Advisory Committee Overview

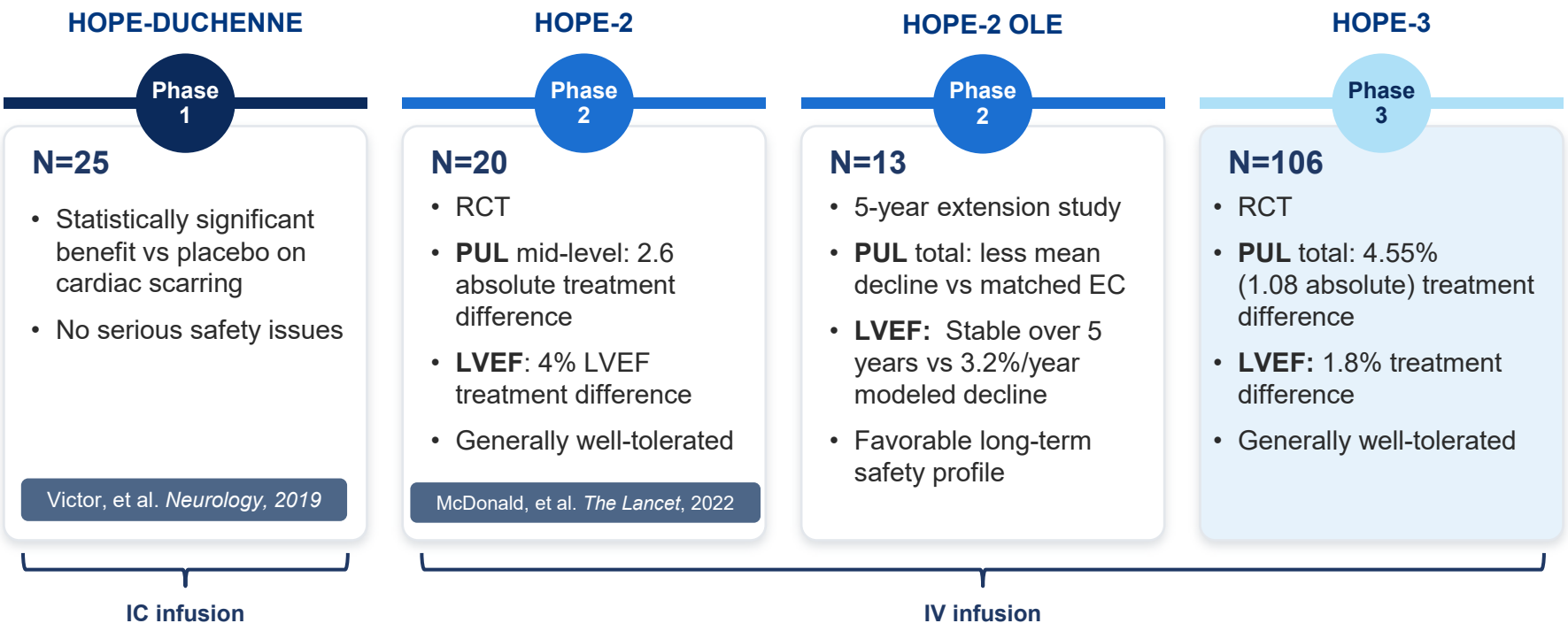
Capricor Therapeutics, Inc.
Nasdaq: CAPR
July 27, 2026

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, revenue and reimbursement estimates, projected terms of definitive agreements, our financial position, our possible uses of existing cash and investment resources, and statements regarding our litigation with Nippon Shinyaku Co., Ltd. and NS Pharma, Inc., including the nature of the dispute, our expectations regarding any legal proceedings, and our ability to commercialize Deramiocel independent of our existing distribution agreement 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, 2025, as filed with the Securities and Exchange Commission on March 17, 2026 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2026, as filed with the Securities and Exchange Commission on May 13, 2026. 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.

Deramiocel and the StealthX™ vaccine are investigational candidates and have not been approved for commercial use in any indication.

Deramiocel Has Been Evaluated in 3 Independent Clinical Trials in DMD Over ~5 Years in 200+ Patients



HOPE-3 Regulatory History

Protocol and SAP revisions driven by ongoing FDA feedback on Development Program (2022-2025)

PROTOCOLS

~2022
V1–V4.1
Phase 3 trial protocol (clinical drug supply)

AUG 2023
V5
Addition of commercial supply (Cohort B)

NOV 2024
V6
Analysis for Cohort A & B combined

FEB 2025
V7
Never implemented; study repositioning for OUS authorization

JUL 2025
V8
Never implemented; reverted to U.S. only enrollment, PUL→LVEF

SEP 2025
V9
PUL 2.0 retained as primary; LVEF → key secondary **(SAP 2.0)**
✓ Revised per FDA request

KEY INTERACTIONS

AUG 2024
Pre-BLA Meeting
FDA recommended cardiac-focused BLA filing; combine Cohorts A&B
✓ Agreement reached

JUL 2025
Complete Response Letter
FDA issues CRL

AUG 2025
Type A Meeting
Held to address CRL & primary endpoint

SEP 2025
Type A Meeting Minutes
FDA retained PUL 2.0 primary; LVEF key secondary
✓ FDA feedback incorporated

25 NOV 2025
DB Lock & Unblinding
HOPE-3 Phase 3 clinical milestone

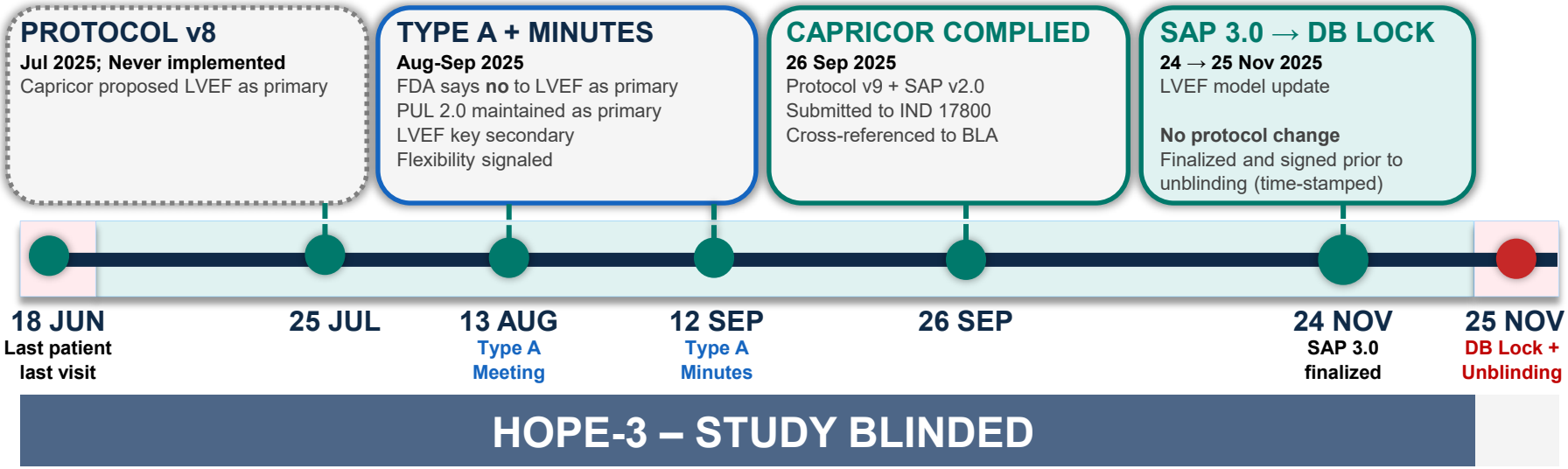
SAPs

DEC 2023
SAP 1.7
In place at the time of futility analysis
✓ Revised per FDA request

SEP 2025
SAP 2.0
Absolute → % change analysis; LVEF key secondary
✓ No FDA revisions requested

24 NOV 2025
SAP 3.0
Finalized pre-DB lock; **no protocol change v2→v3**

Capricor Remained Blinded Until Database Lock

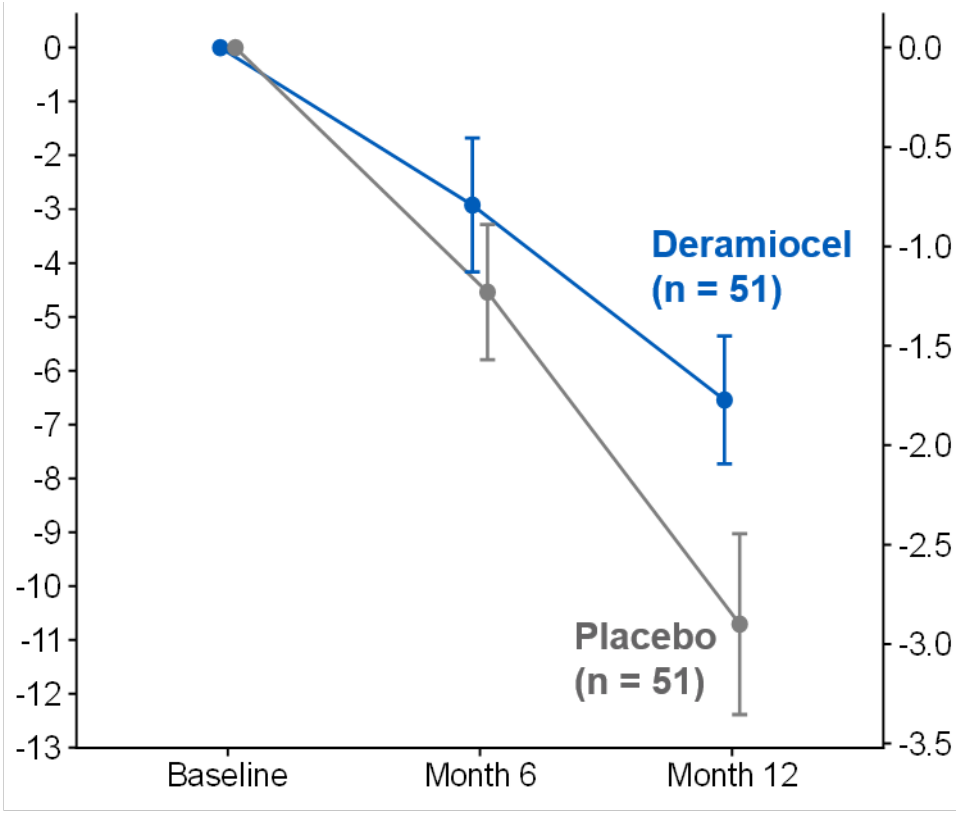


- **Capricor proposed LVEF primary ----- FDA said NO ----- Capricor complied**
- **Protocol v9, SAP v2.0 submitted September 2025**
- **SAP v3.0 was finalized before unblinding**
- **Blinding maintained as verified by audit trail**

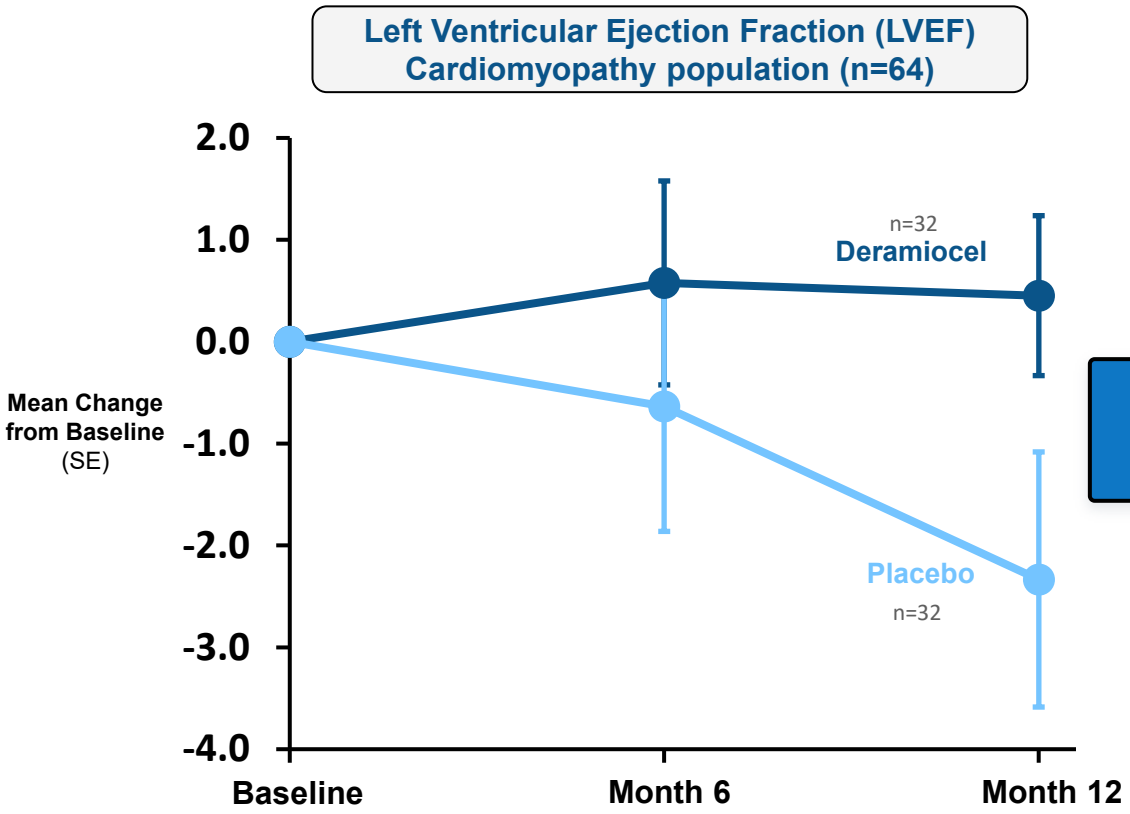
HOPE-3: Primary Endpoint Met Regardless of Analysis

Percent Δ = 4.55% *primary endpoint*	p = 0.029 (MMRM)
Absolute Δ = 1.1 *sensitivity analysis*	p = 0.050 (MMRM)

PUL 2.0 Total Score
ITT Population (N = 106)



HOPE-3 Preserved LVEF in Patients with Cardiomyopathy



Δ = 2.9% p = 0.035 (Ranked ANCOVA)
p = 0.026 (Wilcoxon Rank Sum)

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)

FDA Case, Answered — Point by Point

FDA WILL SAY

The pre-specified analyses did not reach significance

OUR ANSWER

The plan being critiqued is an unsigned draft (v1.1). Our final analysis plan was locked and signed before unblinding.

FDA WILL SAY

The plan changed, so the results are post-hoc

OUR ANSWER

The Agency asked us to keep PUL as the primary endpoint. We signed and finalized SAP 3.0 before unblinding.

FDA WILL SAY

The result leans on a small number of patients

OUR ANSWER

Consistency is the signal: the same direction across our models, across independent measures, and across multiple clinical trials.

Advisory Committee Agenda & Speakers

Deramiocel MoA	**Eduardo Marbán, MD, PhD** Distinguished Professor and Director Smidt Heart Institute, Cedars-Sinai Medical Center
Deramiocel Assay and Potency	**Kristi Elliott, PhD** Chief Scientific and Operating Officer, Capricor
Statistical Overview	**Adam Sullivan, PhD** Senior Director of Biostatistics, Capricor
Skeletal Efficacy	**Craig McDonald, MD** Distinguished Professor of Pediatrics and PM&R, Director MDA Clinics and Neuromuscular Research Laboratory, UC Davis Health, Chair CINRG Duchenne Natural History Study
Cardiac Efficacy	**Jonathan Soslow, MD, MSCI** Professor of Pediatrics and Director of Clinical Research, Pediatric Cardiology; Co-Director, Duchenne Multispecialty Clinic, Vanderbilt University Medical Center
Safety Overview	**Michael Binks, MD** Chief Medical Officer, Capricor
Meaningfulness of Results	**Mindy Leffler** Patient Advocacy, Capricor
Benefit / Risk	**Linda Marbán, PhD** Chief Executive Officer, Capricor