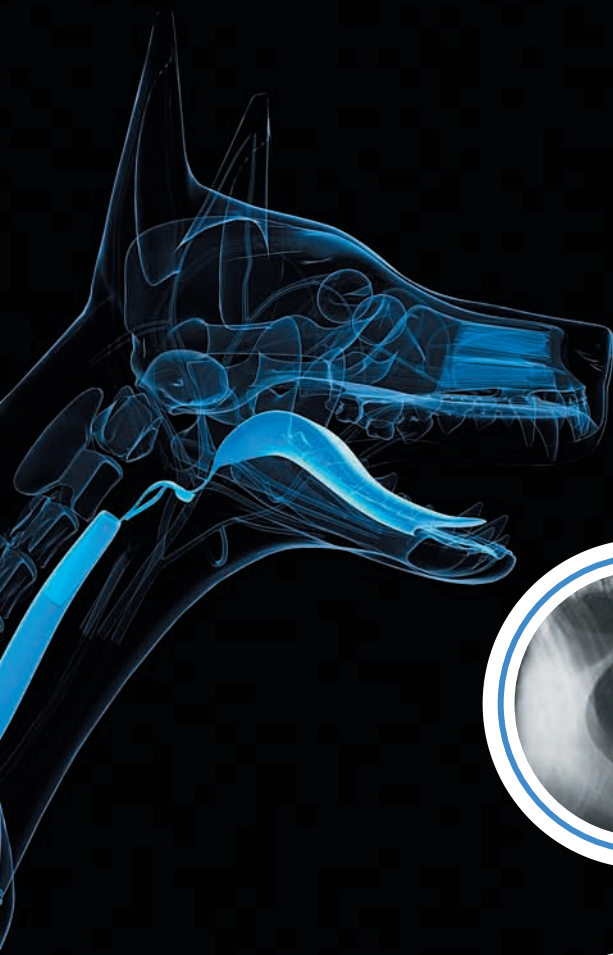
Laparoscopic-assisted gastropexy shortens time under anesthesia and produces less discomfort. Here's an overview—plus tips to get owners on board.

By Mitch Robbins, DVM, DACVS

The ESSENTIALS

Flip for this: We've compiled our best resources on knowing which dogs might be at risk for GDV, performing various gastropexy techniques, managing patients with this emergency condition and helping clients recognize the signs. Truly life-saving content ahead at **dvm360.com/essentialGDV**.





It is extremely important that owners of large and giant-breed dogs be aware of gastric dilatation-volvulus (GDV) and take precautions to prevent it. One intervention is a laparoscopic-assisted gastropexy—an elective procedure that affixes the stomach to the body wall permanently to prevent the stomach twisting that occurs in GDV

(**Photo 1**). A laparoscope allows you to perform a gastropexy with just two small incisions. General anesthesia is still necessary, of course.

First, introduce the laparoscope into the abdomen with a small incision near the umbilicus. Then introduce the instruments through a slightly larger incision behind the last rib on the right. Grasp a small portion of the stomach with the scope and the instruments (**Photo 2**), and permanently suture it to the inside of the abdominal wall (**Photo 3**).

Finally, remove the instruments and laparoscope and close the two incisions.

Postoperative care for patients that have undergone a laparoscopic gastropexy is relatively straightforward. Remove the sutures in seven to 10 days. Tell the owners to inspect the incisions daily for excessive redness, swelling or discharge.

Placing an ice compress over the larger incision helps minimize swelling and discomfort. This cold pack should be applied for five minutes two to three times a day for the first three days. Tell the clients to contact you if the dog is licking at the incision site.

Restrict the dog's activity during the first two weeks after surgery. We recommend continuing to feed several smaller meals a day of large-sized kibble food and

avoiding exercise before and after eating.

Postoperative complications are rare and often involve self-trauma to the incisions. The laparoscopic gastropexy will not prevent bloating but should prevent further stomach twisting. In most cases, recurrence of bloating can be treated with an orogastric tube and medical management.

The prognosis for dogs that have undergone a prophylactic gastropexy is excellent. There has never been a report of GDV in a dog that has received a prophylactic gastropexy. And the laparoscope improves the technique by shortening the time under anesthesia and providing less discomfort than a conventional surgical gastropexy.

PHOTOS 1-3 COURTESY OF MITCH ROBBINS, DVM, DACVS



Belly **UP**

**Before you drop serious dough on new tools:
The 4 most important questions of equipment
purchasing.**

1. Do we need it?
2. Do we need it now?
3. Can we afford it?
4. Is it a good time to buy?

Those first three are between you, your medical team and your balance sheet. But that fourth question? Gary Glassman, CPA, a *Veterinary Economics* Editorial Advisory Board member, a partner with Burzenski and Co. in New Haven, Connecticut, is all about helping practice owners figure out what they can afford and whether the time is ripe for action.

Glassman is bullish on equipment financing: "There's not much credit restriction. Interest rates are still good but could increase some soon."

Most common big buys Glassman's seeing in the past few months? In-house lab units, digital dental radiography units and replacing older digital radiography

with better and faster units (like a sports car, only with amazingly detailed bone breaks instead of more horsepower).

Go ahead and depreciate to \$500,000!

Glassman also gave us the low-down on the top tax change affecting veterinary practices that came in with the new year. That Section 179 equipment depreciation maximum has been made permanent for 2015: \$500,000 instead of a more stingy \$25,000. (Yay for you!) For 2016 tax years and beyond, the maximum amount will also be indexed for inflation. Also made permanent was the special rule allowing off-the-shelf computer software to be treated as qualifying Section 179 property. (If anything goes out-of-date fast, it's software.) Read more from

Glassman at
[dvm360.com/
purchasingadvice](http://dvm360.com/purchasingadvice).

Defusing the tummy-twisting worry of GDV

Have veterinary clients whose stomachs are in knots over their concern for gastric dilatation-volvulus in their at-risk dogs? They want to do their utmost to ensure their dogs aren't affected by this life-threatening turn of events, so we worked with Jennifer Wardlaw, DVM, DACVS, to develop videos you can share directly with your clients once you raise the issue of GDV with them. Get them now at dvm360.com/tummytwist.

GET THE LATEST

Feeling like you could stomach an all-day surgery course? Check out the Clinical Techniques Courses at CVC Virginia Beach, May 13-16—especially the Essential Gastrointestinal Surgeries in Dogs, where surgical specialists will guide you and answer any questions you have about these key operations. Go to thecvc.com for more.



TAKE ANOTHER LOOK

Browse the latest endoscopy product options at dvm360.com/endoscopyoptions.



Vmed Wireless Monitors

Optional Windows tablet for mobile display



VetGard+ Surgical monitor with tablet



VetChek ECG/recovery monitor with tablet

- Monitor on your tablet or clinic computer
- Auto store files to your computer or server
- Attach data files to your practice management software
- Use large remote display with your computer for enhanced viewing

vmed technology

www.vmedtechnology.com • info@vmedtech.com
800-926-9622

More Features. Lower Price.

Sentinel-V 3025i Vital Signs Monitor from Leading Edge

- 8.4" Touch Screen Display
- ECG / SpO2 / NIBP / Resp / Temp Printer (EtCO2 capable)
- Adap-DSP for precise BP measurement
- Nellcor SatSeconds reduces "nuisance alarms"
- Provides more features and flexibility than Cardell/Midmark or SurgiVet at a lower price



FREE Temp Probe and operational overview with purchase.

Offer good thru May 31, 2016

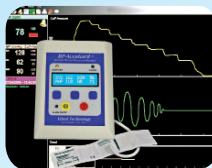


800.211.0036 • www.apexx360.com

Vmed Blood Pressure Solutions



VetDop2 is the Doppler of choice for veterinarians. Superior sensor and low noise electronics make detection and measurement easy. Training DVD included.



BP-AccuGard provides small animal validated accuracy in manual or automatic mode. Optional wireless link to your Windows computer. Includes easily silenced alarms and full menu.

vmed technology

www.vmedtechnology.com • info@vmedtech.com
800-926-9622

Medi-Dose[®] EPS[®]


Unit Dose,
Bar Coding,
Pharmacy &
Nursing Supply
Experts!

Solutions for your Solutions!



From bulk storage to unit dose delivery, EPS stocks a wide variety of bottles and containers for your liquid packaging needs.

MediDose.com • 800.523.8966



You're never too Old for good dental health

Individualized anesthesia protocols and monitoring make a big difference to your patients that are, well, long in the tooth. *By Heidi Lobprise, DVM, DAVDC*

The drill before you drill

Individualized treatment plans are essential for senior and geriatric patients: from the preoperative evaluation and stabilization therapy (if needed) to the immediately preoperative period and perioperative time frames. Many comparisons can be made to guidelines for people for dental procedures, including the benefit of preoperative laboratory screening, but we have to realize that our patients cannot give us details about how they are feeling.

What's the risk?

Identifying the patient's American Society of Anesthesiologists (ASA) physical status classification is a good starting point when evaluating patients in the mature, senior or geriatric categories. This will help you determine which assessments to perform.

Patients classified as ASA I or II might require basic blood work, a urinalysis and an electrocardiogram (ECG), while patients classified as ASA III, IV or V might require additional diagnostic testing. Urine output (1 to 2 mg/kg/hour is normal) monitoring is seldom performed but can provide beneficial information.

Do you need an anesthesia tech for dentals? YES.

"What do veterinarians do in this situation when their own beloved dog or cat needs a dental?" asks Fred Metzger, DVM, DABVP, owner of Metzger Animal Hospital in State College, Pennsylvania. "The answer is, they have their best anesthesia technician on the case or two technicians: one for the dental work and one for anesthesia."

Metzger gets it—he knows a second technician boosts the cost of procedures for clients. But he argues that if clients really knew how important an anesthesia technician was, "they wouldn't comply [with a dental procedure recommendation without one], because I know I wouldn't."

"Would you let an uncertified anesthesia assistant [monitor anesthesia for] your child?" Dr. Metzger asks. "I didn't think so."



Monitor THIS

The reason I have confidence in safe anesthesia is the combination of individualized analgesia and anesthesia protocols and the level of patient monitoring that can be provided. General anesthesia depresses many systems that may already be compromised—respiratory, cardiovascular, central nervous, thermoregulatory, hepatic and renal, to name a few. Monitoring should be constant throughout the procedure and into the postoperative period, where most unexpected deaths occur.

And keep in mind that with all the advances in monitoring equipment available, the best monitor is still a good technician. Observing the general parameters and readings from monitoring equipment provides the best assessment of the depth of anesthesia and indicates when there is a need for intervention. Heart and respiration rates recorded every five minutes can be combined with pulse oximetry and blood pressure values, carbon dioxide concentrations, capnograph readings, body tem-

perature and continuous ECG readouts. Central nervous system evaluation of the muscle tone of the jaw and eye position or palpebral reflex are more subtle indicators of anesthetic depth.

While senior animals may present with particular circumstances that make anesthesia planning more complicated, in most instances, appropriate patient evaluation and care will provide an opportunity for good dental care. If dental health can be improved in a senior patient, its overall health is likely to improve as well.



Dr. Lobprise is a dental expert with Main Street Veterinary Hospital and Dental Clinic in Flower Mound, Texas. Here she's demonstrating how to decipher a tooth on film—yay, opposable thumbs! Get this hack and more at dvm360.com/dentalhacks.



How do you stack up?

Do you charge enough for anesthesia and monitoring during dental procedures at your clinic? Do you account for all the staff time, prep work, supplies and expertise? In a time when consumers are more sensitive to price, it can be scary to raise prices. But it might have been way too long since you've looked at this. Here's what the data from high-performing Well-Managed Practices shows in *Benchmarks 2015: A Study of Well-Managed Practices* ...

Nerve blocks, even for pluckers (we're looking at you!)

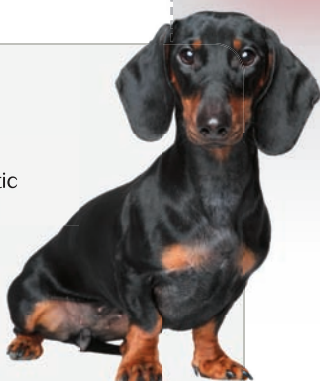
Are you ready for the 12-year-old Yorkie that needs 24 teeth extracted? There's no cookie-cutter approach in veterinary medicine! Here's help.

Dental patients are often at high risk, so you need to be sure you're monitoring and offering pain control. Tasha McNerney, MS, CVT, cofounder of Veterinary Anesthesia Nerds and Mary Berg, RVT, VTS (dentistry), say you need a dedicated anesthetist, a multimodal pain approach ... oh heck, just watch the video.

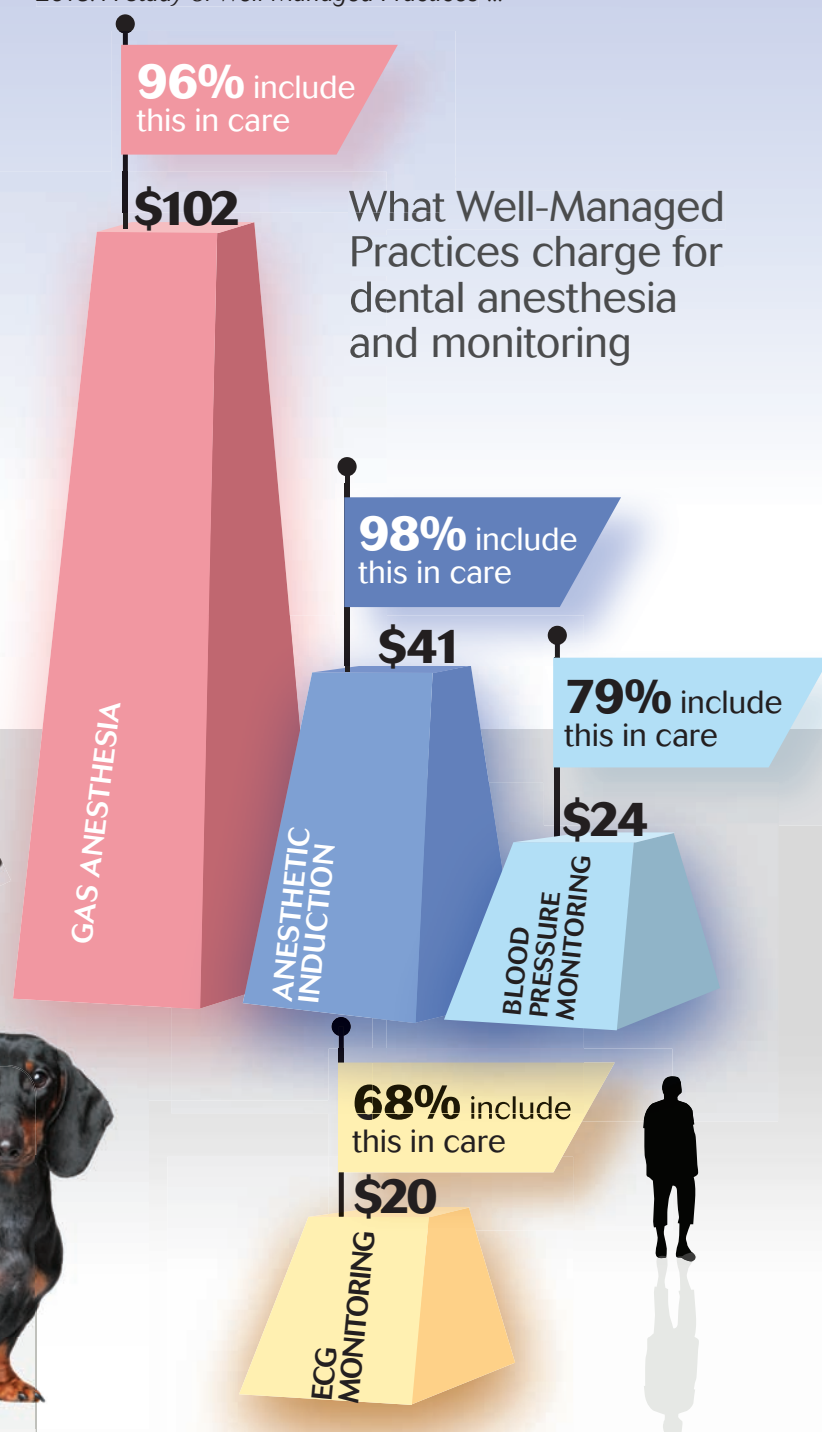


MONITORS: YOUR VERY OWN WATCHDOG

In the market for a diagnostic or multiparameter monitor? We've got you covered. Go to dvm360.com/monitors to browse our selection of efficient, accurate patient monitoring systems.



GETTY IMAGES/FOTOJAGODKA

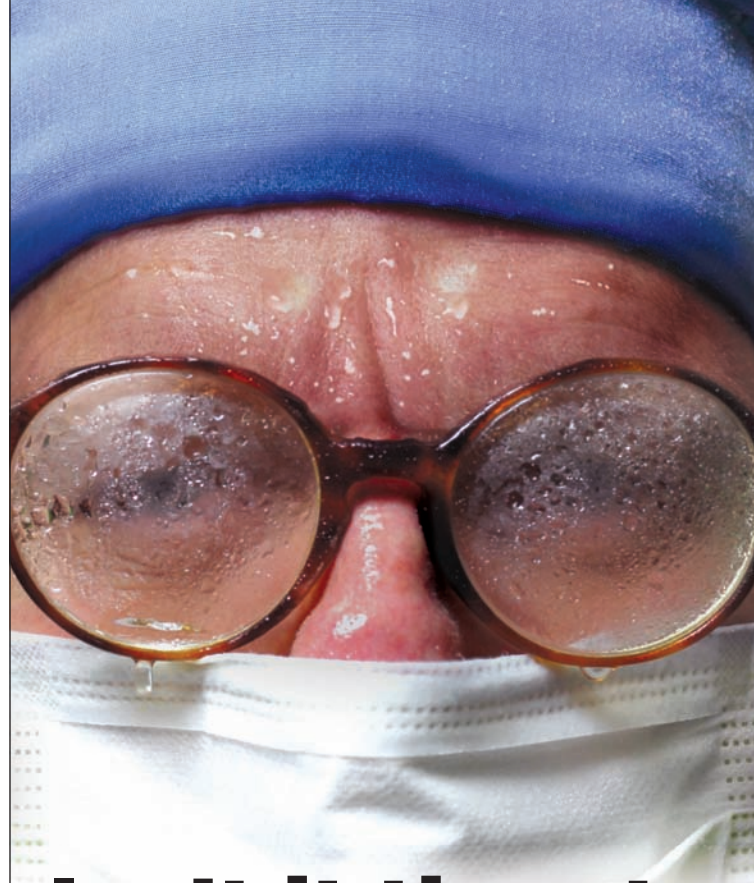




**Midmark Dental
Solutions are
the key to happy,
healthy pets.**

For more information, call
(844) 475-9143 or visit:
midmarkanimalhealth.com/vettedMar.

f t y
Better Patient Care. Better Business.™
Manufactured and/or distributed by Midmark Corporation, Versailles, OH



**Isn't it time to
get a cooler
surgical light?**



With near-zero radiated heat, the MI-1000 LED Surgery Light provides the brightest, whitest, coolest illumination of any light in its class. At a price you won't sweat over either. Check the specs at Medillum.com or contact your distributor.



Medical Illumination

547 Library Street, San Fernando, CA 91340
(800) 831-1222 | www.medillum.com

**Medi-Dose®
EPS®**

**Unit Dose,
Bar Coding,
Pharmacy &
Nursing Supply
Experts!**

**The Right Bag
for the Job!**



- Resealable
- Chemo-Safety
- Specimen
- Handling Instructions
- Crash Cart
- UV Inhibitant

MediDose.com • 800.523.8966

INTRODUCTION TO MONOCLONAL ANTIBODIES:

Latest Advancement in Companion Animal Veterinary Medicine

Innovations in human medicine and technology have long inspired new therapies and treatments in animal health. Biological therapy is the newest area being explored to help improve the health and quality of life of companion animals.

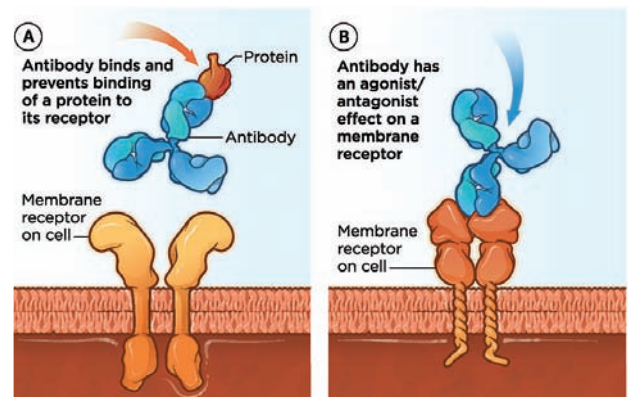
Biological therapy can take the form of vaccines, like immunotherapy, or therapeutic monoclonal antibodies. Examples of antibodies used in human health therapeutic areas include the development of Humira® for the treatment of rheumatoid arthritis and Xolair® for the control of asthma.

Monoclonal Antibodies (mAbs): A New Frontier for Animal Health*

All mammals produce antibodies to protect against foreign proteins or antigens introduced into the body. These are produced by a variety of plasma cells resulting in polyclonal antibodies. Scientists are now developing monoclonal antibodies that can be used therapeutically to mimic the immune system and to direct it against one specific antigen. The antibody is engineered with sequences compatible with the immune system of the target species (e.g., called “caninization” for the dog) so that the body does not recognize them as foreign.

These antibodies and therapeutic mAbs exert biological activity through various mechanisms. The antigen-binding fragment can interact with

high specificity and affinity to soluble targets like cytokines in the blood and tissue interstitium to prevent these molecules from binding to their receptors and thus prevent cytokine activation of the receptor (A). Alternatively, an antibody or therapeutic mAb can bind to a target receptor on a cell surface to block its activation. These are described as antagonistic mAbs; most human mAbs fall under this category (B).



Monoclonal antibodies have three main safety advantages:

- 1) mAbs have very specific targets.
- 2) mAbs don't have intercellular activity—as a result, there are few anticipated side effects and reactions.
- 3) mAbs are not metabolized by the kidney or liver but are catabolized within the cells resulting in amino acids, which are recycled within the body.

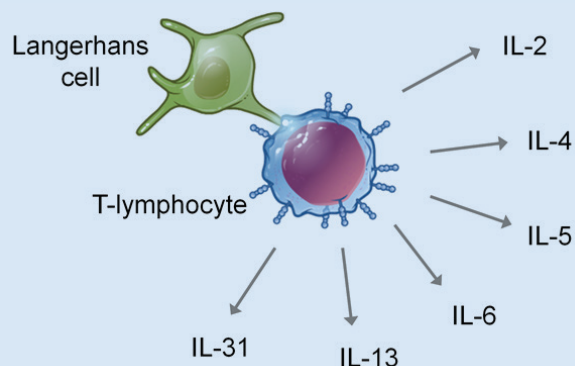
Applying Monoclonal Antibodies (mAbs) in Veterinary Dermatology

Capitalizing on knowledge from the development of human monoclonal antibodies, veterinary researchers are developing therapeutic mAbs for the treatment of many important and common conditions that affect the quality of life of dogs and cats such as osteoarthritis pain, chronic kidney disease, oncologic conditions, cardiac disease and atopic dermatitis.

The past decade has produced more insights into the pathophysiology of allergic skin disease—in particular, atopic dermatitis. Cytokines such as interleukin (IL)-2, -4, -6, -13 and -31 play an important role in orchestrating the cycle of itch as well as inflammation. Each of these cytokines plays a specific role in the production of clinical signs such as pruritus and inflammation.

Research has demonstrated that IL-31 plays a major role in the induction of pruritus in dogs with atopic dermatitis. It also has effects on keratinocytes and the inflammatory cells that are part of the condition. A mAb that inhibits the function of only IL-31 holds the potential to uniquely and specifically target the signs of atopic dermatitis without the side effects associated with broad-spectrum pharmacotherapy.

CYTOKINES INVOLVED IN CANINE ALLERGIC SKIN DISEASE



Many cytokines implicated in allergic skin disease (e.g., atopic dermatitis) are secreted from activated T-lymphocytes.

Effective therapies for atopic dermatitis inhibit T-cell and cytokine function. How they affect immune function or other organ systems may lead to differential safety profiles.

Learn More About mAb Therapy

This article provides a high-level view of mAb technology. More information is available at www.itchcycle.com/antibodytherapy.

* All data from: Olivry T, Bainbridge G. Advances in veterinary medicine: therapeutic monoclonal antibodies for companion animals. *Clinician's Brief*. <http://www.cliniciansbrief.com/article/advances-veterinary-medicine-therapeutic-monoclonal-antibodies-companion-animals>. Published March 2015. Accessed December 3, 2015.



Product picks

Four ways to take a much closer look

1

Variable Loupes

Just like a zoom lens on a camera, the Variable Loupes from LW Scientific allow the user to work close up with higher magnification, or far away with lower magnification and a wider field, as well as for diopter adjustments between left and right eyes. The Loupes feature ergonomic, lightweight sport frames, as well as high-resolution, scratch-resistant, anti-glare glass optics. Using loupes reduces eyestrain and fatigue and improves quality and patient care.

2

M250 LED Microscope

This high-quality microscope features the rugged construction needed for a mobile or large animal practice. The sealed optics, anti-fungal coating and battery-operated cordless lighting have been designed for field use.

3

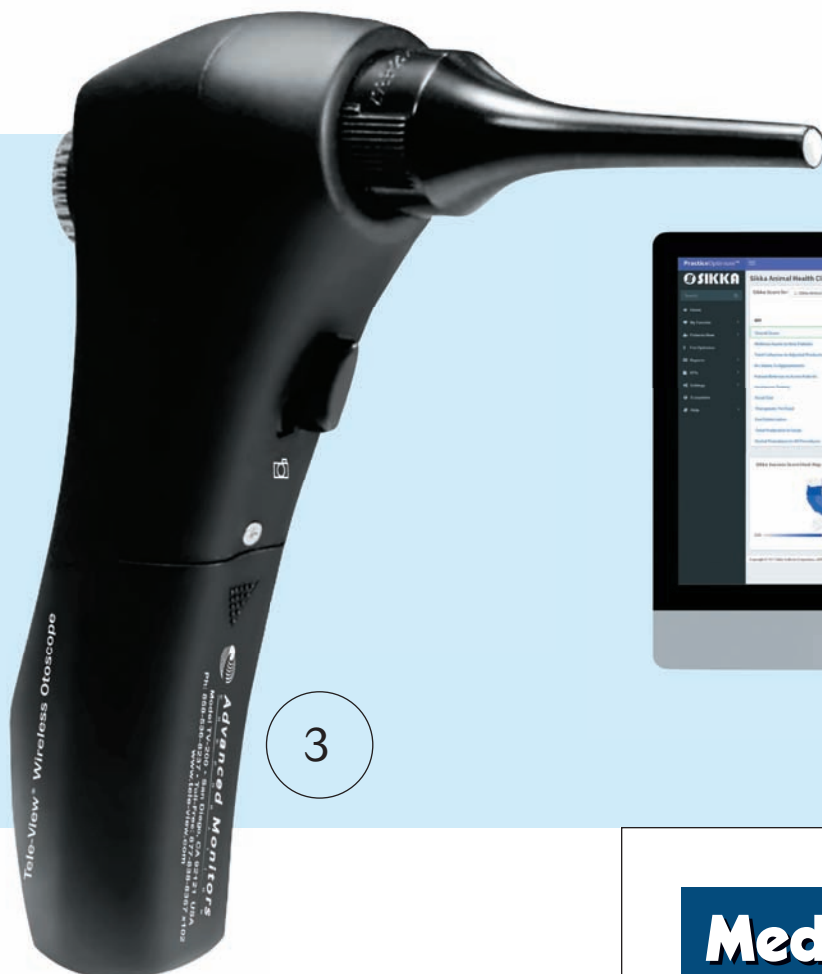
Tele-View TV-200V Wireless Digital Video Otoscope

This updated video otoscope includes brighter and whiter LEDs as well as improved wireless transmission. The TV-200V video otoscope is designed specifically for veterinary practitioners.

4

Practice Optimizer

Practice Optimizer Animal Health is a software system that includes a fee optimizer, an insurance rating system, profit-and-loss analysis and marketing ROI. It can send daily, weekly and monthly reports straight to veterinary practices.



Learn more about these specific products and the companies that offer them and browse other related products in these categories:

Magnifiers

dvm360.com/magnifierproducts

Microscopes

dvm360.com/microscopeproducts

Otoscopes

dvm360.com/otoscopeproducts

Software and cloud services

dvm360.com/softwareproducts



Medi-Dose® EPS®

Unit Dose,
Bar Coding,
Pharmacy &
Nursing Supply
Experts!

Steri-Dropper®

Package what you need
...when you need it!

- Ideal for Compounding and Dispensing Eye Medication
- Convenient Sterile Packs of 2 Bottles, Tips and Caps
- Four Sizes: 3, 7, 10 and 15 mL



MediDose.com • 800.523.8966

HELPFUL STUFF



How Patches got her pizzazz back

Sure, you can judge your success in alleviating a cat's osteoarthritis pain on physical exam, says Jennifer Wardlaw, DVM, DACVS. But an equally important gauge of success? Whether the cat returns to its traditional, pre-debilitation pizzazz.

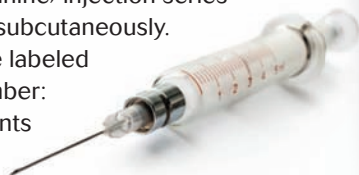
To get that pizzazz back, first follow Wardlaw's basics: Control weight, ensure the cat's access to essentials at home and discuss exercise (see Dr. Wardlaw on video with more details at dvm360.com/pizzazz). Next? Use nutraceuticals. The best option for supplementation is a therapeutic diet with omega-3s and a track record of effectiveness in cats with osteoarthritis. Here are some other options:

Fish oils. If the cat just won't make the change to an osteoarthritis diet, you can add fish oil to its food. "I love the liquid versions for cats so they do not have the added calories of the gel capsule—and they have a more controlled total dose," says Dr. Wardlaw.



Chondroitin and glucosamine. Dr. Wardlaw is a believer in giving these add-ons, if they're high-quality. "Quality ingredients are bioavailable—they get to the joint and help," she says. "But they need to be given every day. I advocate for adding it to a small portion of their food to ensure they eat it before the entire meal or giving the cat a pill."

PSGAGs. Dr. Wardlaw also sometimes uses polysulfated-glycosaminoglycan (PSGAG) injections in cats. This is extralabel usage in cats. "I do the traditional (canine) injection series at half the dose and only administer subcutaneously. Then, long-term I continue at half the labeled dose once a month for cats." Remember: PSGAGs should not be given in patients with bleeding issues or liver or kidney disease, Dr. Wardlaw says.



Wait! Fluffy hurts?! Telltale signs clients should watch for

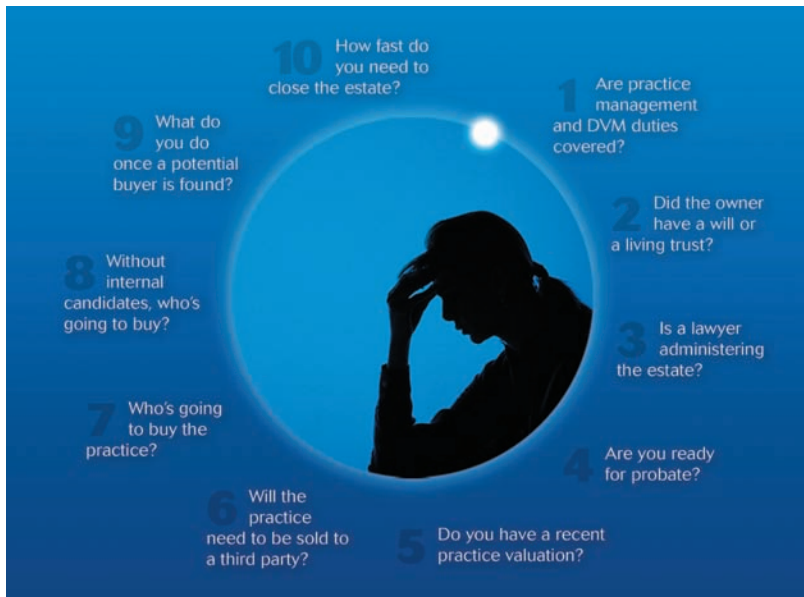
Of course, to commence treatment for pain in cats, your clients must recognize it and bring their pet in for a visit. Here are the telltale signs, according to pain expert Janice Huntingford, DVM, DACVSMR, CVA, CVPP, CCRT, CAVCA—mention them early and often to all of your cat owners.

- > Not being able to jump on a bed or counter
- > Not being able to use the litterbox
- > Decrease in appetite
- > Not wanting to self-groom or be groomed
- > "Grouchy cat" behavior: When you pet the cat or touch it on the back, it turns around and bites.

When cats are extremely painful, they flatten their ears and crouch up, plus they hide as a survival instinct, Huntingford says. Those cats need your help fast!



>>> Give pain the shove-off: Provide clients with this take-home tool on recognizing pain in both dogs and cats. Visit dvm360.com/painID.



The business of death: 10 steps to take after the unthinkable happens

The death of a solo practice owner can kill a veterinary business. This highly emotional time is stressful not only for an associate and her family but the veterinary staff as well. Whether you're facing that situation right now, you're a proactive practice owner planning for the worst or you're an associate worried about the future, you can use the advice from Karl Salzsieder, DVM, JD, and his attorney, Josh Dailey, JD, featured in the interactive at dvm360.com/unthinkable (a low-tech practice handout is also available).

Redefining Surgery Recovery

Fiberglass kennels and cages from Mason Company are quieter, softer, warmer, attractive and more durable than cold metal.

Mason's Quiet Cottages and Heated Recovery Cages are the stacked caged system of the future.

- Molded, solid-surface fiberglass cage bodies.
- Available with individual built-in drains to ensure sanitary conditions.
- Available in a variety of colors.



Warm fiberglass to speed healing.

The UltraBase™ Above Floor system is available only from Mason Company.

- One piece fiberglass floor with 6" sides eliminates leaks.
- Individual drains to prevent cross contamination.
- Stainless steel side panels for durability and ease of cleaning.



(800) 543-5567
www.MasonCo.com/surgery
info@MasonCo.com

Visit our website to download this helpful guide!



Colorful coordination

1st Pet Veterinary Centers in Mesa, Arizona, our 2016 Hospital of the Year winner, adopted a bright teal-and-orange color theme throughout the hospital. The result is cheerful but still sophisticated.

Think outside the box

Randy Spencer, DVM, owner of this 24/7 specialty referral, emergency and general practice, had always considered orange an accent color until he saw the proposal for his new brand colors. Now he's convinced the exposed masonry with teal and orange panels is the perfect fit for the surrounding Arizona landscape. The large sign on the northwest side of the building lights up at night, serving as a guiding light for clients with pets in crisis.



A private escape

In the hospital's comfort room, the colors coordinate with the theme but are more subdued. "Emergency medicine is the largest of services we provide," Spencer says. "It's such an emotional area. Many times our patients are very sick or injured." Abundant seating for families and natural light were a must in 1st Pet's comfort room. The ceiling-to-floor glass door brings in even more light and provides a private exit for pet owners. The vessel sink, large area rug and vinyl geometric pattern wall covering create a warm, comfortable setting for clients during difficult times.



Sterile doesn't have to mean sterile

The color palette, which Spencer achieved with the help of a veterinary branding company, continues even in clinical spaces, such as the intensive care unit. It's true: Clinical doesn't have to mean sterile white—note the colorful coordinating mats in the recovery cages.



Client-free oasis

In a 24/7 hospital with seven associates, 24 full-time team members and three part-time employees, a flexible meeting-break-work space is key. Orange-and-blue silk floral centerpieces and chairs match 1st Pet's brand colors and liven up lunchtime. The folding acoustic partition provides an easy way for veterinarians to get a little privacy in the back office area.

veterinary economics



Design your dream hospital

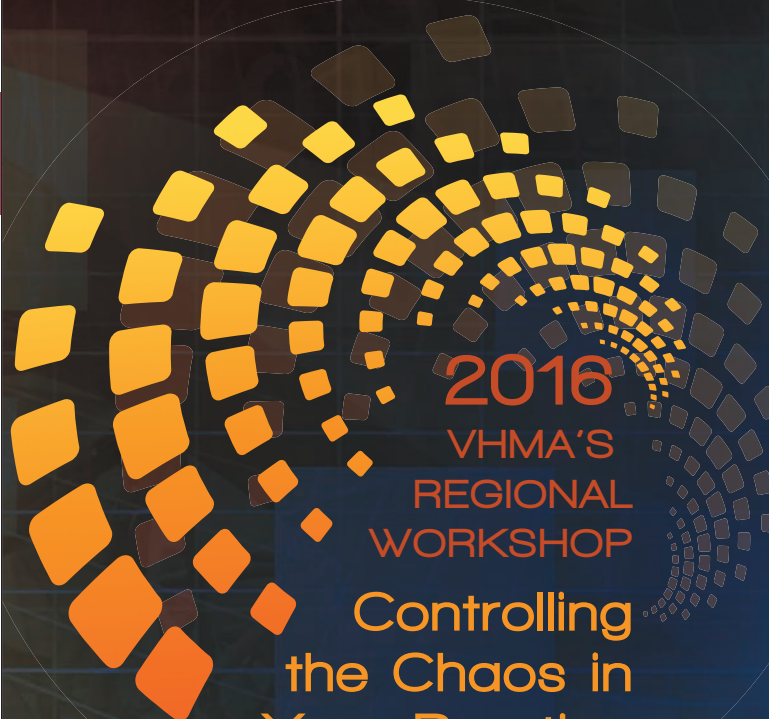
Attend the Hospital Design Conference at CVC Kansas City Aug. 24-26 to hear from all the top veterinary architects on how to create the perfect veterinary hospital for you. Visit thevcv.com/HD to register.



To find more on the 2016 Hospital of the Year—including a link to the practice photo gallery, visit dvm360.com/2016HOY or scan the QR code above.

Enter the competition

Already finished with your pride and joy? Enter the Hospital Design Competition by visiting us online at dvm360.com/hdentryform.



2016

VHMA'S
REGIONAL
WORKSHOP

Controlling the Chaos in Your Practice

March 22 – Toronto, Canada

April 20 – Baltimore, MD

August 25 – Kansas City, MO

September 21 – Indianapolis, IN

December 7 – San Diego, CA

6 Continuing Education Hours are available.

- Attendees will use *The E-Myth Veterinarian* as a primer to identify why most veterinary practices are not effective businesses, and how creating systems can get them to the next level.
- The workshop will be presented by *The E-Myth Veterinarian* co-author Peter Weinstein, DVM, MBA.

Registration details at VHMA.org.



Veterinary Hospital
Managers Association



BRIEF SUMMARY (For full Prescribing Information, see package insert)

Caution:

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

Indications:

Bravecto 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), *Dermacentor variabilis* (American dog tick), and *Rhipicephalus sanguineus* (brown dog tick)] for 12 weeks in dogs and puppies 6 months of age and older, and weighing 4.4 pounds or greater.

Bravecto is also indicated for the treatment and control of *Amblyomma americanum* (lone star tick) infestations for 8 weeks in dogs and puppies 6 months of age and older, and weighing 4.4 pounds or greater.

Contraindications:

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

Warnings:

Not for human use. Keep this and all drugs out of the reach of children. 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. Wash hands thoroughly with soap and water immediately after use of the product.

Precautions:

Bravecto has not been shown to be effective for 12-weeks duration in puppies less than 6 months of age. Bravecto is not effective against *Amblyomma americanum* ticks beyond 8 weeks after dosing.

Adverse Reactions:

In a well-controlled U.S. field study, which included 294 dogs (224 dogs were administered Bravecto every 12 weeks and 70 dogs were administered an oral active control every 4 weeks and were provided with a tick collar); there were no serious adverse reactions. All potential adverse reactions were recorded in dogs treated with Bravecto over a 182-day period and in dogs treated with the active control over an 84-day period. The most frequently reported adverse reaction in dogs in the Bravecto and active control groups was vomiting.

Percentage of Dogs with Adverse Reactions in the Field Study

| Adverse Reaction (AR) | Bravecto Group: Percentage of Dogs with the AR During the 182-Day Study (n=224 dogs) | Active Control Group: Percentage of Dogs with the AR During the 84-Day Study (n=70 dogs) |
|-----------------------|--|--|
| Vomiting | 7.1 | 14.3 |
| Decreased Appetite | 6.7 | 0.0 |
| Diarrhea | 4.9 | 2.9 |
| Lethargy | 5.4 | 7.1 |
| Polydipsia | 1.8 | 4.3 |
| Flatulence | 1.3 | 0.0 |

In a well-controlled laboratory dose confirmation study, one dog developed edema and hyperemia of the upper lips within one hour of receiving Bravecto. The edema improved progressively through the day and had resolved without medical intervention by the next morning.

For technical assistance or to report a suspected adverse drug reaction, 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-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

How Supplied:

Bravecto is available in five strengths (112.5, 250, 500, 1000, and 1400 mg fluralaner per chew). Each chew is packaged individually into aluminum foil blister packs sealed with a peelable paper backed foil lid stock. Product may be packaged in 1, 2, or 4 chews per package.

Distributed by:

Intervet Inc (d/b/a Merck Animal Health)
Summit, NJ 07901

Made in Austria

Copyright © 2014 Intervet Inc, a subsidiary of Merck & Company Inc.
All rights reserved

141487 R2

Reference: Bravecto [prescribing information] Summit, NJ: Merck Animal Health; 2014
Available by veterinary prescription only.





SAN DIEGO DECEMBER 8-11, 2016



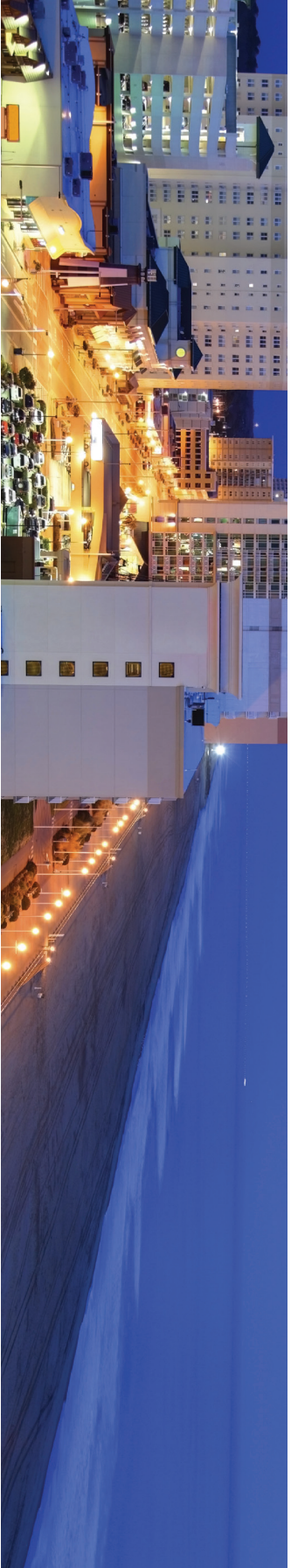
UBM Life Sciences, Veterinary



smarteasyaffordable
veterinarycontinuingeducation



KANSAS CITY AUGUST 26-29, 2016



VIRGINIA BEACH MAY 12-15, 2016

800.255.6864, ext. 6

TheCVC.com

cvc@advanstar.com

©2016 Advanstar Communications, Inc.



SHOWCASE | dvm360.com/products

ADVERTISING

HELPING YOU GROW YOUR BUSINESS... IT'S WHAT WE DO.



Providing Complete Marketing Solutions for Your Veterinary Practice

(800) 564-4215
www.vetnetwork.com



MOBILE VETERINARY



**"If you buy *strictly* on price,
you're gonna pay twice!"**



www.laboit.com

 visit us on facebook

800-776-9984



Get more product information *online*

Researching a purchase? dvm360.com
offers hundreds more product listings.
Just visit dvm360.com/products





DENTAL PRODUCTS

Leba III is on your side,
tartar will tap out.



BLUEWATER BRIDGE, ON, CA & MI, USA
Photo by David J Sullivan

LEBALAB

Search

100% response in Double Blind Tests
See the results on www.lebalab.com

Cleans Teeth with the Ease of a Spray

The LebaLab difference:

Leba III stimulates the good flora in the saliva. The longer Leba III is used, the cleaner the teeth and the healthier the chemistry of the mouth becomes. Antibacterial products kill the good bacteria in the mouth leading to imbalance and repeated dental procedures.

Pets ingest dental products, they cannot rinse. They can become subject to the side effects of the components, that's why Leba III contains no Grapefruit Seed Extract, no chlorides or chemical agents.

Used by veterinarians since 1994.



Before

After



Before

After

TO ORDER, CALL 1.866.532.2522

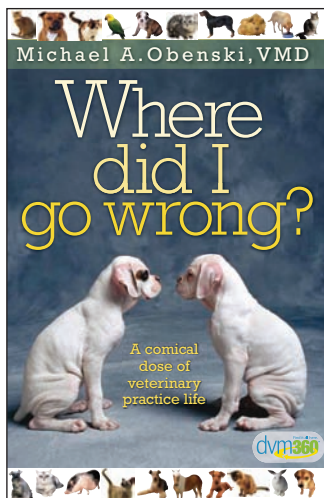
Questions? Call 1.519.542.4236 | www.lebalab.com | tellus@lebalab.com



SHOWCASE | dvm360.com/products



Missing **Dr. Obenski's** column already? We can help.



The maestro of mirth's legacy lives on

Michael Obenski, DVM may have retired from his column in dvm360 but you can still enjoy ten years of unbelievable-but-true stories from the examination room and beyond.

For you, for your practice—share this classic compilation of more than 130 columns with anyone who appreciates the lighter side of veterinary practice! (\$29.95, free US shipping.)

go to industrymatter.com/obenski
or call 1-800-598-6008



CLEANING EQUIPMENT AND SUPPLIES

Take care of your patients and leave the laundry to us.



Miele Professional

Search

Miele Professional high performance, small footprint washers and dryers are designed to last at least 30,000 operating hours. If used 40 hours per week, that equals 15 years of service or more. Don't replace machines every few years - rely on a system that won't let you down.

- Highest G force drastically reduces drying time and saves money
- Laundry throughput of 20-25 lbs. per load
- Stackable units available
- High temperature disinfection and treatment of laundry contaminated with Canine Parvovirus



Scan to learn about Miele reducing the risk of Canine Parvovirus in contaminated laundry.



☎ 800.991.9380 • ✉ proinfo@mieleusa.com • 🌐 www.miele-pro.com

Miele
PROFESSIONAL

Search for the company name you see in each of the ads in this section for **FREE INFORMATION!**



ANESTHESIA EQUIPMENT

BLUEPRINT FOR BREATHING
Anesthesia made simple... **A.D.S. 2000**
Proudly made in the U.S.A.



Revolutionary Veterinary Breakthrough

- Anesthesia Machine (Positive Pressure)
- Electronically microprocessor controlled
- Delivery & Ventilation for small animal use
- Automatically sets breathing parameters
- Very affordable and easy to use
- Just connect to vaporizer & Oxygen
- Two year parts & labor warranty
- Lifetime loaner service

6 Hour Battery backup providing portability and protection.

engler
engineering corporation
In Business Since 1964

1099 East 47th Street - Hialeah, Florida 33013 USA
800-445-8581 - FAX 305-685-7671
www.englerusa.com

ARCHITECTS/BUILDERS

ANIMAL ARTS
architecture
animals
people

800.332.4413
www.animalarts.com

DVM360.COM
FIND IT ALL HERE!

BICKFORD
SENSIBLE SOLUTIONS
VETERINARY ANESTHESIA



Bickford's Fair Scavenging Kit

A.M. BICKFORD, INC.

SINCE 1974

CALL FOR CATALOG:

1-800-795-3062

VISIT US AT: www.ambickford.com

ARCHITECTS/BUILDERS

RWE
MANAGEMENT COMPANY

Chicagoland's most experienced provider for the development, design and construction of award winning animal care facilities.

630.734.0883
www.rwemanagement.com

SILBERSTANG LASKY
ARCHITECTS, PC

2015 MERIT AWARD WINNER
Veterinary Economics Hospital Design Competition

Appropriate, Practical Design for Veterinarians

www.slanyc.com
212.242.3234



ARCHITECTS/BUILDERS

C Chester inc
Architectural & Construction Services

Primarily serving veterinary customers in NW Indiana, SW Michigan & NE Illinois



We specialize in veterinary facilities!
www.chesterinc.com
Phone: 219-465-7555 • 800-778-1131

JEFFREY L. GROGAN ARCHITECTS

VETERINARY ARCHITECTURE AND INTERIOR DESIGN
UNCOMPLICATED PRACTICAL DESIGN SOLUTIONS

906 FAYETTE ST., CONSHOHOCKEN, PA 19428
610-825-7780 FAX: 610-825-8620
WWW.JLGARCH.COM

TWC
TERWISSCHA CONSTRUCTION, INC.

Your Source From Start To Finish!



Veterinary Architecture & Construction Specialists

www.twcinc.com
1-800-478-4892

PLACE YOUR AD HERE!



ARCHITECTS/BUILDERS



General Construction
Design Build
Construction Management
T 732-389-0202 x401
F 732-389-0836
info@L2MConstruction.com
www.L2MConstruction.com
Est. 2002

FRANCHISE OPPORTUNITY



PET DEPOT
VETERINARY GROUP



**Time to diagnose
your career path?**

Own a PET DEPOT®
Hybrid Hospital / Retail Store.
It's easier than you think.

www.petdepot.net/vet
937.402.8300
dr.fling@petdepotvetgroup.com

Over 40 independently owned & operated locations in the USA and Canada

Knapp Schmidt
Architects
www.ksarch.net
1.800.236.0140
Specialists in Animal Care Facilities

CONSTRUCTION

KLINE
construction

**A National Company
Specializing in Veterinary
Hospital Construction**

▪ New Construction ▪ Renovations
440.357.4500

WWW.KLINECONSTRUCTION.COM

DIAGNOSTIC IMAGING

**VETERINARY
RADIOLOGY SPECIALISTS**

DRwizard Wireless Flat Panel
\$30,000-\$40,000

WITH DICOM SOFTWARE & COMPUTER

- True Cassette Sizes: 10x12 & 14x17
- Wireless • Shock Resistant
- Auto-Xray Detection

**PORTABLE X-RAY SERVICE
BROKEN? WE FIX IT!**
All Makes & Models



**DIAGNOSTIC
IMAGING SYSTEMS**
XRAYCATALOG.COM & VETXRAY.COM

800-346-9729
VetXray.com

**Get more product
information online**



Researching a purchase?
dvm360.com offers
hundreds more
product listings.
Just visit
dvm360.com/products



**Follow
us!**

Get instant updates on
critical developments
in veterinary medicine,
business, and news by
following **dvm360**.



[facebook.com/
dvm360](https://facebook.com/dvm360)



[twitter.com/
dvm360](https://twitter.com/dvm360)

DVM360.COM

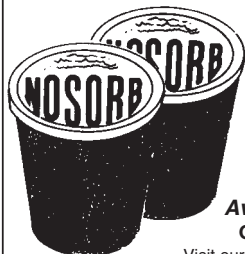
**FIND
IT
ALL HERE!**



DIAGNOSTIC TESTING

NOSORB™

Easy Urine Collection from Cats



- Nonabsorbent cat litter
- Comes in urine cup
- Easily dispensed or used in hospital
- Clients love it
- Inexpensive, bulk 5lb. tub with scoop
- Readily accepted by cats
- Inert—will not affect test results
- Recommended and used by Veterinary urologists at many Veterinary teaching hospitals

Available through your Veterinary Distributor, or contact:

CATCO, 140 SE 23rd St., Cape Coral, FL 33990 for information

Visit our Web Site at [HTTP://www.bpsom.com/catco/catco.htm](http://www.bpsom.com/catco/catco.htm) for distributor information.

MEDICAL EQUIPMENT

VETERINARY EQUIPMENT / "NEW CLINIC" DISCOUNTS



Dental & Anesthesia Equipment
Autoclaves • Surgery Lights
Centrifuges • Microscopes • Cages
Central Oxygen & Suction Systems
Patient Monitors • Wet Tables
Scrub Sinks • Cabinetry • X-Ray

PARAGON

MEDICAL

1-800-780-5266

Visit Our Online Catalog

www.paragonmed.com

PORTABLE ULTRASOUND

DIGITAL DOPPLER ULTRASOUND

includes 1 transducer of your choice

\$3,995 - \$8,995



Eco-1 BW

Add one additional transducer for \$1,200,
Add second additional transducer \$1,600



Eco-5 Color

DIAGNOSTIC
IMAGING SYSTEMS

800-346-9729 • VETXRAY.COM
QUALITY | INTEGRITY | VALUE SINCE 1983

DVM360.COM

FIND
IT
ALL
HERE!

Find it all here.
dvm360.com

GET MORE PRODUCT
INFORMATION
ONLINE

Researching a purchase?

dvm360.com

offers hundreds more
product listings.

Just visit

dvm360.com/products

vettEd™

VetEc + VetMed, shaken not stirred

Content Licensing
for Every Marketing
Strategy

Marketing
solutions fit for:

Outdoor

Direct Mail

Print Advertising

Tradeshow/POP

Displays

Social Media

Radio & TV

Leverage branded content from *Vetted* to create a more powerful and sophisticated statement about your product, service, or company in your next marketing campaign. Contact Wright's Media to find out more about how we can customize your acknowledgements and recognitions to enhance your marketing strategies.

For information,
call

Wright's Media at
877.652.5295 or

visit our website at
www.wrightsmmedia.com



MEDICAL EQUIPMENT

RECRUITMENT

6 YEAR WARRANTY

6 year warranty
on Son-Mate II



Son-Mate II Scaler / Polisher
Sale Price \$ 1,825



A.D.S. 2000 Anesthesia Machine / Ventilator
Sale Price \$ 5,595



Tri-Mate (3 units in 1)
Scaler / Polisher / Electrosurge
Sale Price \$2,755

engler
engineering
corporation



Proudly made
in the U.S.A.

IN BUSINESS SINCE 1964

6 year warranty on Son-Mate
1 year warranty on Scale-Aire
2 year warranty on A.D.S. 1000

Engler Scale-Aire

High Speed Veterinary Dental Air Unit

- 360,000 RPM high speed drill
- 20,000 RPM low speed H.P.
- Built in 25K ultrasonic scaler
- Auto-tune circuitry
- Air water syringe
- On-Demand Compressor (MF)
- H-Frame mobile stand
- Built in water reservoir
- Switching power supply
- Automatic handpiece activators
- Lifetime loaner service
- Proudly made in the USA

NEW \$4275

ENGLER ENGINEERING CORP.
52
YEARS OF EXCELLENCE
1964 - 2016

1099 East 47th Street - Hialeah, Florida 33013 USA

800-445-8581 / FAX 305-685-7671

www.englerusa.com / www.engler411.com

GEORGIA

Well established, 10 year old, small animal practice seeks an ambitious, personable, responsible, and compassionate full-time veterinarian. Experience in internal medicine and surgery is a plus. Our hospital has a solid reputation for professional quality care. We are located in Pooler, GA, which is approximately 15 minutes outside of Savannah. We offer a benefits package including vacation time, CE and license allowance. For more information about our hospital visit our website at www.godleystationvet.com. Please send resume to 127 Canal Street Pooler GA, 31322 or you may contact Kathy at 912-748-8805

CONNECTICUT

Consulting Veterinarian - Will consult on and assist veterinarian's practice with respect to the review and enhancement of policies and procedures for the management and administration of the veterinarian and under her supervision, will render consultation to the licensed veterinarian on parasitology and on the diagnosis and treatment of diseases and injuries of pets and farm animals based on the examination and reports prepared by the licensed veterinarian who examined the animal. Will assist the licensed veterinarian in the observations of animals and the review and administration of parasitological tests for dogs, cats, birds and other animals against rabies, brucellosis and other disorders. Will establish sanitary measures, feeding and general care to promote the health of animals under the supervision of the licensed veterinarian. Requires Doctorate of Veterinary Medicine or equivalent. Contact Cheryl Sackler, DVM, Beacon Falls Animal Hospital, 45 Pine Bridges Road, Beacon Falls, CT 06403. 203-828-6686

DVM360.COM

FIND IT ALL HERE!



PLACE YOUR AD HERE

Get your message to veterinarians
and team members **TODAY.**

Call **Angela Paulovcin** at (800) 225-4569, ext. 2629
apaulovcin@advanstar.com



PRACTICES FOR SALE OR LEASE

National



**TOTAL PRACTICE
SOLUTIONS GROUP**

Veterinary Practice Sales & Appraisals

www.tpsgsales.com



**Kurt
Liljeberg**

**Dave
Davenport**

**Nick
Elliston**

**Rex
Salzsieder**

**Karl
Salzsieder**

**Len
Jones**

**Richard
Alker**

**John
Bryk**

**Bill
Crank**

**George
Sikora**

Selling or Buying a Veterinary Practice?

Dr. Kurt Liljeberg – 800.380.6872 – kurt@tpsgsales.com
MN, WI, MI, IN, OH, NY, PA

Dr. George Sikora – george@tpsgsales.com

Dr. John Bryk – john@tpsgsales.com

Dr. Bill Crank – bill@tpsgsales.com – 877.487.7765

DC, IL, KY, MD, OH, NC, SC, VA, WV / CT, MA, ME, NH, RI, VT, DE,
NJ, NY, PA

Dr. Len Jones – len@tpsgsales.com – 334.703.5837
TX, NM, LA, MS, AL, TN, GA, FL

Dr. Richard Alker – 850.814.9962 – richard@tpsgsales.com
FLORIDA

Dr. Karl Salzsieder – 360.636.1228 – Rex Salzsieder

karl@tpsgsales.com – rsalzsieder@tpsgsales.com

AK, AZ, HI, ID, NV, OR, UT, WA

Dr. Dave Davenport – 816.331.9449 – dave@tpsgsales.com

Nick Elliston – 513.267.9930 – nick@tpsgsales.com

MT, WY, CO, ND, SD, NE, KS, OK, IA, MO, AR

Broker Coming Soon!
CALIFORNIA

NATIONAL

PS BROKER, INC.

California: Amador County - 1,700sf SA w/RE;
Santa Barbara County - 2,500sf
leased, SA.

Colorado: El Paso County - 1,700sf SA w/RE;
Jefferson County - 5,000sf hospital,
kennel and residence.

Florida: Brevard County - 2,000 SA w/RE;
Brevard County - 1,800sf leased, SA;
Charlotte County - 1,300sf leased SA;
Hillsborough County - Add Vet services to
Kennel;

Indian River County – Feline.

1,765sf leased;

Martin County - 1,600sf leased, SA.

Michigan: Bay County - 2,500sf SA w/RE;
Western UP - Practice, home and
+/-40 acres.

Missouri: Butler County - 5,000sf SA w/RE.
St. Louis - Feline, 2,200sf SA leased.

Montana, Lewis & Clark County - Mixed,
3-exam rooms.

New Jersey, Middlesex County – High-Grossing SA.
Up-Scale area.

New York, Elmira: 3,500sf SA w/RE.

North Carolina, Northwestern: Equine.

6,350sf w/RE.

Ohio, Cuyahoga County: 2,700sf SA w/RE.

Oklahoma, Texas County: Turn-Key Start-Up.

Pennsylvania, Northwest: 2,100sf SA w/RE.

Texas, Northeastern: Mixed, multi-doctor w/RE.

800-636-4740

psbroker.com

info@psbroker.com

NATIONAL

**NEED HELP SELLING OR BUYING?
CONTACT ME!**



DR. JOSEPH ERTEL
D.V.M./C.B.I.

1468 SHOREWOOD DRIVE, LAKELAND, FLORIDA 33803
www.brokerdoc.com Cell: 863-698-1043 Office: 863-646-9044

National Practice For Sale Listings

Fl. Martin Co. 18 yrs. gr. \$372,000

Duval Co. 20 yrs. gr. \$217,000

Mich.(SW) Ionia Co. 32 yrs. OB. \$90,000

Get more product information online



Researching a purchase? dvm360.com
offers hundreds more product listings.
Just visit dvm360.com/products

GEORGIA

Unique opportunity to own a specialty feline
practice in picturesque, historic Georgia
community near major university. Quality lifestyle
in growing community and family environment.
Freestanding facility. Tenured staff and well
established business make this a truly special
opportunity. Real estate available. Highly
motivated seller. Call Mike Nelson, Nelson &
Associates, 770-475-7559.

West of Atlanta – Small animal practice grossing
\$1.2 million and growing quickly. Located in
rapidly developing community. Excellent staff and
great leasehold location. Call Mike Nelson, Nelson
& Associates, 770-475-7559.

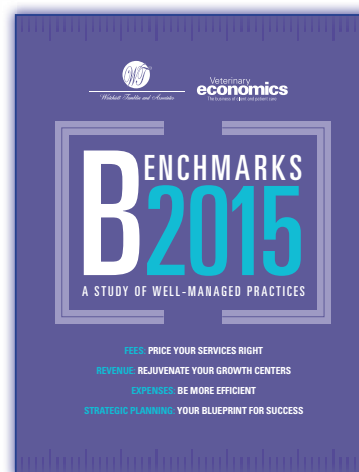
SOUTH CAROLINA

Greenville, SC -- Small animal practice grossing
\$1 million. Outstanding opportunity with amazing
cash flow in high trafficked location. Exceptionally
well-equipped, very well-established practice
with tenured staff. Real estate available. Highly
motivated seller. Call Mike Nelson, Nelson &
Associates, 770-475-7559.

DVM360.COM
FIND IT ALL HERE!



here's to **success.**



Numbers don't lie. And they're *all here*.

Veterinary Economics and Wutchiett Tumblin and Associates are back with another edition in our Benchmarks series for veterinary practice owners and managers. This year we reveal the **fees**, **revenue** and **cost control** key to running a well-managed practice!

Fees. Survey's in, with more than 200 median fees for services and procedures animal hospitals perform every day — plus data and analysis putting it all into context.

Revenues. Bringing in revenue can be like completing a puzzle. We lay all the pieces out for you. See what opportunities well-managed practices are tapping to make more money.

Expenses. From wages & compensation and facility costs, to fixed and variable items and capital improvement, up-to-date figures from practices are in one place.

Benchmarks 2015 is the one practice owners and managers can't wait to see. Order yours now!

Go to industrymatter.com/benchmarks
or call 1-800-598-6008



Who SHOULD I LISTEN TO?

→ A matrix.

Lovers!

Rational

Critics!

- These people give a hoot!
- They'll give you thoughtful negative feedback.

• Your BEST clients

• Experts

- Be open to what they say, but understand it's NOT personal.

• Consultants

• Your mechanic

KNOWS You

• MOM

Doesn't know you

- These people DO NOT want to see you succeed

• An ex

• Undermining coworkers

• Your WORST clients

- Ignore this group. Engaging will get you Nowhere—fast.

• The frenemy within

cut that ish out!

• Toddlers

• INTERNET TROLLS

• generally NUTTY pet owners

FRENEMIES!

Irrational

HATERS!



MORE INSIGHT

helps you make the most of your practice's cash flow.

KNOW YOU HAVE A DEDICATED BANKER WHO UNDERSTANDS YOUR INDUSTRY AND YOUR NEEDS.

As a healthcare professional, you want to spend more time helping patients and less time worrying about your finances. With dedicated Healthcare Business Bankers, PNC provides tools and guidance to help you get more from your practice. The PNC Advantage for Healthcare Professionals helps veterinarians handle a range of cash flow challenges including insurance payments, equipment purchases, and managing receivables and payables. In such a fast-moving business, PNC understands how important it is to have a trusted advisor with deep industry knowledge, dedication and a lasting commitment.

ENSURE ACCESS TO CREDIT | ACCELERATE RECEIVABLES | IMPROVE PAYMENT PRACTICES | MONITOR & PROJECT CASH | PURSUE FINANCIAL WELL-BEING

PNC|CFOSM
Cash Flow Optimized

*Call a Healthcare Business Banker
at 877-566-1355 or go
to pnc.com/hcprofessionals*



Cash Flow Optimized is a service mark of The PNC Financial Services Group, Inc. ("PNC"). Banking and lending products and services, bank deposit products, and treasury management services, including, but not limited to, services for healthcare providers and payers, are provided by PNC Bank, National Association, a wholly owned subsidiary of PNC and Member FDIC. Lending and leasing products and services, including card services and merchant services, as well as certain other banking products and services, may require credit approval. All loans and lines of credit are subject to credit approval and require automatic payment deduction from a PNC Bank business checking account. Origination and annual fees may apply. ©2015 The PNC Financial Services Group, Inc. All rights reserved. PNC Bank, National Association. **Member FDIC**



For every GI problem, there's a solution

i/d[®] Low Fat

Clinically tested to lower serum triglycerides, a risk factor for pancreatitis

i/d[®] Stress

FIRST and ONLY GI nutrition to help alleviate stress-related GI upset in dogs up to 30 lbs

i/d[®] Sensitive

Single nutritional solution to manage food sensitivities with GI upset

i/d[®]

Clinically proven to resolve diarrhea in as little as 3 days



Also available for cats

Nothing helps you work harder on tough GI cases than the power of **Prescription Diet[®] GI solutions**

For more information, talk to your Hill's Representative.

