

The logo for CALVIRI, featuring the word "CALVIRI" in a bold, white, sans-serif font. A solid orange circle is positioned at the end of the word, serving as a period. The background is a dark blue gradient with several overlapping, thin white circular lines that create a sense of motion and depth.

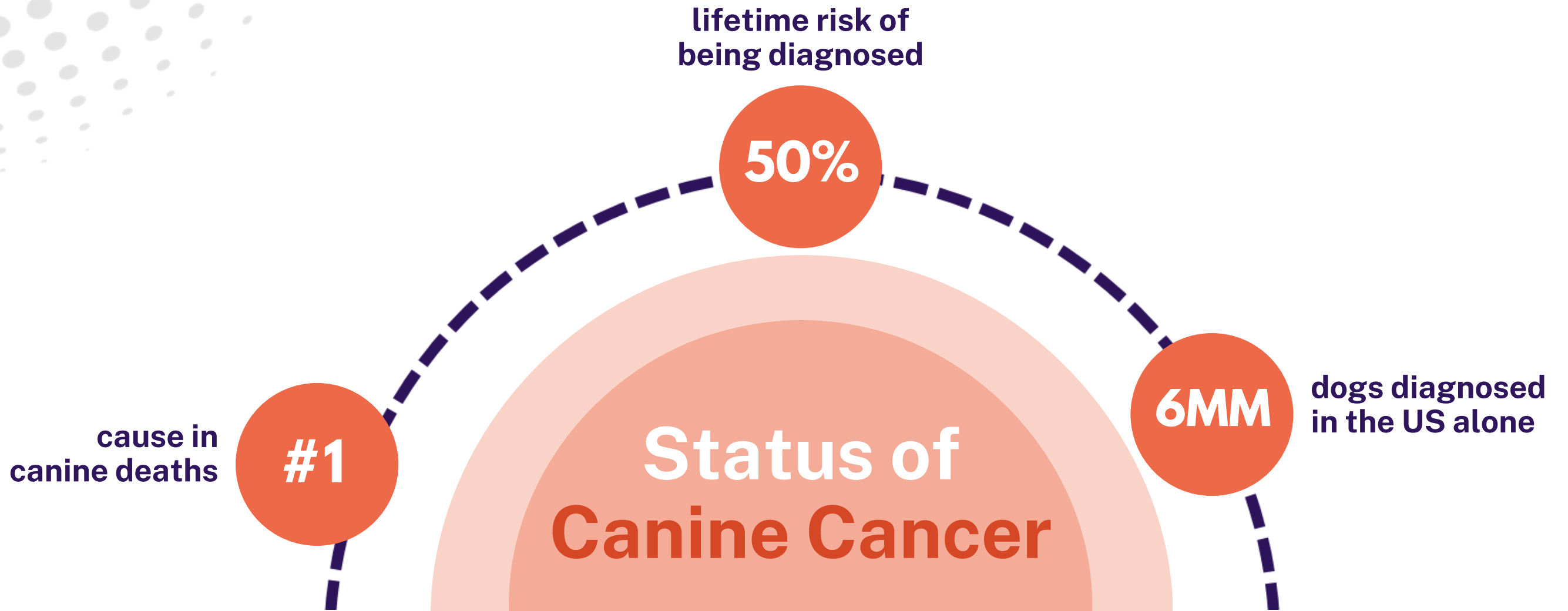
CALVIRI.

Let's End Cancer.

Animal Health

The Problem

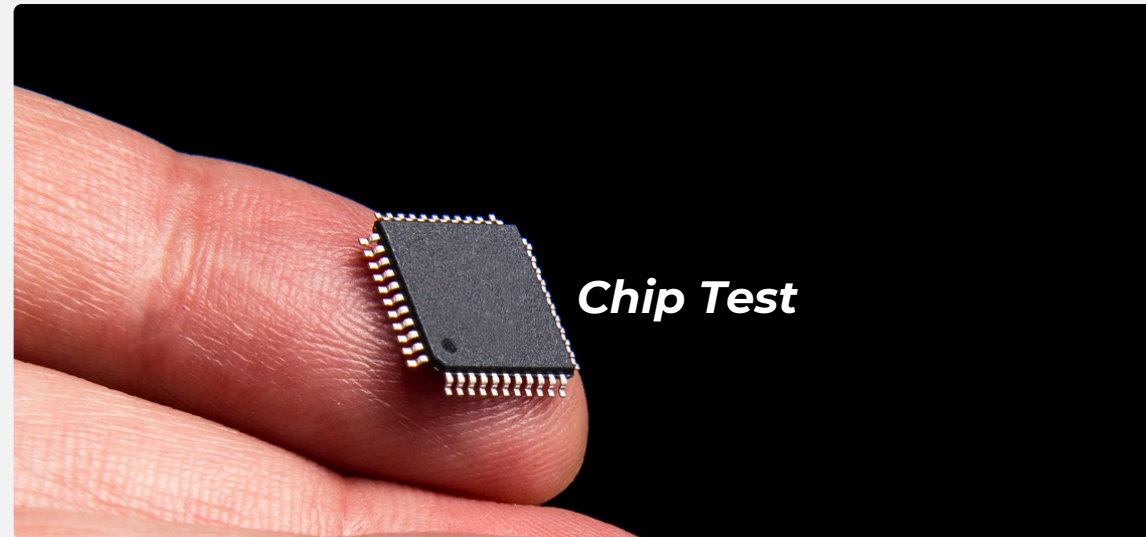
Canine Cancer Detection and Treatment



The **Solution**

Calviri's Complimentary Products

- 1 Sensitive diagnostic for stage 1 cancers**



Calviri solves the stage 1 sensitivity problem

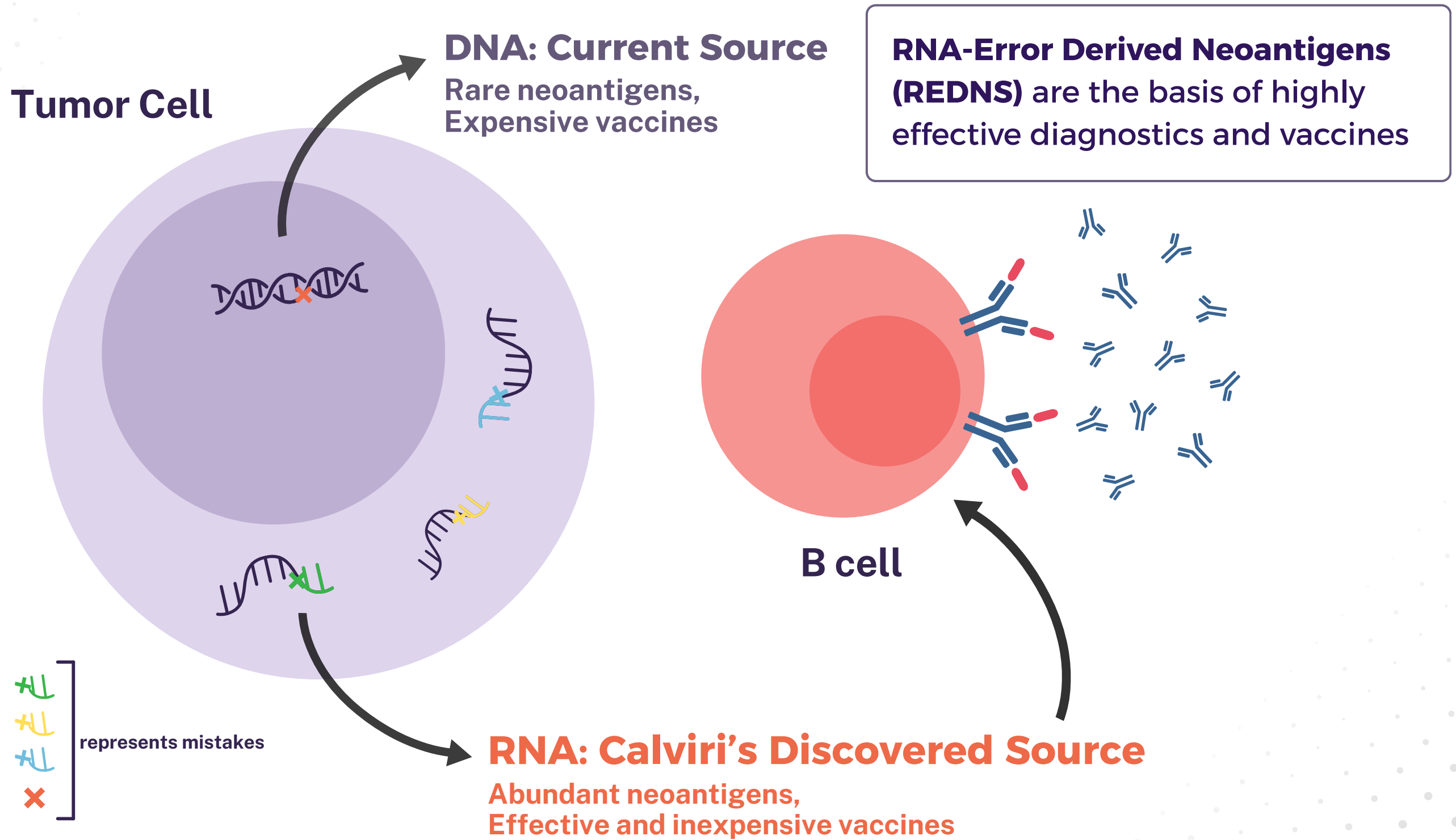
- 2 Premade vaccine to treat multi-cancers**



Premade vaccines treat, broadly & inexpensively

New Neoantigen Source

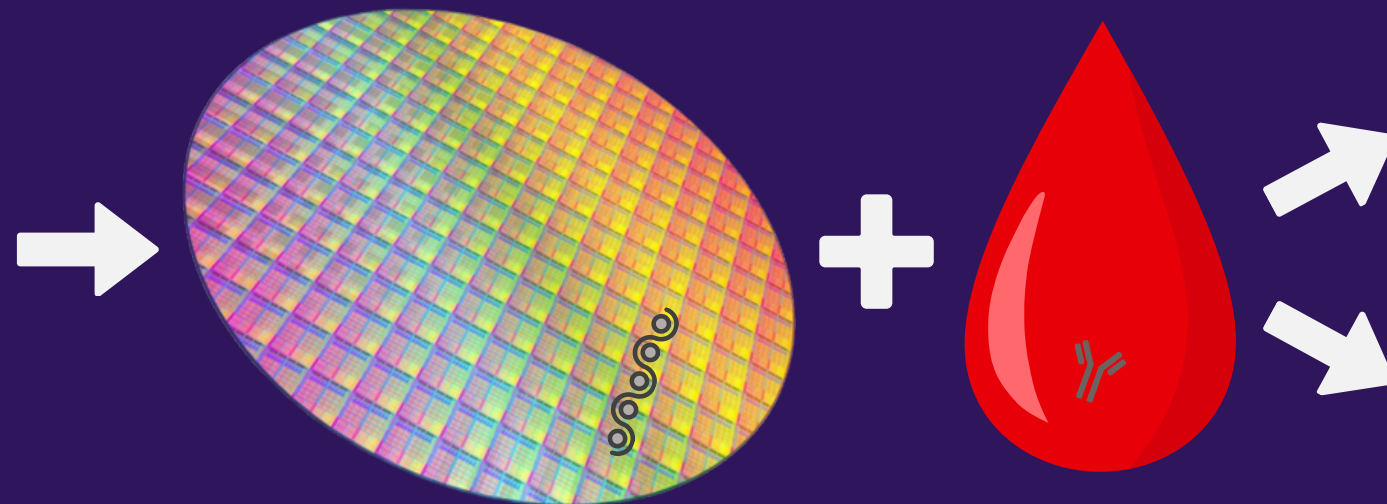
Enables Our Diagnostics and Vaccines



Calviri Invented Only Technology to **Search REDN Space**



New Machine



Semiconductor Chip

Patient Sera

Vaccine

Diagnostic

Multi-Cancer **Early Detection** Test Ready for Commercialization 6/2025

Stage 1 Diagnostic Sensitivities*

Cancer Type	Calviri	PetDx (former)	Volition
Mast Cell Tumor	80%	6%	11% (stage 2)
Lymphoma	>99%	0%	33% (9)**
Hemangiosarcoma	90%	50% (2)**	67% (3)**
Osteosarcoma	71%	NA	NA
Soft Tissue Sarcoma	89%	13% (15)**	NA

*Sensitivities at 97% specificity

** group size

Therapeutic Vaccine Competition

Hemangiosarcoma therapeutic vaccine - Clinical trial ongoing
Multi-cancer therapeutic vaccine - 2025

Specifications	Calviri	Torigen/Elias
Components	REDNs	Undefined Lysates
Design	Pre-Made	Personal
Price	\$500	\$1,500-\$10,000
Application	Any stage, Any tumor	Only later stages, Only some tumors

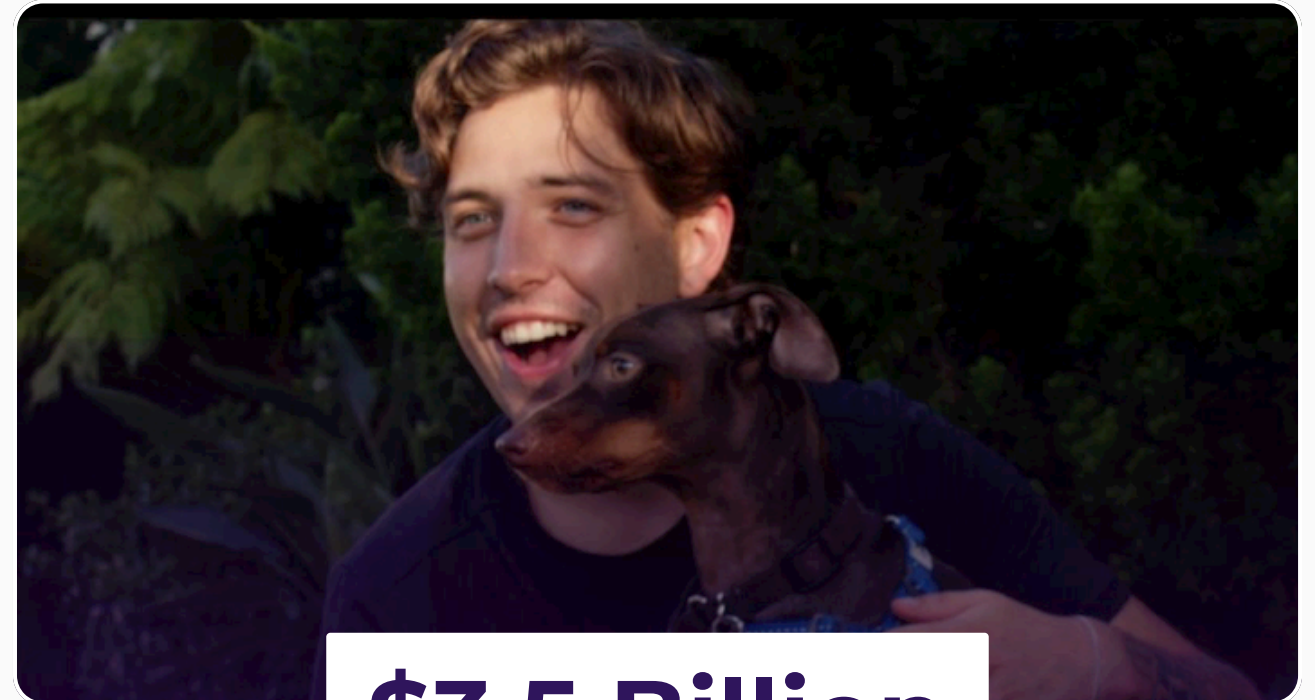
Pet Oncology is Huge **Untapped** Market

Early Diagnostic



\$4 Billion

Vaccine to Treat

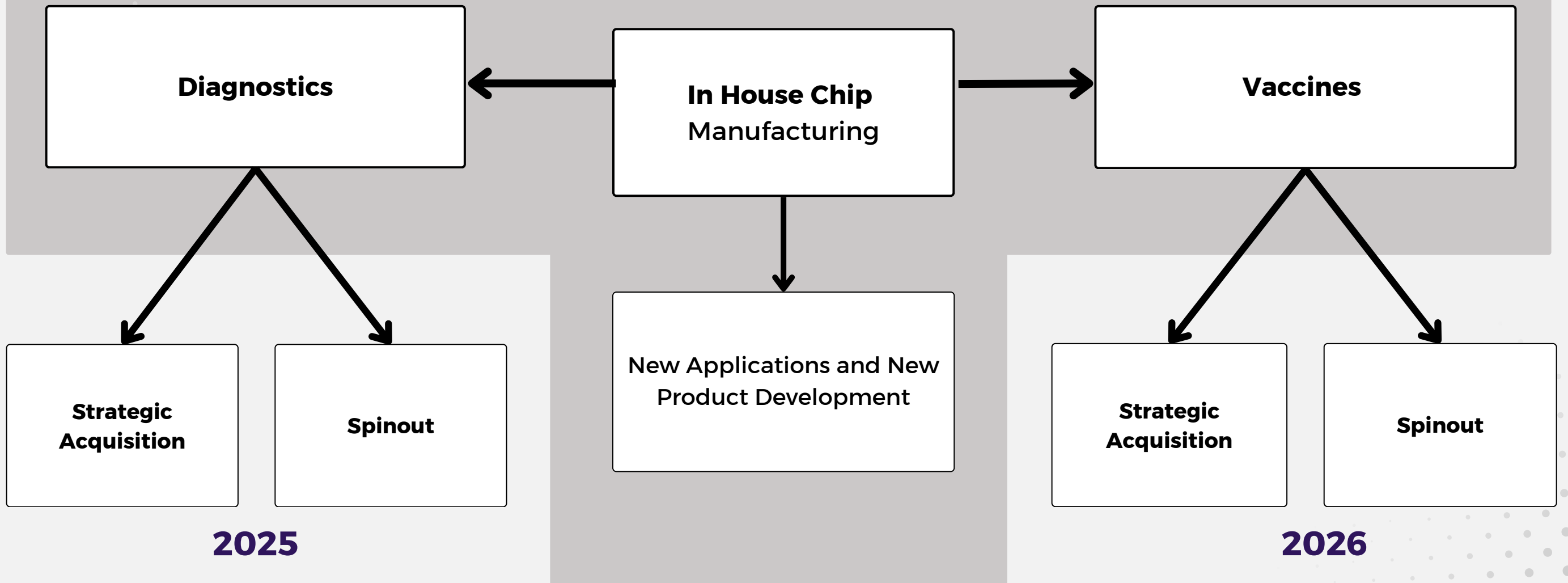


\$3.5 Billion

- There are 90 million pet dogs in the US alone
- More than half of them are 7 years of age or older and considered “senior”
- Canine studies show that senior dogs develop cancer at a 4-fold higher rate than younger dogs

Business Plan

CALVIRI.



Risks and Limitations To Successful Commercialization

Diagnostics

- Unknown adoption rate

Vaccines

- Unknown efficacy in clinical trials

Our Traction

\$24M Private Investors
& Family Offices

\$6.4M Non-Dilutive
Grant

No Debt

60 Patents
Granted/Pending

Chip Production Protected By
Trade Secrets

2024 COMPANY OF THE YEAR

AZBIO AWARDS

Milestones To **Revenue**

Diagnostics

- ✔ License/partner MCED dog diagnostic- 2025
- ✔ Commercialize MCED dog diagnostic- 2025

Vaccines

- ✔ Initiate multi-cancer vaccine conditional trial - 2026
- ✔ Commercialize multi-cancer vaccine - 2026



Founder Has History of **Only-In-Class** Inventions

Gene Delivery

- Gene Gun: now commonly used to transform plants
- Method to genetically modify chloroplasts and mitochondria

Resistance & Immunity

- New method to create pathogen resistance in plants (PDR): now widely used
- Nucleic acids for vaccination: basis for Covid vaccines
- Simple, rapid method to make synthetic antibodies

Molecular Biology & Genetics

- Simple way to make new plants (EBN): solved 50 year puzzle
- Discovered proteins have separable functional domains: in textbooks now
- First to develop a recombinant DNA technology that is cloning-free
- TEV protease system: now widely used in research and industry for protein purification

Most Recent Calviri Inventions

- ACED arrays for early diagnosis of stage 1 cancers
- RNA frameshift neoantigens and preventative cancer vaccine

Experienced and Invested **Board**



Jeff Le Benger, MD

Calviri Chairman of
the Board

Former CEO of
Summit Health



**Stephen Albert
Johnston**

Calviri CEO,
Co-Founder

Over 60 patents,
Member of National
Academy of Inventors



Kathryn Sykes, PhD

Calviri VP of Research
and Product Devt.,
Co-Founder

Diagnostic and
vaccine patents for
cancer and other
diseases



Jacque Sokolov, MD

Director

Chairman for SSB
Solutions, Board of
Directors for Phoenix
Children's Hospital,
GlobalMed, Veterans
Accountable Care
Group



Michael McCallister

Director

Board of Directors for
Zoetis, Former CEO of
Humana

Scientific **Advisory** Board



Terry Alice McInnis, MS, MBA, MPH | Chairman

Is a seasoned executive serving at the intersection of business and medicine. She closes gaps between technologies, diagnostics, and pharmaceuticals and regulation, market access, and patient care. Acknowledged as a futurist, her key talent is finding “out of the box” approaches that generate new business, accelerate growth, or disrupt competitors.



John Ballantyne, PhD | Advisor

Received his PhD in Pharmaceutical Sciences from North Dakota State University in 1997. In 1998 he co-founded Aldevron with Michael Chambers. He served as chief Scientific Officer before retiring at the end of 2021 after the company was acquired by Danaher. He is an active investor in early-stage biomedical companies.



Stan Lapidus | Advisor

Founded and led two of the most successful cancer diagnostics companies of all time: Cytoc and Exact Sciences. He is an inventor and entrepreneur, currently serving on several healthcare and medical technology boards. He holds 37 patents, primarily for methods of early cancer detection.



Steven W. Dow, DVM, PhD | Advisor

Is a veterinary internist and professor of Clinical Sciences in the College of Veterinary Medicine and Biomed Sciences at CSU. He directs the immunotherapy Research Lab, investigating new immune-based approaches to treatment of cancer and infectious disease. He received his DVM from the University of Georgia and PhD in Comparative Pathology at CSU.



Peter P. Lee, MD | Advisor

Is the Chair of the Department of Immuno-Oncology at the Beckman Research Institute at City of Hope. He is Co-leader of the Cancer Immunotherapeutics Program, Professor in the Department of Hematology & Hematopoietic Cell Transplantation and the Billy and Audrey Wilder Professor in Cancer Immunotherapeutics. He received his MD at UC-San Diego.



Future Opportunities For Our Technologies

Human Diagnostic and Therapeutic Vaccine

Preventative Cancer Vaccine

Calviri Publications

Vaccines

A Worldwide Preventative Cancer Vaccine Is Achievable With New Discoveries And Comparative Oncology 10.29011/2833-3497.000162

RNA transcription and splicing errors as a source of cancer fsp neoantigens. 10.1038/s41598-019-50738-4

Comparison of shared and personal frameshift neoantigens vaccines in mouse mammary cancer models. 10.1186/s12865-020-00350-3

Using frameshift peptide arrays for cancer neoantigen screening. 10.1038/s41598-018-35673-0

Diagnostics

Predicting response and toxicity to immune checkpoint inhibitors using antibodies to frameshift neoantigens. 10.1186/s12967-023-04172-w

Production of high-complexity frameshift neoantigen peptide microarrays. 10.1039/D0RA05267A

Clinical Trials

Design of a randomized clinic controlled study of a preventative cancer vaccine in dogs. 10.1016/j.vetimm.2023.110691

Low Prevalence of Occult Cancer Diagnosis when Screening Healthy, Higher-Risk, Middle-Aged to Older Dogs. Journal of American Veterinary Medicine Assoc. 10.2460/javma.24.07.0463

Results of a clinical trial of a broadly preventative cancer vaccine. (in preparation)



**Together,
Let's End Cancer.**

CALVIRI.
Animal Health