Capricor Therapeutics™

Corporate Presentation

Capricor Therapeutics, Inc.
Nasdaq: CAPR
February 2026

Forward Looking Statements

Statements in this presentation regarding the efficacy, safety, and intended utilization of Capricor's product candidates; the initiation, conduct, size, timing and results of clinical trials; the pace of enrollment of clinical trials; plans regarding regulatory filings, future research and clinical trials; regulatory developments involving products, including future interactions with regulatory authorities and the ability to obtain regulatory approvals or otherwise bring products to market; manufacturing capabilities; dates for regulatory meetings; the potential that required regulatory inspections may be delayed or not be successful which would delay or prevent product approval; the ability to achieve product milestones and to receive milestone payments from commercial partners; and any other statements about Capricor's management team's future expectations, beliefs, goals, plans or prospects constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any statements that are not statements of historical fact (including statements containing the words "believes," "plans," "could," "anticipates," "expects," "estimates," "should," "target," "will," "would" and similar expressions) should also be considered to be forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements. More information about these and other risks that may impact Capricor's business is set forth in Capricor's Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the Securities and Exchange Commission on March 26, 2025, and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, as filed with the Securities and Exchange Commission on November 10, 2025. All forward-looking statements in this presentation are based on information available to Capricor as of the date hereof, and Capricor assumes no obligation to update these forward-looking statements.

Capricor has entered into an agreement for the exclusive commercialization and distribution of Deramiocel for DMD in the United States and Japan with Nippon Shinyaku Co., Ltd. (U.S. subsidiary: NS Pharma, Inc.), subject to regulatory approval. Deramiocel and the StealthX™ vaccine are investigational candidates and have not been approved for commercial use in any indication.

At Capricor, we are committed to advancing transformative treatments and delivering meaningful outcomes for patients in need.

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Capricor's History & Evolution

From Discovery to Late-Stage Clinical Validation and Platform Expansion

2004: **Discovery** of **Cardiosphere-derived cells** (CDCs) at **Johns Hopkins University**

2005: Capricor was founded and **embarked** on a journey to **elucidate** the **mechanism** of **cell-based** biology for **therapeutic development**

2012: Initial **publication demonstrating** early **clinical benefits** of CDCs[1]

2014: **Uplisted** to **NASDAQ** Capital Market **(CAPR)**

2015: **Discovery** of **exosomes** as the primary **mode** of action of CDCs

2018: **Published** foundational preclinical **Duchenne muscular dystrophy (DMD)** study in ***Stem Cell Reports***

2019: **Published positive clinical** results from HOPE-Duchenne **Phase 1 study** in ***Journal of Neurology***[2]

2021: **Relocated** Capricor's **HQ** to **San Diego, California**

Platform expansion
Leveraging **exosome-biology** beyond DMD into **new indications**

2022-2023: **Established** strategic **commercial partnerships** in the **U.S.** and **Japan**

2022: **Published positive Phase 2** HOPE-2 **results** in ***The Lancet***

Q4 2025: Announced **positive topline** results from HOPE-3 **Phase 3** study in **Duchenne muscular dystrophy**

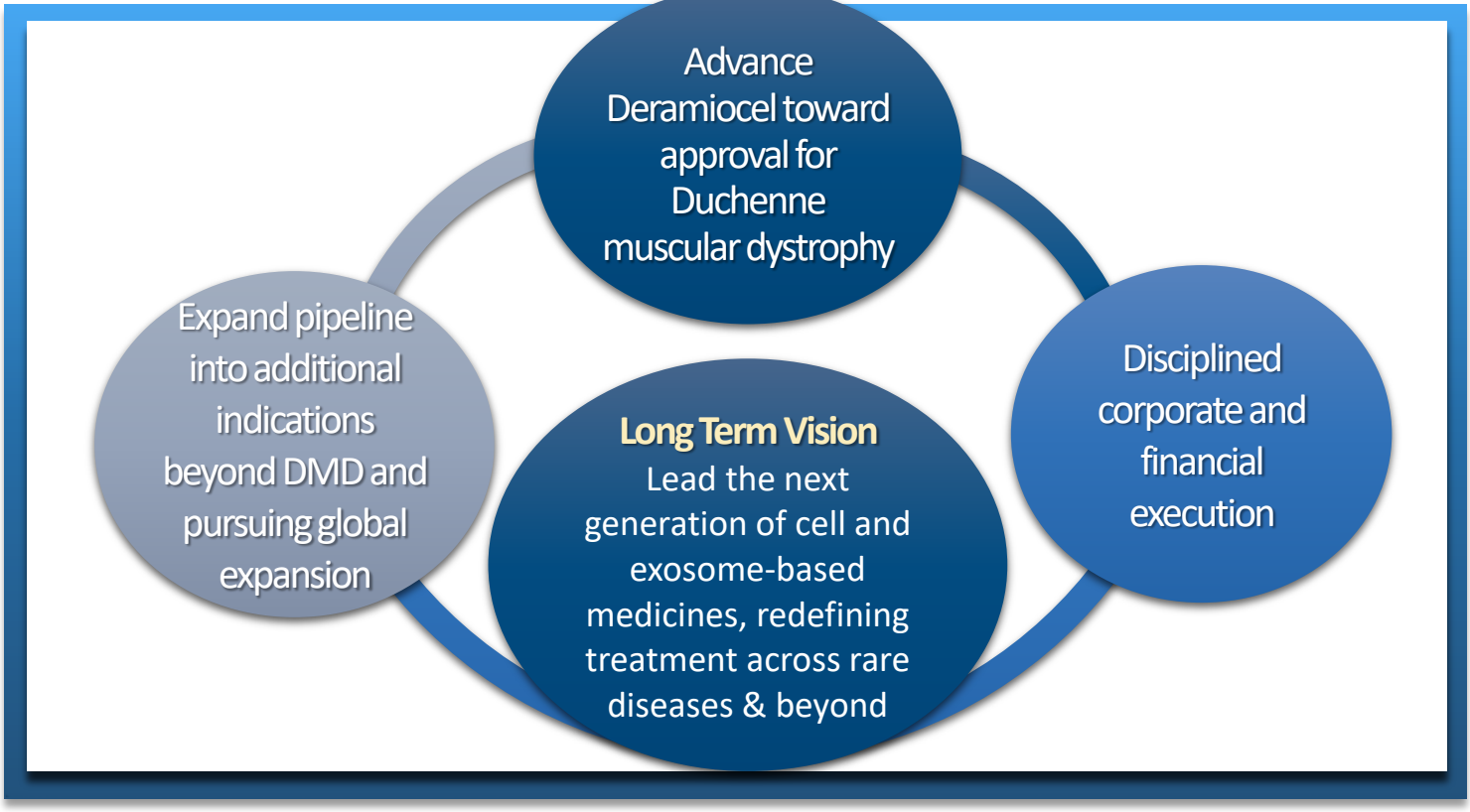
2025: **Initiated** Phase 1 **StealthX™** exosome-based vaccine study in collaboration with the **National Institutes of Health (NIH)**

Present: Active **FDA engagement** to support potential **approval** for **Deramiocel (CDCs)** in DMD

[1]Makkar, et al. *The Lancet*. 2012

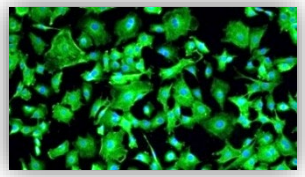
[2]Study funded with the support from the California Institute for Regenerative Medicine (CIRM)

Capricor's Strategic Priorities



Groundbreaking Science

Developing First-in-Class Therapeutics



Scientific Foundation
Cardiology and Cell Biology

- **Initial Technology:** developed at Johns Hopkins University
- **Lead Product:** cellular therapy comprised of cardiosphere-derived cells; endogenous human heart stromal cell population
- **Extensive IP portfolio:** ~150 patents & patent applications

Lead Program in Rare Disease
Duchenne Muscular Dystrophy

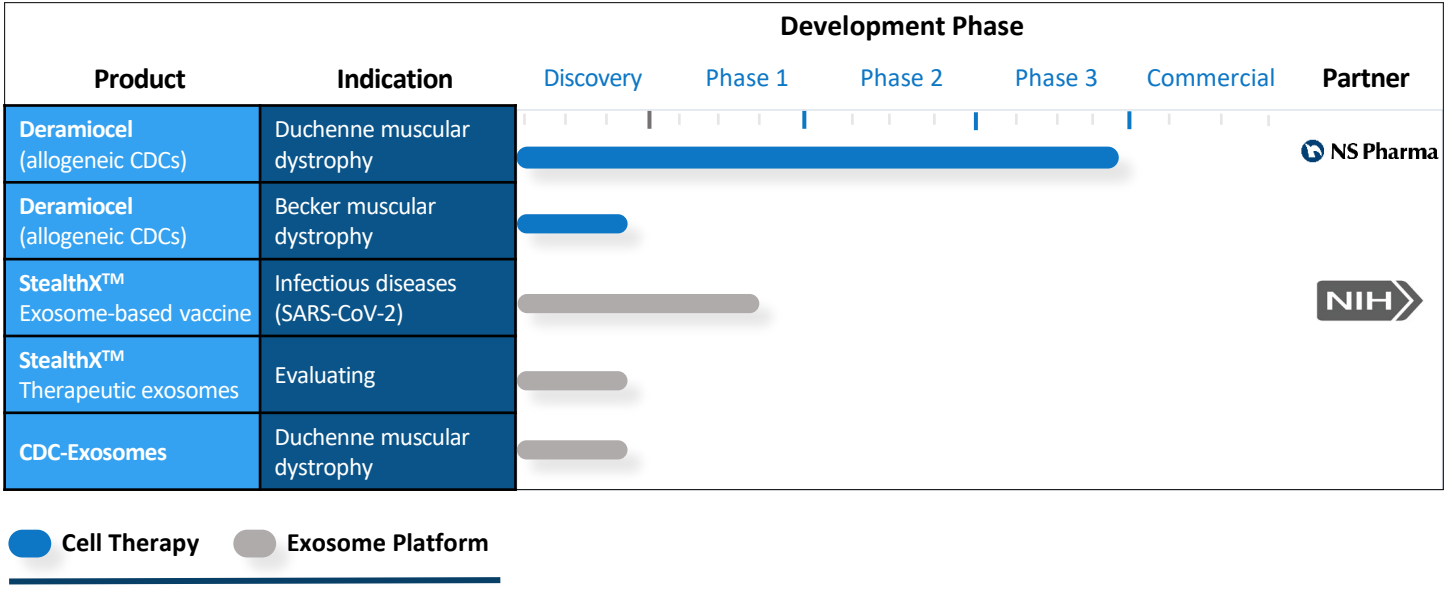
- **Indication**: Duchenne muscular dystrophy (DMD): rare, genetic disease afflicting ~15K boys and young men in U.S. & ~150K worldwide
- **Positive safety and efficacy results** shown across multiple clinical trials
- **In-house GMP manufacturing**
- **Established commercial partnerships** in U.S. and Japan

Pipeline Development
StealthX™ Exosome Platform

- **Targeted** natural drug delivery platform
- **Phase 1 study underway** in collaboration with NIH with exosome-based vaccine
- **Aim to secure partnerships** for platform advancement

Capricor's Product Pipeline

Advancing Transformative Therapies for Rare Diseases & Beyond



Deramiocel Duchenne Program

Pathway to Approval & Next Steps

- Pre-license inspection (PLI) completed and CMC alignment
- CRL issued requesting additional clinical evidence; Type A FDA meeting confirmed HOPE-3 Phase 3 should serve as the required additional study
- Positive HOPE-3 Phase 3 topline data announced in Dec. 2025

Next Steps

- Planned submission of requested documents to FDA with aim to lift CRL **(Target: February 2026)**
- Estimated PDUFA date: **(Target: 2H 2026 if BLA re-accepted)**
- If approved, this would aim to address an extensive population of DMD patients (mutation agnostic)

Capricor: Financial Overview

Runway and Potential Cash Infusions

Proforma cash balance	**$335 million**[1]	**Employees: ~250 FTEs**
Current runway	**~2-3 years** Based on current operating plan[2]	
Outstanding shares	**55.3 million**[1]	
Milestone payments to Capricor (NS Pharma: U.S. Distribution Agreement)	**U.S. approval:** $80 million **Sales-based milestones:** up to $605 million	
Eligible for priority review voucher (PRV)	**Potential sale of PRV, if received** ~$150-200 million[3]	

[1]Based on Q3 10Q + recent equity offerings (Dec. 2025)
[2]This expectation excludes any additional potential milestone payments under the Agreements with Nippon Shinyaku, as well as any strategic use of capital not currently in our base case planning assumptions.
[3]Estimate based on recent public sale of PRV = ~$200M

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Deramiocel: Cellular Therapy

Comprised of Human Allogeneic Cardiosphere-Derived Cells (CDCs)

CDCs are derived from cells of transplant qualified human hearts; they are not stem cells

>250

Peer-reviewed scientific publications worldwide[1]

>250

Patients administered CDCs across multiple clinical trials

>800

Doses of intravenous Deramiocel administered to patients with DMD

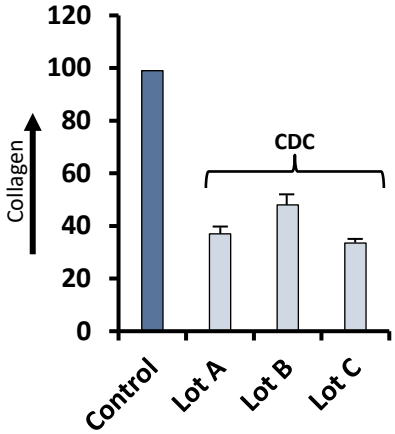
[1]Based on PubMed search

Deramiocel's Multi-Modal Mechanism

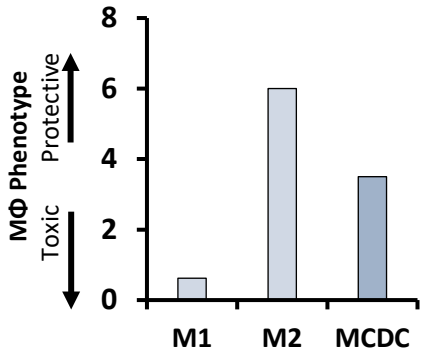
CDCs

Exosomes and growth factors

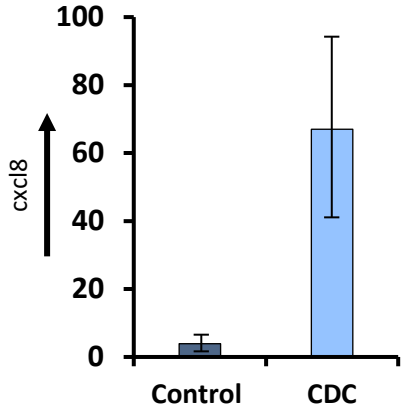
Anti-fibrotic[1]



Immunomodulatory[1]



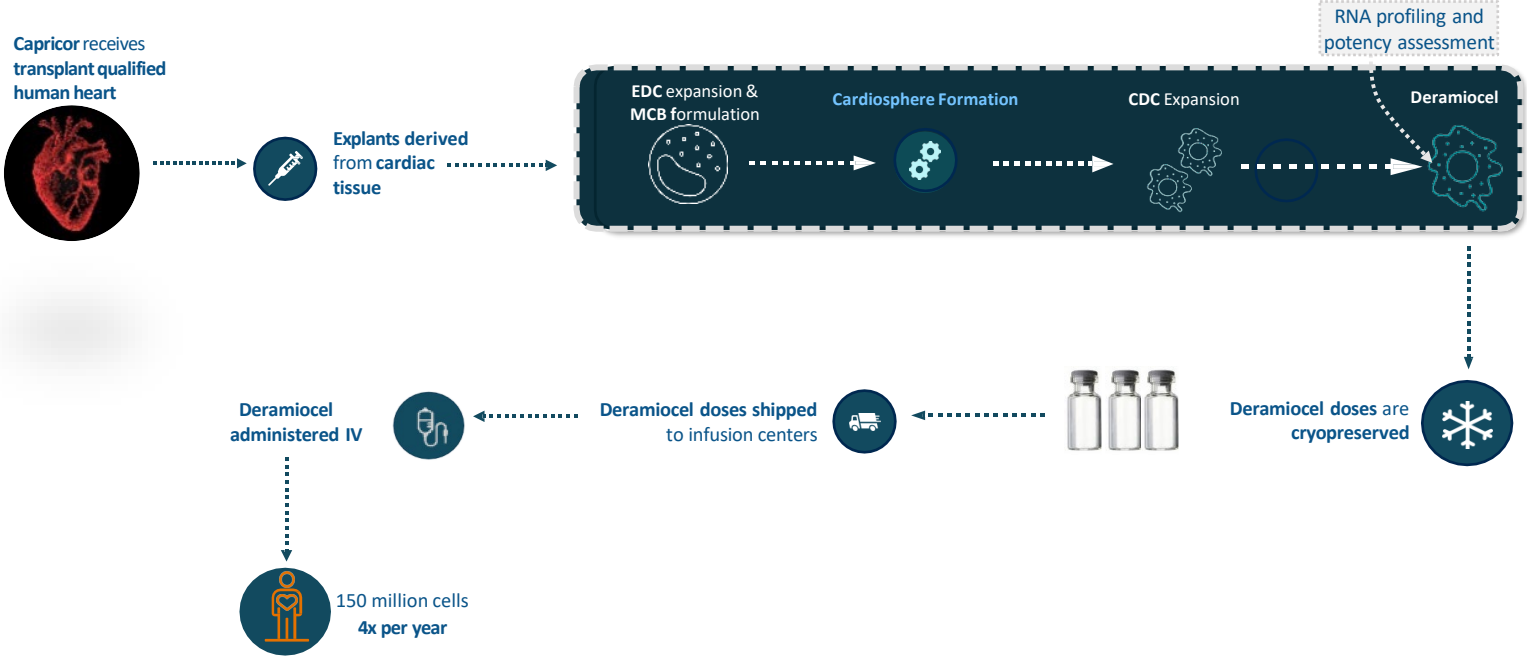
Anti-inflammatory



[1]de Couto et al., 2015

Deramiocel Manufacturing

Novel Process Enables a Multi-Dose Allogeneic Product



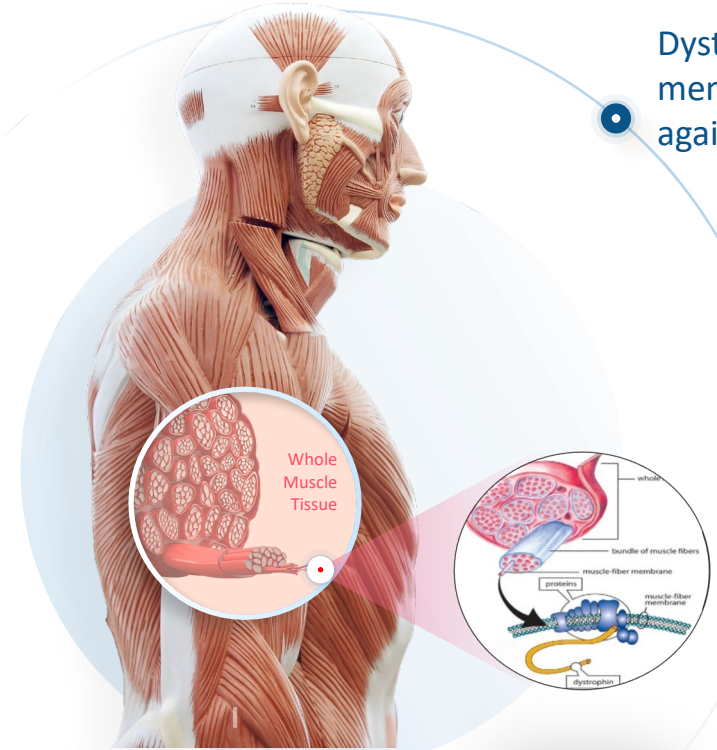
Capricor's GMP Manufacturing Facility

San Diego, California

FDA Pre-License Inspection (PLI) successfully completed in June 2025

DMD: A Devastating Rare Disease

High Unmet Needs Across the Entire Disease Trajectory



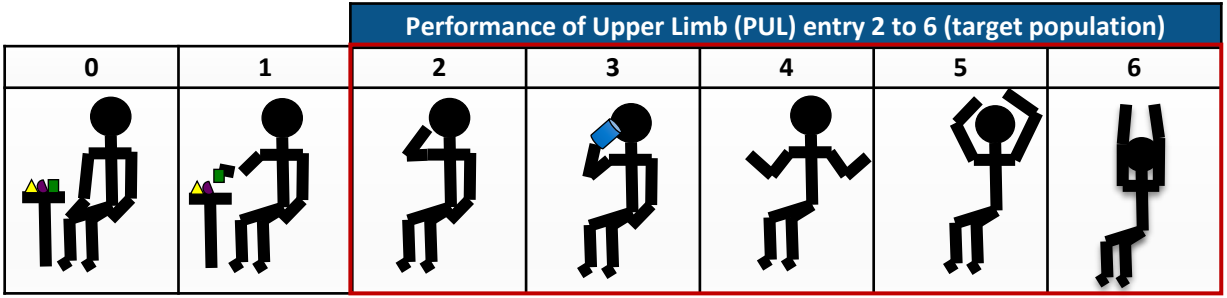
Dystrophin is a key structural protein at the muscle cell membrane that maintains muscle integrity and protects against damage; acts both as a cushion and glue

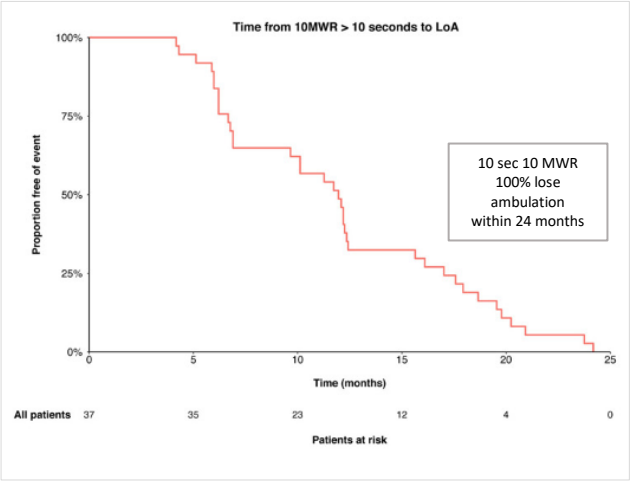
Much of the muscle injury that occurs in DMD is attributable to **secondary damage caused by inflammation**

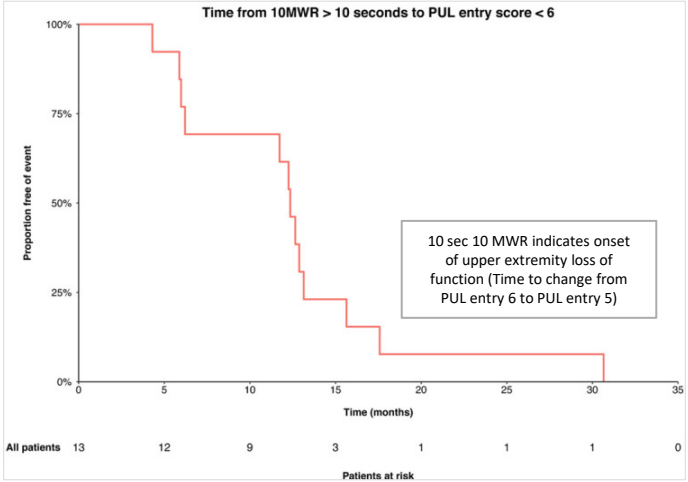
Without dystrophin, muscles (**cardiac and skeletal**) are unable to function properly, suffer progressive damage and eventually die

Approaching Loss of Ambulation

Late-Ambulatory Patients with DMD



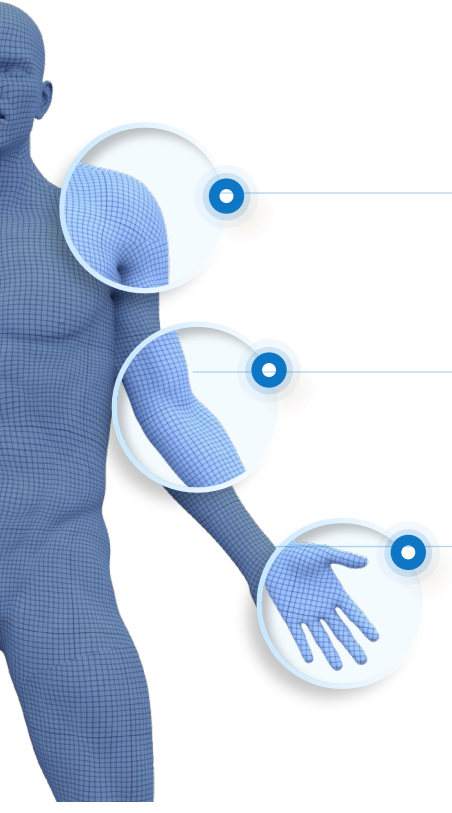




McDonald CM, Signorovitch J, Mercuri E, et al. PLoS One

Performance of Upper Limb (PUL)

Validated Tool to Assess Skeletal Muscle Function



Shoulder Level
4 items

- Lifting upper extremity weights
  - Shoulder height
  - Above shoulder height

Middle Level
9 items

- Hand to mouth w/w/o weights
- Hand to table
- Stack light and heavy cans
- Moving weights on table
- Remove container lid
- Lift light and heavy cans
- Tearing paper

Distal Level
8 items

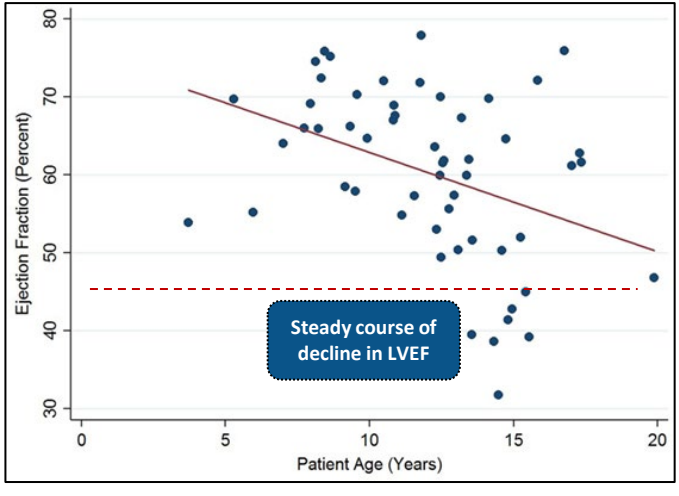
- Tracing a path
- Supination
- 3-point grip
- Push on a light
- Pick up coins
- Finger pinch
- Place fingers on diaphragm
- Thumb (key) grip

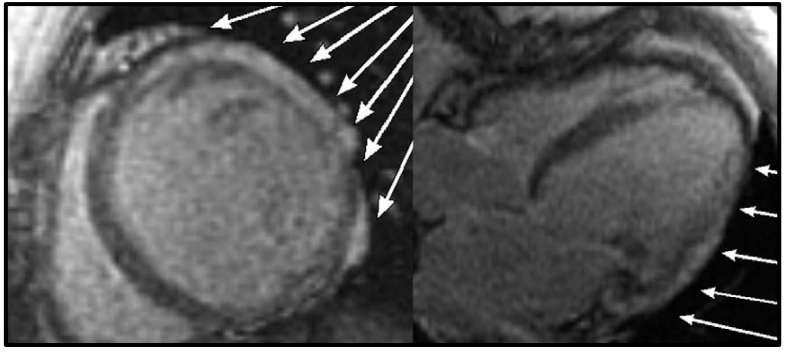
*Mayhew et al, 2019; Pane et al, 2018.

Duchenne Cardiomyopathy

"Cardiopulmonary failure is the leading cause of mortality in DMD in the current era…Unfortunately, standard heart failure therapies are not DMD-specific and have limited efficacy….For maximal efficacy, most therapies should begin early in the disease process…"

Circulation: Heart Failure, (2023) , Soslow J.H., M.D., et al.





Cardiac MRI in DMD patient

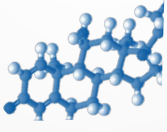
Delayed enhancement indicative of myocardial fibrosis

Frontiers | Echocardiographic Image Quality Deteriorates with Age in Children and Young Adults with Duchenne Muscular Dystrophy (frontiersin.org)

Deramiocel has the Potential to Redefine the Standard of Care for Duchenne

Deramiocel can be used in combination with existing therapeutics

GENE THERAPIES



EXON SKIPPING THERAPIES

Deramiocel

First-in-class potential therapy for Duchenne muscular dystrophy
CARDIAC AND SKELETAL MUSCLE

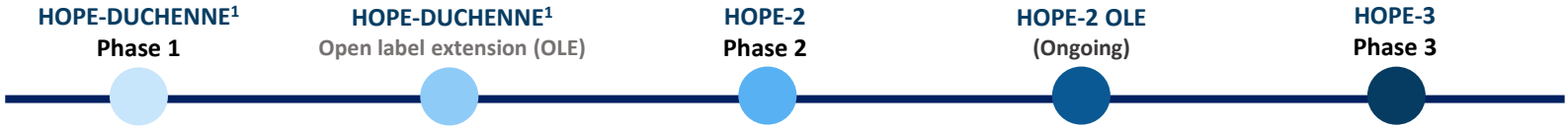
- **Orphan Drug Designation** (FDA and EMA)
- **Regenerative Medicine Advanced Therapy Designation** (FDA)
- **Rare Pediatric Disease Designation** (FDA)
- **Advanced Therapy Medicinal Product Designation** (EMA)

CORTICOSTEROIDS

STANDARD CARDIAC MEDICATIONS

Deramiocel's Clinical Development

A Decade of Development in Duchenne

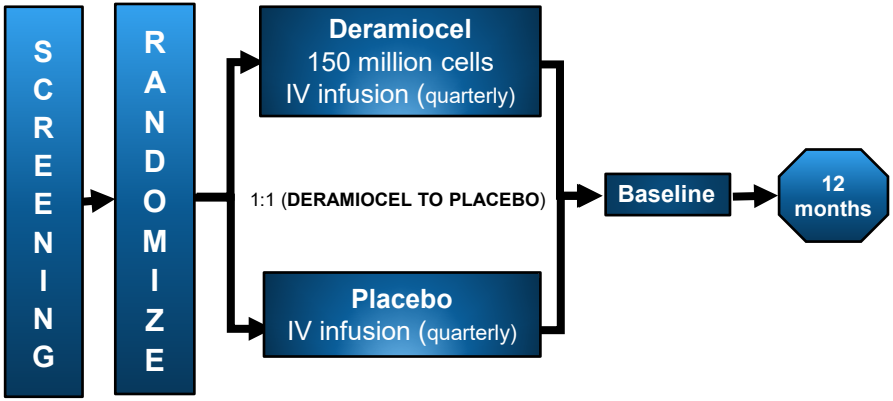


N = 25 IC infusion	N = 8 IV infusion	N = 20 IV infusion	N = 13 IV infusion	N = 106 IV infusion
• Improved skeletal and cardiac and function • Reduced cardiac scarring • Informed dosing and administration	• First study with IV and multiple dosing • Generally safe to increase number of cells and frequency of dosing	• Significant improvements in skeletal muscle function • Significant preservation across multiple cardiac endpoints • Generally well-tolerated	• Confirms HOPE-2 results • Sustained efficacy shown over 4 years • Favorable long-term safety profile • Matched external comparator data	• RCT fully enrolled • Primary and key secondary endpoints met • Generally well-tolerated

[1]Study funded with the support from the California Institute for Regenerative Medicine (CIRM)

HOPE-3 Pivotal Phase 3 Trial

Overview



HOPE-3 DUCHENNE CLINICAL TRIAL

Design & Endpoints

- Phase 3: randomized (1:1), double-blind, placebo-controlled study
- **N = 106 subjects randomized**
- Conducted in the United States at 20 clinical sites
- **Primary efficacy endpoint**[1]: PUL v2.0
  skeletal muscle assessment
- **Key secondary endpoint**[1]: left ventricular fraction (LVEF)
  cardiac assessment
- **Other secondary endpoints**[1]: mid-level PUL v.2.0, GST and LGE
- **Announced positive topline results**: **Dec. 2025**

ClinicalTrials.gov ID: NCT05126758
[1]Type-I error controlled

HOPE-3: Study Demographics

Baseline Demographics	Placebo (n=52)	Deramiocel (n=54)	Overall (n=106)[1]
Age (years)			
N	52	54	106
Mean (SD)	14.6 (2.95)	15.4 (3.10)	15.0 (3.04)
Median	14	15	15
Min, Max	10, 22	10, 22	10, 22
PUL v2.0 entry item score			
2,3	23 (44.2)	25 (46.3)	48 (45.3)
4,5,6	29 (55.8)	29 (53.7)	58 (54.7)
Diagnosed cardiomyopathy[2]			
No	14 (26.9)	13 (24.1)	27 (25.5)
Yes	38 (73.1)	41 (75.9)	79 (74.5)
Baseline LVEF%			
n	46	45	91
Mean (SD)	59.303 (6.108)	55.345 (7.743)	57.346 (7.206)
Median	59.309	55.892	57.532
Min, Max	47.395, 73.981	36.537, 71.112	36.537, 73.981
Ambulatory status			
Non-ambulatory	44 (84.6)	46 (85.2)	90 (84.9)
Ambulatory	8 (15.4)	8 (14.8)	16 (15.1)

[1]One subject enrolled but dropped out prior to baseline assessment (n=105)
[2]Updated as of Feb. 2026; subgroup: 64 of 79 patients with centrally reviewed and evaluable cardiac MRI LVEF assessments at baseline and 12 months

HOPE-3: Safety Profile Results

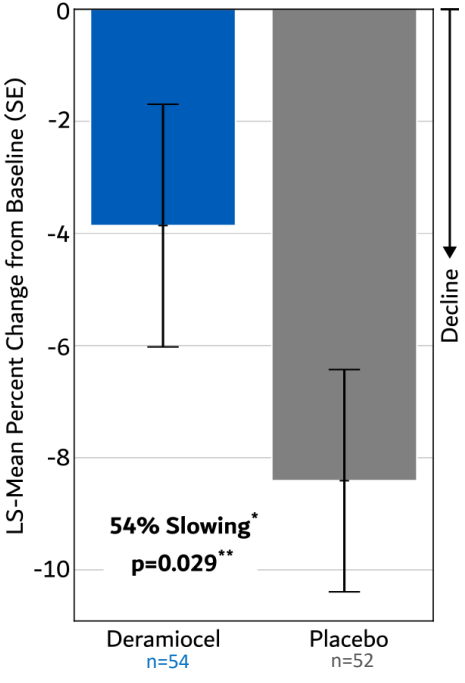
Overview	Placebo (n=52), n (%)	Deramiocel (n=53), n (%)	Overall (n=105[1]), n (%)
Any TEAEs	43 (82.7)	50 (94.3)	93 (88.6)
TEAEs related to IP or administration procedure	19 (36.5)	44 (83.0)	63 (60.0)
TEAEs related to IP	16 (30.8)	44 (83.0)	60 (57.1)
TEAEs related to administration procedure	9 (17.3)	23 (43.4)	32 (30.5)
TEAEs related to IP or administration procedure by maximum severity			
Mild (grade 1)	15 (28.8)	19 (35.8)	34 (32.4)
Moderate (grade 2)	3 (5.8)	25 (47.2)	28 (26.7)
Severe (grade 3)	0	0	0
Life-threatening (grade 4)	1 (1.9)	0	1 (1.0)
Fatal (grade 5)	0	0	0
TEAEs leading to death	0	0	0
Any serious TEAEs	5 (9.6)	1 (1.9)	6 (5.7)
Serious TEAEs related to IP or administration procedure	1 (1.9)	1 (1.9)	2 (1.9)

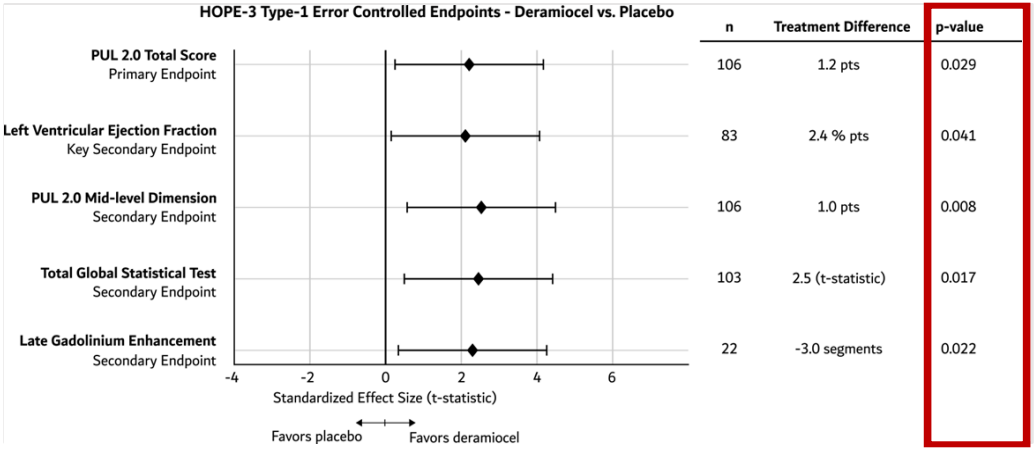
[1] Safety population (n=105)

HOPE-3: Topline Efficacy Results

Primary Endpoint Met with Statistical Significance Achieved in **All** Type-1 Error Controlled Secondary Endpoints

PUL 2.0 Total Score - Month 12
Primary Endpoint





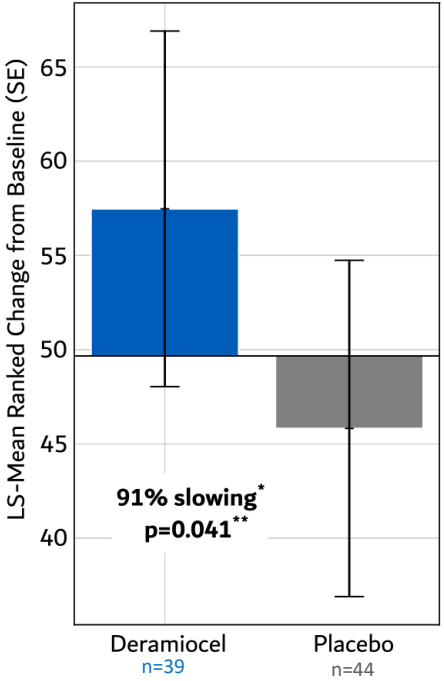
	n	Treatment Difference	p-value
PUL 2.0 Total Score Primary Endpoint	106	1.2 pts	0.029
Left Ventricular Ejection Fraction Key Secondary Endpoint	83	2.4 % pts	0.041
PUL 2.0 Mid-level Dimension Secondary Endpoint	106	1.0 pts	0.008
Total Global Statistical Test Secondary Endpoint	103	2.5 (t-statistic)	0.017
Late Gadolinium Enhancement Secondary Endpoint	22	-3.0 segments	0.022

*LS-Mean difference = 4.55 percentage point (1.2 -point difference on the PUL scale)
** Based on prespecified repeated measures model using percent change from baseline

HOPE-3: Topline Cardiac Efficacy Results

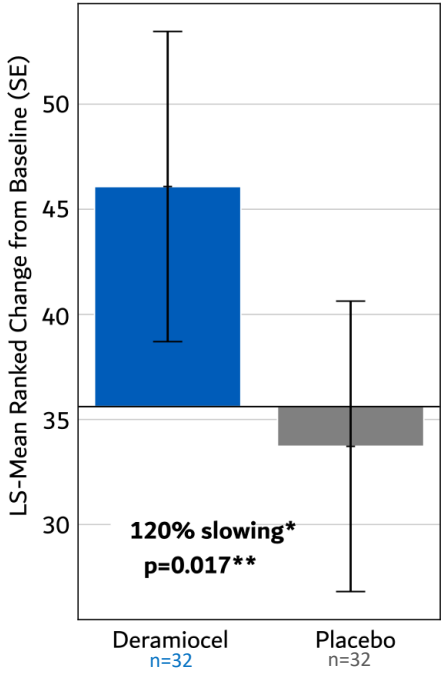
Left Ventricular Ejection Fraction

Left Ventricular Ejection Fraction - Month 12
Key Secondary - ITT Population



* LS-mean difference = 11.65 ranks (2.4 percentage point difference in LVEF)
** Based on prespecified rank ANCOVA model
LVEF: n reflects the number of patients in the ITT population with centrally reviewed and evaluable cardiac MRI LVEF assessments at baseline and 12 months (n=83)

Left Ventricular Ejection Fraction - Month 12
Secondary Endpoint - Cardiomyopathy Population



* LS-mean difference = 12.36 ranks (3.3 percentage point difference in LVEF)
** Based on prespecified rank ANCOVA model
LVEF: n reflects the number of patients in the subgroup population with centrally reviewed and evaluable cardiac MRI LVEF assessments at baseline and 12 months (n=64)

DMD: Large Commercial Opportunity

Capricor Therapeutics

Deramiocel

Potential to be first-in-class cellular therapy for DMD patients

Prevalence[1]	**~15,000** DMD patients in **United States**	**~150,000-200,000** DMD patients **worldwide**
Life Expectancy	**~25-30 years**	
Disease Burden	**High unmet clinical need** Patients experience **high symptom burden** including muscle weakness, **loss of ambulation**, loss of independence to transfer, feed or turn, **respiratory** and **cardiac failure**	
Market Size[2]	**~$27 Billion** **Global market** size estimated by **2030**	
Commercial Opportunity	**Target reimbursement price** Aim to be similar or **higher** than approved **exon skipping** therapies	

[1]DMD estimated prevalence

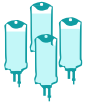
[2]Data estimate from Research and Markets Report

Deramiocel: Strong Commercial Profile

Capricor Therapeutics

Strong Clinical Profile

First-in-Class Therapy for DMD



Deramiocel has **immunomodulatory**, **anti-fibrotic** and **anti-inflammatory** properties

Slows Disease Progression

Data shows **slowing of** DMD **skeletal and cardiac** disease **progression** in **multiple** clinical trials

Sustained Benefit

4-year long-term data continue to support **safety and** potential **disease attenuation**

Safety Profile

Over **800 IV infusions** of Deramiocel with **favorable safety profile**

Significant Potential Commercial Reach

Commercial Partnership

Alliance with an industry partner in **Nippon Shinyaku** for **U.S.** and **Japanese** markets

Patient Support

Patient support leveraging **Capricor's deep understanding** of **patients** and **physicians**

Large Reimbursement Potential

With small market penetration, **annual revenue** estimates could **exceed 1.5B**[1]; pricing estimates **similar to approved** exon skipping drugs

[1]Capricor revenue will be less than product revenue due to revenue share under Distribution Agreement with Nippon Shinyaku

Partnership with Nippon Shinyaku

Commercial Distribution of Deramiocel for DMD

- **Capricor responsible for product manufacturing and clinical development necessary for potential approvals in select territories**
- **Nippon Shinyaku and NS Pharma teams to support broad commercialization efforts**

United States Partnership

- Capricor to receive $80M milestone payment at approval and up to $605M in potential sales-based milestones
- Capricor to receive between 30-50%[1] of product revenue, offset by amount paid for purchase of the product

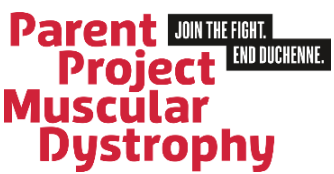
Japan Partnership

- Capricor to receive up to $89M[2] in potential milestones and double-digit share of product revenue

Europe Territory - discussions ongoing

[1] Exact percentage undisclosed
[2] Subject to foreign currency exchange rates

Key Duchenne Advocacy Relationships



World-Class Duchenne Advisory Board

Jonathan Soslow, M.D. MSCI
Vanderbilt University Medical Center (USA)

Chet Villa, M.D.
Cincinnati Children's Hospital Medical Center (USA)

Timothy Franson, M.D., FACP, FIDSA
Faegre Drinker Biddle & Reath LLP (USA)

Michelle Eagle, Ph.D., M.Sc., MCSP
Atom International Ltd. (UK)

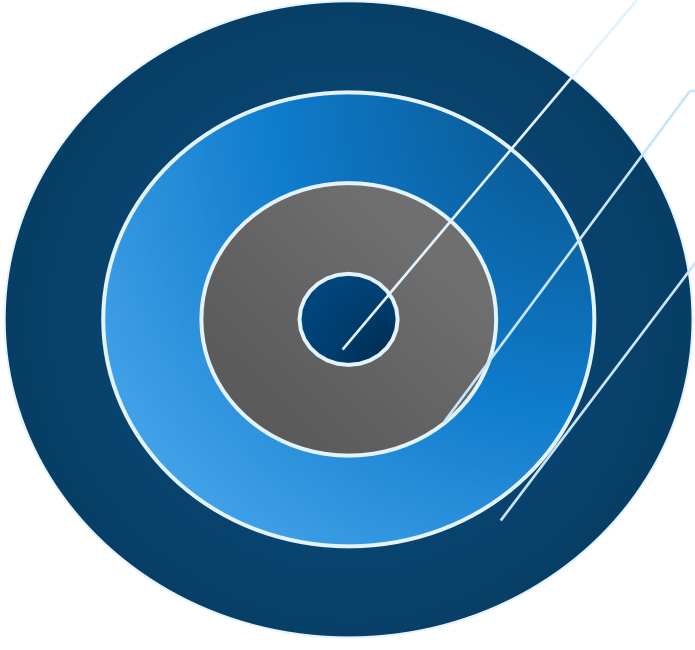
Eugenio Mercuri, M.D., Ph.D.
Catholic University of the Sacred Heart (Italy)

Kan Hor, M.D.
Nationwide Children's Hospital (USA)

Pat Furlong
Parent Project Muscular Dystrophy, PPMD (USA)

Michael Taylor, M.D., Ph.D.
Texas Children's Hospital (USA)

Potential Indication Expansion of Deramiocel



DUCHENNE MUSCULAR DYSTROPHY

BECKER MUSCULAR DYSTROPHY

Becker cardiomyopathy has similar progression to DMD-cardiomyopathy

OTHER POTENTIAL DISEASES STATES

-Cardiomyopathies
-Dystrophinopathies
-Muscular dystrophies

Table of Contents

Exosomes are Nature's Delivery Tool

Natural Drug Delivery Platform

- ~100 nanometer vesicles
- Made by nearly all cells
- Abundant in blood and biofluids
- Transfers signals and molecules to other cells
- Decades of transfusion and transplantation medicine indicates safety
- Can be used to deliver RNAs, DNA, proteins and small molecules

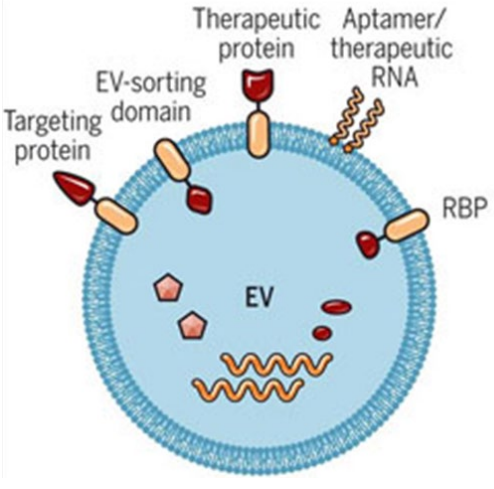
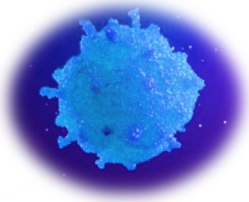
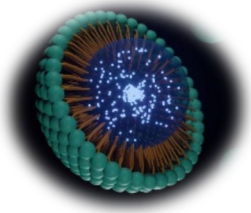


Image adapted from Wiklander, 2019

Extracellular vesicles (EV) - term for cell-derived vesicles, including exosomes

Potential Benefits: Exosomes vs. LNPs





	Natural Exosomes	*Synthetic LNPs*
Commercial manufacturing	+	+++
Therapeutic loading	++	++
Therapeutic release	+++	+
Cellular uptake	+++	+
Targeting	+++	+
Low immunogenicity	+++	+
Safety (expected)	(+++)	+
Clinical trials	+	+++

StealthX™ Exosome Platform

StealthX™ technology allows Capricor to present diversified proteins *outside* of exosomes

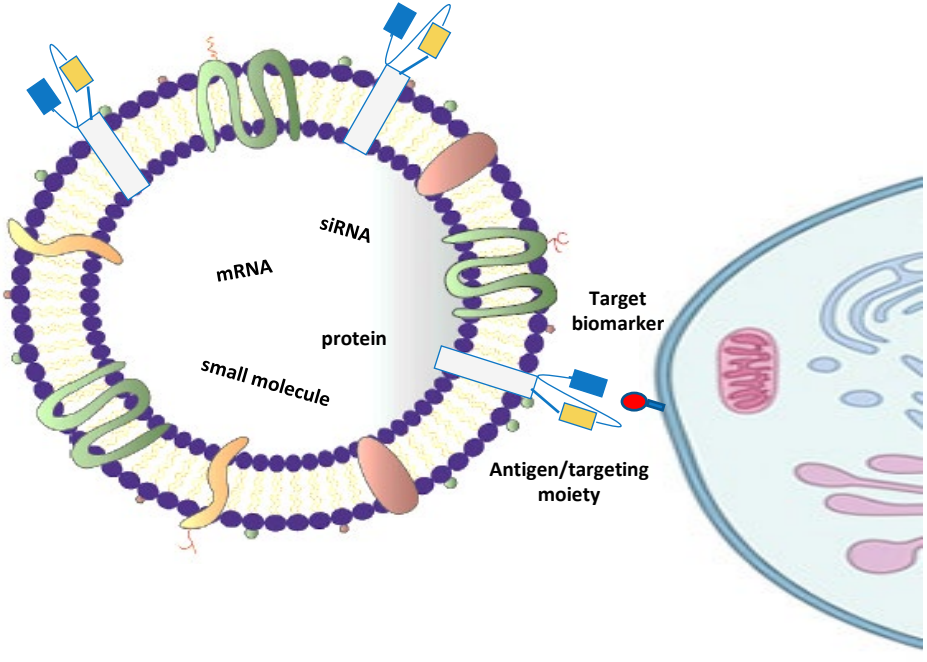
- ✓ Soluble proteins (ex. ScFvs)
- ✓ Transmembrane proteins (ex. Receptors)
- ✓ Viral antigens

StealthX™ technology allows Capricor to load diversified payloads *inside* of exosomes

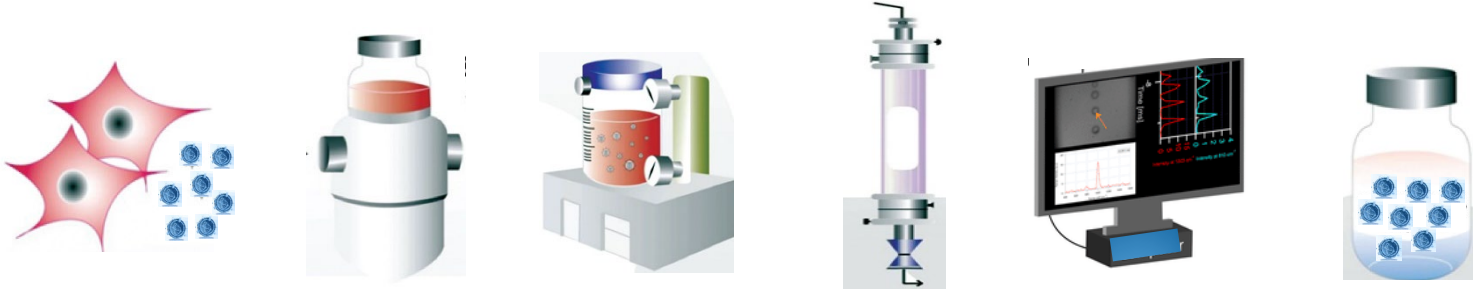
- ✓ RNA (siRNA, etc.)
- ✓ ASOs
- ✓ Proteins
- ✓ Peptides
- ✓ Small molecules

Potential cell and tissue specific targets with targeting moieties

- ✓ Muscle
- ✓ Brain
- ✓ Lung



Exosomes: Scalable Production



- **Capricor has developed a scalable, reproducible process for exosome purification**
  - Producer cell line is widely used for production in other applications
  - Exosome purification process developed using scalable processes
- **Capricor's exosomes have been extensively characterized using qualified assays**
  - Exosome assays developed and qualified with guidance from FDA
  - Exosome yield, size, surface expression, payload content, loading and potency

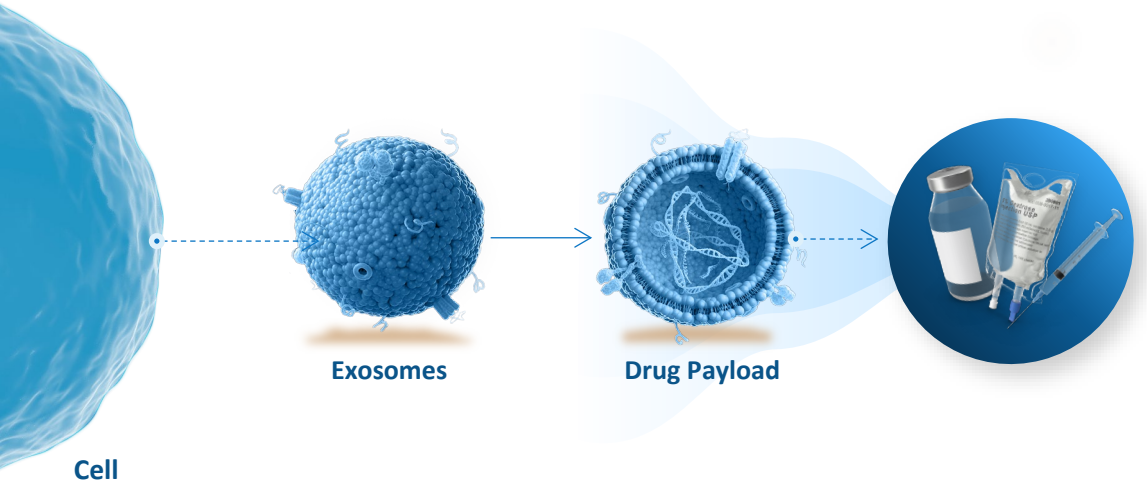
Active NIH Collaboration

Exosome-Based Multivalent Vaccine Currently in Phase 1

- Capricor's **StealthX™ vaccine** was **selected** by **Project NextGen**
  - Aim is to advance a pipeline of innovative vaccines which may provide broader and more durable protection against COVID-19 and other potential infectious threats
- The **National Institute of Allergy and Infectious Diseases (NIAID)** is conducting and funding the **Phase 1 clinical trial**
  - Capricor is supplying investigational product
  - Trial underway with **topline data** expected in **~Q1 2026**
- If NIAID finds Capricor's vaccine **meets** its criteria for safety and efficacy, they may consider our program for a **funded Phase 2**

StealthX™ Exosome Platform

Building a New Class of Medicines



- **Monogenic Diseases**
  RNA, protein and small molecule therapeutics
- **Infectious Diseases**
  Vaccines
- **Oncology**
  Vaccines and targeted delivery therapeutics

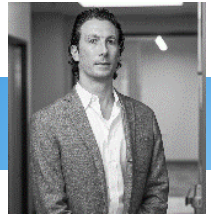
Goals

- Scale and partner
- Drive research through collaborations
- Expand and exploit platform and IP through partnerships

Experienced Leadership Team

Extensive Scientific and Operational Experience Across Pharma & Biotech

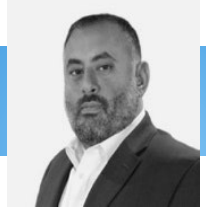
Linda Marbán, Ph.D.
Chief Executive Officer
Prior experience: Excigen, Johns Hopkins University



AJ Bergmann, M.B.A
Chief Financial Officer
Prior experience: Gettleson, Witzer & O'Connor

Michael Binks, M.D.
Chief Medical Officer
Prior experience: Pfizer, GlaxoSmithKline

Kristi Elliott, Ph.D.
Chief Operating & Science Officer
Prior experience: Exotech, Intrexon Corp



Mark Awadalla
Chief Development Officer
Prior experience: Celularity, Mustang Bio, Celgene

Karen Krasney, J.D.
Executive VP and General Counsel
Prior experience: Biosensors International

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