



Unlocking Epigenetic Therapeutics to Revolutionize Medicine

February 2024



Disclaimer

This presentation and various remarks we make during this presentation contain forward-looking statements of DURECT Corporation ("DURECT," the "Company," "we," "our" or "us") within the meaning of applicable securities laws and regulations, which are subject to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements relating to the potential for larsucosterol to demonstrate a reduction in mortality or liver transplant in patients with alcohol-associated hepatitis ("AH") and to save lives, DURECT's plans for a Phase 3 trial for larsucosterol and to meet with the FDA to review the results of AHFIRM trial, the potential for a Phase 3 trial of larsucosterol to show a statistically significant improvement in the treatment of AH over standard of care, the potential FDA or other regulatory approval of larsucosterol for the treatment of AH, anticipated product benefits and other potential uses of larsucosterol, and anticipated product markets and potential sales. Actual results may differ materially from those contained in the forward-looking statements contained in this presentation, and reported results should not be considered as an indication of future performance. These forward-looking statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. Potential risks and uncertainties include, but are not limited to, the risk that future clinical trials of larsucosterol do not confirm the results from subset analyses of the AHFIRM trial, including geographic or other segmentation, or of earlier clinical or pre-clinical trials, or do not demonstrate the safety or efficacy of larsucosterol in a statistically significant manner, the risk that the FDA or other government agencies may require additional clinical trials for larsucosterol before approving it for the treatment of AH, and risks related to the sufficiency of our cash resources, our anticipated capital requirements and capital expenditures, our need or desire for additional financing, our ability to obtain capital to fund our operations and expenses and our ability to continue to operate as a going concern. Further information regarding these and other risks is included in DURECT's most recent U.S. Securities and Exchange Commission ("SEC") filings, including its Annual and Quarterly Report on Form 10-K or 10-Q, respectively, filed with the SEC under the heading "Risk Factors." DURECT is under no duty to update any of these forward-looking statements after the date of this presentation to conform these statements to actual results or revised expectations, except as required by law. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Subsequent events and developments may cause DURECT's expectations and beliefs to change.

This presentation does not constitute an offer to sell or a solicitation of an offer to buy any securities of the Company. Any offer of securities will only be made pursuant to a registration statement (including a base prospectus) and prospectus supplement filed with the SEC, copies of which may be obtained for free on our website at www.durect.com under the "Investors" tab or by visiting EDGAR on the SEC website at www.sec.gov. All information provided in this presentation is based on information available to DURECT as of February 12, 2024, and DURECT assumes no obligation to update this information as a result of future events or developments, except as required by law.

Company Highlights

Larsucosterol: Phase 3-ready, potential life-saving treatment for alcohol-associated hepatitis (AH)

- **Compelling Phase 2b AHFIRM trial results (November 2023)**
 - Reduction in mortality in 307-patient placebo-controlled trial
 - Well tolerated with no drug-related toxicities
- **Novel mechanism of action in hepatic disease**
 - Modulator of DNA methyltransferases (DNMTs)
- **Strong rationale for advancing to registrational Phase 3 trial**
 - FDA feedback expected in Q1 2024
 - Received Fast Track Designation
- **Significant unmet need: >\$1 billion market opportunity in U.S.**
 - 90-day mortality rate of ~30%
 - No approved therapy for AH



Pipeline

Program	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Marketed	Status
Epigenetic Modulator Program							
Larsucosterol	Alcohol-Associated Hepatitis (AH) (intravenous administration)	<div></div>					Completed Phase 2b AHFIRM trial; FDA feedback expected in Q1 2024
NCEs ¹	Hematology/Oncology (small molecules)	<div></div>					Preclinical studies ongoing
Partnered Program							
POSIMIR® (bupivacaine solution)	Post-surgical pain ²	<div></div>					Sold by Innocoll in the U.S.; DURECT maintains ex-U.S. rights

AH Represents a Large Market with Substantial Unmet Need

~158,000
Hospitalizations
annually in U.S.¹

~\$10 billion
Annual direct hospital
charges in U.S.¹

0
Approved therapies for
treatment of AH

>\$1 billion annual peak sales potential in the U.S. for AH

Key Takeaways from Phase 2b AHFIRM Trial

Pronounced reduction in mortality at 90 days with both doses of larsucosterol compared with SOC¹

30 mg dose

U.S.: ↓57%
(p=0.014)

Global: ↓41%
(p=0.068)

90 mg dose

U.S.: ↓58%
(p=0.008)

Global: ↓35%
(p=0.124)

Both doses of larsucosterol were well-tolerated

Fewer TEAEs²



30 mg: ↓24%

90 mg: ↓22%

Strong rationale for advancing larsucosterol to a registrational Phase 3 trial with 90-day mortality as the primary endpoint

¹Numerical improvement in primary endpoint of mortality or transplant at 90 days did not achieve statistical significance.

²Numerical reduction in total treatment-emergent adverse events (TEAEs) compared with standard of care (SOC).



Larsucosterol Potential in Alcohol-associated Hepatitis

Larsucosterol: Our Lead Epigenetic Modulator Program

Phase 3-Ready in AH with Novel Mechanism of Action (MOA)

Demonstrated Clinical Efficacy and Safety

- Phase 2b AHFIRM trial showed signal in reducing mortality in AH patients
- Well tolerated at all doses
- >500 subjects dosed in multiple completed Phase 1 and 2 studies

Potent DNMT Modulator

- Inhibition of DNMT-1, 3a & 3b aligns with AH biology
- Supports investigating larsucosterol for the treatment of multiple acute organ injuries and chronic liver diseases

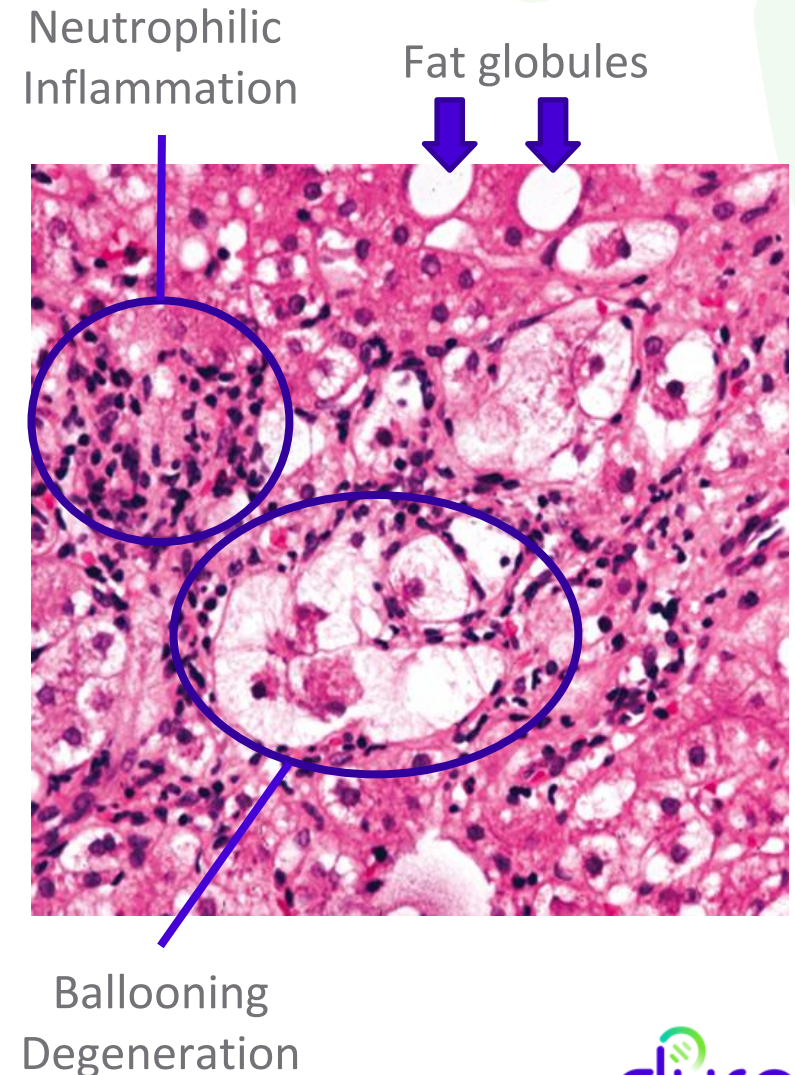
Positive Effects on Key Cellular Functions

- Stabilizes mitochondria
- Reduces lipotoxicity
- Regulates inflammatory or stress response
- Promotes cell survival

What is Alcohol-associated Hepatitis?

- Life-threatening form of alcohol-associated liver disease (ALD)
- Can occur in individuals who chronically misuse alcohol— frequently after increased consumption
- Excessive drinking can cause significant – but reversible – liver impairment leading to hepatocyte death
- Characterized by jaundice and severe multi-system inflammation – indicative of SIRS (Systemic Inflammatory Response Sndrome)¹
- SIRS may progress to multi-organ failure and ultimately death

90-day mortality rate is ~30%²



Current Treatments for AH are Inadequate with No Approved Therapies

Corticosteroids

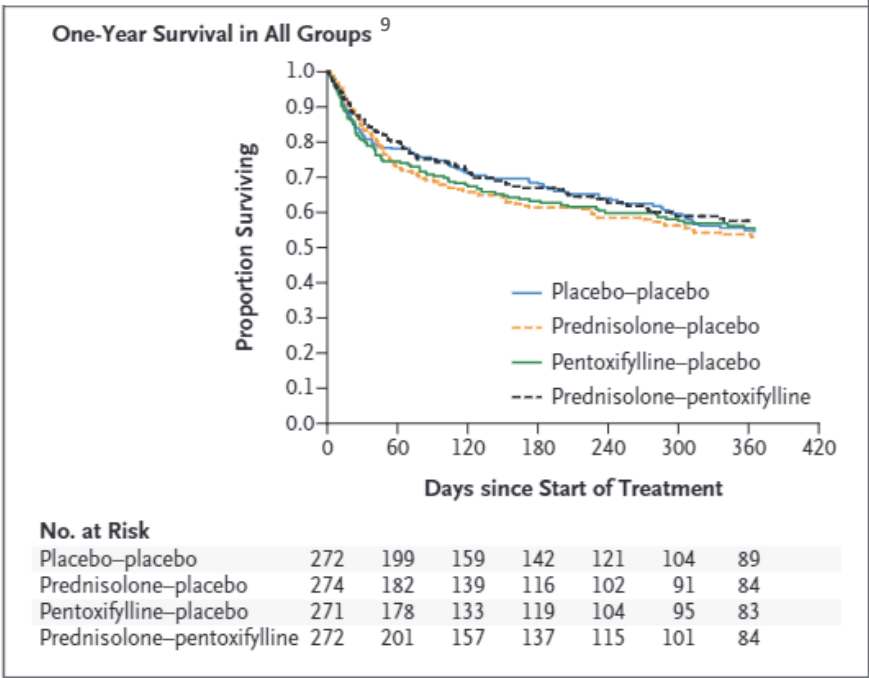
- Used as first-line treatment despite no proven survival benefit
- Only 25% to 45% of patients are eligible for corticosteroids due to well known complications and contraindications^{1,2,3,4,5,6}

Liver Transplant

- Limited availability of donated organs restricts access^{3,7,8}
 - High liver transplant costs >\$875,000
 - Requires lifetime of immunosuppression

Few Programs in Clinical Development

- Most advanced competitive clinical program is in Phase 2a
- No other completed clinical trials have reduced 90-day mortality



Larsucosterol could be the first FDA-approved drug for AH

References:

¹Crabb DW et al. 2016. *Gastroenterology*, 150:785-790; ²Shipley LC and Singal AK. 2020. *Transl Gastroenterol Hepatol*, 5:26; ³Singal AK et al. 2018. *Am J Gastroenterol*, 113:175-194; ⁴Singal AK et al. 2018. *J Hepatol*, 69:534-543; ⁵Singal AK and Mathurin P. 2021. *JAMA*, 326:165-176; ⁶Bataller et al. 2022. *N Engl J Med*, 387:2436-2448; ⁷Cotter TG et al. 2021. *Am J Transplant*, 21:1039-1055; ⁸Tornai D and Szabo G. 2020. *Clin Mol Hepatol*, 26:686-696; ⁹Thursz M et al. 2015. *NEJM*, 372: 1619-1628.



Larsucosterol AHFIRM Trial

Phase 2b Trial in Alcohol-associated
Hepatitis to Evaluate Safety and
Efficacy of Larsucosterol Treatment

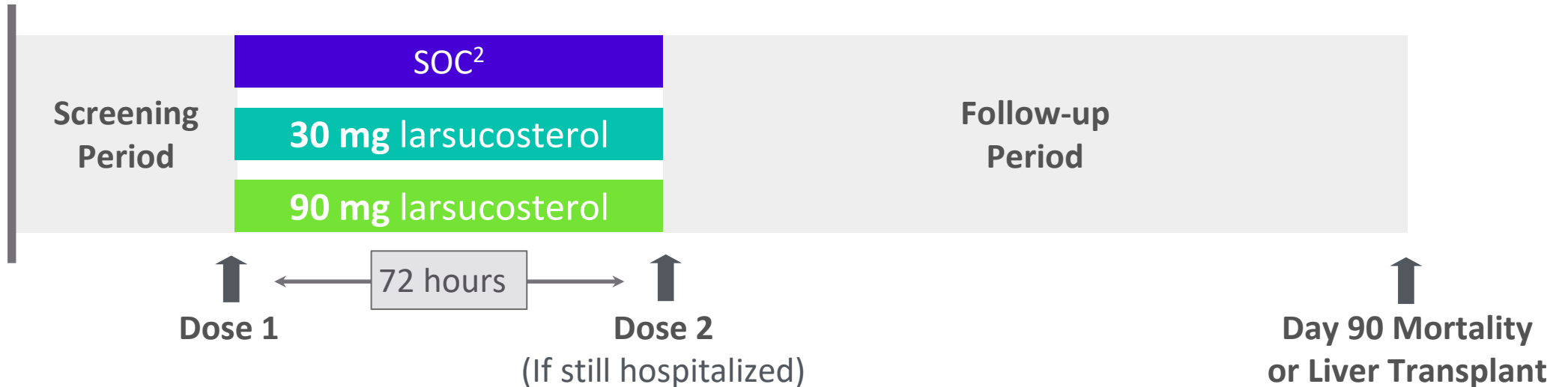


Phase 2b AHFIRM Trial Design

Trial Overview

Severe AH patients with MDF¹ score ≥ 32 and MELD¹ score 21-30
307 subjects randomized to three groups in a 1:1:1 ratio
Global trial conducted in U.S., E.U., Australia and U.K.
Standard of Care (SOC) included active steroids at investigators' discretion²

Study Design



¹ Maddrey's Discriminant Function (MDF); Model for End-Stage Liver Disease (MELD)

² All patients received supportive care, which for SOC patients included methylprednisolone capsules at the investigators' discretion. In order to maintain blinding, patients in the two larsucosterol arms received matching placebo capsules if the investigator prescribed steroids.

Median Baseline Characteristics by Arm – Global Population

	SOC	Larsucosterol 30 mg	Larsucosterol 90 mg
Number of patients randomized	103	102	102
Number of patients with 90-day outcome data	102*	99	101
MELD ¹	25.0	24.0	25.0
MDF	61.50	57.20	63.00
Age	47.0	44.0	43.0

* One subject in SOC group was confirmed alive at Day 90 but transplant status unknown

¹ Based on central lab MELD score.

Trial Outcomes by Arm – Global Population

	SOC*	Larsucosterol 30 mg	Larsucosterol 90 mg
Deaths (%)	25 (24.5%)	15 (15.2%)	17 (16.8%)
Transplants (%)	4 (3.9%)	6 (6.1%)	9 (8.9%)
Alive & Transplant-free (%)	73 (71.6%)	78 (78.8%)	75 (74.3%)
All Alive (%)	77 (75.5%)	84 (84.8%)	84 (83.2%)

“The AHFIRM trial results represent the most promising data set I have seen on new therapy for severe AH with no important toxicity and a trend toward reducing mortality.”¹

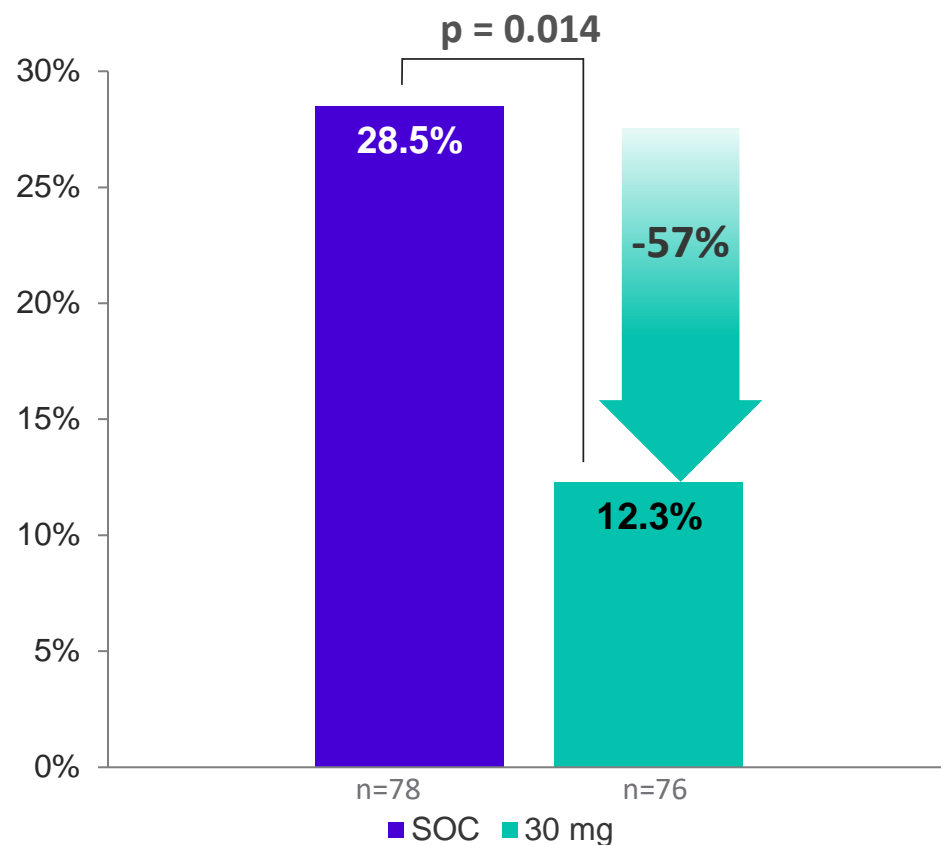
Craig McClain, M.D., AGAF, FACG, FAASLD, FACN, Professor of Medicine and Pharmacology & Toxicology at University of Louisville School of Medicine

“[T]he results of the current study demonstrating survival benefit are exciting and provide hope for many patients with this condition.”²

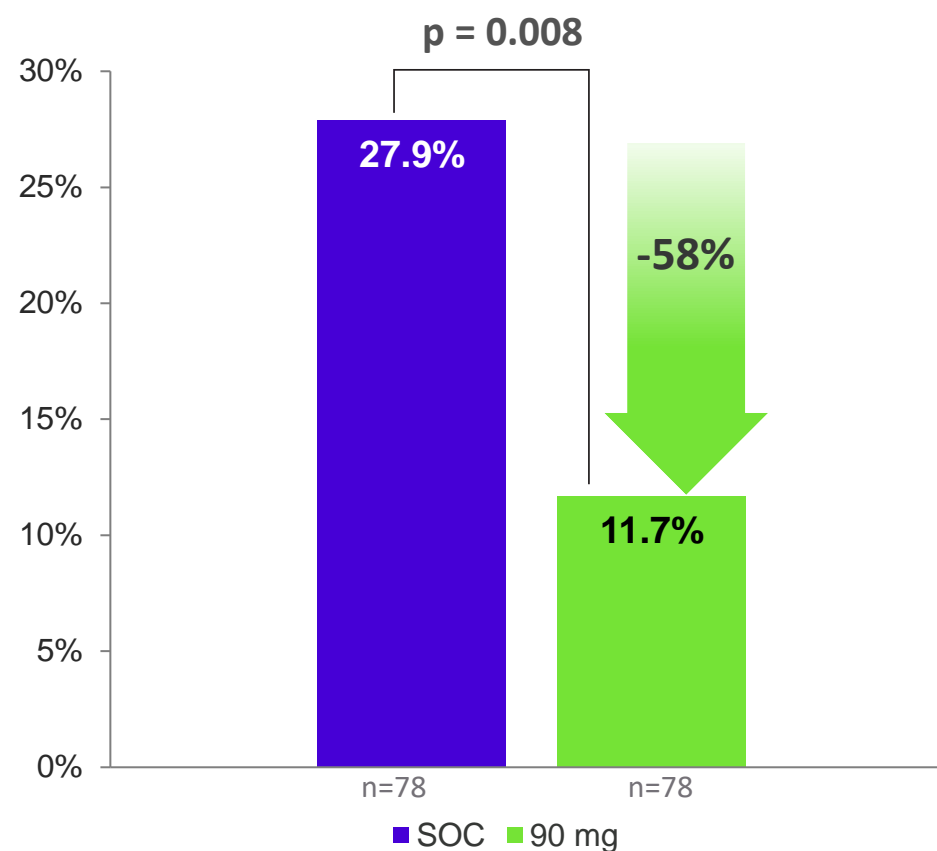
Arun Sanyal, MD, MBBS, Director of Stravitz-Sanyal Institute for Liver Disease & Metabolic Health at Virginia Commonwealth University

Pronounced Reduction in Mortality Observed in U.S. Patients (ITT)

**Mortality at 90 Days – U.S. Patients
30 mg Larsucosterol vs. SOC**

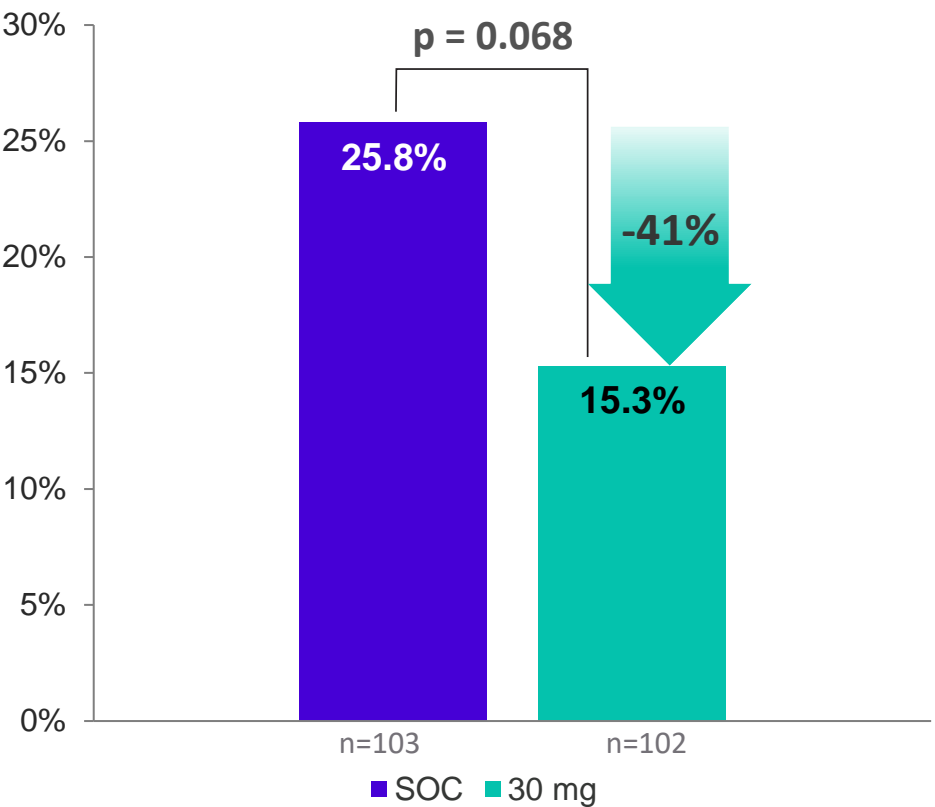


**Mortality at 90 Days – U.S. Patients
90 mg Larsucosterol vs. SOC**

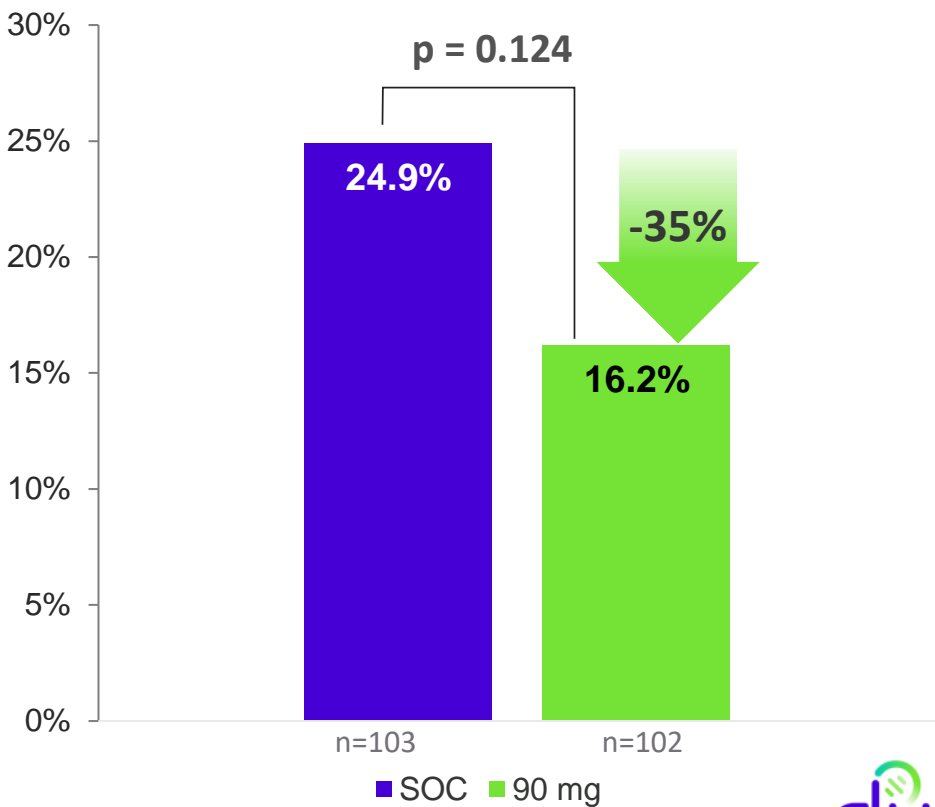


Clinically Meaningful Trend Toward Reduced Mortality – All Patients (ITT)

Mortality at 90 Days
30 mg Larsucosterol vs. SOC



Mortality at 90 Days
90 mg Larsucosterol vs. SOC



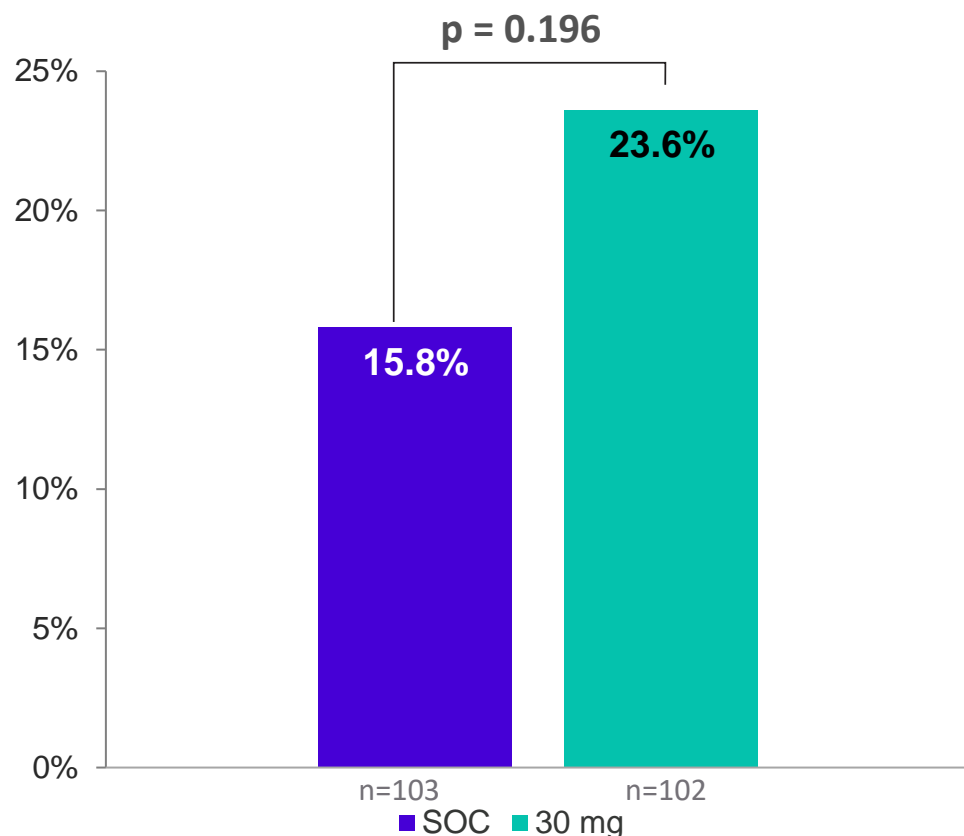
ITT includes patients with missing 90-day outcome data. The analyses were adjusted to account for subjects with missing outcome data by the method of multiple imputations.



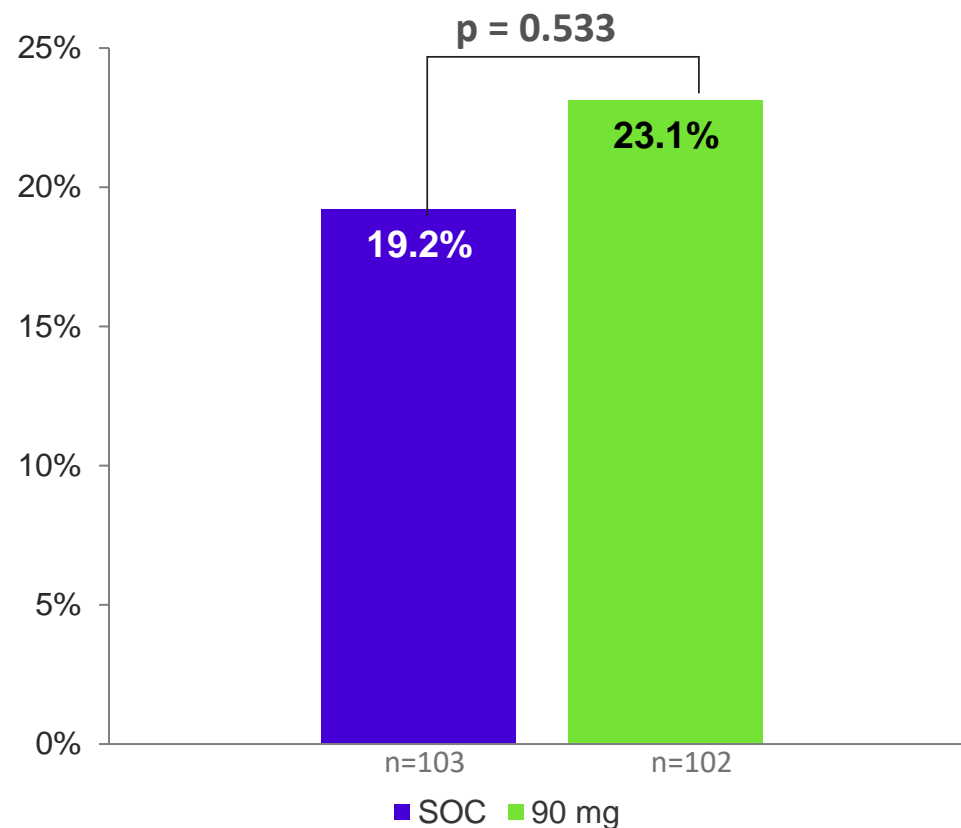
Numerical Improvement in Win-Ratio Primary Endpoint – All Patients

Did not achieve statistical significance

**Win Probability at 90 Days
30 mg Larsucosterol vs. SOC**

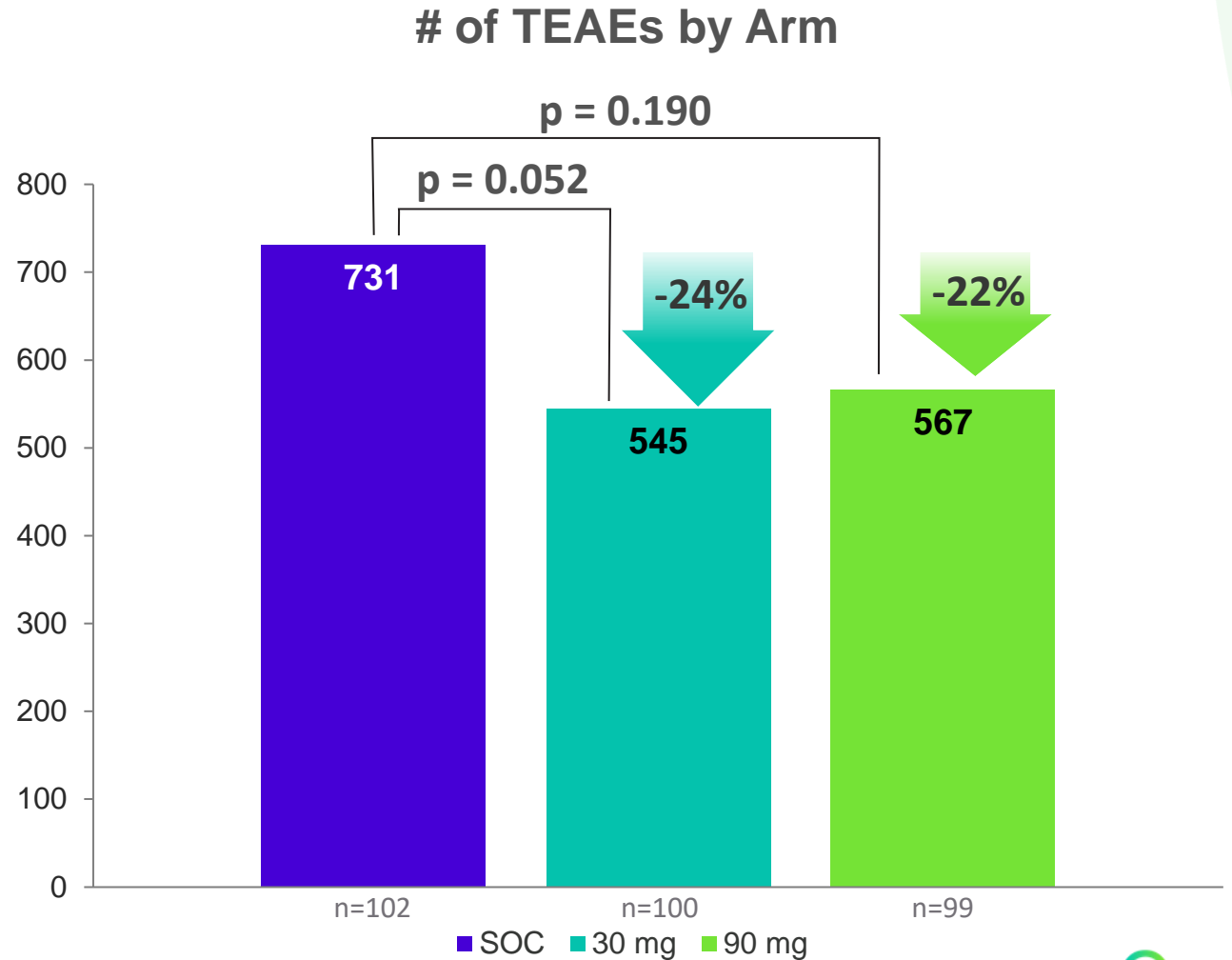


**Win Probability at 90 Days
90 mg Larsucosterol vs. SOC**



Larsucosterol Was Well-Tolerated

- Numerically fewer TEAEs in both 30 mg and 90 mg arms compared with SOC
- No meaningful difference in serious AEs and none attributed to larsucosterol



Conclusions and Next Steps for Larsucosterol in AH

- Compelling efficacy outcome in favor of larsucosterol in key secondary endpoint of reduced mortality at 90 days; 41% lower for the 30 mg dose ($p=0.068$) and 35% lower for the 90 mg dose ($p=0.124$) compared with SOC
- In U.S. patients, larsucosterol treatment reduced 90-Day mortality by 57% in the 30 mg dose ($p=0.014$) and by 58% in the 90 mg dose ($p=0.008$) compared with SOC
- Larsucosterol was well-tolerated; both dose groups had numerically fewer adverse events than standard of care

NEXT STEPS

- FDA feedback expected in first quarter of 2024
- Strong rationale for advancing larsucosterol to a registrational Phase 3 trial with 90-day mortality as the primary endpoint
- AHFIRM data to be presented at upcoming scientific meeting

A background image featuring a faint DNA double helix on the left side and several abstract, rounded green shapes of varying sizes and orientations on the right side, set against a light blue and green gradient.

Larsucosterol

Commercial Opportunity in AH

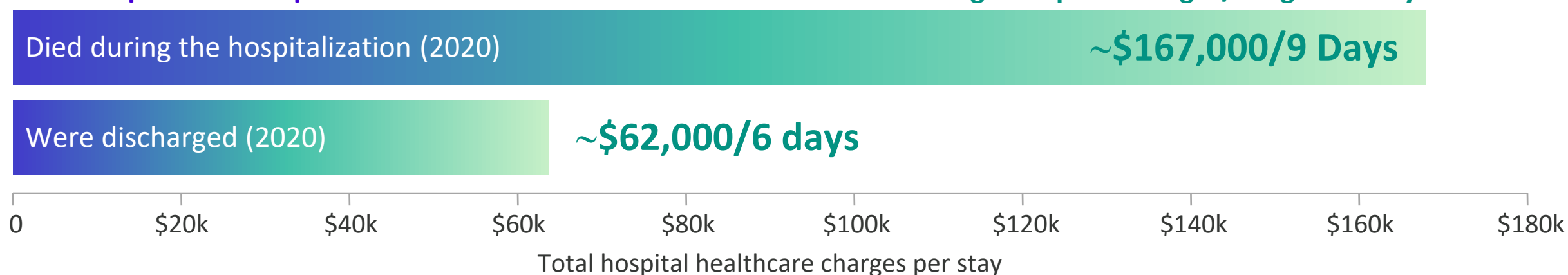


AH Imposes High Economic Burden on US Healthcare System

- ~158,000 U.S. hospitalizations in 2020¹
- Incidence may yield ~300K hospitalizations by 2034² based on historical yearly growth rate of 5.5% between 2015-2019³
- Increased physician and hospital awareness of AH could result in more robust ICD-10 coding and increased recorded hospitalizations
- 86% of hospitalized AH patients are insured³

Each hospitalization episode with AH¹:

Average Hospital Charges/Length of Stay



References:

¹ Marlowe N, Lam D, Liangpunsakul S. 2023. *Alcohol Clin Exp Res*, 00:1-7; ²Market Research – ClearView Analysis 2023; ³Marlowe N et al. 2022. *Alcohol Clin Exp Res*, 46(8):1472-1481.

Larsucosterol Value Proposition Supports Blockbuster Potential

Larsucosterol has the potential to become a >\$1B/year drug in the U.S. for the AH indication alone, if approved

Reduction in Mortality

Physicians prioritize **mortality as the most important endpoint**, and nearly all found a potentially significant reduction in 90-day mortality rate clinically meaningful

Hospital Cost Offset Economics

Reducing costly **length of inpatient stays and 30-day readmissions** is key for offsetting drug costs and securing favorable hospital formulary inclusion

Reduction in Healthcare System Cost Burden

Hospital economics and payer stakeholders may use **reduction in 30-day readmissions** to assess impact on per-patient cost burden

Physicians Are Enthusiastic About Larsucosterol

MECHANISM OF ACTION (MOA)

High enthusiasm for novel, specific MOA which targets the underlying liver inflammation and degradation



◆ Level of enthusiasm

CLINICAL EFFICACY

Reduction in 90-day mortality viewed as an advancement, as steroids do not show an effect on mortality past 28 days



SAFETY AND TOLERABILITY

Larsucosterol safety profile was well-received, with hundreds of patients dosed, viewed as compelling for use



DOSING AND ADMINISTRATION

Physicians saw no issues with inpatient IV doses



AH Intellectual Property Highlights



A donut chart representing 8 patent families. The chart is a thick green ring with a teal-colored segment at the bottom, indicating approximately 12.5% completion. The number 8 is centered in the white space of the donut.

8

PATENT FAMILIES

Includes pending patent applications that, if granted, could result in **protection until at least 2044**



A donut chart representing 3 issued families. The chart is a thick green ring with a teal-colored segment at the top, indicating approximately 33% completion. The number 3 is centered in the white space of the donut.

3

ISSUED FAMILIES

Three patent families each include at least one **granted patent** that could provide **protection until at least 2037**

The background features a faint, light green DNA double helix structure on the left side. On the right side, there are several abstract, elongated green shapes that resemble stylized DNA base pairs or molecular components. The overall color palette is light green and white.

Financial Overview and Summary



Financial Overview

Nasdaq

Market Cap

Shares O/S

Cash & Cash Equivalents

Debt

DRRX

\$25.4 MM¹

29.8 MM²

\$39.1 MM³

\$18.7 MM³

Cupertino, CA headquarters



¹ As of February 12, 2024

² As of November 13, 2023

³ As of September 30, 2023

Larsucosterol – Positioned for Success in AH

Compelling AHFIRM Mortality Results

- Compelling outcome on key secondary endpoint of mortality reduction at 90 days
- Pronounced reduction in mortality at 90 days in U.S. population
- Supports advancement to Phase 3 registrational trial
- Fast Track Designation

Clinical Safety

- Well tolerated, no drug-related toxicities
- Numerically fewer TEAEs in AHFIRM
- No serious AEs in AHFIRM attributed to larsucosterol
- More than 500 patients dosed in multiple Phase 1 and 2 trials

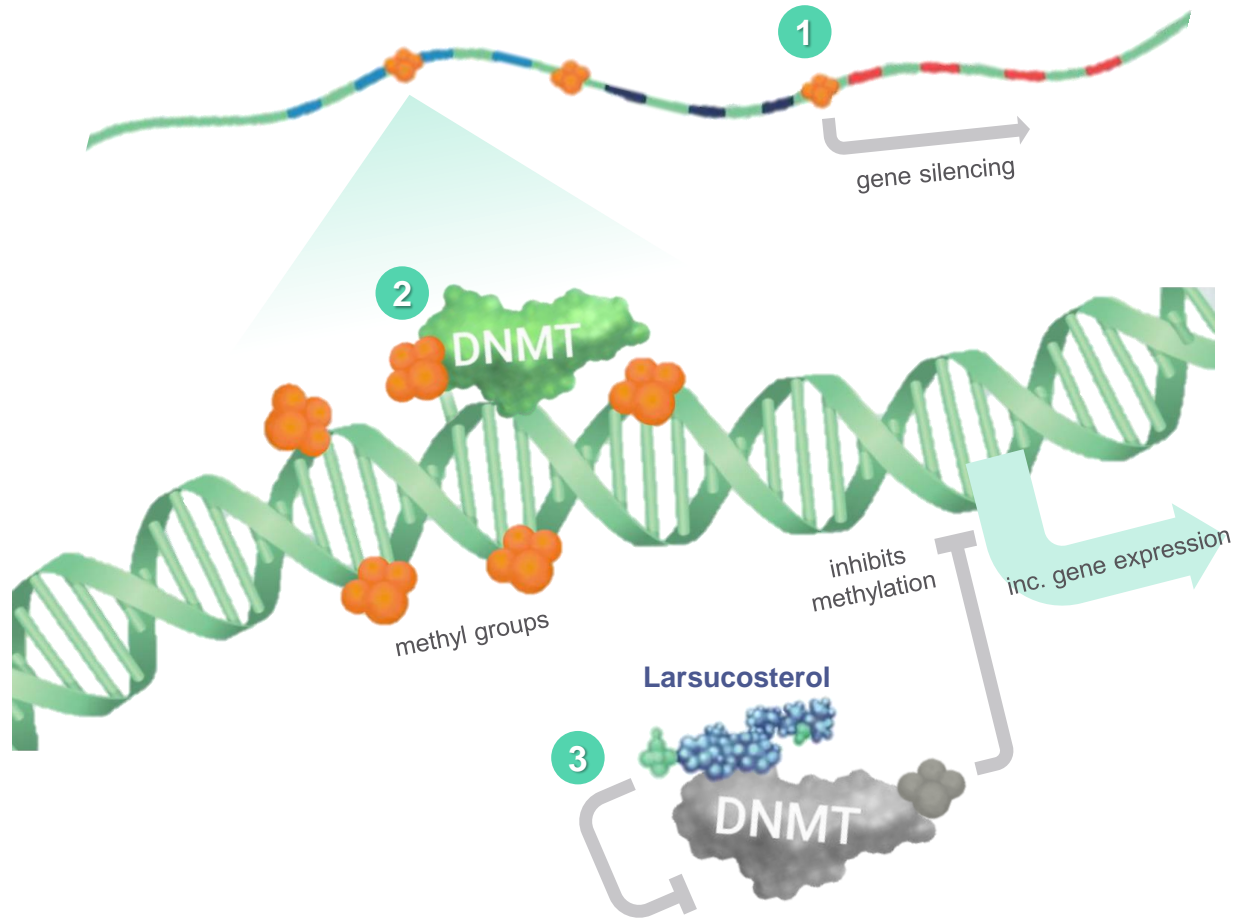
>\$1 Billion Peak Sales for AH in U.S.

- ~158,000 annual hospitalizations in U.S.
- ~\$10 billion annual direct hospital charges in U.S.
- No approved therapy
- Potential patent protection through at least 2044

FDA feedback on Phase 3 trial and next steps expected in Q1 2024

Appendix

Mechanism of Action Leverages Epigenetics to Impact Disease



- 1** **Epigenetic Dysregulation in AH Patients**
Aberrant DNA hypermethylation is associated with many diseases including severe AH
- 2** **Epigenetic Regulators Modulate Gene Expression**
DNA methyltransferases (DNMTs) are one such regulator that add methyl groups to certain regions of DNA, generally reducing gene expression
- 3** **Larsucosterol Inhibits DNMTs**
By inhibiting DNMTs (1, 3a, & 3b), larsucosterol reduces DNA hypermethylation, which modulates important cell signaling pathways

Inhibition of DNMT-1, 3a & 3b Aligns with AH

Liver samples from patients with severe AH have increased expression of DNMT-1 & 3a

