# Corporate Overview 2024

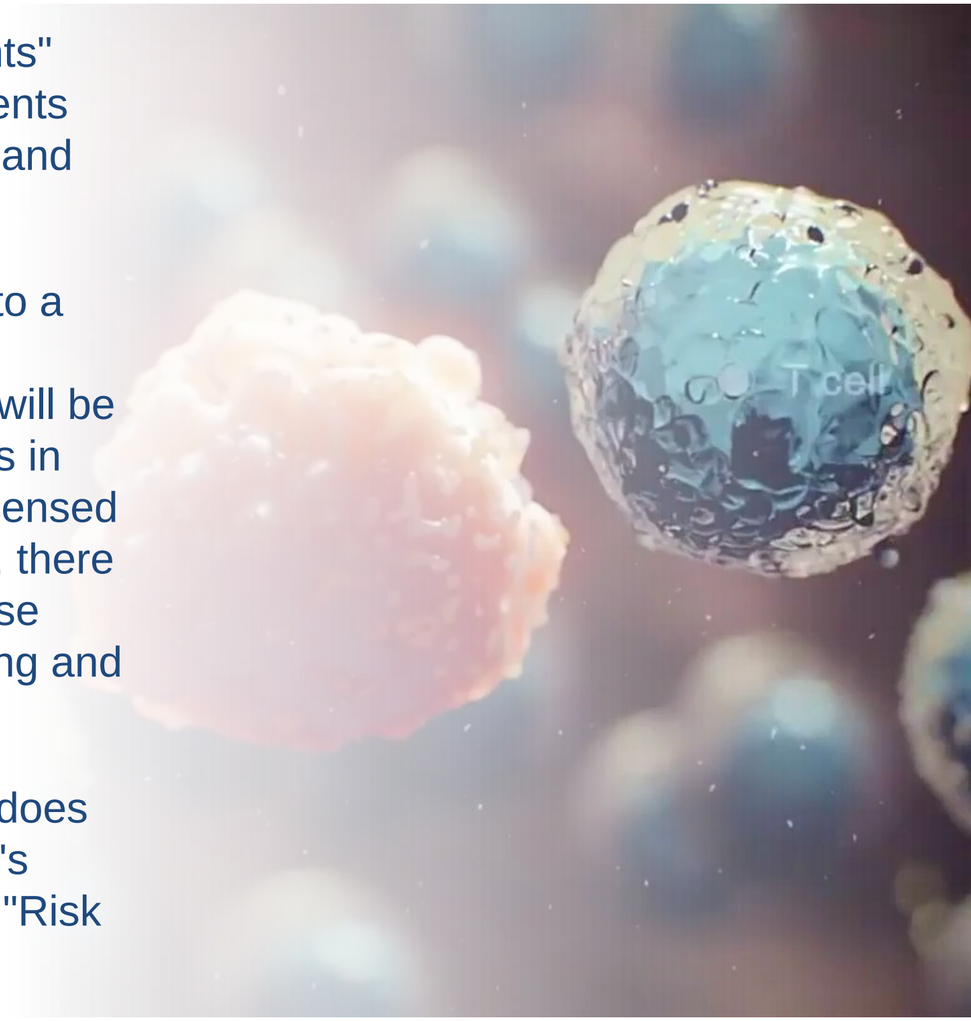
## Nasdaq: GOVX

# 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 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**

# Experienced Leadership with Expertise in Life Sciences

**David A. Dodd**
CEO, President & Chairman

- Has led the approval of over 10 NDAs, over 15 acquisitions/divestitures, in excess of $2.5B in financial transactions, and over $5B in incremental enterprise growth
- Executive roles with Abbott Laboratories, Bristol-Myers Squibb, Serologicals Corporation, Solvay Pharmaceuticals, Wyeth (now Pfizer)

**Kelly McKee, MD**
Chief Medical Officer
Colonel US Army (retired)

- Extensive experience in clinical development in infectious diseases including antiviral drugs/biologics, emerging infectious diseases, COVID-19 vaccines & therapeutics, biothreat countermeasures, sexually transmitted infections
- Former Director of Medical programs at U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)
- Former VP, Vaccines and Public Health, Infectious Diseases and Vaccines Center of Excellence at Quintiles

**Mark Newman, PhD**
Chief Scientific Officer

- Participated/directed teams responsible for the transition of 10 vaccine or vaccine-related products (protein, peptide, plasmid DNA and viral vectored vaccines and multiple vaccine adjuvants) from the research stage to Phase 1 & 2 clinical testing
- Principal Investigator on multiple USA government and foundation grants and contracts

**John Sharkey, PhD**
VP Business Development

- Executive management, technical development, regulatory and business development services to small and mid-size pharma and medical device companies

**Mark Reynolds, CPA**
Chief Financial Officer

- Held CFO positions in multiple private and public healthcare companies

# GeoVax Clinical Portfolio: U.S. Revenue Opportunity

| Product | Disease | Target | Est'd U.S. Market Revenue Potential $(000) |
|---|---|---|---|
| GEO-CM04S1 | Covid-19 | Primary Vaccine For Immune Compromised Patients | **$ 7,400,000** |
| Gedeptin® | Cancer | Advanced Head & Neck Cancer | **$ 2,625,000** |
| Gedeptin® | Cancer | Early-Stage Head & Neck Cancer | **$ 11,725,000** |
| GEO-MVA | Smallpox/Mpox | US Strategic National Stockpile & Adult Men at High Risk of Mpox | **$ 7,300,000** |

**$25-$30 Billion in U.S. Market Revenue Potential**

# Oncology – Gedeptin®

# Gedeptin®: U.S. Medical Need

## Target Cancer Patient Populations

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

## Patient Characteristics

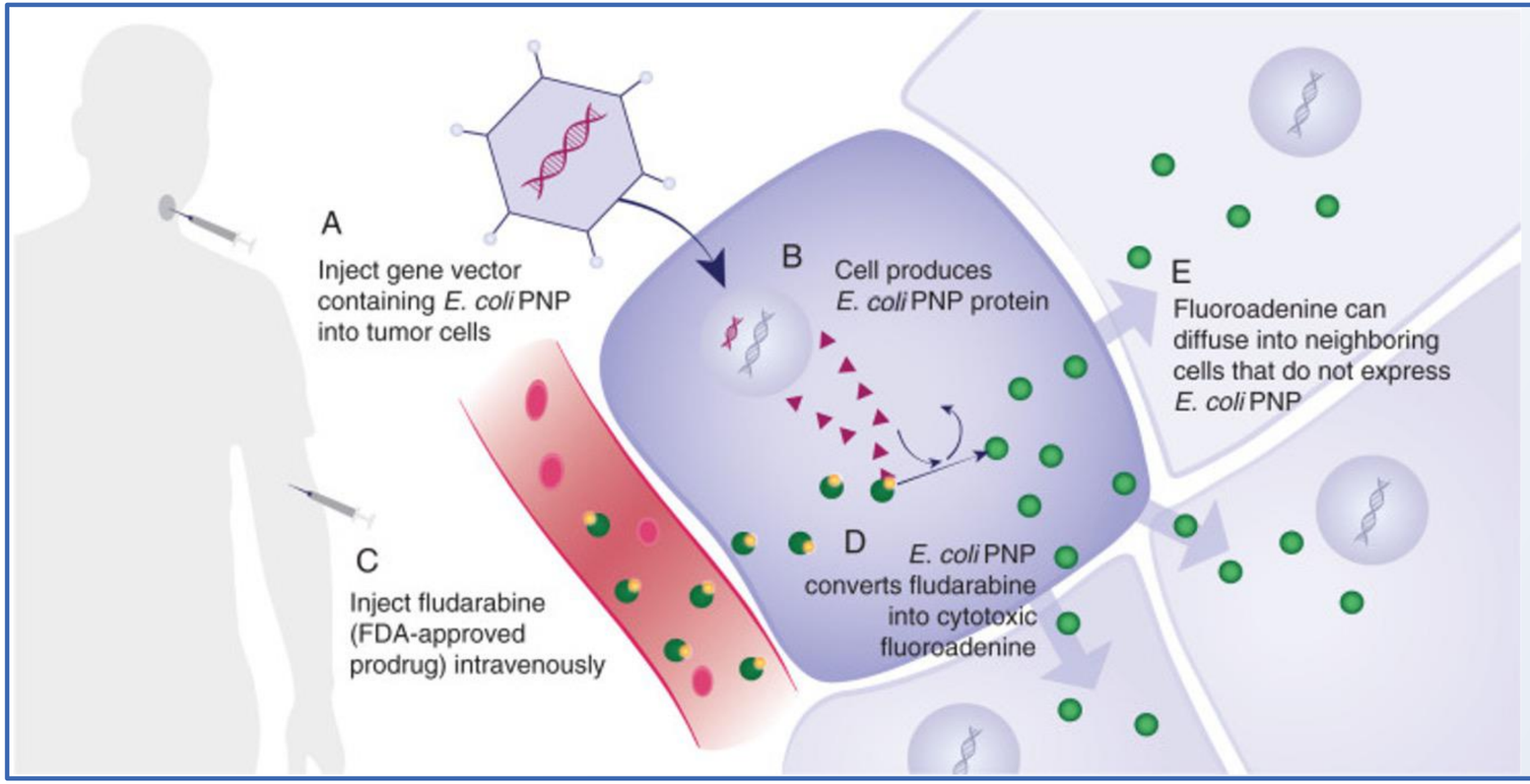
- “Needle-accessible” solid tumors

## Patient Prevalence (U.S.)

- Advanced Head & Neck Cancer (deaths/yr) - 15,000
- Early-Stage Head & Neck Cancer (new dx/yr) - 67,000
- Other Solid Tumors (deaths/yr) - 321,000

*Source: American Cancer Society (ACS) Cancer Facts & Figures 2023*

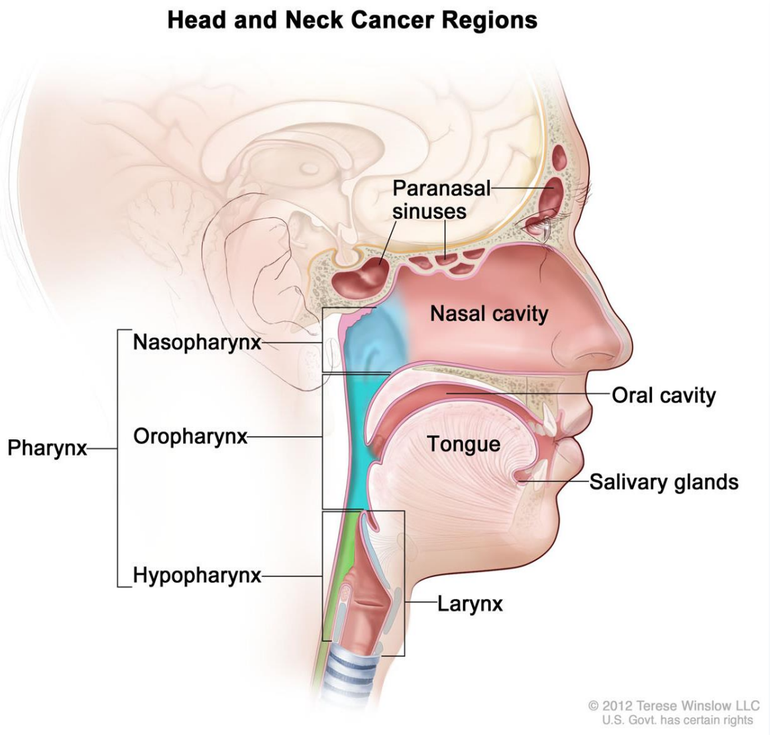
# Gedeptin® Mechanism of Action




- 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®




- **Initial Indication:** Advanced Head and Neck Cancers

**~ 67K H&N Cancer new cases annually in US[1]**

**~ 15K H&N Cancer deaths annually in US[1]**

**~ 900K H&N Cancer new cases annually Worldwide[2]**

**~ 400K H&N Cancer deaths annually Worldwide[2]**

*Source: NIH: National Cancer Institute*

(1) American Cancer Society Cancer Facts & Figures, 2023
(2) International Agency for Research on Cancer; World Health Organization, 2023

# Gedeptin® Clinical Data*

## Phase 1/ 2 study of Ad/PNP with fludarabine for the treatment of head & neck squamous cell carcinoma

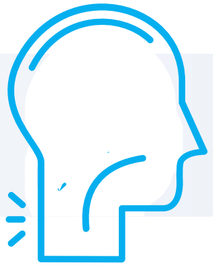
A. Dimitrios Colevas[1*], Eric J. Sorscher[2*], William Parker[3], Roan Courtney Raymundo[1], Jeong S. Hong[2], Regina Rab[2], Camilo Henao[4], Nikki Schmitt[2], Madison Stallings[2], Kelly T. McKee, Jr.[5], Eben Rosenthal[6], Joseph Curry[4]

- Evaluation of Gedeptin® as an experimental therapy for refractory tumors (NCT03754933)
- Safety and efficacy of repeat cycles of Gedeptin® therapy in patients with recurrent head and neck squamous cell carcinoma (HNSCC) with tumor(s) accessible for injection and no curable treatment options
- Data highlights (8 patients):
  - No dose limiting toxicities or serious adverse events (SAEs) are attributable to treatment
  - No adverse events above grade 3 severity
  - Up to 5 cycles of Gedeptin® treatment administered without limiting sequelae
  - Intratumoral expression of the PNP transgene bt RT-PCR established in treatment tumors to date
  - Impaired tumor growth (i.e., stable disease using RECIST 1.1 evaluation criteria) in targeted lesions seen in 5 of 7 patients (tumor response assessment in 1 patient remains under study)
- Conclude from interim analysis that administration of Gedeptin® is safe and feasible

* Poster presentation at the July 10, 2023 American Association for Cancer Research (AACR) and the American Head and neck Society (AHNS) joint Head and Neck Cancer Conference in Montreal, QC, Canada

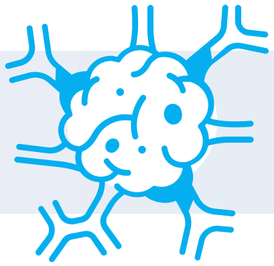
**1.** Stanford Cancer Institute, Stanford University; **2.** Emory University School of Medicine; 3. PNP Therapeutics, Inc.; **4.** Thomas Jefferson University; **5.** GeoVax Laboratories; **6.** Vanderbilt University

# Gedeptin® Clinical Development Plans



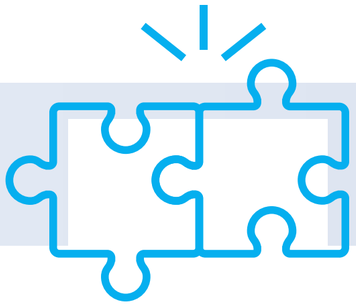
## Initial Focus: Advanced Head & Neck Cancer Indication (Mono-therapy)

- Complete initial Ph 2 trial (FDA funded), validating safety and tumor shrinkage
- Initiate expanded Ph 2 trial focused on expedited registration



## Secondary Focus: Additional Solid Tumor Indications (Mono-therapy)

- Clarify next mono-therapy indication and protocol



## Tertiary Focus: Combination-Therapy (in conjunction with ICIs)

- Complete current preclinical studies of Gedeptin in conjunction with ICIs
- Clarify initial clinical indication and trial of Gedeptin + ICI therapy

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

# Infectious Diseases – Covid-19/GEO-CM04S1

# GEO-CM04S1: U.S. Medical Need

## Immune Compromised Patients Includes:

- Cancers
- Renal disease
- Transplants
- HIV
- Various other conditions

## Patient Characteristics:

- Under active medical management
- Impaired immune responses to Ab stimulation (e.g., authorized Covid-19 vaccines, mRNA, protein adjuvant)
- Greater risk of severe disease, hospitalization and/or death from SARS-CoV-2 infection

## Immune Compromised Prevalence (% of population)

- United States ~23M (6.6%)

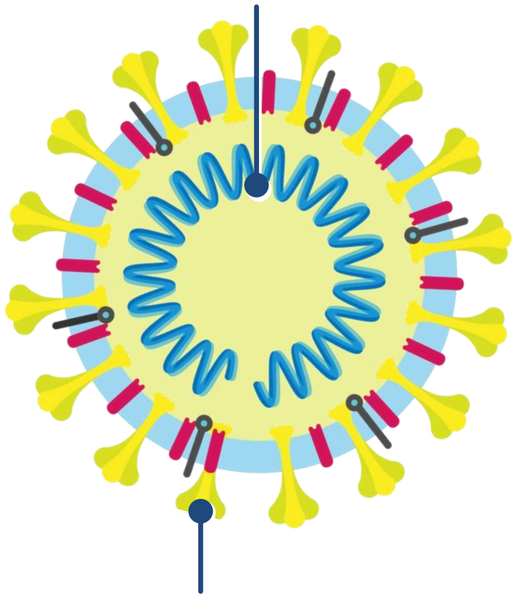
*Prevalence of Immunosuppression Among US Adults, JAMA, Feb 15, 2024*

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

## GEO-CM04S1

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

Nucleocapsid (N) Protein



Spike (S) Protein

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

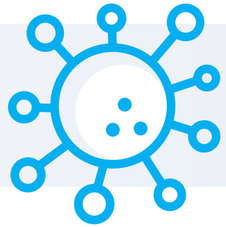
**COVID-19 Disease Severity**

| | Asymptomatic Infection | Symptomatic Infection | Severe Disease, Hospitalization | Death |
|---|---|---|---|---|
| Antibodies | ++++ | +++ | ++ | ++ |
| T Cells | + | ++ | ++++ | ++++ |

**Humoral and cellular immune responses contribute to protection against SARS-CoV-2 infection and coronavirus disease 2019 (Covid-19). Plus signs denote the relative importance of antibodies and T cells for protection in each category of disease severity, with more plus signs indicating greater importance.**

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

# GEO-CM04S1



**Covid-19 Vaccine**

**More robust, durable**

**“Variant Agnostic”**

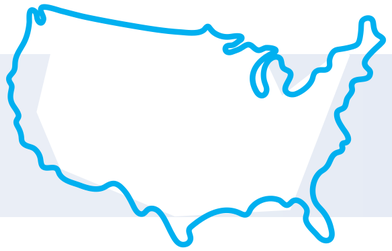
## GeoVax platform (MVA): recognized safety, potent, durable, minimal refrigeration/freeze-dried delivery

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

Source: Airfinity Ltd.

# GEO-CM04S1

**Targeting Immunocompromised patients**



**23 million in the U.S.**

**>250 million Worldwide**

**Immunocompromised patients are under active physician care, making the message and vaccine acceptance more cost effective:**

- Cancers
- Renal disease
- HIV
- Sickle cell anemia
- Autoimmune disease (e.g., Lupus)
- Multiple sclerosis
- Transplantation (e.g., immune suppressive therapy)
- Diabetes
- Etc.

Source: Airfinity Ltd.

# 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

## Booster to mRNA vaccine

- Healthy population following vaccination with an mRNA vaccine
  - Potential for broader and more durable protection versus multiple, continuous mRNA doses

# GEO-CM04S1 Development Plan

- Validate the Differentiation of GEO-CM04S1 Addressing Immunocompromised Patients
  - Broader (Variant Agnostic), more durable protection (6-12+ months)
  - “Preferred Covid-19 vaccine for immunocompromised patients”
- Expedited Registration Focused on Immunocompromised Patient Populations

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

# Infectious Diseases – Mpox & Smallpox/GEO-MVA

# GEO-MVA

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

- Currently one supplier worldwide – unable to meet demand
- High federal government interest in establishing a U.S. based supplier
- HHS interest in replenishing/re-stocking Strategic National Stockpile (SNS)
- GeoVax rapidly advancing development

# GEO-MVA: U.S. Medical Need

## Target Patients Candidates For

- Smallpox (Strategic National Stockpile)
- Mpox (Monkeypox)

## Customer Profile

- Smallpox: U.S. Government Strategic National Stockpile (SNS)
- Mpox: Adults at risk

## U.S. Stockpile Target Requirement

- 66M at risk Americans
- 132M doses

## US At Risk Population

- 7M Adult Males at risk*
- 14M doses

*Source: Mpox cases reported to CDC: Age and Gender (August 23, 2023);
*Gallup Poll: LGBT Identification (Feb 2022)

# Advanced, Transformative MVA Manufacturing

# GeoVax MVA Manufacturing

**Transformation to Advanced High-Yield, High-Capacity Continuous Cell Line System**

- **MVA vaccines are currently manufactured via a sub-optimal, antiquated process (using Chicken Embryonic Fibroblasts)**
  - Time consuming
  - Low capacity, low yield
- **GeoVax is focused on transforming MVA production to high-yield, high-capacity continuous cell line manufacturing system**
  - Providing ability to address epidemics and pandemics
  - Providing additional/alternative for products stockpiled
  - Low-cost, scalable versatility for broad MVA-vaccine and immunotherapy applications

# Milestones, Catalysts & Summary

# 2024 Milestones & Catalysts

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

- Immunocompromised/stem cell transplant patients: **Expansion sites actively recruiting; interim data H1**
- Immunocompromised/Chronic Lymphocytic Leukemia (CLL) patients: **Enrollment completed H2 ‘24; interim data H1**
- Healthy patient booster trial: **Initial Data H1; Study results H2**

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

- Initial Ph 1/2: **Study data results H1**
- Plans for expanded Ph 2 study: **H1**
- Updates & Plans re Gedeptin + ICI: **H2**

## GEO-MVA (Mpox; Smallpox)

- Progress re expedited regulatory registration pathway: **H1**

## Advanced, Transformative Continuous Cell-line MVA Manufacturing

- Progress for GEO-CM04S1 and GEO-MVA

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

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