Twelve years ago a report of two beagle dogs with osteosarcoma and tumor regression after treatment with alendronate (Fosomax) was published in the veterinary literature. Because so many Irish Wolfhounds die of osteosarcoma, this treatment was investigated in Irish Wolfhounds with a study headed by Dr. Bill Dernell then at Colorado State University. 30 dogs were enrolled in the study and several others were treated off protocol. Unfortunately follow-up was very poor. Too few owners took their hounds for the formal follow-up visits and the study results could not be published without objective information. However, informal follow-up reports were provided by owners in order to receive the drug. There was some response with improved mobility and less pain in most of the dogs which unfortunately did not last longer than 1-3 months. There were 4 dogs with very good responses including regression of the tumor. Two of these dogs survived to die from other causes.

There has been prolific and conflicting data from studies with bisphosphonates used to treat malignancy and bone metastasis in human cancer. Intravenous bisphosphonates are widely used to prevent and treat bone metastases in kidney, breast, prostate, bone cancer with some success.

Dr. Tim Fan of the University of Illinois investigated the use of intravenous bisphosphonates combined with radiation therapy for canine osteosarcoma. There has been some success with this therapy and it is now widely utilized although expensive. Dr. Fan was concerned about the absorption of Fosomax which was not well documented in canines. There was also little information on toxicity including GI problems or ulcers of the esophagus which might be caused by taking the drug orally.

**Side Effects from Oral Fosomax in Irish Wolfhounds**

There are anecdotal reports of tolerance to oral fosomax on over 50 Irish Wolfhounds. Two dogs developed diarrhea and stopped the drug. There was no vomiting reported. There was no gastrointestinal bleeding or decreased appetite reported. In humans long term fosomax therapy at high doses can result in kidney dysfunction, GI upset, jaw necrosis after dental work and some reported cases of femur fractures. No reports of any of these problems are known in Irish Wolfhounds. These are rare but real. Because osteosarcoma is a rapidly progressive and fatal disease in our hounds, blood work has usually not been done on dogs taking Fosomax. In the dogs in the original study who did have labs done there were no abnormalities in renal function, liver function or electrolytes.

**Maybe the Dose was wrong?**

During the original IW study with Fosomax one of the study participants also had a Saluki who developed osteosarcoma. The Saluki (weight about 50 lbs) was treated with the oral Fosomax which was not well documented in canines. There was also little information on toxicity including GI problems or ulcers of the esophagus which might be caused by taking the drug orally.

**Progress by the Broad Institute**

“The ‘Identification of Genetic Risk Factors of Osteosarcoma in Irish Wolfhounds’ study at the Broad Institute, which is supported by the IWF, IWCA, and other generous donors, is making real progress. The researchers wanted at least 80 samples for this study (40 affected and 40 controls), and exceeded this goal by obtaining blood samples from 63 affected dogs and 79 control dogs, including samples collected in Europe. They are ready to run the samples and begin their analysis at the end of November 2012.

The researchers had already identified two regions of association in the genome that are linked to early onset osteosarcoma (before 6 years) through analysis of other IW blood samples. Genotyping the additional samples they’ve obtained for this study may provide a clearer view of which genes contribute significantly to the disease.

Finding the specific genetic disease mutations is an enormous task, even after the regions of association narrow the search area. The researchers will be hard at work on this task for the next few months.

Once this project is complete, the next phase (not yet funded) will include the development of a clinical test(s) for risk factors and genetic counseling. The IWF will soon be raising money for additional work on this phase and on determining the mechanism(s) at work so as to improve therapies.
same dose used for her wolfhound. The Saluki responded with tumor regression and lived 6 years afterwards. Treatment was stopped after a year without recurrence.

Many years passed. Fosomax is on the market in generic form and quite inexpensive. A DVM had a wolfhound with right radial osteosarcoma and called. We discussed trying a much higher dose than used previously in the study remembering the saluki. She tried a much higher dose with very good response including tumor regression and improvement in pain for the next 3 months. This increased dose was tried on three other dogs with the same improvement.

**Personal Story**

My beautiful bitch developed a limp after galloping on Sept 13th 2011. Radiographs showed an osteolytic lesion rt radius. She was unable to get in and out of the car, jump on the couch or trot without pain despite Rimadyl and tramadol(which she did poorly on). She was started on the new dose fosomax protocol and within 3 weeks was symptom free. She was off all meds except the fosomax for 7 months before the tumor gradually began to enlarge. Fosomax had been stopped the 3 weeks before the tumor began to grow. Response to restarting the fosomax has been poor with slow tumor growth and symptoms. But she has lived a year fully active with no problems. Despite taking massive doses(for a human) she had no side effects at all.

Please remember that this was a protocol of desperation. It offers some hope for improved symptoms for at least some time. There have been no harmful side effects although it has been used on only a small number of dogs. It can be used for dogs who do not like to leave home for treatment, when treatment with more aggressive means is not desired or available. It is inexpensive and offers more than just treatment for pain. Because of the way bisphosphonates work(osteoclast or bone destroyer cell inhibition) they may be more helpful if the x-ray shows an osteolytic picture-or some tumors will respond better than others depending on their make-up.

**High dose fosomax protocol**

140mg of fosomax(alendronate) every other day if hound is 140lbs or under.

If over 140lbs use 210mg every other day for three weeks.

If there has been no improvement at all benefit is unlikely and stop the drug.

If there has been improvement and it is continuing use this dose another three weeks. After 6 weeks decrease to every third day for three weeks and then to twice a week. If you notice tumor growth there have been no problems going back to the starting dose. Med is given in the a.m. with a treat. No other food for 1-2 hours to help absorption. Water anytime OK. Cost is about $100 a month depending on your pharmacy.

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**IWF Donations**

The IWF Gift Shop found at www.iwfoundation.org can accept donations or memorials through credit card and Paypal. Please specify if you have a health study preference for your donation. Memorials can be acknowledged with an IWF notecard, and you will receive a letter confirming your donation for tax deduction purposes.

If you prefer to make a donation by check, please make your check payable to The Irish Wolfhound Foundation and mail directly to:

IWF
150 Creek Road, Phillipsburg, NJ 08865

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**2012-2013 Calendar**

60% of the profits from the sale of this 15-month calendar (October 2012 through December 2013) go directly to The Irish Wolfhound Foundation, a 501(c) (3) organization which supports health, education and rescue for Irish Wolfhounds. It is full of beautiful pictures of Irish Wolfhounds taken by photographer Mary O’Malley. Many US and Canadian specialty show dates are noted on the calendar. The cost is $25.00 and ships in 3 to 5 business days.

Mary O’Malley is a photographer located in northern Virginia who specializes in nature and event photography. Mary is also an active volunteer at her local animal shelter and shares her life with Irish Wolfhounds, houserabbits, a cat and a Congo African Grey parrot.

There is a link on the home page of www.iwfoundation.org for ordering.
NEW GIFT TO SUPPORT STUDY OF OSTEOSARCOMA IN IRISH WOLFHOUNDS

reprinted with permission from the October 2012 issue of the newsletter of the Dog Disease Research Group at the Broad Institute

The DDRG is delighted that the Irish Wolfhound Foundation (IWF), together with the Irish Wolfhound Club of America (IWCA) and regional clubs devoted to the breed, have made a gift of $42,160 to the Broad Institute to support research on genetic risk factors for early onset osteosarcoma in Irish Wolfhounds. This one year project will be part of an ongoing effort at the Broad to identify the primary risk factors for this cancer in Irish Wolfhounds.

The project is the first step toward developing specific genetic markers that can be used for identification of wolfhounds likely to develop osteosarcoma. It will also aid in understanding the modes of transmission of risk factors and will provide insights that could help improve clinical treatment for this disease, which affects so many Irish Wolfhounds.

“We are delighted to be teaming with the IWCA and other regional clubs to fund this research under Dr Lindblad-Toh and her excellent team,” said Douglas Marx, President of the Irish Wolfhound Foundation. “The gift is a great example of what can be accomplished when so many clubs and supporters of the breed come together. We hope to continue working toward a better understanding of the susceptibilities for this devastating disease and means to reduce its incidence and impact.”
 Help Us Meet The Challenge!

The Irish Wolfhound Foundation, Inc.

Treasurer’s Report

Balances are as of 11/12/12

$135,311.86 - Regular Account
$91,062.82 - General/Unrestricted Endowment Fund
$18,092.16 - Rescue Endowment Fund

2nd Half of 2012 Activity:

Disbursements - 07/01/12 - 11/12/12 = $18,569.95
Receipts - 07/01/12 - 11/12/12 = $13,926.27

The purpose of the Foundation is to promote the appreciation, knowledge, and understanding of Irish Wolfhounds by raising and allocating funds for research, education, and rescue.

Dear Friends of the Irish Wolfhound,

As the President of the Irish Wolfhound Foundation I have the good fortune to share some great news on a fundraising opportunity that will benefit our breed. The Foundation has been approached by an anonymous breed fancier that has proposed a fundraising challenge. Starting immediately all donations designated by a donor for basic research with the goal of treating, minimizing, or eliminating Osteosarcoma in the Irish Wolfhound will be matched dollar for dollar by this anonymous member of the Irish Wolfhound Foundation, up to a total of $10,000.00.

The current grant to the Broad Institute researching this disease is just the beginning; this generous offer could result in a total of $20,000.00 of funding that could further help in the next phase of this study.

DNA samples from both Osteo-affected and healthy Wolfhounds are still needed. Please refer to the IWF web site under health studies for blood draw procedures and blank forms. http://www.iwfoundation.org

So, in the inspiring spirit that this challenge was given I will be the first. My wife Amy and I will be sending a $100 donation earmarked for Osteosarcoma research to the IWF. With that, I hope to encourage all to donate an amount that you feel comfortable with. No amount is too small. Remember your donation will be matched dollar for dollar, and is tax deductible. Donations can be sent to the IWF Treasurer, David Milne, 150 Creek Road, Phillipsburg, NJ 08865.

Please do not hesitate to contact me with questions at aeriedogs@aol.com

Sincerely,

Doug Marx – President, Irish Wolfhound Foundation

Presidents Message

Winter 2012

Seems like I was just penning my presidents message for the spring issue and here we are approaching the end of another year. As I always do, I would like to thank each and everyone that volunteers their time in any capacity to help our breed. Someone is behind the inner workings of all the events we attend; thank them when you see them!

It has been a busy year for the Foundation: testing, new studies starting, and redefining our role in Rescue, just to name a few. For the latter, we have brought Jean Minnier in as our resident expert on all things rescue. I would like to remind everyone that Rescue Grants are available for those hounds that are in need. Please visit the Foundation’s web site under Rescue for a grant application and Jean’s contact information. As one of my mentors used to say “if you don’t ask, you don’t get”.

All of the work that the Foundation does throughout the year, be it low cost testing, Rescue funding, and health grants, such as the Osteo study with the Broad Institute, depends greatly on the generosity of our supporters. We are all aware of the demand for charitable donations these days, so please know that the IWF greatly appreciates your financial support, we cannot function without it!

I wish everyone a Merry Christmas, Happy Holidays, and a wonderful New Year.

Regards,

Doug Marx – IWF President
The Irish Wolfhound Club of Canada invited the IW Foundation to do testing and offered to cover the expenses for Dr. Tyrrell as well. They even offered a veterinarian to draw blood for the DNA collection. So Mariellen drove to Ohio and we set out early hoping to make Canada in time to participate in the LGRA event. Without going into details on the adventures along the way we did make it to London and back, did get to the LGRA and got set up in the spacious quarters provided for testing in time to meet Bill for dinner.

The next day was beautiful, the show grounds spectacular and the Canadian owners filled our day with work and then gave us a great meal afterwards. We had splendid help from Audrey St. Clair (who organized my paperwork and kept the dogs coming), Nikko Morito, who helped with holding dogs, and Dr. Allyson MacDonald, who did blood draws and, especially, Sid Wood and Donita Osborne who approached us with the idea and made the arrangements with the IWCC.

The less said about the return trip, the better. Let us just say that the US Border Patrol does not employ anyone with the ability to smile.

The heart research group returned to the IWADV show. The new site was not quite as spacious as the hotel room we have used in the past, but much closer to the show ring and, when combined with the nearby shelter for paperwork and waiting, worked very well. The IWADV did not do as well with the weather as the IWCC but it could have been much worse and the convenience of being near the show ring made it much easier to fill the schedule. Special thanks to everyone who put up with my less than stellar paperwork, especially my excellent helper, Audrey St. Clair, and to Mariellen and to Dave Milne and Doug Marx who really listened when I said “no more tents”.

This research project has already resulted in one poster presentation. The team that has been doing cardiac research will be meeting in December to review this project, the VPC project and the findings from the Lifetime Cardiac Study with Dr. Greene at Purdue. The resultant data should include recommendations for cardiac testing of Irish Wolfhounds, both for breeding and for health.

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The Irish Wolfhound Foundation gratefully acknowledges contributions from the following supporters:

Frances Abrams
IMO Sidhe’s Whitney of Tailstorm
Beverly Alba
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Celebration of Monique Seguin & David Swift-marriage June 2012
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Carole Silverthorne
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Dane & Audrey St Clair
Edward Storm
Donna Sula
Jennifer Sula
Tatsuki Yumiko
Daisan Taylor-Glass
Karen Titterington
Martha Ann Traylor
Robert Tregillis
Kathy Twomey
Darlene & Patrick Walker
Joseph Wheeler
Jonna Whetsel
David Williamson
AB Worthmann
Rosemary Wortman
Audrey Wright

Reduced-cost Echocardiograms and EKGs

The IWF is sponsoring reduced-cost echocardiograms and EKGs at the 2013 National Specialty. We will be doing the echo/EKG for dogs over 2 years of age. Owners will pay only $125.00 per hound, with the balance of the cost paid by the IWF. All data collected will be helpful for the ongoing heart studies. Veterans over 8 years will be done free. EKGs will be done on dogs of any age for $25.00. Additional donations to the Foundation are much appreciated and wisely used to fund our mission of Health, Education, and Rescue. Preregistration is required. Further details will become available on the IWF website www.iwfoundation.org Why not take advantage of this great opportunity?
You Can Count on US ---- Can We Count on You?
With your donations the IWF is taking steps to insure your hounds will have a healthier future.

Please use my contribution for the following:

___Research     ___Education     ___Rescue     ___Wherever it’s needed most

Name:___________________________________________________________
Address:__________________________________________________________
City/State/zip:_____________________________________________________ 
Country:__________________________________________________________
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