

The next breakthrough in cancer treatment, backed by Founders Fund



sirenbiotechnology.com San Francisco, CA

Highlights

- 1 \$28M raised from leading VCs including Founders Fund, Lux Capital, and more
- 2 Fighting the world's second deadliest disease, cancer, with immuno-gene therapy
- 3 Led by expert doctors and scientists from Stanford, UCSF, Duke, Mount Sinai, and Roche
- 4 2025 Start Up of The Year winner at Phacilitate Advanced Therapies Week
- 5 \$4M in competitive grant awards from the California Institute for Regenerative Medicine (CIRM)

- 6 Targeting clinical trials in 2026, a critical step toward FDA approval and commercialization
- 7 The global brain tumor therapeutics market cancer is a \$3.2B global market
- 8 CEO featured in Wall Street Journal, Economist, Wired, MIT Tech Review, and Boston Globe

Featured Investors



Lynn Fischer 
Syndicate Lead

Follow

Invested \$400,000 

Lynn Fischer, MBA, is CEO of KMAK Capital, Founder/Board Member of Title21 Health Solutions, and 2024 Distinguished Alumna of Pitt Graduate School of Business. Lynn is dedicated to getting lifesaving cell and gene therapies to patients globally.

“Siren Biotechnology is bringing groundbreaking cancer therapies to patients in need. They are developing a brand new class of therapies that is set to transform the treatment landscape for some of the deadliest cancers. The Siren Biotechnology team is equipped with world-class gene therapy and oncology expertise, and their data to date shows immense promise in treating deadly brain cancers. Our investment is an expression of confidence in Siren Biotechnology’s scientific innovation, their ability to navigate the complexities of the regulatory landscape, and their power to deliver on the massive potential of AAV immuno-gene therapy for patients.”

Other investors include [Founders Fund](#)  , [Lux Capital](#)

 , [Innovation Endeavors](#),



[Michael Polansky](#), [Co-Founder Parker Institute of Cancer Immunotherapy](#).

Our Team



Dr. Nicole K. Paulk. PhD CEO. Founder. and



President

Award-winning biotech executive. Extensive patent portfolio. Scientific Advisory Board member for renowned companies like Sarepta, Astellas, and Dyno Tx. Former gene therapy faculty at UCSF. Oregon Health & Science University PhD. Stanford University Postdoctoral Fellow.



Dr. Nathalie Clément, PhD SVP, Vector Development

Gene therapy pioneer for over 25 years. Drug manufacturing expert. Pivotal role at Powell Gene Therapy Center at the University of Florida, has gotten 10 AAV INDs approved. Led the Vector Core at Mount Sinai. Université Libre de Bruxelles BS and PhD.



Dr. Edward Schnipper, MD Lead, Clinical Development

Expert in clinical trial design for innovative cancer therapies. Previously President & CEO of Cellgate, EVP & Chief Medical Officer at Novacea, and VP of Clinical Development at ALZA Corporation. Pivotal role in securing FDA approval for multiple drugs.



Lauren Kelly, MS Director, Preclinical Research

Pharmaceutical trailblazer. Veteran in drug development for multiple disease indications and biologic modalities. Expert in animal models of neuro-oncology. California Polytechnic State University San Luis Obispo BS & MS.



Dr. Akela Kuwahara, PhD Chief of Staff and Director, Corporate Strategy

Innovative disruptor. Ex-Gordian Biotech; led next-gen sequencing for longevity gene therapy screening. Smithsonian Institute researcher. Fulbright Scholar. Stanford Research Fellow. UCSF PhD.

Why Siren Biotechnology?



Siren Biotechnology is transforming the way we treat cancer. By merging the precision of gene therapy with the power of immunotherapy, we're creating a universal adeno-associated virus (AAV) immuno-gene therapy. This off-the-shelf treatment is designed to make the next generation of cancer therapy accessible, scalable, and effective across multiple cancers.

Led by world-renowned scientists and biotech innovators, Siren's team brings expertise from Stanford, UCSF, Duke, Mount Sinai, Roche, and multiple leading gene therapy companies.

Our pioneering approach to cancer treatment is backed by \$28 million in funding from marquee investors, with preclinical data showing curative potential.



Founders Fund, Lux Capital, Innovation Endeavors – VC's who have backed industry-defining companies like OpenAI, Spotify, Airbnb, and Zocdoc – all agree: Siren is redefining cancer treatment in a \$3.2B+ market.

The deadliest cancers have outpaced available treatments

Cancer is the second leading cause of death worldwide, claiming

over 10 million lives every year. Gliomas, the most common malignant brain tumors, impact over 20,000 people each year in the U.S. alone. High-grade glioma, the most aggressive and prevalent form of glioma, has a median survival of just 12–18 months.

Cancer is the second leading cause of death worldwide - **10M lives lost annually**

26,000

Americans will receive a brain cancer diagnosis this year.

The average survival for the most common form of brain cancer is **1 year**

For the deadliest brain cancers, there are no effective therapies

Traditional treatments, such as chemotherapy and radiation, are limited in their effectiveness, can harm healthy tissues, and fail to improve patient survival rates in some of the deadliest cancers like high-grade gliomas.

Challenges of traditional treatment



Lack of precision:

Traditional therapies can't differentiate between healthy cells and cancer cells, leading to negative off-target effects.



Systemic toxicity at high doses:

High doses of intravenously administered treatments can cause widespread harm to the body, severely affecting a patients' quality of life.

The last FDA-approved treatment for adults with high-grade glioma was over 20 years ago. For patients facing the most dire cancers, innovation has largely stagnated, leaving them with few effective options.

For traditional gene therapy, new solutions often take over a decade and billions of dollars to develop and are focused on a single disease.

Conventional gene-therapy AAV development



10-15 Years /program and \$2-3 Billion /program

A smarter, safer way to treat cancer: AAV immuno-gene therapy

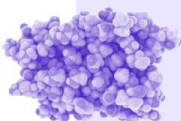
At Siren Biotechnology, we're pioneering a revolutionary approach to treat cancer using an established gene therapy tool called adeno-associated virus (AAV).

AAV is a safe virus that has been used for decades to deliver gene therapies to patients. Already, it has been used to successfully treat genetic blindness, muscular disorders, and a pediatric form of Parkinson's disease. It's exceptional at delivering precise instructions to specific areas of the body, making it the perfect tool for targeting cancer safely and effectively.



AAV Gene Therapy

AAV is a safe, FDA-approved virus that can deliver medicine directly to specific cells.



Cytokines

Natural proteins that help the immune system recognize and attack cancer cells.



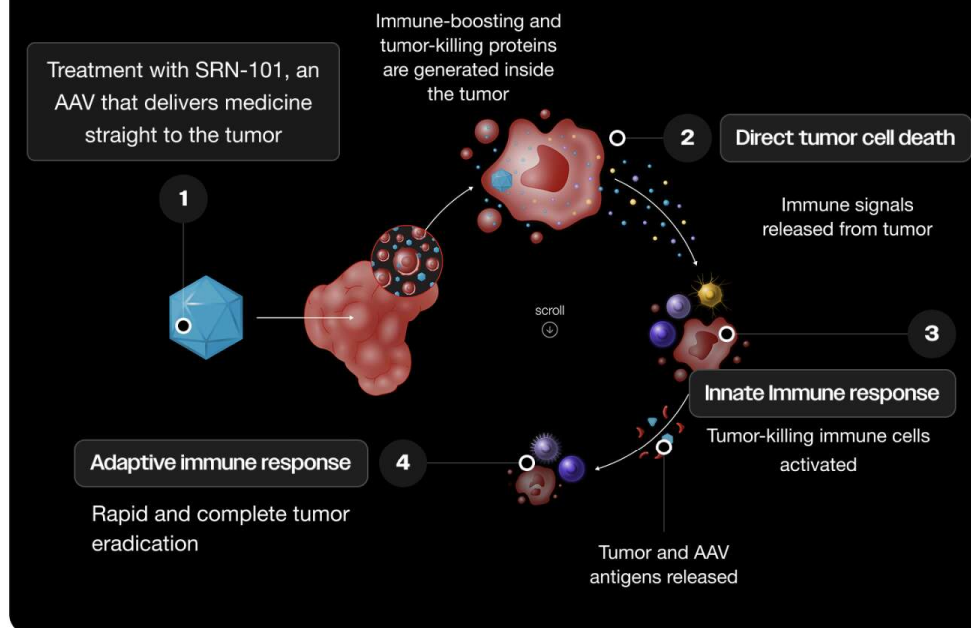
AAV Immuno-Gene Therapy

This brand new type of therapy uses AAV gene therapy to deliver cytokines directly to the tumor. It is safe, durable and could potentially treat any cancer.

We're using AAV to deliver precision-engineered cytokines, natural proteins that help the body recognize and eliminate cancer cells.

How it works

SRN-101, our lead therapy, causes **rapid tumor killing**



While most cancer treatments rely on chemotherapy, radiation, or surgery, methods that often damage healthy cells and come with serious side effects like nausea, fatigue, and long-term organ damage, Siren's approach is different.

Our advantage



More precise: Targets tumors directly, sparing healthy tissue.



Longer-lasting: Works steadily over time, improving durability.



Safe: Precision delivery of FDA-approved AAV results in safe and

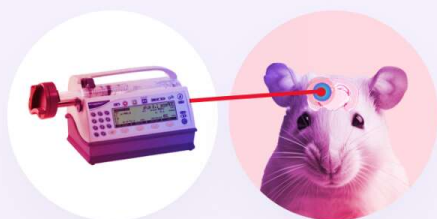


approved AAVs results in safe and effective tumor killing.

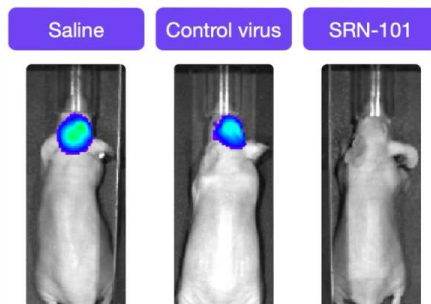
We're starting with brain cancers, which include some of the most aggressive and devastating cancers, due to their low survival rates, high unmet need, and streamlined regulatory path. Success here could change outcomes for those facing this devastating disease and pave the way for treating countless other cancers.

SRN-101 demonstrates powerful efficacy in treating human high-grade glioma

Human high-grade glioma

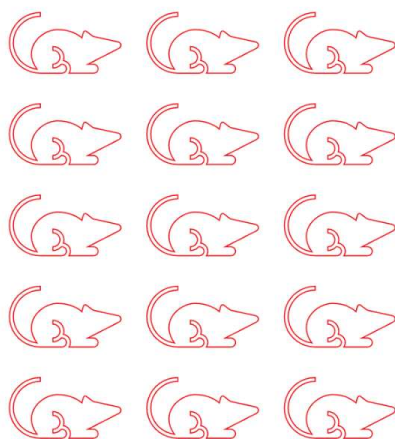


Deliver SRN-101, AAV control, or saline via convection enhanced delivery (CED)



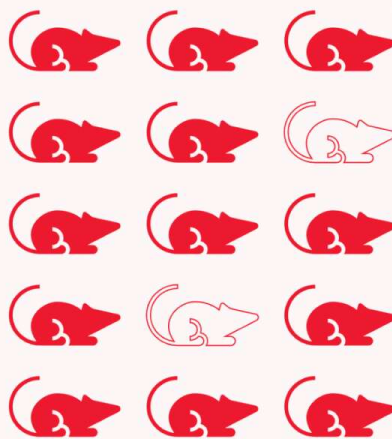
Mouse survival after treatment

Control



0% Survival

SRN-101 Treated

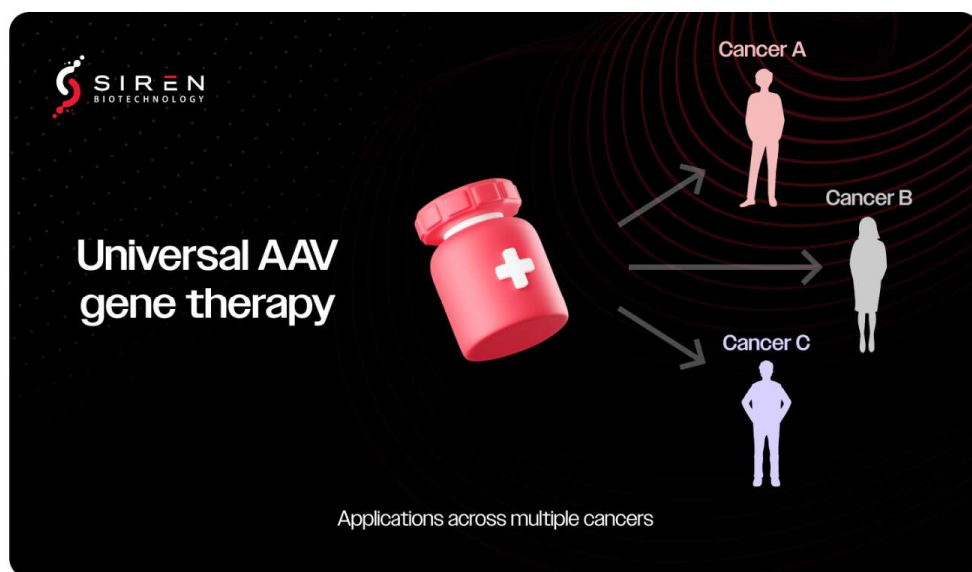


86% Survival

In preclinical studies with over 550 animals treated, our therapy has already demonstrated curative potential, completely eliminating tumors and significantly improving survival rates — a major step toward human trials.

A single therapy for any cancer

Our universal AAV immuno-gene therapy platform is designed to work across multiple cancer types. Our therapies are broadly applicable to solid tumors regardless of tumor mutation or antigen, thus overcoming the need to re-engineer new therapies for each new cancer type.



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Siren's universal approach overcomes a limitation of both traditional gene therapies, which are developed one-to-one for a single disease, and traditional cancer drugs, which to date are ineffective in brain cancers. This also reduces development timelines and capital needs per program, allowing us to treat patients faster.

We have 4 patent families pending across the globe

Siren Biotechnology's innovative platform is backed by a robust intellectual property portfolio, including four pending patent families that protect critical advancements in gene therapy delivery, safety, and scalability in cancer treatment.

These patents span innovations such as our AAV immuno-gene therapy platform itself, as well as breakthroughs in AAV genome design that reduce unwanted immune responses, making therapies safer and more effective.

Additional protections cover regulatory elements that improve the safety and strength of Siren's gene therapies, and manufacturing methods that ensure the quality and scalability of our drug productions.

Pioneers in gene therapy driving a cancer breakthrough

Siren Biotechnology's team is a powerhouse of visionary scientists and biotech innovators from top institutions like Stanford, UCSF, Duke, Mount Sinai, and Roche.

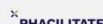
Siren Biotechnology Team



Nicole Paulk, PhD

CEO, Founder, President,
Global AAV Leader

Scientific Advisory Boards





Nathalie Clement, PhD
SVP Vector Development



Akela Kuwahara, PhD
Chief of Staff and Director,
Corporate Strategy



Ed Schnipper, MD
Clinical Lead



Teilo Schaller, PhD
Director, Clinical Strategy



Lauren Kelly, MS
Director, Preclinical Research



Chris Lovejoy, MS
Associate Scientist



Justin Lee
Associate Scientist



Dr. Nicole Paulk, Siren's Founder and CEO, is a global expert in AAV gene therapy, having developed next-generation viral platforms now used by dozens of biotech companies. She has shaped FDA regulatory guidance and advised leading biopharma companies, including Sarepta, Astellas, and Dyno Therapeutics.

From breakthroughs in AAV manufacturing and vector engineering to scaling biotech innovations into real-world treatments, our team brings the expertise and industry leadership needed to turn cutting-edge science into life-changing cancer therapies.



World-class oncologists and gene therapy experts support Siren's vision

Siren Biotechnology is guided by an advisory board of globally recognized leaders whose groundbreaking contributions have shaped the fields of gene therapy, oncology, and immunobiology.

World class scientific and industry advisors



Samuel Blackman, MD, PhD

Neuro-Oncology
Therapeutics



Mustafa Khasraw, MD

Neurosurgery & Cancer
Immunotherapy



Beverly Davidson, PhD

Vector Engineering



Leonidas Platanias, MD, PhD

Oncology and Cytokine
Biology



Kaye Spratt, PhD

Regulatory Affairs



Carolina Lopez, PhD

Viral Genome Immunogenicity



Susan Kaech, PhD

Brain Immunobiology



Elias Sayour, MD, PhD

Pediatric Neuro-Oncology



Dr. Samuel Blackman has played a pivotal role in securing the first FDA approval for a pediatric brain cancer treatment in

nearly 30 years.

Dr. Mustafa Khasraw has led numerous clinical trials in neuro-oncology and cancer immunotherapy, redefining how some of the toughest cancers are treated and improving outcomes for thousands of patients.

On the gene therapy front, **Dr. Beverly Davidson** is a pioneer. As the co-founder of Spark Therapeutics, she helped bring Luxturna – the first FDA-approved AAV gene therapy – to life, leading to its acquisition by Roche in a \$4.8B deal.

Meanwhile, **Dr. Leonidas Platanias**, Director of the Robert H. Lurie Comprehensive Cancer Center at Northwestern University, runs one of the nation's top clinical trial centers and is a world expert in the very cytokines we use in our therapy.

"SRN-101 has the potential to address a critical gap in effective high-grade glioma therapies by leveraging the body's immune response in a targeted, innovative way. This approach could represent a major breakthrough in how we treat one of the most devastating brain cancers and offers a new path of hope for patients"



Dr. Nicholas Butowski

MD, Neuro-Oncologist and Director of Translational Research in Neuro-Oncology at the University of California, San Francisco.



The total addressable market for Siren's groundbreaking therapy is driven by the urgent need for more effective brain cancer treatments.

The global brain tumor therapeutics market grew from \$3.03 billion in 2023 to \$3.28 billion in 2024 and is expected to

continue its rapid expansion, reaching \$5.28 billion by 2030 at a CAGR of 8.24%.

In the U.S. alone, the brain cancer therapeutics market was valued at \$966 million in 2022 and is projected to nearly double to \$1.87 billion by 2030, growing at a CAGR of 8.6%.

This growth reflects the increasing demand for innovative therapies to combat aggressive and often fatal brain cancers. Siren's universal AAV immuno-gene therapy platform is uniquely positioned to lead this market, offering a transformative approach that could redefine brain cancer treatment and establish a new standard of care.

A scalable, universal approach to transforming cancer care

Siren Biotechnology operates on a proven therapeutics biotech model, generating future revenue through FDA-approved therapy sales and pharmaceutical partnerships.

Once our universal AAV immuno-gene therapy is available to patients, we aim to generate revenue via treatment insurance reimbursements. In addition to direct sales of our therapy, we will explore potential partnerships that may grant pharmaceutical companies the use of our therapies for specific cancer types.



These partnerships could generate additional revenue through upfront payments, milestone-based payments, and royalties on future sales. Additionally, these co-development agreements would allow us to expand our reach while maintaining control

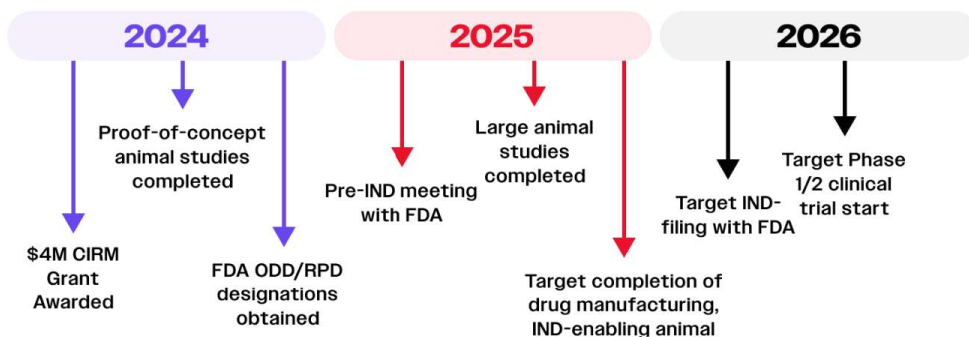
over our universal platform.

We're leveraging expedited FDA pathways to bring Siren to market in record time

By focusing on deadly brain cancers with no effective therapies, we qualify for expedited regulatory pathways, cutting years off traditional timelines and bringing transformative treatments to patients faster.

We're on track to begin human clinical trials in 2026

We're accelerating the development of life-saving therapies by utilizing fast-track FDA programs designed for high-need, rare diseases.



We're accelerating the development of life-saving therapies by utilizing expedited FDA programs designed for high-need, rare diseases.



Siren has the potential to reduce development timelines by up to 6 years via numerous expedited FDA pathways.

Recent gene therapy deals show a multi-billion dollar exit potential

The gene therapy space has seen a litany of successful exits as of late, with several companies achieving multi-billion-dollar

late, with several companies achieving multi-billion dollar valuations or acquisitions. Siren Biotechnology's universal AAV platform and unique positioning at the intersection of two high-growth markets — AAV gene therapy and brain cancer treatment — sets us up for even stronger outcomes.

Notable Comparables



Acquired by Bayer
for **\$2B in 2020**



Acquired by Roche for
\$4.8 billion in 2019



Acquired by Astellas
for **\$3 billion in 2019**



Acquired by Novartis for
\$8.7 billion in 2018

We're building a company for a successful exit; FDA approval, licensing, and co-developments will help us scale quickly. Siren's IP bridges the oncology and AAV gene therapy spaces, creating novel partnership opportunities and unique valuation potential.

Help us turn the deadliest cancers into treatable diseases



We're on a mission to transform the world's deadliest cancers into treatable diseases. Our universal AAV gene therapy platform is pioneering a scalable, groundbreaking approach to cancer care.

By investing, you're not just supporting innovation, you're joining a movement to bring life-saving therapies to patients

facing some of the world's deadliest cancers.

Let's change the future of cancer care, together. Invest today.