



Dear Doctor,

Many Vet-Stem Credentialed Veterinarians have been contacted by local and national media. As Vet-Stem's technology continues to launch across the nation we would like to keep information as consistent and factual as possible. We created these resources to help you prepare for media inquiries.

When the media contacts you, please email or call me (Michael Dale, mdale@vet-stem.com, 858-748-2004) ASAP so that I can answer your questions and also help prepare the reporter prior to your interview. Our professional Public Relations Team, Bailey Gardiner, is more than happy to coordinate your interview with the reporter, and help prepare you for the interview.

Please use the sample Q&A's as a preparation piece for your interview. Take special note that some questions, such as those pertaining to costs and recovery, are better answered without quoting exact numbers because they vary with each case and clinic. Please refrain from quoting specifics.

We understand that media may ask you questions regarding the history and development of Vet-Stem's stem cell therapy. We have included in this packet a media kit that you can review. This should cover all the information and facts that a reporter may need.

We do not expect you to be an expert in these areas and want you to feel comfortable letting the interviewer know this. If you are asked a question regarding Vet-Stem that you aren't comfortable answering, please tell the reporter: "Vet-Stem can more accurately answer that question for you. I will put you in touch with their PR contact." In the best case scenario, my team will have already been in touch.

If the media contacts you and you are not comfortable doing an interview, please forward the reporter's information to me, and my team will assist the reporter in finding what s/he needs.

Thank you for being an advocate of Vet-Stem's stem cell therapy for animals. Should you have any additional questions, please feel free to contact me.

Thank you,

Michael Dale
COO, V.P. Sales and Marketing

Stem Cells 101

What is a stem cell?

A stem cell is a cell that can renew itself and can differentiate or make other cell types. Below is the formal definition...

From Gimble et al, 2007:

By definition, a stem cell is characterized by its ability to self-renew and its ability to differentiate along multiple lineage pathways (cartilage, bone, tendon, etc.). Ideally, a stem cell for regenerative medicinal applications should meet the following criteria:

1. Can be found in abundant quantities (millions to billions of cells)
2. Can be harvested by a minimally invasive procedure
3. Can be differentiated along multiple cell lineage pathways in a regulatable and reproducible manner
4. Can be safely and effectively transplanted to an autologous host
5. Can be provided in accordance with current Good Manufacturing Practice guidelines

When did research into veterinary stem cell therapy begin?

Some of the initial work in mesenchymal stem cell therapy research goes back to the early 1990s (by Arnold Caplan). Research dogs were used as animal models. Vet-Stem started working with equine veterinarians in 2003. In 2005, Vet-Stem trained veterinarians started treating dogs as part of a clinical development program. In May of 2007, the first group of boarded orthopedic veterinary surgeons were trained in the science and techniques. In January of 2008, Vet-Stem launched the Introductory & Orthopedic Training Program for small animal veterinarians.

Please tell me about the history and development of this treatment.

Vet-Stem can most accurately answer this question for you. They'd be happy to speak with you if you would like to arrange an interview.

Do canine stem cells work the same as human stem cells?

Although there are no direct comparisons, dogs are frequently used in studies to test safety and efficacy of stem cells for potential use in people.

Isn't stem cell therapy controversial?

Because the stem cells we use are from the animal's own fat and are "adult" stem cells, not embryonic stem cells, there are really no controversial barriers to using this type of therapy in animals.

What is the main difference between adult and embryonic stem cells?

Adult stem cells are found in the body's tissues such as fat, bone marrow, muscle, etc, and are the cells used in the body's natural healing process. Embryonic stem cells are intended to form a whole organ or organism.

The Treatment

Are stem cells used to prevent disease or to treat it?

Currently they are used to treat disease or an injury.

What are the most common problems currently being treated?

Osteoarthritis (OA) and tendon and ligament injuries. However, other applications are being investigated such as inflammatory bowel disease, atopy, renal disease and immune-mediated diseases.

Can stem cell therapy help an animal with cancer?

Currently, animals with cancer are not being treated with Vet-Stem Regenerative Stem Cell Therapy. There is some human literature suggesting that stem cells modified genetically to kill cancer cells have some efficacy.

Are there any chances the animals will be harmed?

Since the animal's own fat is the source of the stem cells, there is little chance of rejection. Vet-Stem has provided stem cell therapy for treatment of over 3,600 horses and 2,600 dogs since 2003. As of April 2010 Vet-Stem has had no systemic effects reported in the dog and joint discomfort in 0.5% of the cases. In horses, no systemic effects have been reported and injection site inflammation in 1.0% of the cases. Stem cells are a new and exciting field; the client's veterinarian will need to determine the risk benefit ratio for the particular pet since the process does involve a surgical procedure to collect fat.

Is stem cell therapy painful for animals?

There is an initial collection of fat from the animal, that is a simple surgical procedure, but the patient must be healthy enough to undergo anesthesia for the procedure. Wound healing and pain control are important considerations as well. When the cells are injected into joint(s) under anesthesia or light sedation, there may be minor temporary discomfort due to the manipulation of the joint(s). Your veterinarian will determine if pain medicine is indicated.

How long is the recovery from a stem cell treatment?

Each animal's recovery is dependent upon the severity of its case and how long the animal needs to be in a rehabilitation program. Most patients will show clinical signs of improvement in the first few weeks with physical therapy and time off. Results may vary if the recommended rehabilitation program is not followed.

How much does a stem cell treatment cost?

The cost for this therapy varies according to the patient's injuries and the clinic visited. The best option is for an owner to inquire with their local vet regarding their animal's specific ailment, and what other therapies their animal may need in conjunction with stem cells.



How long does the treatment last?

Owner surveys show that many animals treated with stem cells have had long-term success (over one year, some over two years) with one injection, while other patients have required a second injection to continue the healing process in a severe injury site. The longevity of the results varies from case to case. Approximately 75% of young dogs and 65% of older dogs do not need re-treatment in the first year after initial treatment.

Can I do a “Before & After” story following one of your clients?

I'd be happy to introduce you to cases that have completed rehabilitation after the treatment, with owners that are comfortable sharing their experience with the media. Because each animal and each case is different, we prefer to ensure that the patient goes through a complete rehabilitation program appropriate to their situation without time pressures.

Are there any examples of dogs being helped with stem cell therapy that otherwise had no chance of survival?

Many dogs with such severe OA that the owners were considering euthanasia have been helped by Vet-Stem Regenerative Cell Therapy. Testimonials supplied upon request.

The Future

Is this technology being used with other animals?

Currently the process is only authorized to treat osteoarthritis, polyarthritis, tendon injuries and ligament injuries in horses, dogs and cats.

When will this treatment be available for humans?

This treatment is only approved for use in animals within the United States. Although Vet-Stem does collaborate with human-side development companies, you would have to inquire directly with them on any advancements in the human field. You can also go to www.clinicaltrials.gov to see what human studies are being done.

What is the next step for stem cells?

Vet-Stem is in the process of studying stem cell therapy use in internal medicine conditions in dogs such as inflammatory bowel disease, atopy, renal disease and autoimmune disorders. It is uncertain if and when these applications will be available. Vet-Stem will contact their credentialed veterinarians when a new indication is launched.



Vet-Stem Backgrounder

San Diego-based Vet-Stem, Inc. formed in 2002 to become the nation's sole licensed company in fat-derived stem and regenerative cell medicine for veterinary use. Vet-Stem isolates stem and regenerative cells for the treatment of horses, dogs and cats suffering from a variety of tendon, ligament and joint injuries.

Vet-Stem has perfected a procedure that isolates stem and regenerative cells from the animal's own fat for therapeutic injection into the injured tissue. Cells are returned to the authorized veterinarian for initial treatment within 48 hours of collection and most times additional cells are stored for future needs.

Since its creation, Vet-Stem has worked with over 1,200 veterinarians who have treated more than 3,600 horses and 2,600 dogs with Vet-Stem cell therapy. In the case of horses, the procedure has seen a return to prior level of performance rate of 77 percent, 76 percent, and 57 percent respectively tendon, ligament, and joint injuries. In a blinded, controlled study of osteoarthritis in dogs, 80% of the dogs showed improvement.

In 2005, Vet-Stem began working with select clinics in treating dogs with osteoarthritis and orthopedic soft tissue injuries. Vet-Stem launched the small animal veterinary stem cell credentialing program in early 2008.

Vet-Stem is a privately held company with a portfolio of intellectual property centered around Regenerative Veterinary Medicine®. The founders of Vet-Stem have more than 15 years of experience in development and testing of human and veterinary pharmaceuticals as well as production and processing of sterile biological samples.

Robert J. Harman, DVM, MPVM CEO, founder of Vet-Stem, Inc.

Dr. Harman has more than 15 years experience as a chief executive officer and biotechnology entrepreneur in three novel businesses, all successful enterprises. Dr. Harman is a veterinarian and statistician and has overseen the completion of more than 1,000 contract research projects for the development of veterinary and human biotechnology products. He has led the following companies: HTI Bio-Services, a contract research company, HTI Bio-Products, a biological reagent and antibody production company, and now Vet-Stem, Inc., the leader in Regenerative Veterinary Medicine®.

In 2002, he and business partner, Mike Dale, incorporated Vet-Stem, Inc. Dr. Harman combined his passion for the quickly evolving world of stem cell therapy with his experience in clinical development to bring stem cells to veterinarians and their animal patients.

Dr Harman is a frequent lecturer at regional, national and international stem cell conferences as well as veterinary conferences and clinics. He serves as a resource to both the human and animal medical community in the field.

Michael Dale COO, V.P. Sales and Marketing, founder of Vet-Stem, Inc.

Mr. Dale has extensive business and managerial experience with multiple start-up biotech companies, and was co-founder of HTI Bio-Products, a biological reagent and antibody company. His expertise covers start-up and scale-up of operations, sales and marketing, data systems, and production. Mr. Dale and Dr. Harman have been partners for more than 15 years in biotechnology and veterinary service businesses.



Timeline/History

2010

January

The North American Veterinary Conference (NAVC), the American Animal Hospital Association (AAHA), the Western Veterinary Conference and the Atlantic Coast Veterinary Conference (ACVC) invite Vet-Stem to provide on-site regenerative stem cell therapy training for veterinary conference attendees in 2010.

Networking with our credentialed veterinarians and pet owners, Vet-Stem begins a fan page on Facebook.

February

Fox News features Behr, a young German Shepherd plagued by arthritis pain from hip dysplasia who was successfully treated with Vet-Stem Regenerative Cell Therapy.

Over 1,400 owners bank on the future by storing therapeutic doses for their pet.

March

BBC Radio: Dr. Bob Harman is interviewed about the benefits of stem cells.

The first annual North American Veterinary Regenerative Medicine Conference in Buellton, California is held, including presentations from over 40 participants from universities, private practice and the veterinary industry. Dr. Harman presents data from over 3,500 cases of patients suffering from orthopedic injuries and arthritic pain as well as their return to a better quality of life.

Three major Pet Insurance Companies approve the benefits of Vet-Stem Regenerative Stem Cell Therapy as a treatment option for their clients: Pet-Plan®, VPI® Pet Insurance, and PurinaCare® Pet Health Insurance.

April

FoxTV features the Vet-Stem Regenerative Cell Therapy story of Lucky, a Chocolate Labrador Retriever.

May

Vet-Stem reaches over 1,200 fans on Facebook and can now be followed on Twitter.

June

Vet-Stem signs an exclusive license with Chemaphor, a Prince Edward Island based animal therapeutics company, allowing veterinarians throughout Canada to provide fat-derived stem cell therapy to horses, dogs and cats.

Milestone: Over 3,600 horses and 2,500 dogs treated with Vet-Stem Regenerative Cell Therapy

August

Ohio State University invites Vet-Stem to speak provide on-site regenerative stem cell credentialing course as part of their veterinary continuing education program.



2009

January

Nightline features Vet-Stem services for dogs suffering from arthritis pain due to hip dysplasia. Hunter, a Golden Retriever faced with a potential hip replacement, demonstrates the benefits of stem cells in reducing pain.

May

Vet-Stem employees raise over \$2,000 for the ASPCA in a local Southern California walk-a-thon.

July

Vet-Stem offers Culture, a service expanding the supply of stem cells for the animal's lifetime.

Results from a voluntary survey of dog owners indicate that at 90 and 246 days after Vet-Stem treatment, more than 62% of dogs with osteoarthritis discontinued or decreased the use of non-steroidal anti-inflammatory (NSAID) drugs after stem cell therapy.

August

Owner evaluations report that for orthopedic conditions greater than 80% of their dogs treated with fat-derived stem cells showed an improvement in quality of life and 85% of dog owners would recommend Vet-Stem Regenerative Cell Therapy to others.

U.S. Navy, Office of Naval Research, awards a contract to Vet-Stem to engage in a collaborative study of stem cell biology in marine mammals.

October

Vet-Stem launches a blog on arthritisindogsblog.com as a portal to answer frequently asked questions about arthritis and other dog health issues.

November

Dr. Bob Harman, Vet-Stem CEO, speaks at the first annual Cell Therapy Summit Meeting (Human) as a Point of Care stem cell therapy expert.

December

Milestone: Over 2,000 dogs and 3,300 horses have been treated with Vet-Stem Regenerative Cell Therapy.

2008

January

Vet-Stem's Small Animal Online Training Program launches on the East Coast at the North American Veterinary Conference in Orlando, Florida.

February

USA Today features Maggie, a German Shepherd, offering hope through Vet-Stem Regenerative Cell Therapy for pets dogged with pain.



Vet-Stem is invited to instruct a Small Animal Credentialing Course at The Western Veterinary Conference in Las Vegas.

July

TIME Magazine features Blue, a German Shepherd, in an article on stem cell therapy for pets after being treated with Vet-Stem Regenerative Cell Therapy.

Cornell researchers publish a study on the effects of adipose-derived stem cells on tendon repair in horses. Histological evaluation revealed a significant improvement in tendon fiber architecture; reduction in vascularity, inflammatory cell infiltrate, and collagen type III formation; and improvements in tendon fiber density and alignment in tendons treated with Vet-Stem Regenerative Cell Therapy.

September

Veterinary Therapeutics publishes a peer reviewed study on the use of stem cells for treatment of chronic osteoarthritis in the elbow of dogs. This clinical trial reports a significant improvement in lameness, range of motion, and functional ability in dogs treated with Vet-Stem Regenerative Cell Therapy.

October

Milestone: 3,000 horses have been treated with Vet-Stem Regenerative Cell Therapy, and 9 months after launching Small Animal applications over 1,000 dogs have been treated for orthopedic conditions.

2007

May

Vet-Stem secures exclusive worldwide rights to the Emcyte Genesis blood platelet concentrating system (Platelet Rich Plasma, PRP) for providing growth factor therapy in animals.

Vet-Stem conducts the first formal Small Animal Credentialing Course for California Board Certified Surgeons at a workshop in San Diego, California.

August

Milestone: 2,000 horses have been treated with Vet-Stem Regenerative Cell Therapy.

September

Vet-Stem signs an exclusive license to the Central Veterinary Research Labs (CVRL) of Dubai, United Arab Emirates. This gives CVRL the rights to provide fat-derived stem and regenerative cells to veterinarians throughout the Middle East region.

Newsweek features Nakota, a Siberian Husky, on the road to recovery after Vet-Stem Regenerative Cell Therapy.

November

The first randomized double-blinded placebo controlled multi-centered study is published showing that intra-articular injection of fat derived stem cells into the hip joint of the dog decreases patient discomfort and increases patient functional ability.



2006

April

Milestone: Vet-Stem is the first company to provide regenerative stem cell services for 1,000 animals.

The first cat is treated with Vet-Stem Regenerative Cell Therapy.

September

Vet-Stem secures additional exclusive worldwide veterinary rights from the University of California for fat-derived stem cells.

November

Vet-Stem hosts the grand opening of new laboratories in Poway, California with expansion to over three times its prior laboratory space.

2005

September

Milestone: 500 horses have been treated with Vet-Stem Regenerative Cell Therapy.

2004

January

Vet-Stem introduces the first veterinary stem cell service in the United States.

The first horse is treated with Vet-Stem Regenerative Cell Therapy.

October

Vet-Stem secures exclusive worldwide veterinary rights for equine umbilical cord stem cell technology from Kansas State University.

November

Vet-Stem signs an agreement with Cognate Therapeutics, a leader in human stem cell technology, for the further development of stem cell therapy for use in veterinary medicine.

The first dog is treated with Vet-Stem Regenerative Cell Therapy.

2003

October

Vet-Stem signs a worldwide exclusive license to fat-derived stem cell technology for veterinary applications.

2002

October

Vet-Stem founded.



FOR IMMEDIATE RELEASE

CONTACT: Jamie Ortiz or Lauren Clapperton
Bailey Gardiner, 619-295-8232

New Fat Stem Cell Therapy Helps Dogs Find Relief Regenerative cell therapy available nationwide in 2008!

SAN DIEGO, Calif. – March 18, 2008 – Building on equine veterinarian’s fat stem cell therapeutic successes in horses, Vet-Stem has expanded the availability of Vet-Stem Regenerative Cell (VSRC) therapy to small animal veterinarians for the treatment of arthritis and tendon and ligament injuries in dogs. For the first time, these veterinarians can use stem cells to treat dogs and cats for the above injuries.

Vet-Stem is also studying the use of VSRC therapy for other diseases in dogs and horses.

San Diego-based Vet-Stem, the nation’s only company offering veterinarians fat-derived stem cell therapy, has developed a procedure that isolates stem and regenerative cells from the animal’s own fat for therapeutic injection into injured tissue. The cells are isolated and returned to the authorized veterinarian for treatment of the injured animal within 48 hours.

“This is a breakthrough. The cells aren’t foreign to the body, engineered or modified in any way,” says Dr. Robert Harman, founder of Vet-Stem. “Fat stem cell therapy avoids the ethical concerns surrounding embryonic stem cell research because our process uses the animal’s own fat to isolate adult stem cells.”

After having clients successfully treat more than 2,600 tendon, ligament joint injuries in horses, Vet-Stem has nationally unveiled its online veterinary training course to small animal veterinarians. Once a veterinarian completes the VSRC therapy credentialing course, they will have the education to use VSRCs to treat arthritis, fractures and tendon and ligament injuries in dogs and cats.

“We’ve seen stem cell therapy help dogs whose pain was previously so severe that they struggled to stand, jump into cars, chase balls or run up and down stairs,” said Dr. Harman. “Stem cell therapy stimulates healthy cells to grow within the injured area, spurring regeneration.”

Vet-Stem is very pleased to announce that their first blinded, controlled multi-center osteoarthritis study was recently published in *Veterinary Therapeutics*. Clinical trials studying the use of VSRCs for arthritis in dog elbows and knees are concluding with successful results to be published later this year. Vet-Stem is currently conducting studies for the use of VSRC therapy for internal medicine conditions as well.

12860 Danielson Court, Suite B • Poway, California 92064

TEL: 858.748.2004 • FAX: 858.748.2005 • TOLL FREE: 1.88.VETSTEM1 • WEB: www.Vet-Stem.com



In the case of Vet-Stem's work with horses, the therapy has shown a return to prior level of performance rate of 77 percent, 76 percent and 57 percent respectively in tendon, ligament, and joint injuries. Many horses, such as 2006 U.S. Open polo champion Rio, have overcome potentially career-ending injuries to return to competition at their prior level of performance.

With the help of an informative new online credentialing course, any small animal veterinarian in the U.S. has the opportunity to offer stem cell therapy to their clients.

###

About Vet-Stem, Inc.

Vet-Stem, Inc. was formed in 2002 to bring regenerative medicine to the veterinary profession. In January of 2004, Vet-Stem introduced the first veterinary stem cell service in the United States. The privately held company is working to develop therapies in veterinary medicine that apply regenerative technologies while utilizing the natural healing properties inherent in all animals.

For more information log on to www.vet-stem.com or call 888-387-8361. Interested media should contact Jamie Ortiz, Bailey Gardiner, at 619-295-8232 x106.