



# GeoVax Corporate Overview

May 2025

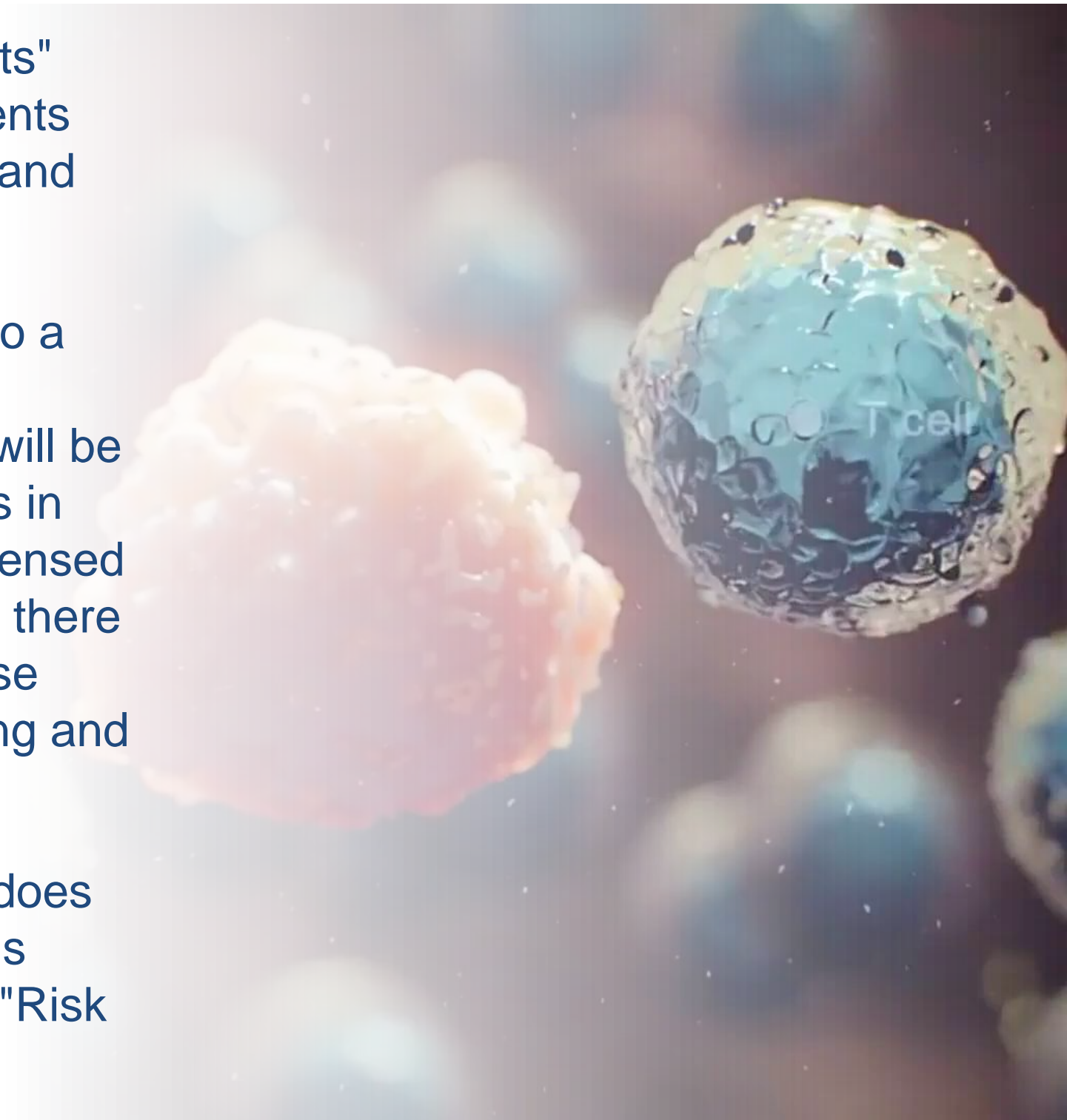
Nasdaq: GOVX

# Forward Looking Statements

Certain statements in this presentation may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act. These statements are based on management's current expectations and are subject to uncertainty and changes in circumstances.

Actual results may differ materially from those included in these statements due to a variety of factors, including whether: GeoVax can develop and manufacture its vaccines with the desired characteristics in a timely manner, GeoVax's vaccines will be safe for human use, GeoVax's vaccines will effectively prevent targeted infections in humans, GeoVax's vaccines will receive regulatory approvals necessary to be licensed and marketed, GeoVax raises required capital to complete vaccine development, there is development of competitive products that may be more effective or easier to use than GeoVax's products, GeoVax will be able to enter into favorable manufacturing and distribution agreements, and other factors, over which GeoVax has no control.

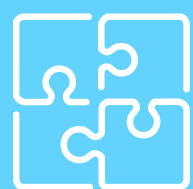
GeoVax assumes no obligation to update these forward-looking statements and does not intend to do so. More information about these factors is contained in GeoVax's filings with the Securities and Exchange Commission including those set forth at "Risk Factors" in GeoVax's Form 10-K.



# GeoVax: Phase 2 clinical-stage biotechnology company developing **immunotherapies** and **vaccines** against a wide range of **cancers** and **infectious diseases**



**Innovate**



**Differentiate**



**Accelerate**



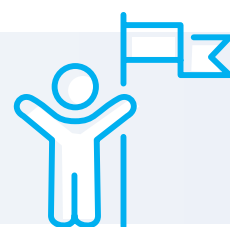
**Collaborate**



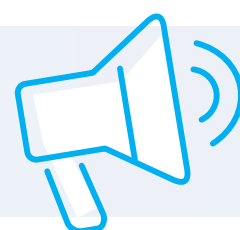
Unique, **patented products** addressing unmet medical needs



**Targeting populations** underserved by existing products/standard of care



Pursuing **expedited registration** pathways



**Worldwide distribution** and administration via business collaborations



A compelling **opportunity** with a value-driven **strategy**

# Priority Programs Advancing

- **GEO-CM04S1: Multi-Antigen Next-generation COVID-19 vaccine**
  - Underserved immunocompromised patients; seeking expedited authorization path
  - Potential more robust & more durable booster to mRNA vaccines
- **GEO-MVA: Mpox/Smallpox vaccine**
  - Expand global access and supply; seeking expedited authorization path
- **Gedeptin<sup>®</sup>: Solid Tumor Therapy**
  - Tumor agnostic
  - Orphan status granted for Advanced Head & Neck cancer

# COVID-19: GEO-CM04S1

# Single-Antigen, 1<sup>st</sup> Generation COVID-19 Vaccines

(mRNA: Pfizer/BioNTech; Moderna; Protein subunit vaccine: Novavax)

- *Limited breadth of protection: Requiring reconfiguration/updating as new variants emerge (e.g., Delta, Omicron, JN.1, etc.)*
- *Limited durability (e.g., 4-6 months vs goal of ~12 months)*
- *Inadequate protection for immune-compromised patients*

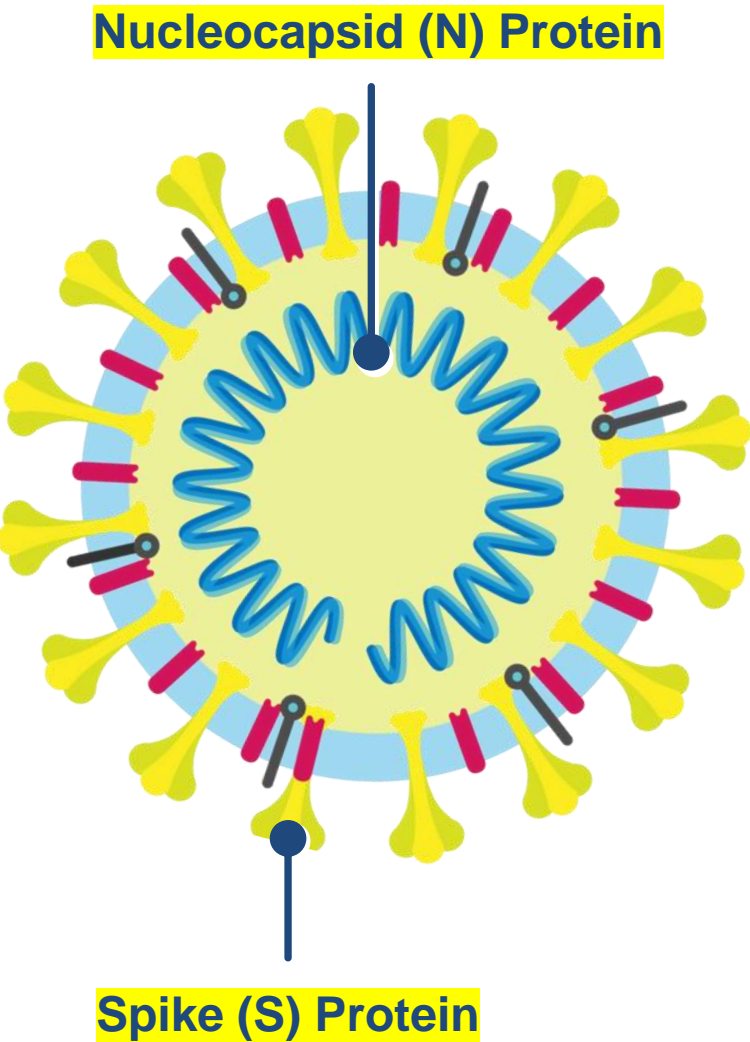
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# Multi-Antigen, Next-Generation COVID-19 Vaccine

- *Increased breadth of protection: Encompassing new variants without the continuous need for reconfiguration/updating*
- *Increased durability (e.g., ~12 months)*
- *Protection for immune-compromised patients*

# Critical Importance of Both Antibodies & T-cells for Protection

**GEO-CM04S1**  
S+N Proteins are Co-Expressed

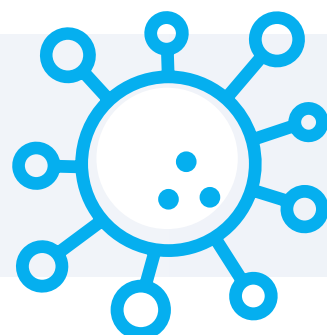


## Immune Responses for Protection against Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)

COVID-19 Disease Severity				
	Asymptomatic Infection	Symptomatic Infection	Severe Disease, Hospitalization	Death
Antibodies	++++	+++	++	++
T Cells	+	++	++++	++++

Both humoral (antibody) and cellular (T cell) immune responses contribute to protection against SARS-CoV-2. “+” signs denote the relative importance of antibodies and T cells for protection at each stage of disease severity, with more “+” signs indicating greater importance/protection.

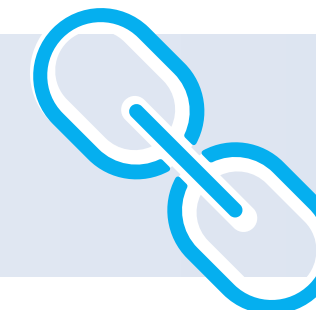
# GEO-CM04S1



**COVID-19 Vaccine**



**Greater breadth of variant protection**

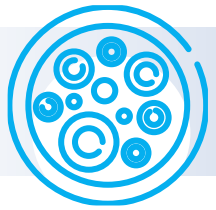


**Longer-lasting immune response**

**GeoVax platform (MVA): recognized safety, potent, durable, minimal refrigeration/freeze-dried delivery**

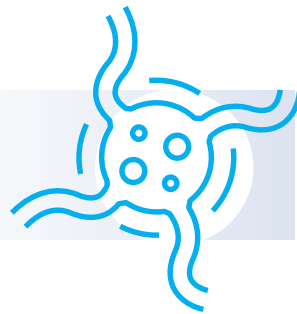
- Current vaccines do not provide sufficient protection for those with depleted immune systems
- GEO-CM04S1: More robust, durable protection – reduces need for boosters
- Can be used as booster to existing vaccines or stand-alone for immunocompromised patients

# GEO-CM04S1 – Phase 2 Clinical Trials



## Immunocompromised/stem cell transplant patients

- Patients with hematologic malignancies receiving stem-cell transplantation or CAR-T therapy
  - Highest at-risk groups for severe infection, hospitalization and death
  - Primary vaccine in direct comparison to mRNA vaccines



## Immunocompromised/Chronic Lymphocytic Leukemia (CLL) patients

- High at-risk population with abated antibody response
  - Major, currently unmet, medical need for alternative immune enhancement response (e.g., T-cells)
  - Booster vaccine in direct comparison to mRNA vaccine



## COVID-19 booster vaccine

- Healthy adults following previous vaccination with an mRNA vaccine
  - Potential for broader and more durable protection vs that provided by currently available mRNA vaccines



## **GeoVax Announces Positive Interim Data Review for Phase 2 Clinical Trial of COVID-19 Vaccine Booster in Patients with Chronic Lymphocytic Leukemia**

### ***GEO-CM04S1 Improved Immune Response vs mRNA Vaccine***

**ATLANTA, GA, November 19, 2024** — GeoVax Labs, Inc. (Nasdaq: GOVX), a biotechnology company developing immunotherapies and vaccines against cancers and infectious diseases, today announced the completion of an interim data review by the Data Safety Monitoring Board (DSMB) for the ongoing Phase 2 clinical trial of GEO-CM04S1, GeoVax’s dual-antigen next-generation COVID-19 vaccine, as a booster vaccine for patients with chronic lymphocytic leukemia (CLL).

Based on the interim analysis of immune responses from the patients enrolled to date, the DSMB determined that, while the mRNA control arm of the study failed to meet the predetermined primary endpoint, the study should continue enrollment of the experimental arm utilizing GeoVax’s Next-Generation GEO-CM04S1 vaccine.

...“the outcome of the DSMB interim review appears to support our view of GEO-CM04S1 as a potentially superior COVID-19 vaccine booster within the CLL patient population”...

# GEO-CM04S1 Development Plan

- Validate the Differentiation and Value of GEO-CM04S1
  - Broader (Variant Agnostic), more durable protection (~12 months)
  - “Preferred COVID-19 vaccine for immunocompromised patients”
- Expedited Registration Focused on Immunocompromised Patient Populations



**Global Development & Commercialization via Collaborations/Partnering**

# Mpox & Smallpox: GEO-MVA

# WHO Declaration – Aug 14; Nov 22; Feb 27

 World Health Organization

Health Topics ▾

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## WHO Director-General declares mpox outbreak a public health emergency of international concern

14 August 2024 | News release | Reading time: 3 min (789 words)

### Media Contacts

News / Press releases

Africa CDC Declares Mpox A Public Health  
Emergency of Continental Security, Mobilizing  
Resources Across the Continent



13 August 2024

Theme

Emergency Response and Preparedness

Region

Central Africa, Eastern Africa, Northern  
Africa, Southern Africa, Western Africa



## Mpox – “What’s the Big Deal?”

- Different than 2022
  - Multiple Mpox variants now circulating
  - More virulent, higher mortality and greater migration (US; EU; Africa)
- Vaccination is critical to reduce morbidity/mortality threat
- Africa & worldwide need for significant resources
  - Increased vaccine availability and better vaccine supply
  - Multiple, flexible manufacturing on Africa continent

Source: Adapted from MedCram.com

# Threatening Symptoms



The rash tends to first develop on the face before spreading elsewhere on the body



# “What’s the Solution?”

**WHO is coordinating global health response**

- **WHO seeking additional MVA-Mpox vaccine supply**
  - Requires engaging with companies having
    - Experienced with the MVA-platform
    - MVA based Mpox vaccine candidate(s) in development
    - Access to existing manufacturing capability for MVA

**Critical need: cGMP MVA clinical batch**

- **Strong preference to establish Regional/Local Africa based Mpox vaccine manufacturing**
  - Difficult for processes requiring Chicken Embryo Fibroblasts (CEFs) as starting materials

**Critical need: Advanced, cell-line MVA Manufacturing Platform**

## GEO-MVA

### GeoVax

Focused on expedited registration for 1st U.S.-sourced vaccine against Mpox & Smallpox

- Currently: one supplier worldwide (MVA-BN) – unable to meet demand (insufficient production capability)
- Strong U.S. government interest in establishing a U.S. based supplier
  - HHS needs to replenish/re-stock SNS (Strategic National Stockpile)
- GeoVax advancing the development of GEO-MVA
  - cGMP clinical batch manufactured & released
- In dialogue with various U.S. & Global stakeholders
- Regulatory discussion/guidance received supporting abbreviated approval pathway
- Implementation of Advanced MVA manufacturing platform

# Oncology: Gedeptin®

# Gedepin<sup>®</sup>: Significant Medical Need

## Potential Target Cancer Patient Populations

- Advanced Head & Neck (initial indication; Orphan Drug Status)
- Earlier-Stage Head & Neck
- Breast
- Prostate
- Colon
- Ovarian
- Pancreatic
- Lung



## Patient Characteristics

- “Needle-accessible” solid tumors

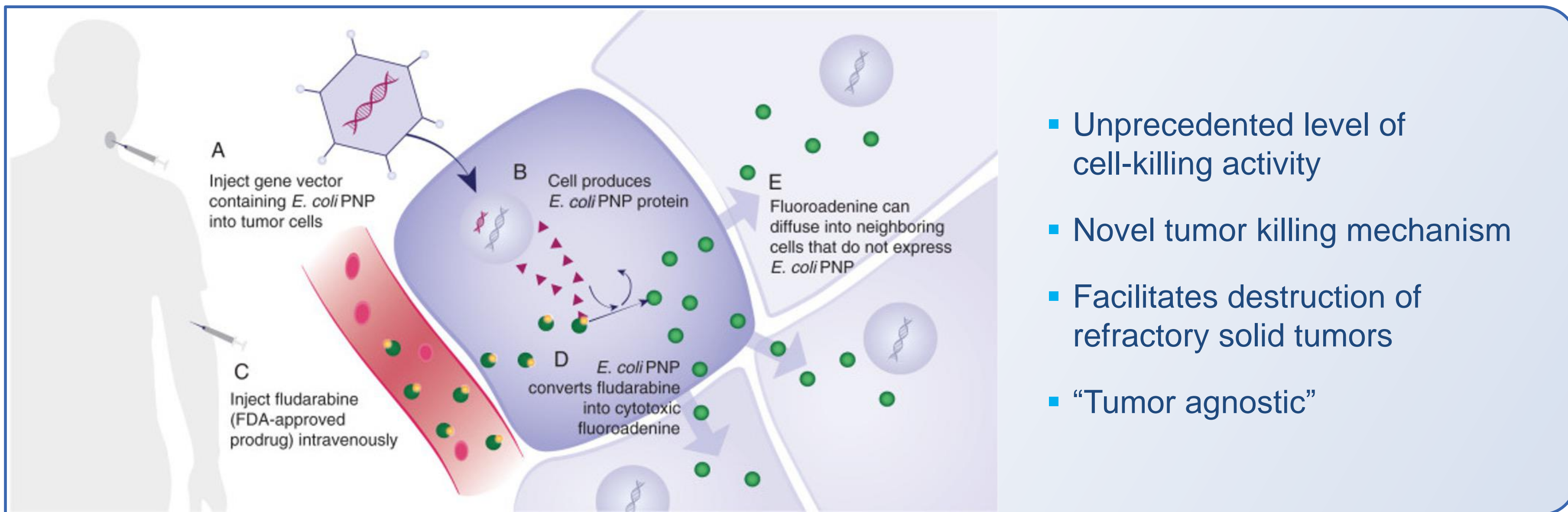


## Patient Prevalence (U.S.)

- Advanced Head & Neck Cancer (deaths/yr) - 16,000
- Early-Stage Head & Neck Cancer (new dx/yr) - 71,000
- Other Solid Tumors (deaths/yr) - 321,000

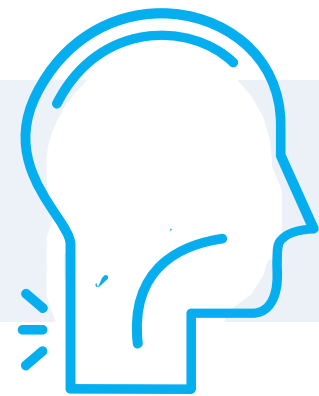
Source: American Cancer Society (ACS) Cancer Facts & Figures 2024

# Gedepin<sup>®</sup> Mechanism of Action



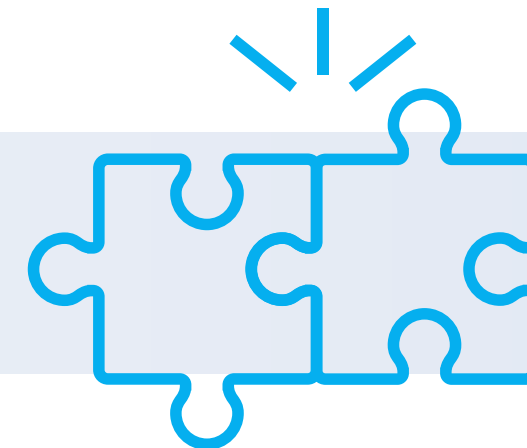
[Phase I dose-escalating trial of Escherichia coli purine nucleoside phosphorylase and fludarabine gene therapy for advanced solid tumors - PMC \(nih.gov\)](#)

# Gedepin® Clinical Development Plans



## Initial Focus: Advanced Head & Neck Cancer Indication (Mono-therapy)

- Completed initial Ph 1/2 trial (FDA funded), validating safety and tumor shrinkage against advanced HNC



## Focus: Combination-Therapy (Gedepin® with ICI)

- Expanded Ph 2 trial focused on Gedepin + ICI therapy against 1<sup>st</sup> recurrent HNC



**Global Development & Commercialization via Collaborations/Partnering**



## **GeoVax Announces Phase 2 Plans for Gedeptin® Cancer Therapy Following Clinical Advisory Committee Review**

*Company plans Phase 2 trial in first-recurrence head & neck cancer,  
in combination with immune checkpoint inhibitor*

**Atlanta, GA, July 31, 2024...**

...The primary goal of the planned Phase 2 trial will be to establish efficacy of neoadjuvant Gedeptin therapy combined with an immune checkpoint inhibitor in first-recurrence squamous cell head and neck cancer...The Company has initiated the necessary planning activities, including protocol development, manufacturing, and CRO selection...

...“We look forward to activation of this trial and are pursuing development plans in additional solid tumor indications in partnership with leading academic oncology centers...” added David Dodd, GeoVax’s Chairman and CEO.

# Milestones, Catalysts & Summary

# Summary of GeoVax Alignment with HHS Priorities

HHS Leadership Priority	GeoVax Response
Vaccine Transparency	Full trial data publication, peer review, open science
Multi-Antigen Vaccines	MVA platform supports multiple antigens and provides an alternative to current single-antigen vaccines
Platform Diversification	MVA-based non-mRNA vaccines with durable safety
Accelerated U.S. Manufacturing	GeoVax selected for RRPV NextGen award (pending funding) to advance novel, rapid-response manufacturing
Domestic Manufacturing	U.S.-based facilities; continuous cell line innovation
Equity and Accessibility	Affordable, stable, scalable solutions
Pandemic Preparedness	GEO-MVA and GEO-CM04S1 clinical trials advancing
Public Trust and Safety	Transparent practices; immunocompromised focus; 50+ years of safety

# 2025 Milestones & Catalysts



## GEO-CM04S1 (Next-Generation COVID-19 Vaccine) – 2 Clinical Program

- Immunocompromised/stem cell transplant patients: **Additional sites initiated; interim data results**
- Immunocompromised/Chronic Lymphocytic Leukemia (CLL) patients: **Interim analysis indicated GEO-CM04S1 superiority vs mRNA**
- Healthy patient booster trial: **Data results**



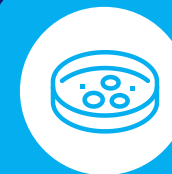
## Gedepin® (Solid Tumor Therapy) – Phase 2 Clinical Trial

- Phase 2 expanded trial: **Operation progress re trial activation**



## GEO-MVA (Mpox; Smallpox)

- Progress re cGMP GEO-MVA production
  - **cGMP clinical batch: In Process**
- Expanded U.S. & Global stakeholder discussions



## Advanced, Transformative Continuous Cell-line MVA Manufacturing

- **Process Development underway; GEO-CM04S1 and GEO-MVA**

# GeoVax Portfolio: Revenue Opportunity

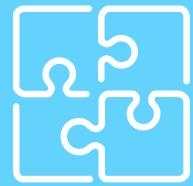
Product	Disease	Target	Est'd Market Revenue Potential \$(Billion)
GEO-CM04S1	COVID-19	Primary Vaccine For Immune Compromised Patients/Booster to mRNA	\$ 30.0+
GEO-MVA	Mpox/Smallpox	Global Health Emergency U.S. SNS	\$ 10+
Gedeptin®	Cancer	Early-Stage Head & Neck Cancer	\$ 12.4
Gedeptin®	Cancer	Advanced Head & Neck Cancer	\$ 2.8

**~\$55 Billion in Market Revenue Potential**

# GeoVax Strategy



**Innovate**



**Differentiate**



**Accelerate**



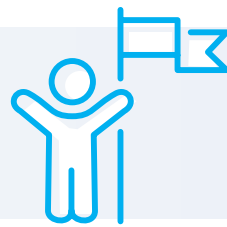
**Collaborate**



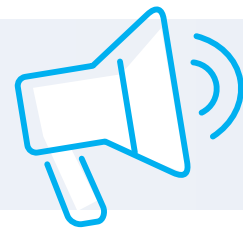
Unique, **patented products** addressing unmet medical needs



**Targeting populations** unserved by existing products/standard of care



Pursuing **expedited registration** pathways



**Worldwide distribution** and administration via business collaborations



A compelling **opportunity** with a value-driven **strategy**



**Thank You !!!**