GeoVax Corporate Overview

July 2025

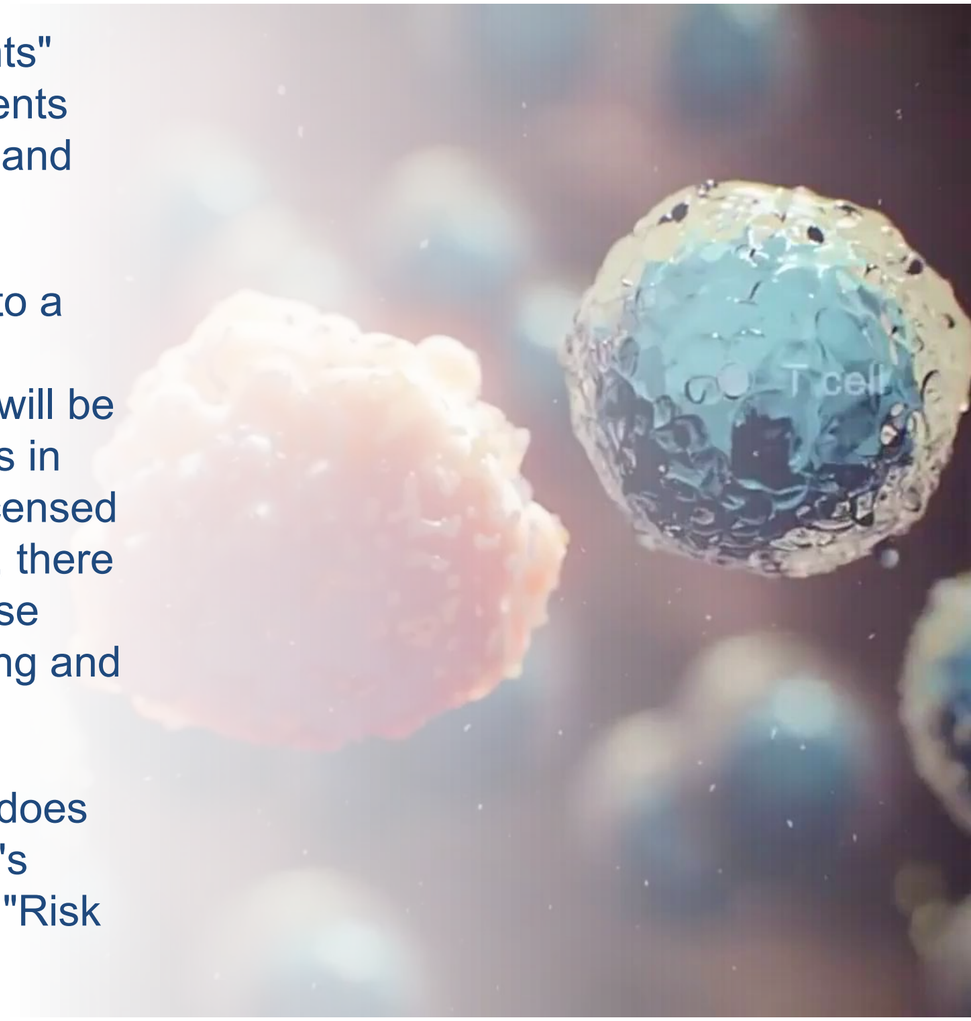
Nasdaq: GOVX

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 commercialization and distribution

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(s)
  - Potential more robust & more durable booster to mRNA vaccines

- **GEO-MVA: Mpox/Smallpox vaccine**
  - Expand global access and supply
  - Pursuing expedited authorization path

- **Gedeptin®: Solid Tumor Therapy**
  - Tumor agnostic
  - Orphan status granted for Advanced Head & Neck cancer

COVID-19: GEO-CM04S1

Single-Antigen, 1st 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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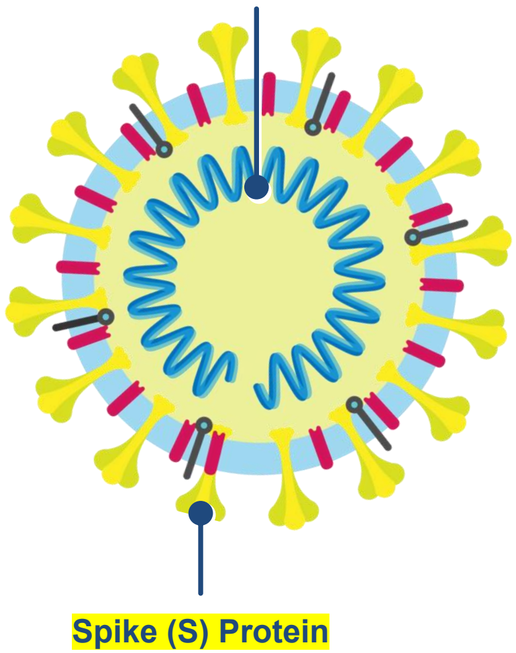
Multi-Antigen, Next-Generation COVID-19 Vaccine

- ***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)

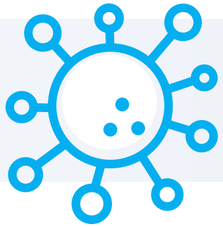
COVID-19 Disease Severity

	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.

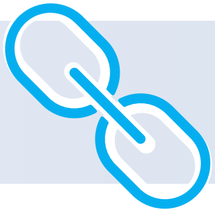
Barouch DH, N Engl J Med 2022; 387:1011-1020

GEO-CM04S1



COVID-19 Vaccine

Greater breadth of variant protection



Longer-lasting immune response

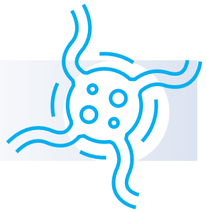
GeoVax platform (MVA): recognized safety, potent, durable, minimal refrigeration/freeze-dried delivery

- 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 ‘24; Nov ‘24; Feb ‘25; June ‘25

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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

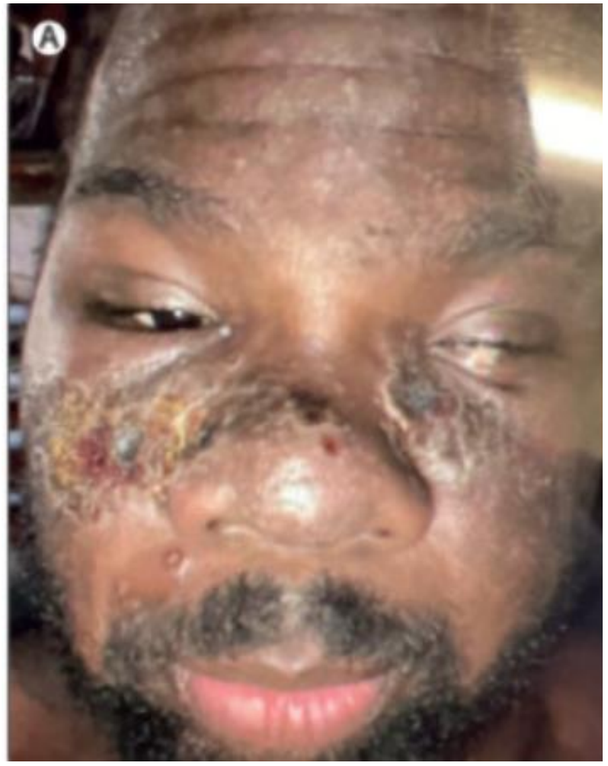
Central Africa, Eastern Africa, Northern Africa, Southern Africa, Western Africa

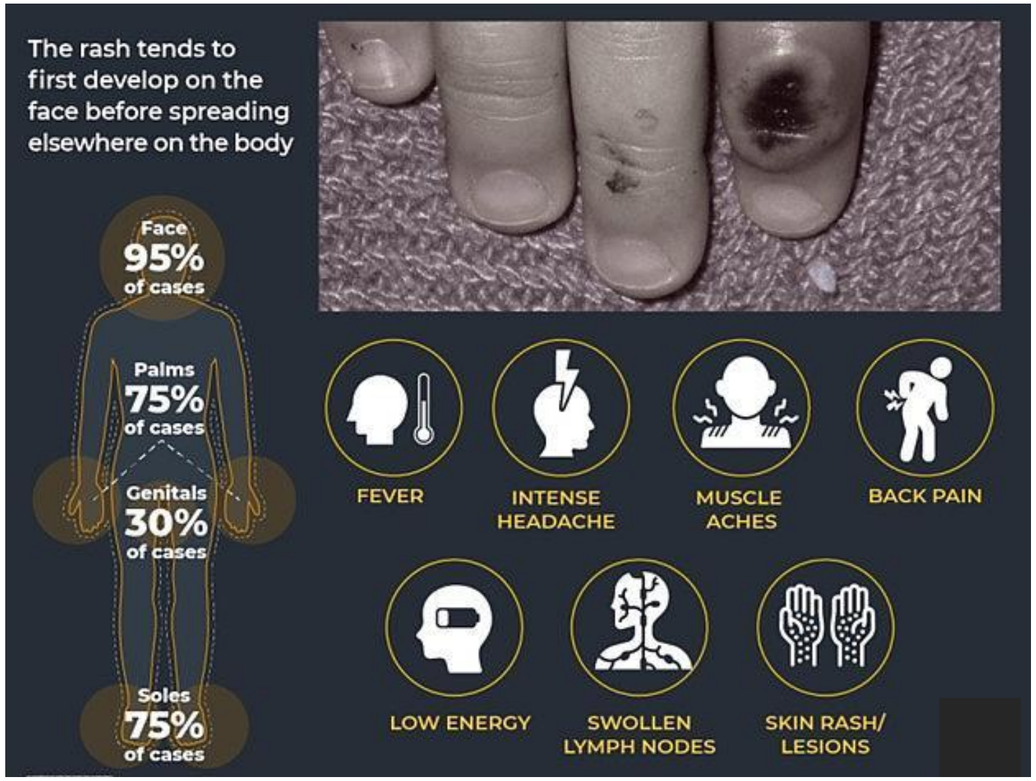
Mpox – "What's the Big Deal?"

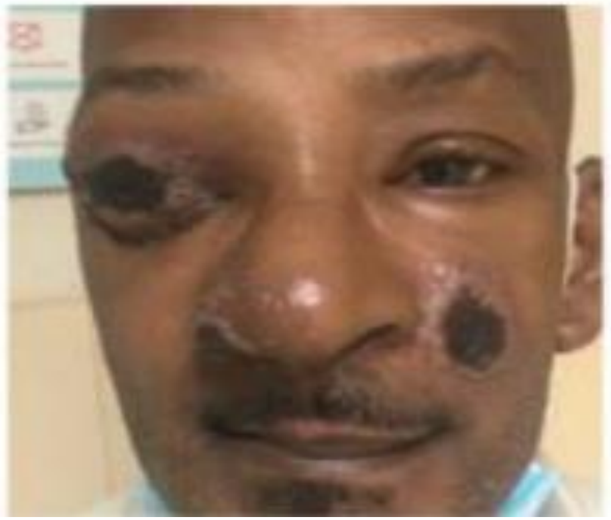
- Different than 2022
  - Multiple Mpox variants now circulating
  - More virulent, higher mortality and greater migration (US; EU; Africa)
- Vaccination is critical to reduce morbidity/mortality threat
- Worldwide need for increase vaccine resources
  - Increased vaccine availability and better vaccine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

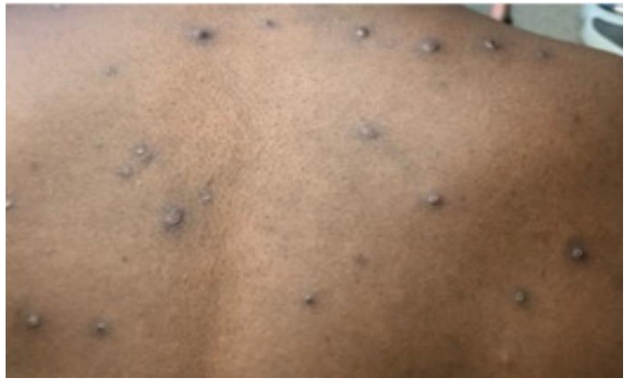
Source: Adapted from MedCram.com

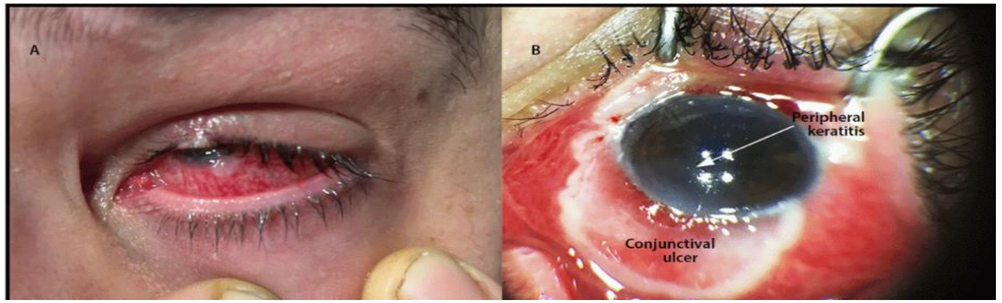
Threatening Symptoms

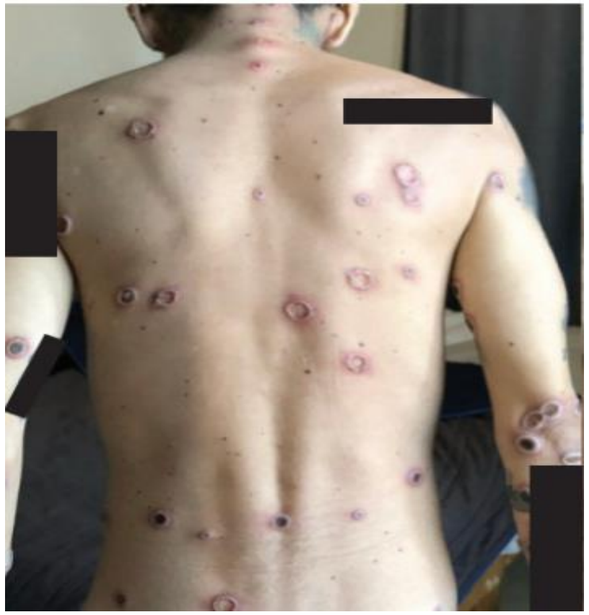












Source: Faisal Syed Minhaj, PharmD, MPH; CDC Poxvirus and Rabies Branch; Advisory Committee on Immunization Practices, April 15, 2025

“What’s the Solution?”

- **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**
  - **In dialogue with various U.S. & Global stakeholders**
  - **Regulatory guidance received supporting abbreviated approval pathway**
- **Implementation of Advanced MVA manufacturing platform**

Oncology: Gedeptin®

Gedeptin®: 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

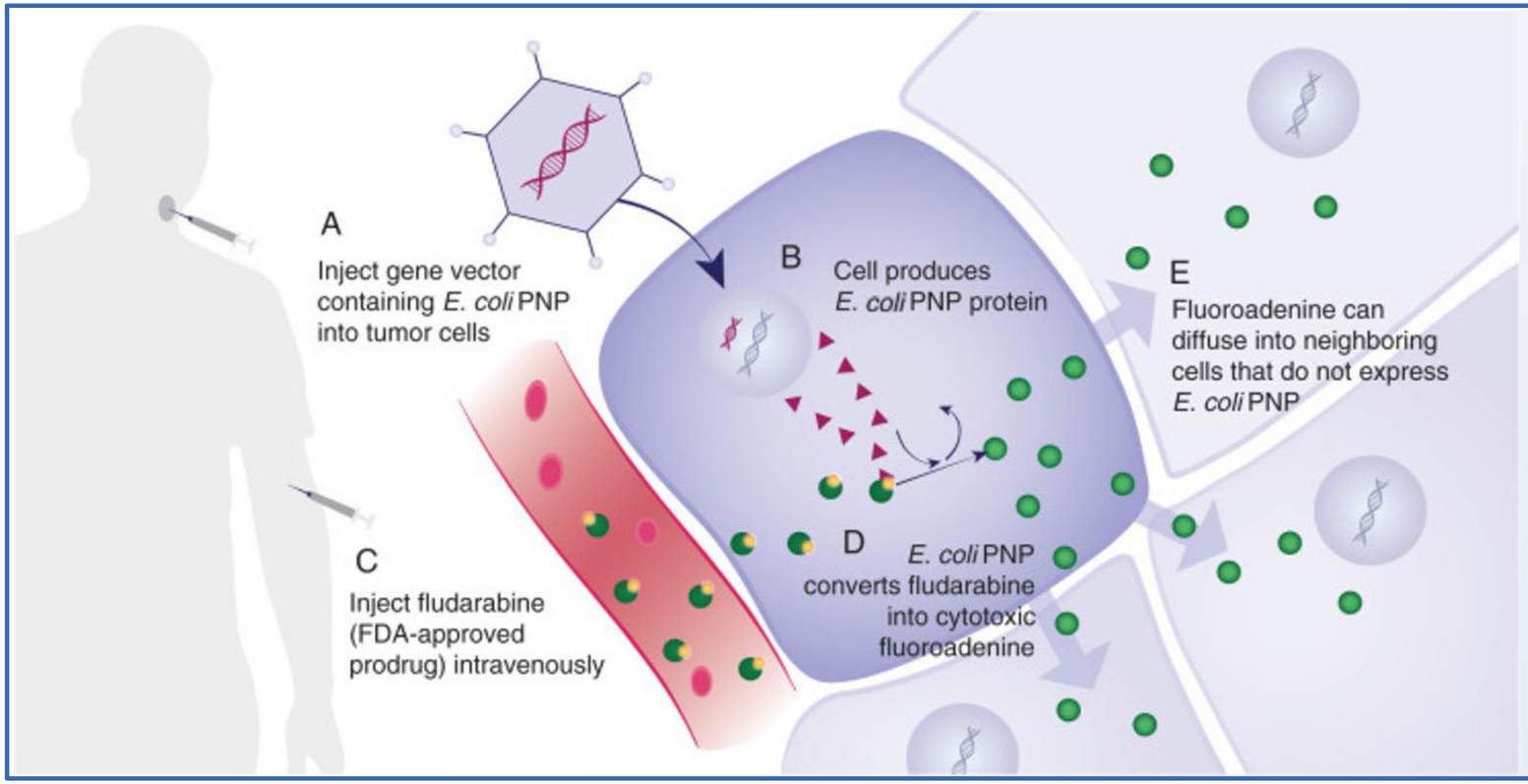
- "Needle-accessible" solid tumors

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

Gedeptin® Mechanism of Action



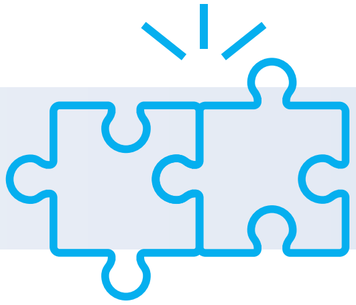
- Unprecedented level of cell-killing activity
- Novel tumor killing mechanism
- Facilitates destruction of refractory solid tumors
- “Tumor agnostic”

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

Gedeptin® 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 (Gedeptin® with ICI)

- Expanded Ph 2 trial focused on Gedeptin + ICI therapy against 1st 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 Q3 '25**

Gedeptin® (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: Completed**
- 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 commercialization and distribution

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


GeoVax
Thank You !!!