



# **Multikine™ “True First-Line” Cancer Therapy**

**First Indication: Potential Blockbuster Head & Neck Cancer Immunotherapy**

# Forward Looking Statements

---

This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. You can generally identify these forward-looking statements by forward-looking words such as “anticipates,” “believes,” “expects,” “intends,” “future,” “could,” “estimates,” “plans,” “would,” “should,” “potential,” “continues” and similar words or expressions (as well as other words or expressions referencing future events, conditions or circumstances). These forward-looking statements involve risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements, including, but not limited to: the progress and timing of, and the amount of expenses associated with, our research, development and commercialization activities for our product candidates, including Multikine; the success of our clinical studies for our product candidates; our ability to obtain U.S. and foreign regulatory approval for our product candidates and the ability of our product candidates to meet existing or future regulatory standards; our

expectations regarding federal, state and foreign regulatory requirements; the therapeutic benefits and effectiveness of our product candidates; the safety profile and related adverse events of our product candidates; our ability to manufacture sufficient amounts of Multikine or our other product candidates for use in our clinical studies or, if approved, for commercialization activities following such regulatory approvals; our plans with respect to collaborations and licenses related to the development, manufacture or sale of our product candidates; our expectations as to future financial performance, expense levels and liquidity sources; our ability to compete with other companies that are or may be developing or selling products that are competitive with our product candidates; anticipated trends and challenges in our potential markets; and our ability to attract, retain and motivate key personnel.

All forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement, the risk factors set forth in our public filings, and in the documents incorporated or deemed to be incorporated by reference therein. The forward-looking statements contained in this

presentation speak only as of their respective dates. Except to the extent required by applicable laws and regulations, we undertake no obligation to update these forward-looking statements to reflect new information, events or circumstances after the date of this presentation. In light of these risks and uncertainties, the forward-looking events and circumstances described in this presentation may not occur and actual results could differ materially from those anticipated or implied in such forward-looking statements. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements.

Multikine is the trademark that CEL-SCI has registered for this investigational therapy, and this proprietary name is subject to FDA review in connection with CEL-SCI’s future anticipated regulatory submission for approval. Multikine has not been licensed or approved for sale, barter or exchange by the FDA or any other regulatory agency. Similarly, its safety or efficacy has not been established for any use. Each page of this presentation must be looked at in the context of the whole presentation, not by itself, and is merely meant to be a summary of the full and detailed information concerning the Company in its public filings and its website.

# Pipeline



## MULTIKINE

### Head and neck cancer:

– right after diagnosis, therapy administered right after diagnosis, before the first surgery

### HPV

– Cervical dysplasia in HIV/HPV co-infected patients (Univ. of Maryland)

## LEAPS

### Rheumatoid Arthritis CEL-2000

– Phase 1 enabling studies CEL-4000 (NIH Grant)

# Why Invest In CEL-SCI Now?

Average Enterprise Value of a Biotech Listed on U.S. Exchanges by Stage of Development, Dec 31, 2021 to March 30, 2024 (\$ Millions)



[https://www.stifel.com/newsletters/investmentbanking/bal/marketing/healthcare/biopharma\\_timopler/biopharmamarketupdate\\_04.01.2024.pdf](https://www.stifel.com/newsletters/investmentbanking/bal/marketing/healthcare/biopharma_timopler/biopharmamarketupdate_04.01.2024.pdf)

# De-Risked Unique Investment Opportunity

## Where we were...

**928-patient Phase 3 completed**



Robust data demonstrating high efficacy (improves survival) and safety in target population



**Undervalued at <\$100M**

## Recent catalysts...

**FDA agreed to 212-person confirmatory Registration Study**



De-risked Registration Study needs only to confirm prior Phase 3 findings



**Valuation average for comps >\$900M per current research**

## Where we are headed...

**Approval: Head & Neck Cancer**



Cancer drugs that improve survival become part of the standard of care



**Valuation >\$5B**

**We believe we should be valued here or greater, because, as we show you, our confirmatory study is significantly derisked**

# Our Confirmatory Trial Is Highly Likely To Succeed

- Confirmatory studies have a much higher chance of success than normal Phase 3 studies. Our confirmatory study is expected to have an even higher chance of success for the following reason:

*A normal confirmatory cancer study seeks to show that tumor responses translate into increased survival. We already know the survival of the selected type of patients. We seek to repeat what we have already shown in a manner that meets regulatory procedures.*

# Our Confirmatory Trial Is Highly Likely To Succeed Because the Data From The Completed Trial Is Better Than What Is Needed For Approval

<b>Standard for Success</b>	<b>Multikine in the Target Population (Selected From Phase 3 Data)</b>
<b>Survival benefit above absolute 10%</b>	<b>Absolute 28% survival benefit</b>
<b>Hazard ratio below 0.72</b>	<b>0.35 hazard ratio</b>
<b>Upper bound of hazard ratio below 1.0</b>	<b>0.66 upper bound of hazard ratio</b>

# What Is Multikine Pre-Surgery Therapy?

## Multikine is ...

- a true first-line cancer immunotherapy given right after diagnosis, before surgery.
- a mixture of natural cytokines and biological molecules.
- mass produced at CEL-SCI's dedicated GMP manufacturing facility near Baltimore.
- initially targeted at head and neck cancer



# What is the big deal about Multikine?

- Multikine is given right after diagnosis, before surgery, radiation and chemotherapy have damaged the immune system. It acts when the immune system is strongest.
- This approach is unique compared to normal cancer drug development, which focuses on late-stage patients with metastasized or recurrent tumors.
- Initially we target head and neck cancer because 1) it is a very hard to treat cancer (unmet medical need) and 2) it one of the largest and most devastating cancers.
- By giving Multikine when the immune system is strongest, we can establish Multikine as part of a new standard of care. The first treatment is the largest market; nobody has died or has been cured yet.

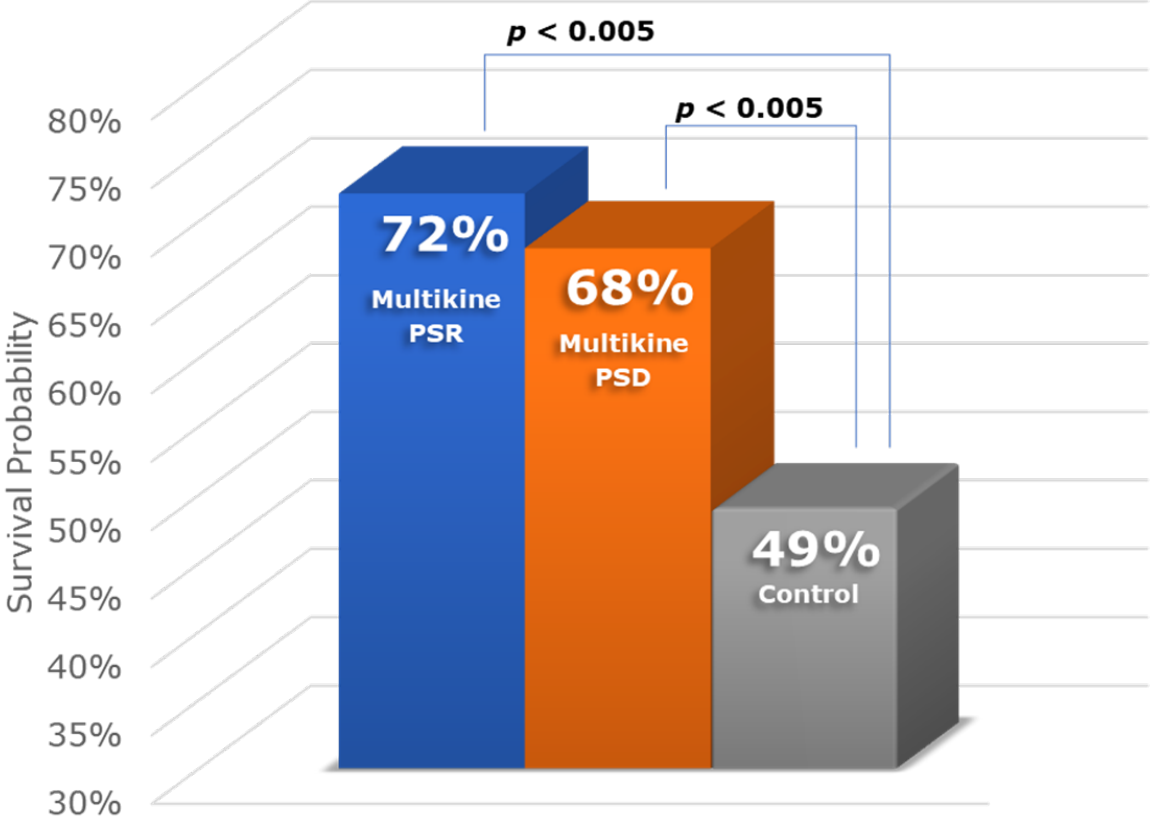
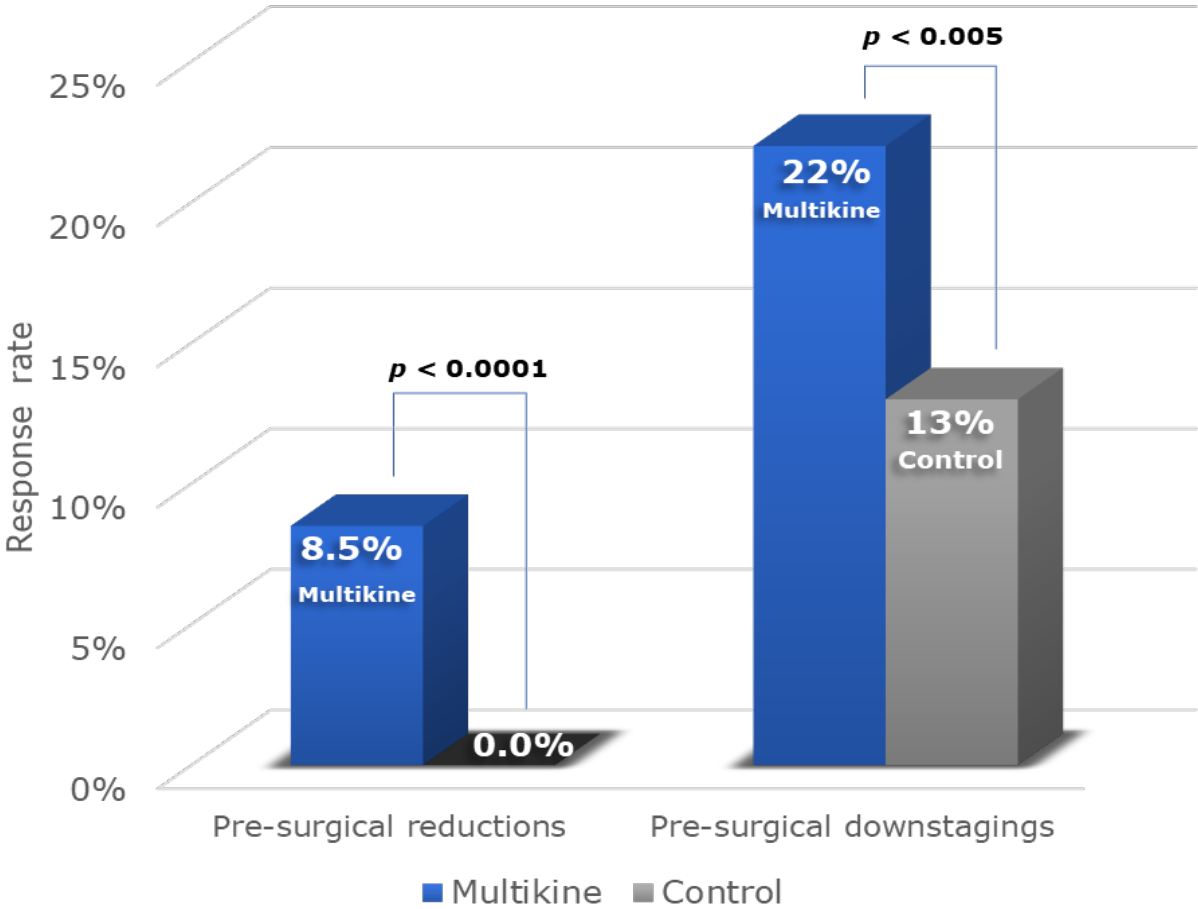
# Summary of Prior Clinical Data

- Multikine has already been in clinical trials in over 750 patients.
- Completed a 928-patient head and neck cancer Phase 3 study.
- Why are we valued at under \$100 m as opposed to \$5 billion?
  - Large survival benefit for patients who had Multikine followed by surgery and radiotherapy.
  - No survival benefit in patients who had chemotherapy added.
  - FDA requires a confirmatory study targeting only those patients who have the survival benefit.
- Across the entire population of patients treated in Phase 3 study:
  - Excellent safety
  - Increased pre-surgical tumor responses appear to lead to increased survival

# Safety Across the Entire Patient Population

- No Multikine-related systemic AEs (Adverse Effects) or SAEs (Serious Adverse Effects).
- No Multikine-related delays of surgery.
- No Multikine-related interference with post-surgical treatment.
- No Multikine-related deaths.

# Increased Pre-Surgical Tumor Responses Appear to Lead to Increased Survival Across The Entire Phase 3 Study



# Focusing the Target Population

- The greatest benefit was in the targeted population:

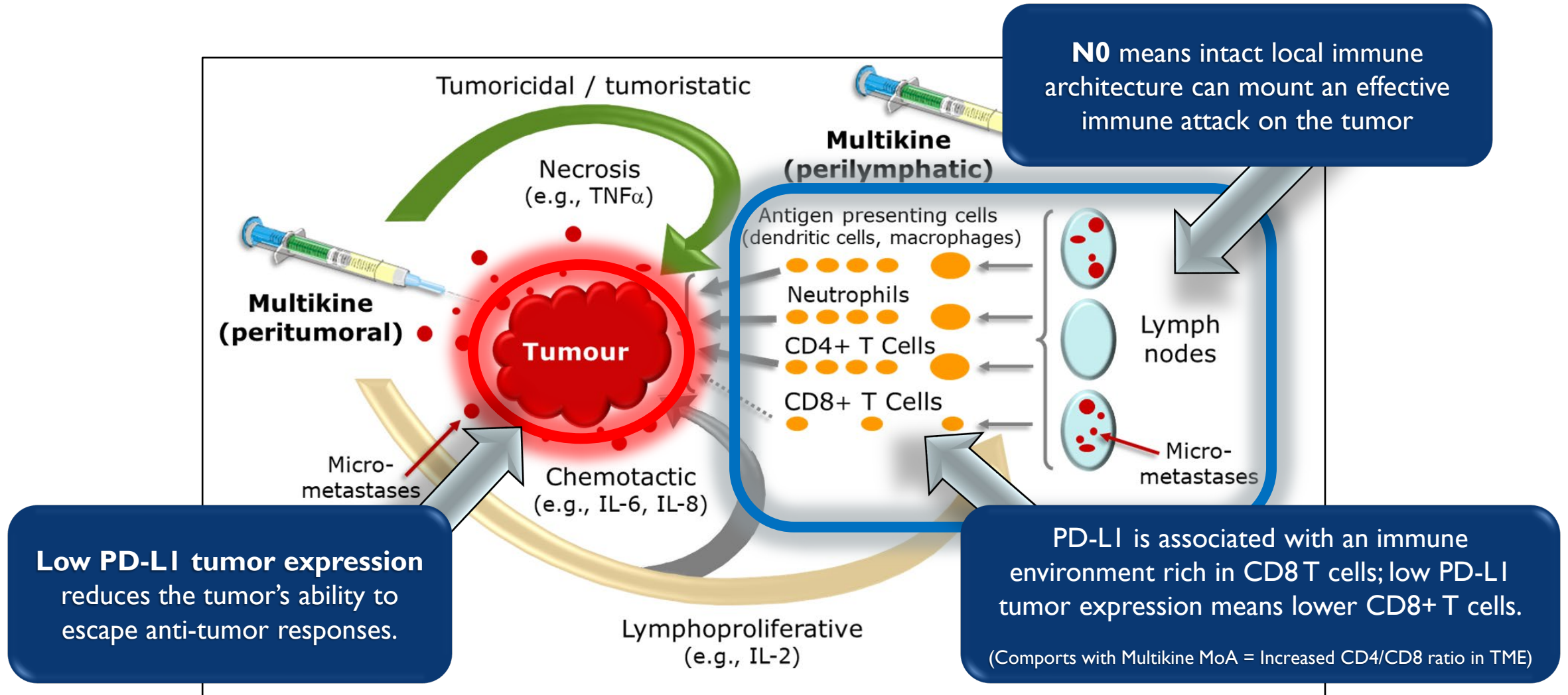
Newly diagnosed advanced primary head and neck cancer patients with no lymph node involvement (determined via PET scan) and with low PD-L1 tumor expression (determined via biopsy).

- Physicians routinely assess these features at baseline as part of standard practice.
- A clear definition is an essential requirement for regulators to write an approval label.
- This population represents approximately 100,000 patients globally per year.

# Supported by the Biological Mechanism of Action

- **Why N0?**
  - The immune system needs the lymph nodes to work. If nodes are damaged by disease, then the immune system is less effective. Patients with “N0” (no cancer found in the regional lymph nodes) can mount the strongest immune attack. Also, physicians want to reduce the chance that the patient will need chemotherapy. N0 patients do not get chemotherapy.
- **Why PET scan?**
  - PET Scan provides greater sensitivity than standard techniques. This ensures that patients are truly “N0,” which means the disease has not spread to the lymph nodes.
- **Why low PD-L1 tumor expression?**
  - PD-L1 is a protein on the tumor surface that acts as a kind of “brake” to keep the body’s immune responses under control. When PD-L1 binds to another protein called PD-1 (a protein found on immune T cells), it keeps T cells from killing the PD-L1-containing tumor cells. Tumors with low PD-L1 expression do not have much of a brake on the immune response and are therefore more susceptible to an immune attack incited by Multikine.
- **Supported by Phase 3 data.**
  - Patients with N0 and low PD-L1 had the best outcomes from Multikine versus control.

# Supported by the Biological Mechanism of Action



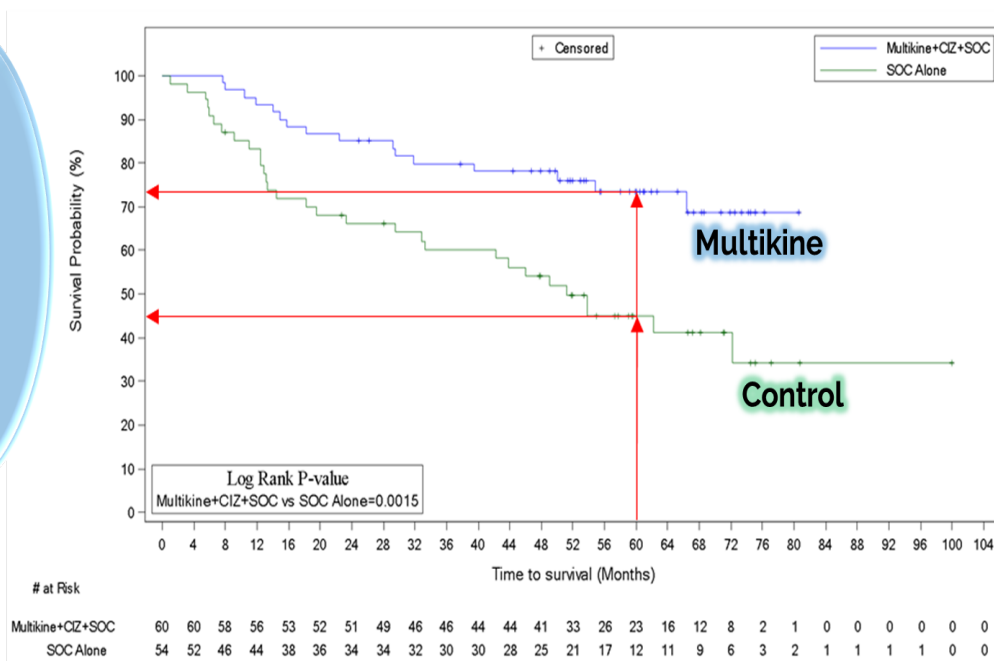
# In the Target Population: Improved Survival In Patients From The Phase 3 RCT

Data Presented at European Society for Medical Oncology in October 2023

- ✓ 73% survival for Multikine vs 45% in the control, at 5 years
- ✓ Absolute 28% jump in 5-year absolute survival
- ✓ Statistically significant  $p = 0.0015$
- ✓ 5-year risk of death cut from 55% to 27%
- ✓ Hazard ratio = 0.35 (95% CIs [0.19, 0.66])
- ✓ Tumor reduction rate >13%
- ✓ Tumor downstaging rate >35%
- ✓ No safety signals or toxicities vs standard of care

5-year  
survival  
**73%**  
VS  
**45%**

Kaplan-Meier Overall Survival for Multikine target population (n=114) in the Phase 3 study

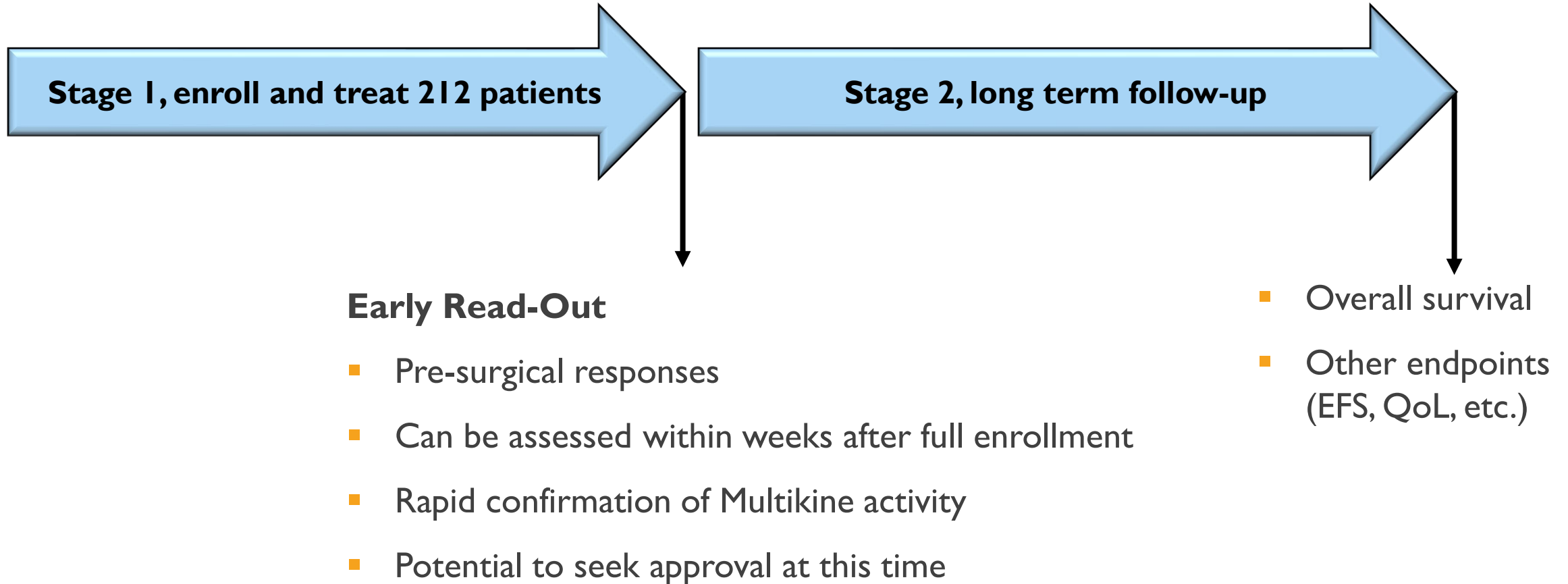




# Multikine's Path Forward

- The ethical standards for exposing patients to an experimental drug are ***much stricter*** for newly-diagnosed patients than for terminal patients, who are already expected to die from the cancer.
- ***We were able to meet FDA's stricter standards.*** FDA has accepted our patient selection criteria and the confirmatory trial design. We have a clear path forward.
- ***Small size***—only 212 patients. Basically a repeat of the old study, but in a focused population of patients that we already know have high survival benefit from Multikine. Obviously that reduces the clinical risk a great deal.
- ***Fast pace***—enrollment expected to take 18 months.
- ***Early read-out*** for pre-surgical responses when enrollment is complete.
- ***Potential to seek conditional / accelerated approvals*** based on pre-surgical responses.
- Follow up for survival benefit.

# Multikine's Path Forward: An FDA-Accepted Confirmatory Trial



# Multikine Approval Pathway With The US FDA



- We received FDA go-ahead for the confirmatory clinical trial in meeting minutes received from FDA in May '24.
- Food and Drug Omnibus Reform Act, enacted Dec '22, requires enrollment to be “substantially complete” before accelerated approval will be considered.
- FDA acknowledged the longstanding unmet need for improved treatments.
- FDA is open to close collaboration with CEL-SCI to help demonstrate that Multikine could be such a therapy.

# Dedicated State-of-the-Art Manufacturing Facility

## cGMP and BSL-I facility near Washington, DC, USA

- Built specifically for Multikine
- State-of-the art facility
- Over 73,000 ft<sup>2</sup> of Manufacturing and R&D space available
- About 45,000 ft<sup>2</sup> fully developed
- Proprietary automated cold fill to ensure no loss of biological activity during fill
- Commissioning was achieved in Feb 2024, and validation expected to be completed in Summer 2024.



**Over \$200 million invested in drug manufacturing. Dedicated facility was built before the Phase 3 trial started and the capacity was recently doubled in preparation for commercialization.**

## Inspected several times by European Qualified Person (QP)

- Inspected by the QP for the manufacture and release of Sterile Medicinal Products (per ICH and EU Directives)

## Barriers to competition - Process of manufacture

- In house manufacturing process for complex biologic with initial capacity 12,000+ treatments per year.

# Top-Tier Physician Consultants



## **Barbara Burtness, MD**

- Anthony N. Brady Professor of Medicine (Medical Oncology) at Yale School of Medicine
- Chief Translational Research Officer, Yale Cancer Center
- Chief, Head and Neck Cancers/Sarcoma and Co-Leader, Developmental Therapeutics, Yale Cancer Center
- Associate Cancer Center Director for Translational Research, Yale Cancer Center
- Internationally recognized for her work in head & neck cancer and leads national and international head and neck cancer trials, extensively published



## **Mehmet Sen, MD, FRCR**

- Practicing head and neck oncologist and radiologist for >30 years in UK and Europe
- Consultant Clinical Oncologist & Honorary Senior Lecturer, St. James Institute of Oncology, Leeds, UK
- Council Member of the British Association of Head and Neck Oncologists (BAHNO)
- Member, EORTC Head and Neck Cancer Group and the EORTC Radiotherapy Group (ROG)
- Internationally recognized for his work in head & neck cancer and leads national and international head and neck cancer trials, extensively published



## **Marshall Posner, MD**

- Consultant for CEL-SCI since 2005
- Principal Investigator and Chair of the IDMC in CEL-SCI's Phase 3 study
- Director, Head and Neck Oncology, Mt. Sinai NY
- Co-Leader, Cancer Clinical Investigation Program, Tisch Cancer Institute
- More than 250 peer-reviewed publications



## **J. Edward M. Young, MD**

- Clinical Professor of Surgery, McMaster University
- 45+ years managing head and neck cancer
- Former President of Society of Head and Neck Surgeons
- Former head Surgical Oncology, Hamilton Regional Oncology Center, Canada
- Principal Investigator in CEL-SCI's Phase 2 and 3 studies

# Investment Highlights and Milestones

---

**Strong survival data:**

The goal of the confirmatory study is to show an absolute 10% survival benefit. The analysis of these patients in the completed study showed an absolute 28% survival benefit.

---

**Addressing an unmet medical need:**

No drug is approved as a pre-surgical treatment in head & neck cancer. In addition, Multikine focuses on the 70% of patients not well served by the two leading approved drugs for head and neck cancer, Keytruda and Opdivo, both of which are also not approved as pre-surgical treatments, the proposed Multikine indication.

---

**FDA approval pathway:**

Confirmatory study of 212 patients. FDA found the proposed study design acceptable. The ethical standard for approving a new drug for newly diagnosed patients is much stricter than for terminal patients.

---

**Commissioned manufacturing facility:**

The commissioning of our manufacturing facility has been completed, and validation is expected in Summer 2024, which will position CEL-SCI to supply up to about 12,000+ treatments per year.

---

**Enrollment commences:**

Expected in Fall 2024. This study will enroll the same type of patient that showed excellent long term survival benefit in the completed Phase 3 study (those with N0 and low PD-L1)

---

**De-risked clinical trial:**

With a high chance of success, CEL-SCI's value should ramp up as investors take note. Given the results of the prior study, we expect the confirmatory study to be successful.

---

# Final Thoughts

- We have identified the exact patient population where Multikine provides a very large survival benefit. FDA has agreed with this selection and has given the go-ahead for the confirmatory trial.
- Statistically speaking and when you look at the large survival benefit seen in the prior study, we should have a very high chance of being successful.
- Now that FDA has given the go-ahead, we have a clear path forward. A new class of investor is now looking at CEL-SCI.
- We recently added a highly experienced Medical Director with experience at leading pharmaceutical companies. We also have changed the Board of Directors to add more Wall Street experience. We will further expand our team as we move forward.

# Equity Summary

CEL-SCI Corporation	NYSE American: CVM
Clinical Trial Stage	Completed 928-patient, global, multicenter, Phase 3 cancer immunotherapy study, preparing for confirmatory study of 212 patients
Market Capitalization	~\$77 million
Avg. Daily Trading Volume	~ 330,000 shares per day
Shares Outstanding	~ 54 million shares; <u>clean cap structure</u>
Share Price	~ \$1.45





---

**Thank you.**

**NYSE American: CVM**

