

Golden Retriever Lifetime Study
Veterinarian Manual

Table of Contents

Welcome Letter	5
Golden Retriever Lifetime Study Description	6
Your Role as a Selected Veterinarian	7
- Annual Veterinary Visits	7
- Tips for Participating Veterinarians	8
- Tumor Sampling Instructions	9
- Additional Veterinary Visits	10
- Necropsy Instructions	10
Kit Tutorial	- 11
Resources	12



Welcome

Dear Veterinarian,

Welcome to Morris Animal Foundation's Golden Retriever Lifetime Study!

Morris Animal Foundation is a nonprofit organization that, in collaboration with scientists, veterinarians and dog owners, is working to advance veterinary medicine so dogs can live longer, healthier lives. The Golden Retriever Lifetime Study is a groundbreaking effort to identify genetic, nutritional and environmental risk factors for cancer and other health problems in dogs. It is the largest and longest observational study ever undertaken for dogs in the United States. We are pleased you are helping your client participate in this study. Veterinarians play a critical role in the success of the Golden Retriever Lifetime Study.

This manual is provided to guide you through your role in this study. The health information you provide for your client's dog is submitted online.

Please use the Study website as your first resource when you have questions: **morrisanimalfoundation.org.** From the homepage, click on the GRLS icon in the upper right corner, and scroll down to log in. Alternatively, if you have bookmarked the Study login page, your bookmark will still work.

If you need further assistance, please email the Golden Retriever Lifetime Study team at **grdogs@caninelifetimehealth.org** or call us toll-free at 855.4GR.DOGS (855.447.3647).

Thank you, and once again, welcome to the Golden Retriever Lifetime Study!

The Morris Animal Foundation Golden Retriever Lifetime Study Team

The Morris Animal Foundation Golden Retriever Lifetime Study Team

Study Team Contact Information

Golden Retriever Lifetime Study Team: Customer Service morrisanimalfoundation.org | grdogs@caninelifetimehealth.org | 855.4GR.DOGS (855.447.3647)

Morris Animal Foundation 720 S. Colorado Blvd, Suite 174A, Denver, CO 80246 | 800.243.2345 | morrisanimalfoundation.org

Morris Animal Foundation is a nonprofit organization. Tax ID: 84-6032307

Golden Retriever Lifetime Study Description

More than half of golden retrievers die of cancer, and cancer is a leading cause of death in all dogs older than 2 years of age. With the Golden Retriever Lifetime Study, Morris Animal Foundation's goal is to better define the incidence and risk factors for cancer and other major medical conditions in golden retrievers. By following the lives of 3,000+ golden retrievers, we will be able to create a brighter future for all dogs.

STUDY OBJECTIVES

The objectives of this study are to:

- Determine the occurrence of cancer in a cohort of 3,000+ golden retrievers in the contiguous United States
- Determine the incidence and prevalence of exposure to potential environmental, nutritional, behavioral • and genetic risk factors among golden retrievers
- Explore associations between potential risk factors and the development of specific cancers, including • hemangiosarcoma, lymphoma, mast cell tumors and osteosarcoma
- Determine the incidence and risk factors for other major health disorders in golden retrievers, such as hypothyroidism, heart disease and arthritis
- Collect, store and analyze blood, DNA and other biological samples to identify potential biomarkers for • the development of cancer and other diseases
- Collect and store tumor tissue samples to confirm diagnosis of cancer and to characterize cancer • pathogenesis at a molecular level
- Develop and evaluate strategies and guidelines for canine cancer screening and prevention •

Your Role as a Selected Veterinarian

By supporting your client in this project, you are making a commitment to participate in the Golden Retriever Lifetime Study. If at any time you are unable or unwilling to perform the tasks required for this study, your client will be asked to select another veterinarian to perform the dog's annual Study examinations and collect samples for the Study. If you are ever concerned about your ability to continue participation, we want to hear from you. Please contact the Study team at grdogs@caninelifetimehealth.org or 855.4GR.DOGS (855.447.3647).

ANNUAL VETERINARY VISITS

Each year that your patient is enrolled in the Golden Retriever Lifetime Study, your client will schedule a visit for a comprehensive health examination and sample collection. You can use each patient's online chart to view the exam due date (Anniversary Date) and questionnaire completion status.

Name: John Smith Email: admin⊜smithanimalhospital.com Edit General Information	Rufus (094-000000) 10Y, 11M Neutered Male Enrolment II:0 ANNE DOE 124 CHERYL WAY. DURVER, CO 80246, United States (789)123-4567				
Clinic:	> Lab Results				
Smith Animal Hospital Office Contact: Angela	> Annual Veterinarian Questionnaire				
Clinic Phone: (123)456-7891	> Malignancy Related Questionnaire				
Clinic Fax: (123)456-7893					
Office Address					
DENVER, CO 80218 United States					
Edit Office Information					
Resources					
Order a biopsy or necropsy kit Annual visit materials					
Biopsy kit instructions Necropsy visit materials more resources					

You will be required to perform a complete physical examination on your patient and collect samples (blood, urine, feces, hair and toenail clippings) at each annual veterinary visit. Additional time should be allotted for these visits to complete the examination, review any medical history provided by the owner, perform the required sample collection procedures, and enter your findings into the online veterinary questionnaire. A veterinary sample kit containing detailed instructions, sample collection supplies, and shipping supplies will be sent directly to your client before the scheduled visit each year. Your client will drop the kit off at your clinic a few days before the appointment or bring the kit to the appointment.

Annual laboratory test results (ClinChem25, CBC, T4, urinalysis, heartworm antigen, ova and parasite fecal analysis) will be reported to you from the diagnostic laboratory at no charge. Each dog's laboratory results will be automatically uploaded to your Study account two to three business days after the exam. It is your responsibility to review these results with your client. You can provide a copy of these results directly to your client by clicking the "share" button next to each laboratory report. If you require assistance locating, printing or sharing these results, please contact the Study team at grdogs@caninelifetimehealth.org.



Welcome John Smith (Veterinarian)

Name: John Smith Email: admin@smithanimalhospital.com Edit General Information	Rufus (094-00000) 10Y, 11M Neutered Male Enrollment ID:0 Anniversary Date: 2012-08-21 JANE DOE 124 CHERVL WAY, DENVER, CO 80246, United States (789)123-4567						
Clinic:	V Lab Results						
Smith Animal Hospital	Accession Number	Study Year	Received Date	Reported On Date	Actions		
Office Contact: Angela	MEEB2000000	8	2020-09-16	2020-09-16	view share		
Clinic Phone: (123)456-7891	> Annual Veterinarian Questionnaire						
Clinic Fax: (123)456-7893	> Malignancy Related Questionnaire						
Office Address 1234 MILKY WAY DENVER, CO 80218 United States							
Edit Office Information							
Resources Order a biopsy or necropsy kit Annual visit materials Biopsy kit instructions Necropsy visit materials more resources							

You also are required to log on to the Study website and enter history and physical examination findings for your Study patient. A hard copy of the Annual Veterinarian Questionnaire Guide is provided in the annual kit. Veterinarians are permitted and encouraged to complete the paperwork during the examination and delegate online data entry to clinic staff.

Your client is responsible for all costs associated with the annual examination, sample collection and laboratory tests. Your client will receive limited compensation of up to \$75 from Morris Animal Foundation to help offset costs of the annual physical examination and sample collection. What you charge your client for Study-related visits, including examination fees and laboratory test fees (phlebotomy, handling, interpretation, etc.), is at your discretion. Please review all financial responsibilities with your client and follow your clinic's normal billing protocols. These financial responsibilities also are outlined in your client's Study materials.

TIPS FOR PARTICIPATING VETERINARIANS

- As soon as possible after the annual Study examination and sample collection, please complete the veterinary questionnaire for your patient. (On the morrisanimal foundation.org homepage, click on the Golden Retriever Lifetime Study icon in the upper right corner, and scroll down to log in). Timely questionnaire completion helps our team stay up to date on Study operations.
- We've found that writing your login username and password in each Study patient's chart can make the • login process guicker.
- For the annual questionnaire, you'll need to report on all medications dispensed and vaccines given over the previous • 12 months. You'll also be reporting on any new health event. If your software system does not show problem lists, medications and vaccines separately, consider maintaining an annual list for each category within the patient chart for easy review. Remember that you'll need the vaccine manufacturer and lot number.
- The Annual Veterinarian Questionnaire Guide is included in each kit. Some of our Study veterinarians find it useful to have on hand during the Study visit.
- Don't forget that anyone can enter the annual exam data - a knowledgeable staff member can input any information online from the completed The Annual Veterinarian Questionnaire Guide or from your medical records.
- Many of our Study veterinarians find that adding extra time on the day of the annual visit for completing their . questionnaire is a good way of getting all their requirements done guickly.
- You can skip a page and go back to it later by using the navigation buttons at the top of the screen.

TUMOR SAMPLE COLLECTION

Tissue samples are essential for the Study. If you suspect that your patient has a malignant cancer, we ask that you (or a veterinary oncologist or other veterinary specialist) take a biopsy of the suspected tumor for examination by a veterinary pathologist. Initial evaluation with fine needle aspirate, clinical pathology, and/or diagnostic imaging is recommended whenever possible. Please use the **Biopsy Decision Tree** to help you decide if a biopsy should be submitted through the Study. If a biopsy does not meet the criteria to be submitted through the Study, please proceed with best clinical practices. However, if the result is malignant or unusual, notify the team so we may discuss additional sampling as appropriate.

The most up-to-date tumor sampling instructions are available at **Biopsy Kit: Collection and Shipping Instructions** or from the Study team at 855.4GR.DOGS. If a Biopsy Kit is needed, please request one using our **online form** or contact the Study team at 855.4GR.DOGS (855.447.3647). Please note that kits do not contain formalin. When using these kits, we request that you use formalin jars from your clinic. We can send a box of formalin containers to replenish your supply upon request. This may take up to three weeks.

A full set of clinical pathology samples, similar to the annual Study exam, are submitted at the time of biopsy. This includes blood, urine, feces, hair and nail samples and does NOT replace the dog's annual sample submission. Results of the clinical pathology tests and histopathology are provided to you at no charge from the diagnostic laboratory, and will be uploaded to the registered Study veterinarian's home page within 3–5 business days. It is your responsibility to review these findings with the owner.

If malignancy is confirmed via biopsy, please complete a Malignancy Related Questionnaire (MRQ) online to record physical examination findings and summarize the diagnosis. MRQ is not needed if biopsy results are benign.

The Golden Retriever Lifetime Study provides the owner with limited reimbursement (maximum of \$500 for the life of the doq) for the costs associated with histopathology (tumor sample collection and analysis). But, as always, what you charge your client for any Study-related visit is at your discretion.

Learn more about biopsy procedures at **Overview of Biopsy Procedures.**

ADDITIONAL VETERINARY VISITS

You must notify the Study team any time a dog is diagnosed with malignancy. We require notification of the four primary cancers being studied (hemangiosarcoma, lymphoma, mast cell tumor and osteosarcoma) as well as any other malignant cancer. Please contact the team at 855.4GR.DOGS or grdogs@caninelifetimehealth.org if you are submitting a suspected malignant biopsy using a Study Biopsy Kit, or if your patient is diagnosed with malignancy without using a Study Biopsy Kit.

If your patient is diagnosed with malignancy without using a Study Biopsy Kit, we request that any tissue blocks and/or slides of the malignancy be shipped to our partners at Colorado State University for review and entry into a tissue bank. Please contact the Study team to discuss transfer of the histopathology samples.

After malignancy is confirmed, log on to morrisanimalfoundation.org to complete a Malignancy Related Questionnaire (MRQ) form. You can access the MRQ questionnaire by clicking on the green button labeled "+Start a new Malignancy Related Questionnaire" under each patient on each patient's Study page. Please note that each diagnosis may be summarized in a single MRQ. Treatment and follow-up examinations will be documented on the subsequent Annual Veterinarian Questionnaire.

To summarize, an MRQ will be completed:

- after a biopsy submitted through the Study confirms malignancy, or
- after a biopsy or cytology submitted through your regular clinic protocol confirms malignancy .

NECROPSY

Everything that we learn from observing your patient throughout their lifetime is valuable. Important additional information can be gained at the time of a dog's death. We have instructed owners that a necropsy is optional, but we hope you will encourage them to participate in this important final step of the Golden Retriever Lifetime Study. Please discuss necropsy options with your client to help them make this difficult decision.

The necropsy can be performed by you or by a veterinary pathologist. If requested, a Necropsy Kit has been shipped to your client. It contains instructions, labels, clinical pathology supplies, labeled containers for fixed tissues and shipping supplies. The client is instructed to provide this kit to the veterinarian presiding at death or necropsy. If the participant's death is unexpected, please use supplies available at your clinic and complete the necropsy as best able. The most up-to-date necropsy instructions are available at Necropsy Kit: Collection and Shipping Instructions, or from the Study team at 855.4GR.DOGS (855.447.3647).

A Death and Necropsy Questionnaire is included in each necropsy kit. If a necropsy kit is not requested, a Death and Necropsy Questionnaire will be emailed to the address on file upon Study dog death. Additionally we request that complete medical records pertaining to your patient be sent to the Study team to complete your patient's Study profile. These can be emailed to grdogs@caninelifetimehealth.org or faxed to 303-713-3399.

Learn more below:

Overview of Necropsy Procedures - Veterinary Clinics

Overview of Necropsy Procedures - Universities and Diagnostic Laboratories

Study Kit Tutorial

1. ANNUAL STUDY KIT

The Annual Study Kit ships to the owner after the owner questionnaire is completed. Owner questionnaires are available on the online portal 30 days before each dog's Study anniversary.

2. ON-HAND BIOPSY KIT

Biopsy Kits can be requested to keep on-hand. This Biopsy Kit should be kept intact at the veterinary clinic or a safe place in the home, and be used to biopsy a suspected malignancy. Please note that a suspicion of malignancy is required to use a Study Biopsy Kit. Review the **Biopsy Decision Tree** to determine if Study involvement is appropriate.

*Please note that at the time of biopsy, blood/urine/feces/hair/nails are collected, similar to an annual Study examination.

3. ON-DEMAND BIOPSY KIT

Biopsy kits can be obtained when needed by online request under the Study Veterinarian Resources tab at morrisanimalfoundation.org or by contacting the team at 855.4GR.DOGS (855.447.3647). Veterinarians are encouraged to consult with the Study team about biopsy submission, but our goal is to make resources available even in an emergency.

*Please note that at the time of biopsy, blood/urine/feces/hair/nails are collected, similar to an annual Study examination.

4. ON-HAND NECROPSY KIT

On-hand Necropsy Kits were distributed to the owner of each participant that consented to a necropsy as of the June 28, 2017 deadline. These kits contain instructions, patient-specific labels, and shipping supplies in a zipped plastic folder (folders are green or orange; the color has no significance). The on-hand kit is offered is a pre-planning tool, so that at the time of death, information can be presented to the attending veterinarian with minimal effort by a grieving owner. These kits are now outdated, as they have materials for Antech Diagnostics, our previous partner laboratory. A replacement onhand kit can be sent and will arrive be in a box instead of a folder. On-hand necropsy kits can be obtained when needed by online request under the Study Veterinarian Resources tab at morrisanimal foundation.org or by contacting the study team at 855.4GR.DOGS (855.447.3647).

• Having an on-hand Necropsy Kit does not obligate an owner to go through with a necropsy.

• The Study provides simplified necropsy instructions for veterinarians in practice who lack the equipment found in university-based and state labs.

5. ON-DEMAND NECROPSY KIT

Complete Necropsy Kits can be obtained when needed by online request under the Study Veterinarian Resources tab at morrisanimalfoundation.org or by contacting the team at 855.4GR.DOGS (855.447.3647). Veterinarians are encouraged to consult with the Study team about this procedure as needed, but our goal is to make resources available even in an emergency.

Reminder – Tubes in each Study kit are specifically coded for the patient and type of sample collection (e.g. - annual visit, biopsy, diagnosis, etc), and should not be intermixed. Please call the team if you need additional supplies.

Thank you for your continued dedication to the Golden Retriever Lifetime Study!



Resources

FAQS

Questions? Visit our Frequently Asked Questions section to learn more.

ADDITIONAL READING

FOR VETERINARIANS

Connecting with Grieving Clients: Supportive Communication for 14 Common Situations Laurel Lagoni, MS, and Dana Durrance, MA AAHA Press, Lakewood, Colorado ISBN 978-1-58326-166-8

FOR OWNERS

Speaking for Spot: Be the Advocate Your Dog Needs to Live a Happy, Healthy, Longer Life by Nancy Kay, DVM ISBN 978-146351464

The Power of Positive Dog Training by Pat Miller ISBN 978-0470241844

How to Raise a Puppy You Can Live With by Clarice Rutherford and David H. Neil ISBN 978-1577790761

The Golden Retriever Puppy Handbook by R. Ann Johnson ISBN 978-0878501656

The Golden Retriever Handbook bu D. Caroline Coile PhD ISBN 978-0764141447

The Ultimate Golden Retriever: A Howell Dog book of Distinction by Valerie Foss ISBN 978-0764526381

Managing the Canine Cancer Patient: A Practical Guide to Compassionate Care by Greg Ogilvie, and Antony Moore Veterinary Learning Systems, Yardley, PA ISBN 978-1884254567

The Golden Retriever by Jeffrey G. Pepper ISBN 978-1-59378-686-1

Zoobiquity by Barbara Natterson-Horowitz, MD, and Kathryn Bowers ISBN 978-0-307-59348-1

Pets Living with Cancer: A pet owner's resource bu Robin Downing, DVM **AAHA** Press ISBN 1-58326-022-6

When Your Pet Dies: A Guide to Mourning, Remembering and Healing by Alan D. Wolfelt, PhD ISBN 978-1879651364

Making Decisions When Your Companion Animal is Sick by The Argus Institute Colorado State University

About Us

ABOUT MORRIS ANIMAL FOUNDATION

Morris Animal Foundation is a nonprofit organization that invests in science that advances veterinary medicine for companion animals, horses and wildlife. We are a global leader in animal health science, and our funding helps more species in more places than that of any other organization in the world.

OUR HISTORY

Dr. Mark L. Morris Sr. believed there was a need for a foundation that solely addressed the health and well-being of animals. He also knew science has the power to change the world. When he established Morris Animal Foundation in 1948, Dr. Morris envisioned a world in which scientific discoveries would lead to healthy lives for animals.

OUR IMPACT

Since our founding, Morris Animal Foundation has invested over \$136 million toward more than 2,780 studies, which have yielded life-saving vaccines, new treatments for critical diseases, superior screening tests and advanced diagnostic tools. Some of the breakthroughs funded through the Foundation have become gold standards in veterinary care.

- affecting dogs, cats and horses.
- have saved the lives of thousands of animals.
- diabetes, canine kidney disease and equine metabolic syndrome.
- Tools for studying genetic diseases: Foundation-funded researchers have developed tools for discovering canine diseases.

• Care and protection for endangered species: The Foundation established the Mountain Gorilla Veterinary Project in 1986 and was its sole funder for nearly 25 years. The project, now its own nonprofit organization, remains one of only a few conservation programs in the world to provide care and treatment to an endangered species in its natural habitat. Additional studies have led to state legislation that increased protections for endangered California sea otters.

• Improved cancer treatments and diagnostics: Morris Animal Foundation has supported more than 200 animal cancer studies. These studies have led to more effective chemotherapy treatments and improved diagnostic tools for cancers

· Vaccines for preventing disease: Morris Animal Foundation funded preliminary work that led to the development of numerous vaccines, including those for parvovirus in dogs, leukemia in cats and Potomac Horse Fever. These vaccines

• Dietary management of health issues: Foundation-funded investigators have improved dietary management of feline

genetic mutations and predispositions to feline diseases. Other studies have led to genetic tests for equine, feline and



LIFETIME STUDY

720 S. Colorado Blvd, Suite 174A, Denver, CO 80246 morrisanimalfoundation.org | grdogs@caninelifetimehealth.org 855.4GR.DOGS (855.447.3647)

FOUNDING PARTNER

The Mark & Bette Morris Family Foundation PLATINUM PARTNERS







GOLD SPONSORS

Golden Retriever Foundation Zoetis Hadley & Marion Stuart Foundation GOLDEN CHAMPIONS

Mars Veterinary