



Helping pets live longer, healthier, and happier lives.

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Safe Harbor Statement

- Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995. In accordance with the safe harbor provisions of the Private Securities Litigation reform Act of 1995, the Company notes that statements in this presentation, and elsewhere, that look forward in time, which include everything other than historical information, involve risks and uncertainties that may affect the Company's actual results of operations.
- The following important factors could cause actual results to differ materially from those set forth in the forward-looking statements: project financing; new scientific findings; our products may not be accepted by the market; and we may have difficulty in hiring and retaining key personnel.

Executive Summary

- **Mission:** Help pets live longer, healthier, and happier lives.
Pets are precious members of the family that need affordable, effective healthcare.
- **Lead Product:** Elenavet™ has successfully treated 10 out of 11 dogs with mammary tumors.
Proof of concept in dogs.
- **Intellectual Property:** patents in 20+ countries.
- **Regulatory:** 24 months to USDA conditional licensure and introduction to the market.
- **Initial Application:** mammary tumor.
- **Future Applications:** osteoarthritis, IBD, metabolic syndrome, dermatitis, anti-aging.
- **Market:** cancer is the leading cause of death in pets; pet care is a growing market with CAGR 6.6%; worldwide pet spend will be \$359B by 2025; beginning with US & Europe.
- **Investment:** break even in 3rd year; profitability in 4th; total capital required is \$15MM.
- **Affordable for Pet Owners:** 1 round of Elenavet™ will cost \$2K with COGS <20% in wholesale by the company; for comparison, 1 round of chemotherapy costs \$3-5K.

Market Opportunity

Overall Pet Market

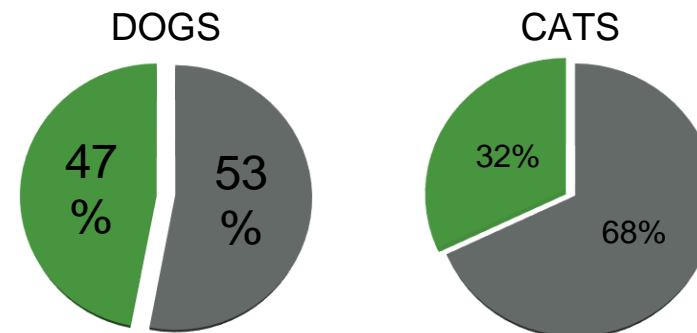
- For 2023, it is estimated that \$145B was spent on our pets in the U.S.
- Vet care & product sales comprise \$30.2B of above for U.S.
- Size of European pet insurance market valued at \$1.4B in 2023, growing 12.5% CAGR to be \$1.75 billion by 2025

Cancer Market Opportunity

- According to the Veterinary Cancer Society, cancer was the leading cause of death in 47% of dogs, especially those over the age of 10, and 32% of cats.*
- According Global Market Insights, the Cat and Dog Cancer Global Market will see double-digit market growth

- The non-profit organization FETCH a Cure states that an estimated 6 million dogs in the USA were diagnosed with cancer in 2019. This indicates a rising need for cancer treatment in dogs, which is likely to boost the demand for cancer therapeutics.
- In addition, growing pet health awareness and a rise in the R&D initiatives regarding pet cancer management are expected to propel the market growth over the forecast period.

*Dogs get cancer at a slightly higher rate than humans



Financial Projections – Canine Mammary Tumor (only)

COST ESTIMATES

- Estimated COGS per course of therapy \$400 in Year 3; \$270 in Year 7
- Projected CureLab wholesale price: \$2,000; veterinarian retail price: \$3,000
- EBITDA per course of therapy \$870 in Year 3; \$1,163 in Year 7

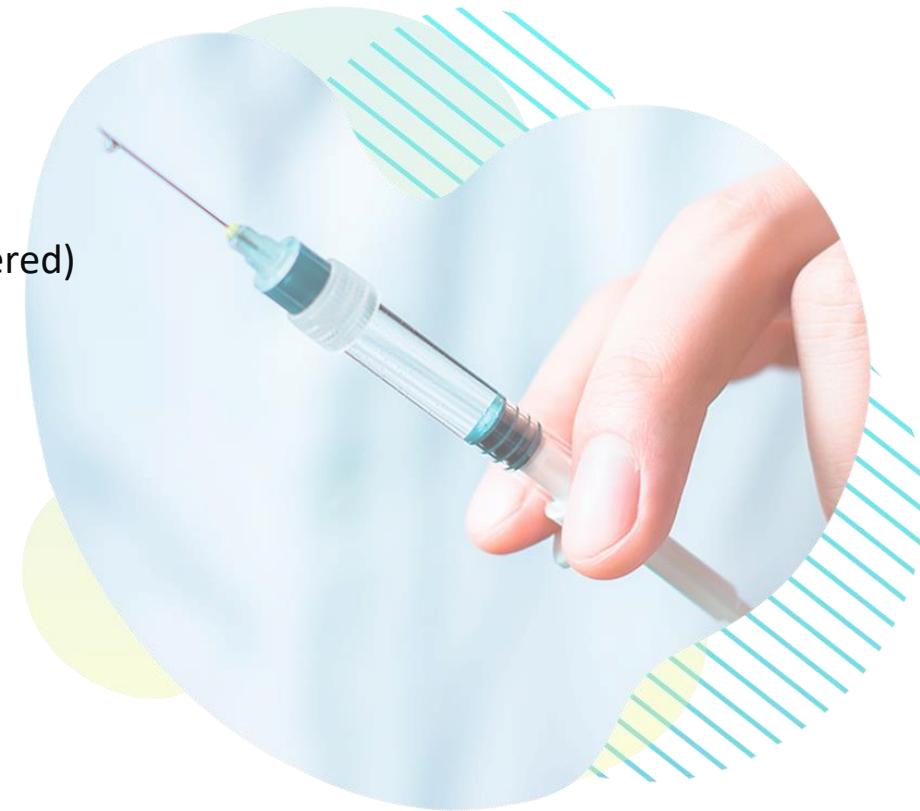
OPPORTUNITY

- 500,000+ new mammary tumor cases per year in the USA
- 5,000,000+ new mammary tumor cases per year in the EU (dogs are not neutered)

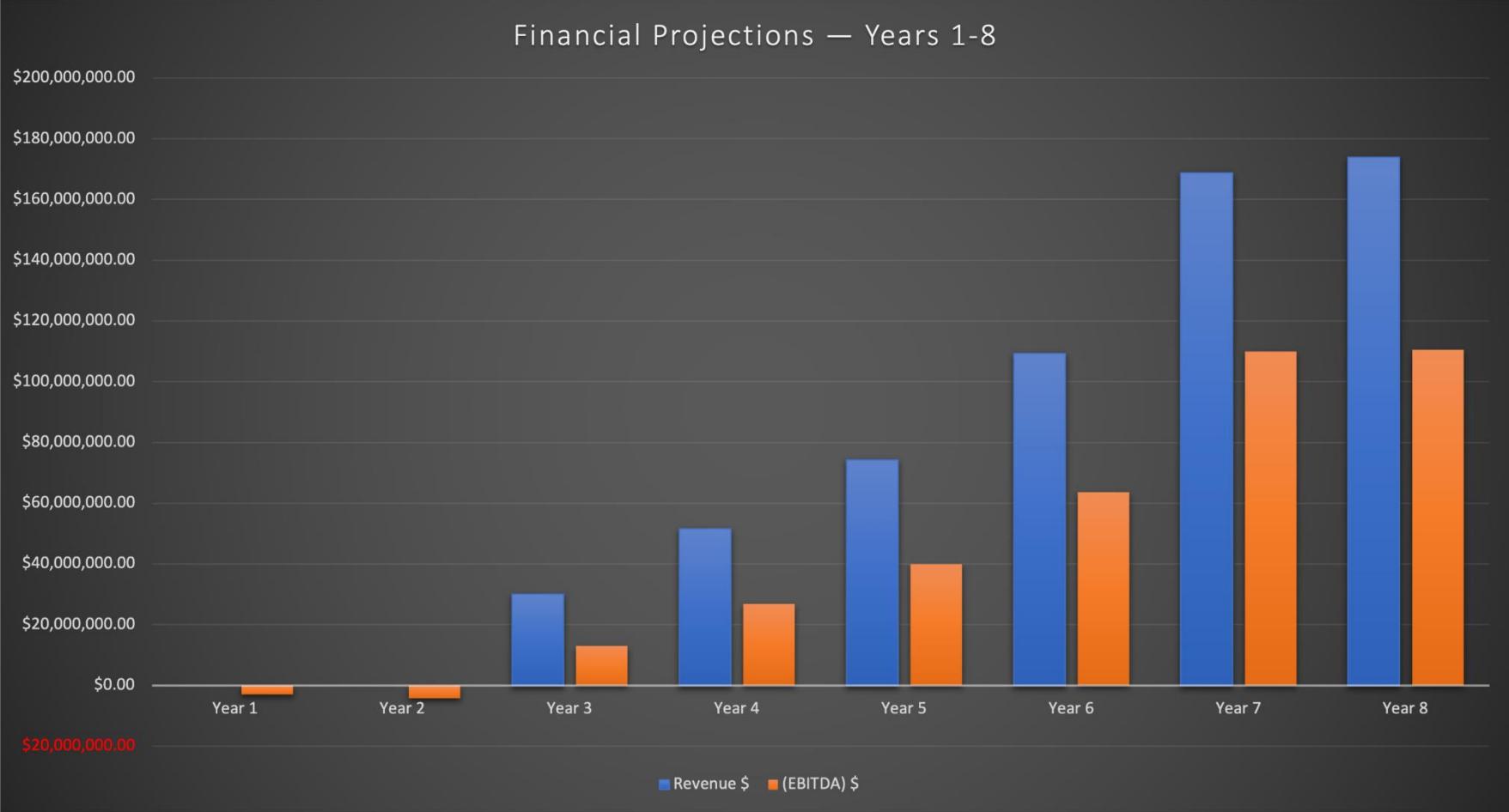
Per David Vail, a veterinary oncologist and professor at the University of Wisconsin, an initial cancer diagnosis costs \$1,000–\$2,000.

A standard course of chemotherapy costs \$3,000–\$5,000, and radiation treatments used for brain and nasal tumors cost \$6,000–\$10,000.

Note: Single course of chemotherapy is typically 3-6 months



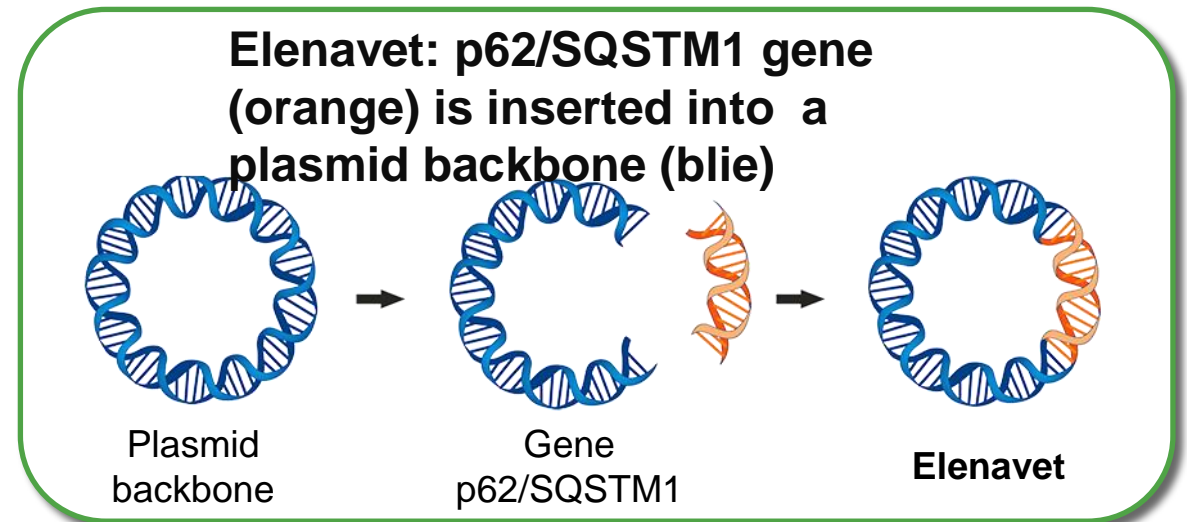
8-Year Projection



- Manufacturing plant will be set up in 18 months
- Scaling of manufacture and distribution will not be a problem, given current process capabilities and excellent product stability.
- The cancer market will continue to grow with pet ownership up 56% from just 30 years ago.

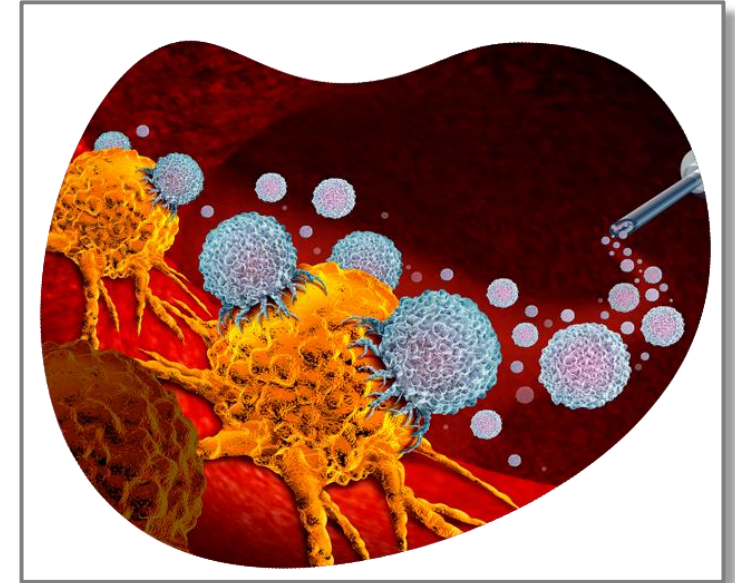
Elenavet™ - p62 Plasmid

- Elenavet is a therapeutic plasmid (supercoiled circular DNA) in which we have inserted a gene-encoding protein p62/SQSTM1.
- Plasmids constitute a major trend in a new generation of biomedicine.
- When injected into a patient, Elenavet enters cells at the site of administering as well as in the bone marrow, and makes the cells it enters produce p62 protein, which leads to multiple physiological outcomes.
- High yield, low cost
- Simple quality control and regulatory processes
- Highly scalable manufacturing
- Excellent stability profile: at -20C, shelf life is >6 years
- Easy dosing/route of administration: intramuscular injection; other modes of administrations may be possible



Elenavet™: Impact on Tumors

- ❖ Elenavet down-regulates chronic inflammation
 - Chronic inflammation plays a key role in the initiation and progression of cancer; also, it inhibits effects of anti-cancer therapies
 - Elenavet inhibits systemic chronic inflammation
- ❖ Elenavet changes the tumor microenvironment
 - Changing tumor stroma makes the tumors less dangerous and improves the disease prognosis.
- ❖ Elenavet reduces/prevents metastatic process
 - Makes it harder for metastatic cells to exit the tumor.
- ❖ Elenavet enhances anti-tumor immune response
 - Elenavet increases tumor penetration of immune cells
 - Elenavet inhibits tumor suppression of immune response
- ❖ Elenavet enhances effects of conventional anti-cancer therapies



Elenavet™: Beyond Breast Cancer

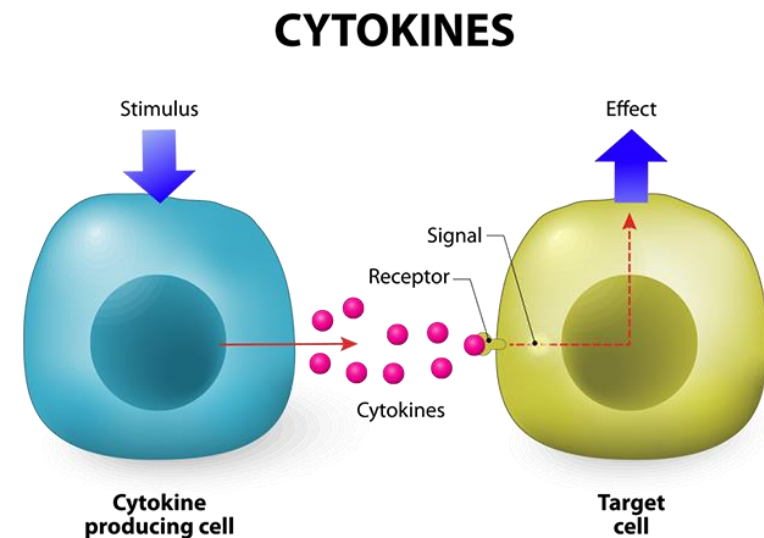
Other cancers:

- Melanoma

Elenavet has high potential to be effective, based on its anti-inflammatory properties, for the treatment of:

- Osteoarthritis
- Inflammatory bowel disease
- Metabolic syndrome
- Dermatitis
- Anti-aging

Elenavet reduces proinflammatory and increases anti-inflammatory cytokines



Regulatory

Elenavet™ has been evaluated by a joint group of FDA and USDA reviewers to determine its regulatory route to market.

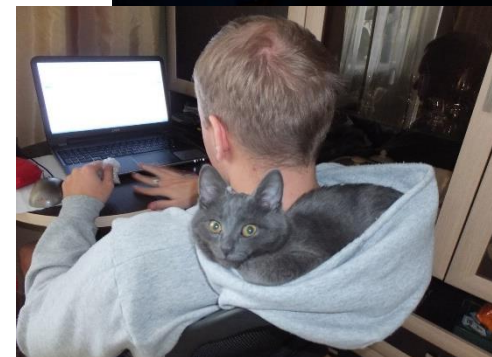
- Decision: Elenavet to proceed through the USDA-CVB approval process (similar to vaccines)
- Implications:
 - Typically, a faster timeframe from initial submission to conditional approval versus FDA
 - After conditional approval, sales can begin while collecting further efficacy data
 - With full efficacy data, the product can be fully approved
- Timing: Goal is to have conditional approval within 18-24 months of initial submission.



Sales & marketing plan

Promotion

- To **veterinarians** (primary)
 - Via trade shows (live and virtual)
 - Via continuing education through SAB lectures
 - Veterinary press media relations
 - Press releases
 - Scientific journals
 - Trade journals
 - Distribution partner representatives
- To **pet owners** (secondary)
 - Consumer and pet media relations
 - Press releases
 - Social/digital media
 - Podcasts
 - Print articles



Manufacturing

- Unlike the FDA, the USDA grants a market authorization to the manufacturing company, not to the IP holder.
- Most of currently available plasmid manufacturers are focused on the human market, so they are cost-prohibitive for the veterinary market.
- We have a proprietary cost-effective plasmid manufacturing technology tested and scaled up.
- CureLab Veterinary will set up its own manufacturing plant in the USA and certify it with the USDA.



Distribution

Domestic US

- Established veterinary distributors
 - 1000+ distributor representatives
 - Covering all 50 US states
- 5-10 CureLab Veterinary field sales reps in key US metropolitan areas to support distributor sales

International

- Select distributors in Europe & ROW with regulatory approval



Management Team



Alexander Shneider, Ph.D. – Founder and CEO

Over 25 years of biotech and entrepreneurial experience. Currently senior research fellow of molecular biology at University of Ariel, Israel; editorial board member for journals Aging and International Reviews of Immunology, advisor at We Fund Health. The past achievements and activities include but are not limited to drug development from concept to market authorization, patents in all major jurisdictions, advisory role for successful exits, consulting for Fortune 100 companies, establishing and leading international R&D consortia, senior authorship in papers and books.



Robert Devlin, DVM, MBA – Executive Consultant

Rob progressed from a practicing veterinarian to an executive director of veterinary science division to a seasoned VP of business development. Proven US and international track record in operations management, online and multichannel B2B and B2C sales within the animal health market, working with and developing US CMO vendors as well as distribution channels, spokespeople and market KOLs, and establishing pricing models.



Alexis Nahama, DVM – EVP Business Development & Licensing

Dr. Nahama's extensive 25+ year career in the animal health and human life sciences sectors, particularly in oncology drug development and business leadership, dovetails with CureLab Veterinary's strategic goals. In his most recent roles as SVP of corporate development at Sorrento Therapeutics and president of ARK Animal Health (a division of Sorrento Therapeutics), Dr. Nahama spearheaded high-priority drug development programs and established global strategies for commercial operations and strategic licensing.



Vlad Gabai, Ph.D. – VP of R&D

Over 30 years of successful discovery and development experience and problem-solving skills in R&D of anti-cancer drugs from bench to bedside. Over 80 papers, over 4,000 references. Past academic appointments with Boston University and Boston Biomedical Research Institute.

Management Team (cont.)



Trevor Olsen – Controller

Trevor has 10 years of experience in FP&A and accounting. His experience has centered on providing innovative solutions through precise financial reporting, accurate planning, and dynamic modeling and analysis.



Ilya Lapshin, JD – General Council

18 years of legal experience in a large New York law firm and two Massachusetts-based boutique firms helping startups and big corporate clients. Between a double major at MIT, Physics with Electrical Engineering and Math, and Boston University Law School, successful entrepreneurial and startup experience including a lucrative exit from a business, which Ilya started as a co-founder as soon as he came to the US.



Stephen Spector – VP of Marketing

Steve's experience includes online B2B & B2C marketing & sales of Techmira Corp., marketing patented teeth-cleaning products for pets and pain-reducing anti-inflammatory devices.



Tim Cox – PR consultant

25+ years of PR and brand-building experience with a wide array of technology and biotech companies. Defined and executed the PR campaign for the launch of Embrace Pet Insurance. Formerly brand marketing at Apple.

Scientific Advisory Board



B. Duncan X. Lascelles

BSc, BVSC, PhD, FRCVS, CertVA, DSAS(ST), Diplomate ECVS, Diplomate ACVS
NC State University, College of Veterinary Medicine
Professor of Surgery and Pain Management
Director, Translational Research in Pain [TRiP] Program
Director, Comparative Pain Research and Education Center



Keith Richter

DVM, DACVIM
Previously a Professor at the Cornell University College of Veterinary Medicine, Hospital Director of the Veterinary Specialty Hospital, Chief Medical Office of Ethos Veterinary Health, President and Board of Regents
Member of the Comparative Gastroenterology Society, Board of Regents
Member of American College of Veterinary Internal Medicine.



Ross H. Palmer

DVM, MS, DACVS
Colorado State University
Veterinary Medical Center
Department of Clinical Sciences
Professor
Associate Director of Education at Translational Medicine



Jörg M. Steiner

Med.vet., Dr.med.vet., PhD, DACVIM-SAIM, DECVIM-CA, AGAF
Texas A&M College of Veterinary Medicine & Biomedical Sciences University
Distinguished Professor – Small Animal Internal Medicine
Dr. Mark Morris Chair in Small Animal Gastroenterology and Nutrition
Director, Gastrointestinal Laboratory



Zachary M. Wright

DVM DACVIM (oncology)
Chair of the VCA Pet CancerCare Alliance
Medical Director-VCA Animal Diagnostic Clinic

Competition

- ❖ We are not aware of any other company developing a DNA (or a biological agent) based on p62
 - We are the first and have robust IP protection
- ❖ p62 plasmid may enhance effects of other anti-cancer products and/or treatment modalities
 - p62 plasmid will hopefully be attractive for use in combination with other treatments
 - In humans, we are testing combinations of the p62-plasmid with chemotherapies, obtaining very promising data

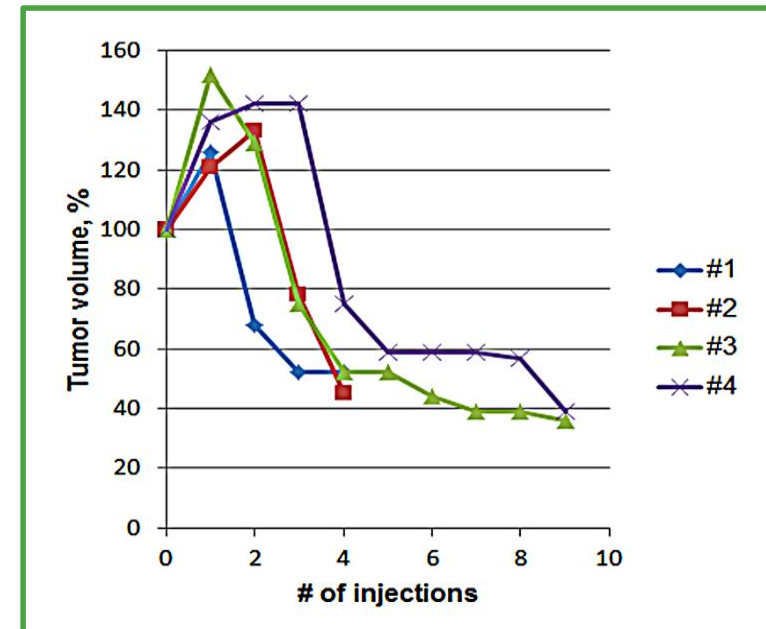
Supplementary Materials

Elenavet™: Canine Study

Effects of Elenavet treatment of canine mammary tumor (carcinoma):

- 10 out of 11 dogs responded to treatment and showed no relapse for the entire duration of observation
- Tumor shrinkage
- Enhanced overall survival
- Inhibited metastasis
- Neo-adjuvant effect, rendering tumors easier to operate on

Mammary Tumor Shrinkage in Dogs



Source: 4(10):1829-35. Gabai V et al. Pilot study of p62 DNA vaccine in dogs with mammary tumors. *Oncotarget*. 2014; 5(24):12803-10

Canine - Effects on Tumors

p62 plasmid reduces/reverts tumor grade:

- The grade of a tumor (cancer grade) indicates how quickly it is likely to grow/spread
- Tumors of higher grades are more resistant to treatment modalities
- Tumor grade was reverted in 5 of 6 dogs treated

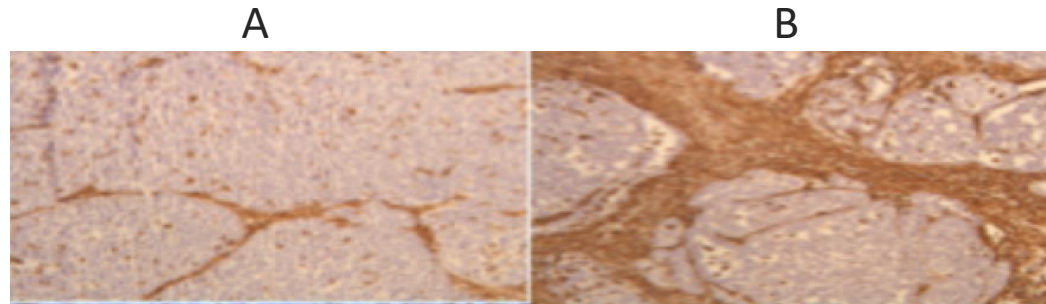
Note: in one case the tumor was reverted to a non-cancerous state

Pts #	Before	Tumor grade	After	Tumor grade
1	SC	+++	TP	++
2	TP	++	TP	+
3	SC	+++	SC	+++
4	SC	+++	CC	++
5	TP	+	TPA	
6	TP	+++	CC	+

SC: solid carcinoma; TP: tubulo-papillary carcinoma; CC: complex carcinoma;
 TPA: tubulo-papillary adenoma.

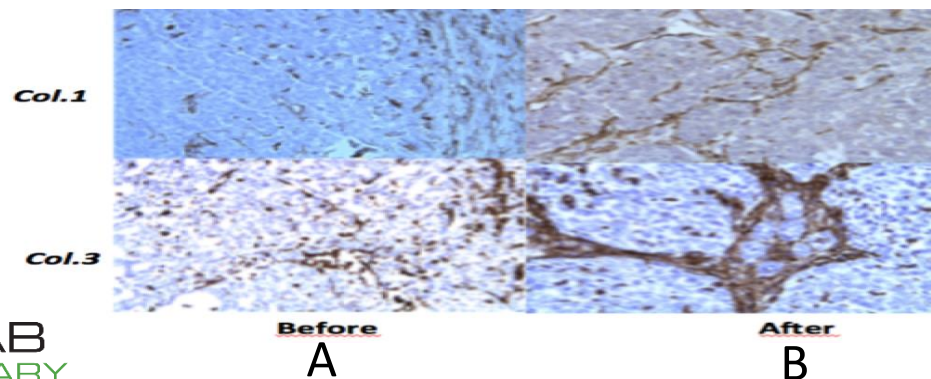
Elenavet changes tumor microenvironment

- Elenagen elevates expression of alpha-smooth muscle actin (alpha-SMA)
- The higher the expression of stromal proteins, including alpha-SMA is, the lower the risk of a tumor is



Evaluation of the intratumoral stromal content of alpha-sma:
A) before
B) after p62 DNA treatment

- Elenagen changes intratumoral extracellular matrix and elevates expression of collagen 3 (Col 3).
- High level of Col3 in the tumor is associated with positive disease prognosis.

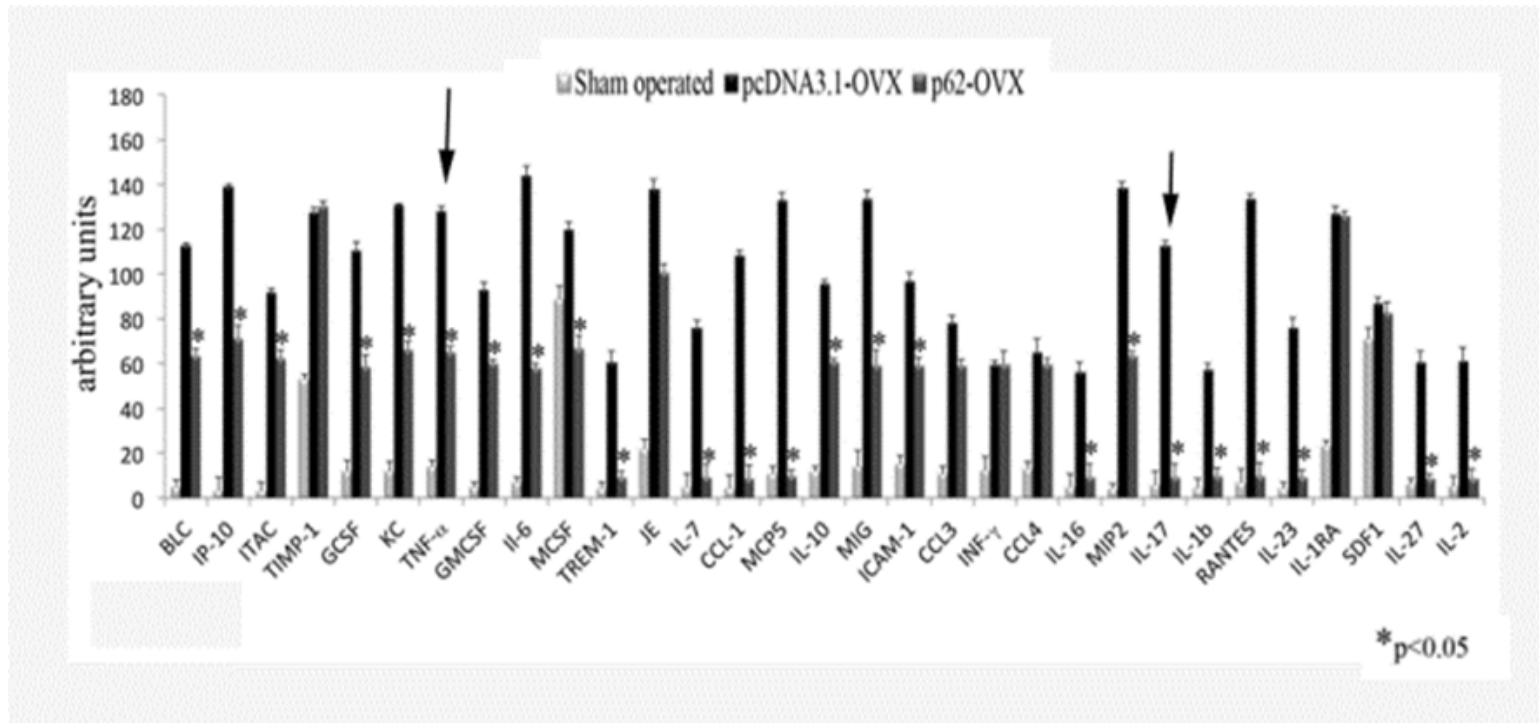


Evaluation of Col.1 and Col 3 expression in tumor biopsies in tumor extracellular matrix, before and after p62 DNA treatment

Elenavet™ Anti-Inflammatory

p62 plasmid down-regulates chronic inflammation

- Chronic inflammation plays a key role in the initiation and progression of cancer
- p62 plasmid inhibits systemic chronic inflammation



Sabbieti et al. Plasmid DNA-coding p62 as a bone effective anti-inflammatory/ anabolic agent
Oncotarget 6 (6):3590-3599 (2015)

Preclinical: Rodent Studies

❖ p62 plasmid inhibits primary tumors:

- Breast cancer by 70% (30 rats, 60 mice)
- Lung cancer by 70% (150 mice)
- Sarcoma by 85% (36 mice)
- Melanoma by 65% (150 mice)

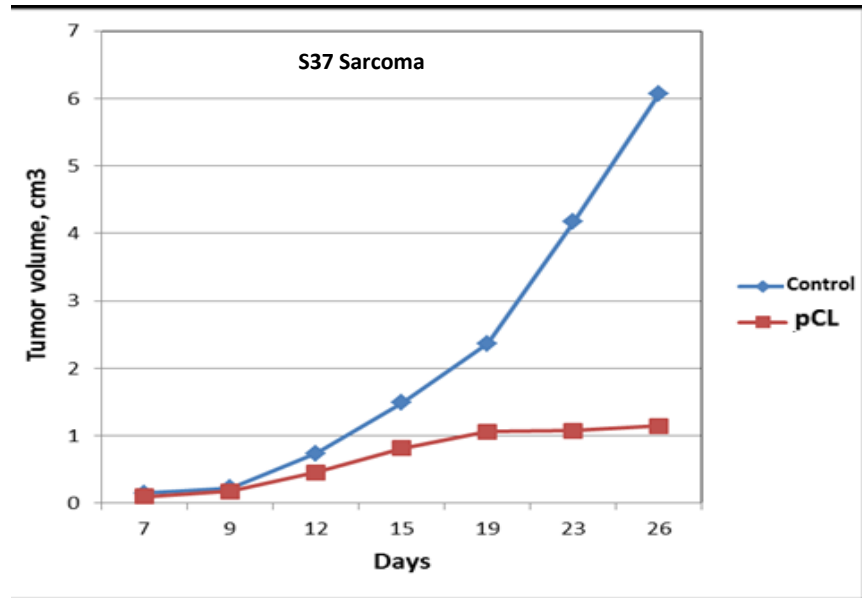
❖ p62 plasmid inhibits metastasis:

- Melanoma by 75% (30 mice)
- Sarcoma by 85% (36 mice)
- Lung cancer by 75% (150 mice)

❖ p62 plasmid enhances overall survival by more than 50%:

- Breast cancer (30 rats, 60 mice)

Elenagen Inhibits Tumor Growth in Rodents



Sources: Venanzi F et al. Broad-spectrum anti-tumor and anti-metastatic DNA vaccine based on p62-encoding vector. *Oncotarget*. 2013; 4(10):1829-35.

Elenavet™ Enhances Other Therapies

- Many chemotherapies, radiation therapies and immune therapies involve the adaptive immune system
- Tumor microenvironment inactivates adaptive immunity protecting cancer cells and promoting the metastatic process
- p62 plasmid injections alter the tumor microenvironment, enhancing effects of other therapies including chemo- and immunotherapies



Elenavet enhances effect of adaptive T-cell transfer:
metastatic lesions (white spots) on the long (dark)

Preclinical: No Toxicity Observed

- ❖ Acute toxicity studies in mice, rats, and Guinea pigs
 - No significant adverse events
 - No injection site reactions
 - No allergic reactions
- ❖ Chronic toxicity studies rats
 - No significant adverse events
- ❖ Chronic toxicity studies in dogs (90 days)
 - No significant adverse events
- ❖ Embryonic toxicity, teratogenicity
 - No significant adverse events

Selected Scientific Publications

Pilot study of p62 DNA vaccine in dogs with mammary tumors.

Oncotarget. 2014 Dec 30;5(24):12803-10.

P62-DNA-encoding plasmid reverts tumor grade, changes tumor stroma, and enhances anticancer immunity.

Aging (Albany NY). November 21, 2019 11(22):10711-10722.

Safety and efficacy of p62 DNA vaccine ELENAGEN in a first-in-human trial in patients with advanced solid tumors.

Oncotarget. 2017 Mar 25;8(32):53730-53739.

Response of a chemo-resistant triple-negative breast cancer patient to a combination of p62-encoding plasmid, Elenagen, and CMF chemotherapy

Oncotarget. 2020; 11:294-299.

Plasmid DNA-coding p62 as a bone effective anti-inflammatory/anabolic agent.

Oncotarget. 2015 Feb 28;6(6):3590-9.

Broad-spectrum anti-tumor and anti-metastatic DNA vaccine based on p62-encoding vector.

Oncotarget. 2013 Oct;4(10):1829-35.

P62 plasmid can alleviate diet-induced obesity and metabolic dysfunctions.

Oncotarget. 2017 Aug 3;8(34):56030-56040

p62 /SQSTM1 coding plasmid prevents age related macular degeneration in a rat model.

Aging (Albany NY). 2018 Aug 28;10(8):2136-2147.

p62 / SQSTM1 Expression In Canine Mammary Tumors: Evolutionary Notes.

Veterinary and Comparative Oncology. 23 July 2019 17(4):570-577.

Neuroprotective effects of p62(SQSTM1)-engineered lactic acid bacteria in Alzheimer's disease: a pre-clinical study.

Aging (Albany NY). 2020 Aug 28;12(16):15995-16020.