# Corporate Presentation

**January 2025**

# FLS

This presentation contains forward-looking statements within the meaning of applicable securities laws and regulations including, but not limited to, statements regarding: the expected design, timing of initiation and receipt of topline results from the ALPHA-ORBIT trial; the goals and objectives of the ALPHA-ORBIT trial and the long-term extension trial, including that they would support registration of Q3M and Q6M administration, and potentially accelerate the availability of Q6M administration; our expectations for the dosing regimens of navenibart and the efficacy data of navenibart in the ALPHA-ORBIT trial; the potential therapeutic benefits of navenibart as a treatment for HAE; the potential attributes and profile of navenibart as a treatment for HAE, including our expectation that it will be the market-leading, first choice and a potentially life-changing treatment for patients with HAE; our overall vision and goals for the navenibart program; expectations about being funded through top-line Phase 3 results and our cash runway; and our corporate strategy and vision, including our mission to bring life-changing therapies to patients and families affected by allergic and immunologic diseases. The use of words such as, but not limited to, “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “goals,” “intend,” “may,” “might,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” “would,” or "vision," and similar words and expressions are intended to identify forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on Astria’s current beliefs, expectations and assumptions regarding the future of its business, future plans and strategies, future financial performance, results of pre-clinical studies and clinical trials of Astria’s product candidates and other future conditions. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including risks and uncertainties related to: changes in applicable laws or regulations; the possibility that we may be adversely affected by other economic, business, and/or competitive factors; risks inherent in pharmaceutical research and development, such as: adverse results in our drug discovery, preclinical and clinical development activities, the risk that the results of preclinical studies may not be replicated in clinical trials, that the preliminary, initial or interim results from clinical trials may not be indicative of the final results, that the results of early stage clinical trials, such as the results from the ALPHA-STAR Phase 1b/2 clinical trial, may not be replicated in later stage clinical trials, such as the ALPHA-ORBIT trial and the open-label extension trial, the risk that we may not be able to enroll sufficient patients in our clinical trials on a timely basis, and the risk that any of our clinical trials, including ALPHA-ORBIT, may not commence, continue or be completed on our anticipated timelines, or at all; decisions made by, and feedback received from, the FDA and other regulatory authorities on our clinical trial design, including for ALPHA-ORBIT, and on our regulatory and clinical trial submissions, including receipt of FDA minutes from our December 2024 end of Phase 2 meeting, and other feedback from potential clinical trial sites, including investigational review boards at such sites, and other review bodies with respect to navenibart, STAR-0310, and any other future development candidates, decisions that we make about the design of clinical trials in response to regulatory feedback, including the design of the ALPHA-ORBIT trial and the long-term extension trial; our ability to manufacture sufficient quantities of drug substance and drug product for navenibart, STAR-0310, and any other future product candidates on a cost-effective and timely basis, and to develop dosages and formulations for navenibart, STAR-0310, and any other future product candidates that are patient-friendly and competitive; our ability to develop sufficient data to enable the use of planned devices with navenibart, STAR-0310 and any other future product candidates at commercial launch or otherwise as planned; our ability to develop biomarker and other assays, along with the testing protocols therefor; our ability to obtain, maintain and enforce intellectual property rights for navenibart, STAR-0310 and any other future product candidates; our potential dependence on collaboration partners; competition with respect to navenibart, STAR-0310, or any of our other future product candidates; the risk that survey results, modeling data and market research may not be accurate predictors of the commercial landscape for HAE, the ability of navenibart to compete in HAE and the anticipated position and attributes of navenibart in HAE based on clinical data to date, its preclinical profile, pharmacokinetic modeling, market research and other data; risks that any of our clinical trials of STAR-0310 may not commence, continue or be completed on time, or at all; risks that results of preclinical studies of STAR-0310 will not be replicated in clinical trials; our ability to manage our cash usage and the possibility of unexpected cash expenditures; our ability to obtain necessary financing to conduct our planned activities and to manage unplanned cash requirements; the risks and uncertainties related to our ability to recognize the benefits of any additional acquisitions, licenses or similar transactions; and general economic and market conditions; as well as the risks and uncertainties discussed in the “Risk Factors” section of our Annual Report on Form 10-K for the period ended December 31, 2023 and in other filings that we may make with the Securities and Exchange Commission. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Astria may not actually achieve the forecasts or expectations disclosed in our forward-looking statements, and investors and potential investors should not place undue reliance on Astria’s forward-looking statements.

Neither Astria, nor its affiliates, advisors or representatives, undertake any obligation to publicly update or revise any forward-looking statement, whether as result of new information, future events or otherwise, except as required by law. These forward-looking statements should not be relied upon as representing Astria’s views as of any date subsequent to the date hereof.

# Building a Leading Allergy and Immunology Company

| | Transforming science that **works**… | …into therapies that patients **want** |
|---|---|---|
| **navenibart**<br>HEREDITARY ANGIOEDEMA (HAE) | • Half-life extended monoclonal antibody inhibitor of plasma kallikrein | • Trusted mechanism and modality<br>• Potential for Q3M and Q6M administration |
| **star-0310**<br>ATOPIC DERMATITIS (AD) & BEYOND | • Half-life extended monoclonal antibody antagonist of OX40 | • Clinically-validated mechanism<br>• Potential best-in-class efficacy and safety |

# Astria's Pipeline Has Multiple Potential Near-Term Catalysts

| PROGRAM | DISCOVERY | PRECLINICAL | PHASE 1 | PHASE 2 | PHASE 3 | RECENT & EXPECTED MILESTONES |
|---|---|---|---|---|---|---|
| **NAVENIBART (STAR-0215)**<br>*Anti-plasma kallikrein half-life extended mAb* | **Hereditary Angioedema** | | | | | ✓ **Q4 2024:** Final results from Phase1b/2 ALPHA-STAR trial<br>◆ **Q1 2025:** Phase 3 trial initiation<br>◆ **Mid-2025:** Initial results from ALPHA-SOLAR<br>◆ **Early 2027:** Phase 3 ALPHA-ORBIT top-line results |
| **STAR-0310**<br>*Anti-OX40 half-life extended mAb* | **Atopic Dermatitis**<br>**Undisclosed Indications** | | | | | ✓ **Year-End 2024:** IND submission<br>◆ **Q1 2025:** Phase 1a initiation<br>◆ **Q3 2025:** Phase 1a results |

# Developing the Potential Market-Leading HAE Treatment: Navenibart Phase 3 Program

ALPHA ORBIT

- **Single 6-month pivotal Phase 3 trial and long-term extension designed with both Q3M and Q6M administration**
- **Pioneering expected patient-centric dosing flexibility in HAE with potential market-leading first-choice profile**
- **Expected to initiate this quarter, with top-line results expected in early 2027**



1. As of 12/31/2024

# Navenibart Designed for Best Patient Experience

## Navenibart Vision

| SCIENCE THAT WORKS: | THERAPY THAT PATIENTS WANT: |
| --- | --- |
| • Monoclonal antibody inhibitor of plasma kallikrein | • Trusted mechanism and modality with established safety |
| • High affinity and potency with fast onset | • Rapid, effective prevention against HAE attacks |
| • YTE modification for extended half-life | • Infrequent administration expected every 3 and 6 months |
| • Citrate-free, high-concentration formulation | • Well-tolerated, pain-free, autoinjector-enabled administration |

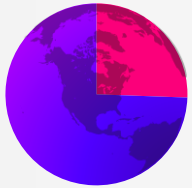
# HAE: Significant Opportunity to Improve Lives

**PREVALENCE**

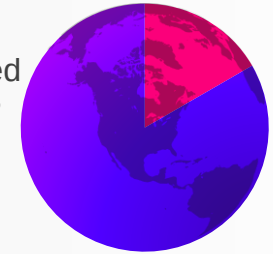
**1 in 50,000 - 80,000** people worldwide (<8k US, <15k EU) [1,2,3,4]

**COMMERCIAL OPPORTUNITY**

**2023** HAE Market[5]
**$2.8B**



**2030** Estimated HAE Market[5,6]
**$5.4B**



**HAE Treatment**
- Preventative
- On-Demand

**Market growth driven by:**
- Patients being diagnosed earlier
- More patients taking preventative treatments
- Geographic expansion for currently available therapies

**COLI**
LIVING WITH HAE

*HAE is a rare, genetic disorder characterized by severe, unpredictable, and uncontrollable swelling*

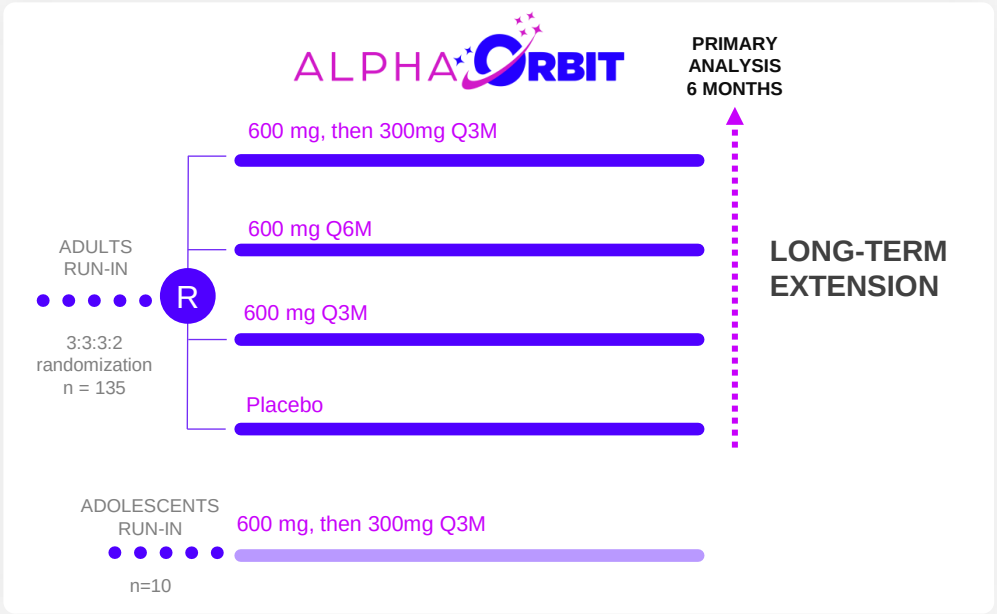

1. Kanepa A, Nartisa I, Rots D, Gailite L, Farkas H, Kurjane N. National survey on clinical and genetic characteristics of patients with hereditary angioedema in Latvia. Allergy Asthma Clin Immunol. 2023;19(1):28.
2. Busse, P.J. et al. JACI. 2021; 132-150.
3. Lumry, W.R. Front Med. 2018; 5, 22.
4. Aygören-Pürsün, E. et.al. Orphanet j Rare Dis. 2018; 13:73.
5. EvaluatePharma
6. Astria company research and analysis

# ALPHA ORBIT Phase 3 Trial Strategy

- Our goal is to revolutionize the way that patients manage their HAE
- Phase 3 designed to evaluate both Q3M and Q6M regimens with the goal of providing options for patients that, if approved, would ultimately create flexibility in how patients manage their disease
- Planned Phase 3 dose selection determined from cumulative program data
- Phase 3 program was designed with input from the EMA and end of Phase 2 meeting with the FDA held in December 2024

# A Single, Global Phase 3 Pivotal Trial Designed to Assess Efficacy and Safety for Both Q3M and Q6M Administration of Navenibart in HAE

## 6-Month Primary Analysis




**Population: Adolescents and adults with HAE Types 1 and 2**

**Primary Endpoint at 6 months:**

- Number of time-normalized investigator-confirmed HAE attacks in the 6-month treatment period

**Secondary Endpoints at 6 months[1]:**

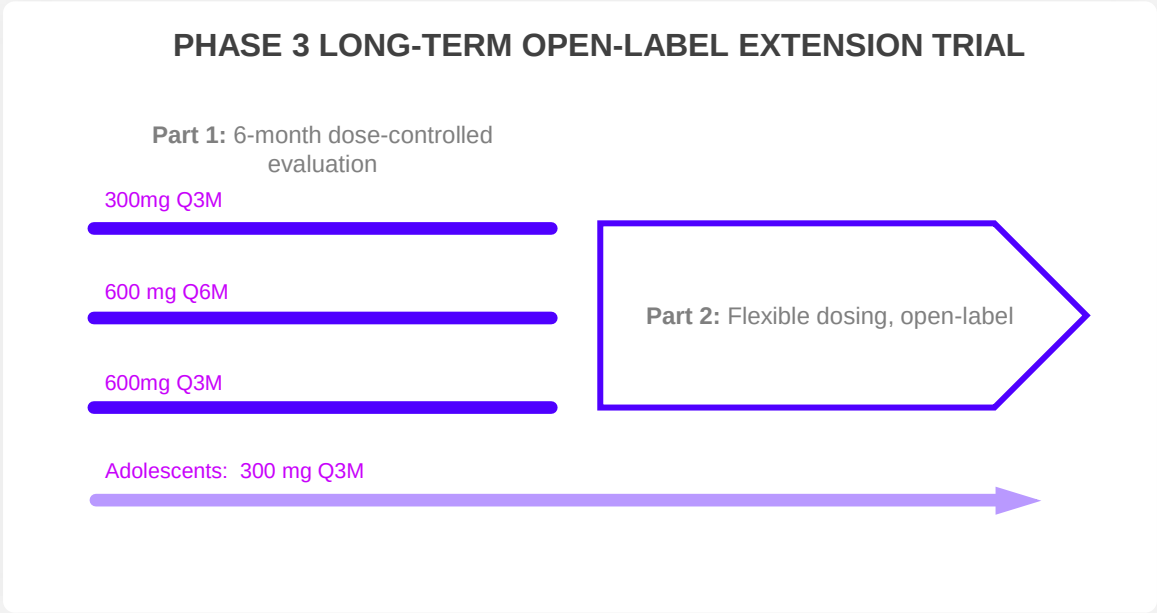
- Proportion of participants attack-free at 6 months
- Number of moderate/severe HAE attacks
- Number of attacks that require on-demand treatment

**All dose regimens expected to meet or exceed the efficacy of current market-leading product[2,3,4]**

1. Selected secondary endpoints shown.
R = randomization
2. Banerji et al (2018), JAMA 3. TAKHZYRO US Prescribing Information (Feb 2023) 4.Astria QSP analysis

# Long-Term Extension Trial to Support Navenibart's Registration and Profile in HAE

- ALPHA-ORBIT participants on drug may be eligible to continue on the same dose regimen through Part 1
- Placebo patients enter 600 mg Q3M arm
- Primary objective: assess long-term safety and tolerability of navenibart



# Path to ALPHA-ORBIT Success

navenibart

**NAVENIBART'S PROFILE**

- Trusted mechanism and modality
- Strong proof-of-concept and safety profile to-date
- Q3M and Q6M administration
- Low risk for administration pain

**OUR COLLABORATION WITH HAE COMMUNITY**

- ALPHA-ORBIT designed with input from patients and physicians from around the world
- Design reflects feedback from FDA and CHMP

alpha-star

**OUR HISTORY OF STRONG EXECUTION**

- Phase 1b/2 enrolled faster than anticipated
- Expanded enrollment has allowed additional site experience that lays foundation for Phase 3

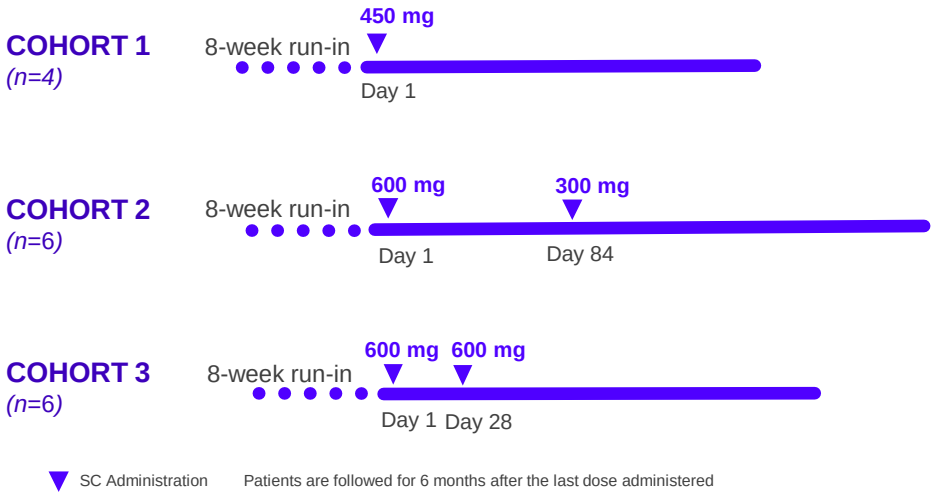
ALPHA ORBIT

**OUR COMMITMENT TO OPERATIONAL EXCELLENCE**

- Wide footprint, global trial
- Robust physician outreach to date
- Site recruiting activities are ongoing

# ALPHA-STAR Informed Q3M and Q6M Dosing

**Trial Design Schematic**




- ALPHA-STAR Phase 1b/2 is a dose-ranging, proof-of-concept trial in adults with HAE
- Target enrollment (n=16) has been achieved with complete follow-up
- Topline results demonstrated potential effectiveness of Q3M and Q6M dosing regimens
- These data to be presented at upcoming scientific conference

SC = subcutaneous. Run-in period is at least 8 weeks (56 days) to measure baseline HAE attacks.
Final data from target enrollment patients (n=16)

alpha-star

# ALPHA-STAR Phase 1b/2 Results Established Proof-of-Concept and Path for Potential Phase 3 Success

*ALPHA-STAR Phase 1b/2 6-Months Results Summary*

**Navenibart Summary**

- **91-95%** Attack Rate Reduction
- **25-67%** Attack-Free Rate
- **95-96%** Reduction in Moderate and Severe Attack Rate
- **91-94%** Reduction in Attacks Requiring Rescue Medication
- **0%** Injection Site Pain
- **2 or 4** Doses Per Year[1]

*6-Month Phase 3 Results Summaries*

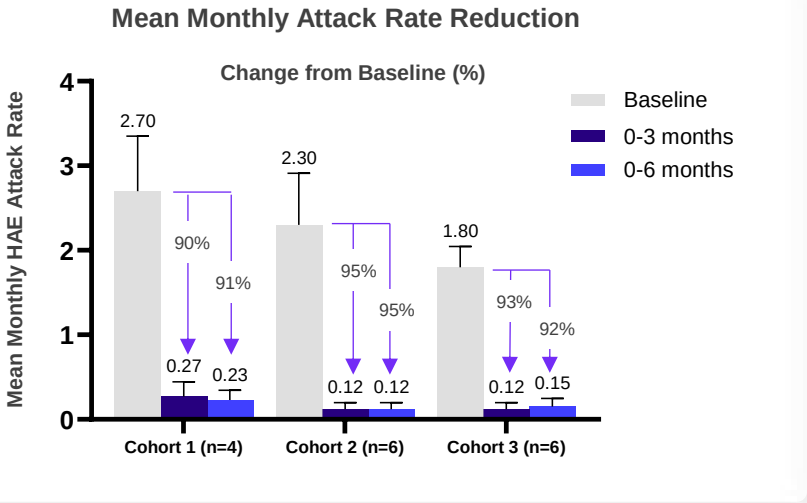
| | Attack Rate Reduction | Attack-Free Rate | Reduction in Moderate and Severe Attack Rate | Reduction in Attacks Requiring Rescue Medication | Injection Site Pain | Doses Per Year |
|---|---|---|---|---|---|---|
| **Lanadelumab**[2,3] 300 mg Q2W | 87% | 44% | 83% | 87% | 52% | 26 |
| **Berotralstat**[4,5,6] 150 mg QD | 44% | 8% | 40% | 49% | N.A. | 365 |
| **Garadacimab**[7] 200 mg Q4W | 87% | 72% | 90% | 88% | N.R. | 13 |
| **Donidalorsen**[8] 80 mg Q4W | 81% | 53% | 89% | 92% | N.R. | 12 |

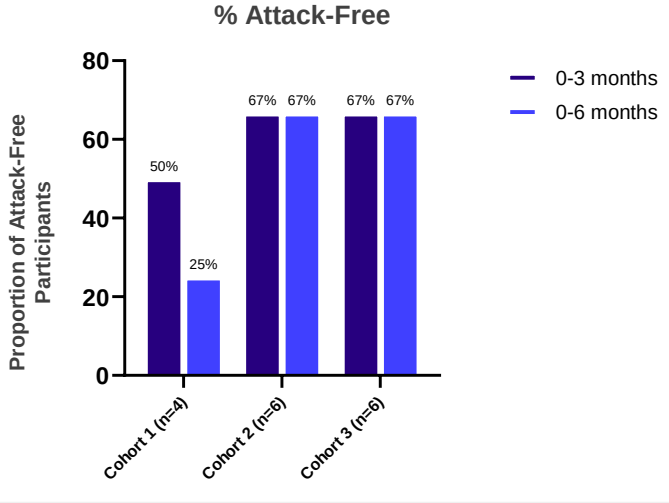
astria THERAPEUTICS

Navenibart efficacy endpoints are mean change from baseline. Final data from target enrollment patients (n=16). Results from lanadelumab, berotralstat, garadacimab, and donidalorsen are from separate, Phase 3, placebo-controlled trials in adults and adolescents with Type 1 or 2 HAE. Data from most efficacious dose regimens shown. The comparison presented between navenibart and the lanadelumab, berotralstat, garadacimab, and donidalorsen data represent cross-trial comparisons and does not involve data from a head-to-head clinical trial. For lanadelumab, berotralstat, garadacimab, and donidalorsen, endpoints are changes from placebo. N.A. = Not applicable; N.R. = Not reported.

1. Planned administration for navenibart 2. Banerji et al (2018), JAMA 3. TAKHZYRO US Prescribing Information (Feb 2023) 4. ORLADEYO US Prescribing Information (Oct 2024) 5. Zuraw et al (2021). J. Allergy Clin. Immunol. 6. CDER Multidisciplinary Review and Evaluation, Orladeyo (Oct 2018) 7. Craig et al (2023), The Lancet 8. Riedl et al (2024), NEJM

# Navenibart Demonstrated 6 Months of HAE Attack Prevention with 1 or 2 Doses




Final data from target enrollment patients (n=16). Showing %difference between the means in each group (3 months and 6 months) vs the mean run-in (baseline).

# Navenibart Was Well-Tolerated and Demonstrated a Favorable Safety Profile

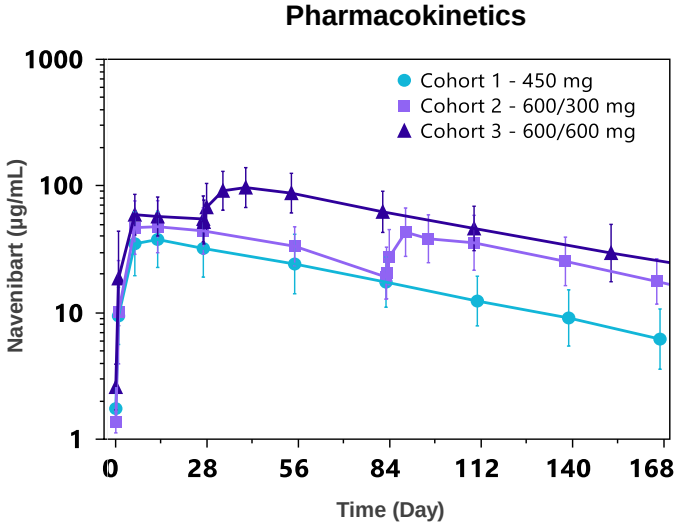
| | Cohort 1 (N=4) | Cohort 2 (N=6) | Cohort 3 (N=6) | Total (N=16)* |
|---|---|---|---|---|
| Participants with at least 1 Treatment-Emergent Adverse Event (TEAE) | 4 | 5 | 6 | **15** |
| TEAEs occurring in ≥ 2 participants | | | | |
| Nasopharyngitis | 1 | 1 | 2 | **4** |
| Sinusitis | – | 1 | 1 | **2** |
| Headache | 2 | – | – | **2** |
| Participants with at least 1 related TEAE[1] | – | 1 | 2 | **3** |
| Injection site erythema | – | – | 1 | **1** |
| Injection site pruritus | – | – | 1 | **1** |
| Injection site rash | – | – | 1 | **1** |
| Dizziness | – | 1 | – | **1** |

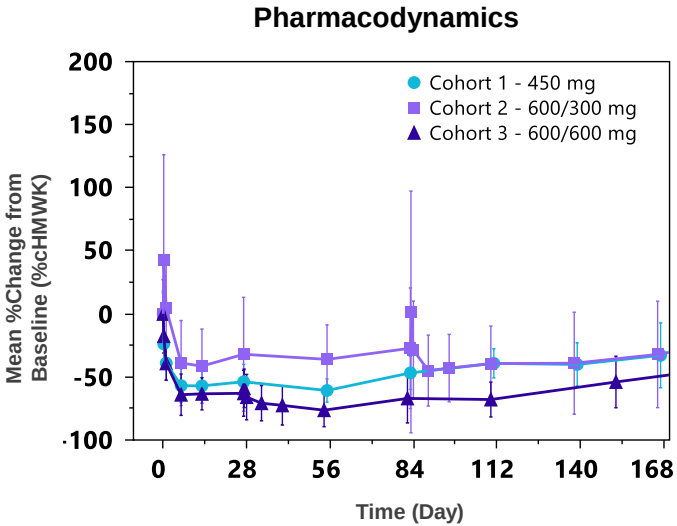
No serious adverse events (SAEs) and no discontinuations due to TEAE

1. One participant experienced mild dizziness occurring 6 days after the first dose in Cohort 2 and lasting < 1 day;
   One participant experienced 2 injection site reactions: injection site erythema and injection site pruritus occurring 1 day after the second dose in Cohort 3 and lasting <1 day;
   One participant experienced injection site rash occurring 5 days after the second dose in Cohort 3 and lasting < 1 day

Final data from target enrollment patients (n=16).

# Results Show that Navenibart PK and PD Are Consistent with Rapid and Durable Clinical Benefit



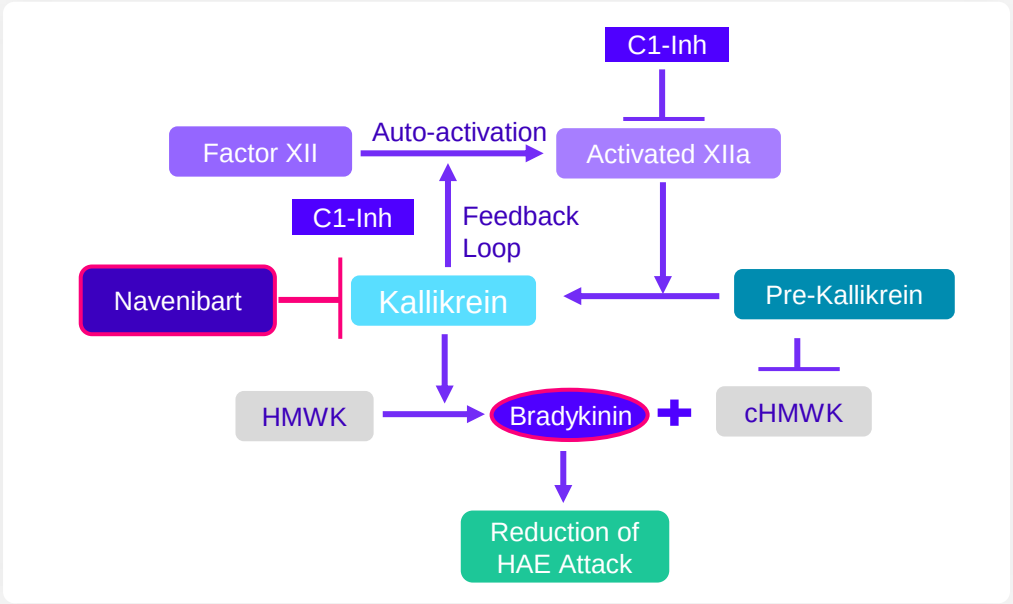

Maximum lanadelumab effect -53.7% [1]

Final data from target enrollment patients (n=16).

1. Wang et al (2020), Lanadelumab FDA Multidisciplinary Review (2017): maximum 53.7% inhibition of formation rate of cHMWK with lanadelumab (exposure-response model).

Navenibart and lanadelumab have not been evaluated in a head to head clinical trial.

# Mechanistic QSP Model Informed Phase 3 Dose Selection




**Mechanistic Quantitative Systems Pharmacology (QSP) Model**

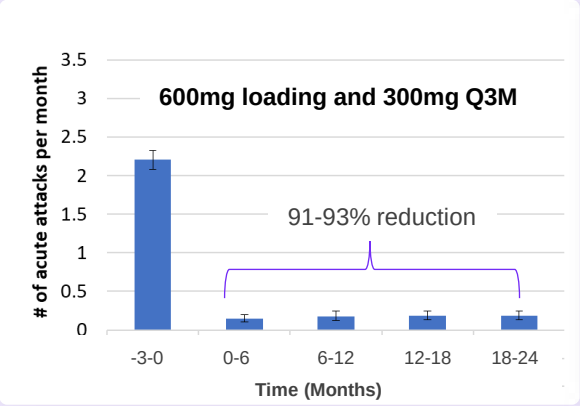
- Validated model in HAE[1]
- Model integrates HAE pathophysiology with accumulated navenibart preclinical and clinical data including:
  - C1-Inh activity
  - Baseline attack frequency
  - PK characteristics
  - PD (cHMWK levels)
- Simulations of various dose regimens in virtual HAE patients informed dose selection

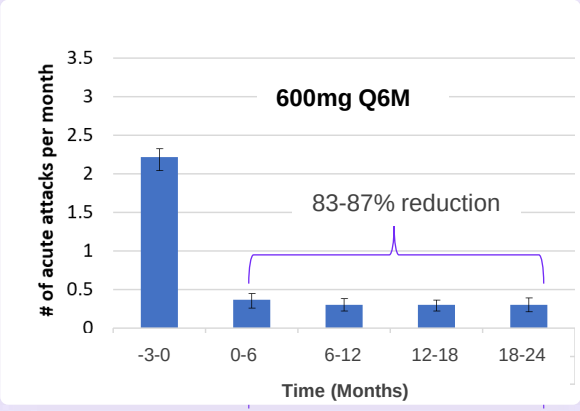
Species: XII = factor XII, XIIa = activated factor XII, C1-Inh = C1-inhibitor, HMWK = high molecular weight kininogen, cHMWK = cleaved HMWK, Kallikrein = plasma kallikrein, PK = pharmacokinetics, PD = pharmacodynamics

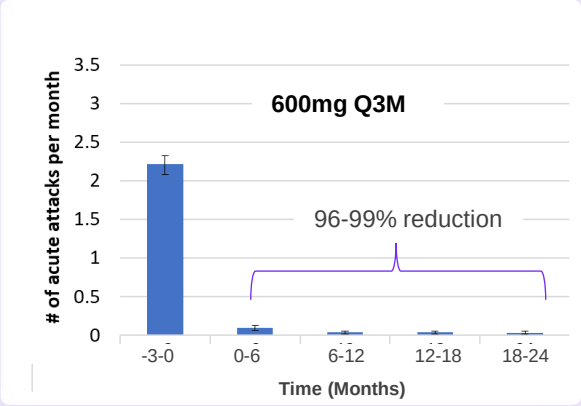
1. Sexton D et al (2024) J Pharmacokinet Pharmacodyn

# Navenibart Has the Potential to be the Market-Leading HAE Preventative Therapy

## QSP Model-Predicted Change in Time-Normalized Monthly HAE Attack Rate[1]




## Phase 3 Results Summaries: 6-Month Time-Normalized Monthly HAE Attack Rate[2,3,4,5,6,7]

| **Lanadelumab** 300 mg Q2W *(70% of use)*[8] | **Lanadelumab** 300 mg Q4W *(30% of use)*[8] | **Berotralstat** 150 mg QD | **Garadacimab** 200 mg Q4W | **Donidalorsen** 80 mg Q4W | **Donidalorsen** 80 mg Q8W |
|---|---|---|---|---|---|
| 87% | 73% | 44% | 87% | 81% | 55% |

1. Mean ± 5 and 95 percentiles from 100 subsets of virtual population with ~ 100 subjects in each subset. Ranges of mean reductions in 6-month time-normalized monthly HAE attack rates through 24 months are shown. Navenibart QSP modeling data is based on the ALPHA-STAR target enrollment attack rates and are mean change from baseline. Results from lanadelumab, berotralstat, garadacimab, and donidalorsen are from separate, Phase 3, placebo-controlled trials in adults and adolescents with Type 1 or 2 HAE. Data from most efficacious dose regimens shown. The comparison presented between navenibart and the lanadelumab, berotralstat, garadacimab, and donidalorsen data represent cross-trial comparisons and does not involve data from a head-to-head clinical trial. For lanadelumab, berotralstat, garadacimab, and donidalorsen, endpoints are changes from placebo. 2. Banerji et al (2018), JAMA 3. TAKHZYRO US Prescribing Information (Feb 2023) 4. ORLADEYO US Prescribing Information (Oct 2024) 5. Zuraw et al (2021). J. Allergy Clin. Immunol. 6. Craig et al (2023), The Lancet 7. Riedl et al (2024), NEJM. QSP = Quantitative Systems Pharmacology 8. Watt et al. AAAAI (Feb 2024).

# Navenibart Dosing Flexibility Has the Potential to Transform the Treatment of HAE

**Patients and physicians increasingly recognize flexible dosing as most appropriate care.**

For example, VABYSMO (faricimab-svoa) revolutionized the wet AMD and DME markets with dosing flexibility ($3.2B USD in sales as of 9/30/2024[1])

**TAKHZYRO (lanadelumab), the current HAE market-leading product ($1.0B USD in sales as of 9/30/2024[2,3,4]) is dosed every 2 weeks with the potential to extend the dosing interval to every 4 weeks**

**Navenibart Phase 3 program is designed to enable dosing flexibility**

**Navenibart has potential to deliver efficacy at or better than TAKHZYRO with the ability for patients and clinicians to decide what works best for them with dosing every 3 or 6 months**

1. Roche. YTD September 2024 sales (2024).
2. Takeda Pharmaceutical Co. Takeda Quarterly Financial Report For the Quarter Ended March 31, 2024. (2024).
3. Takeda Pharmaceutical Co. Takeda Quarterly Financial Report For the Quarter Ended June 30, 2024. (2024).
4. Takeda Pharmaceutical Co. Takeda Quarterly Financial Report For the Quarter Ended September 30, 2024. (2024).

# Advancing Navenibart to Become the Potential Market-Leading Treatment for HAE

**Growing HAE Market Expected to be $5.4B by 2030**

+

**Compelling Navenibart Clinical Profile that Supports Potential Q3M and Q6M Administration**

+

**Pioneering Potential Patient-Centric Dosing Flexibility**

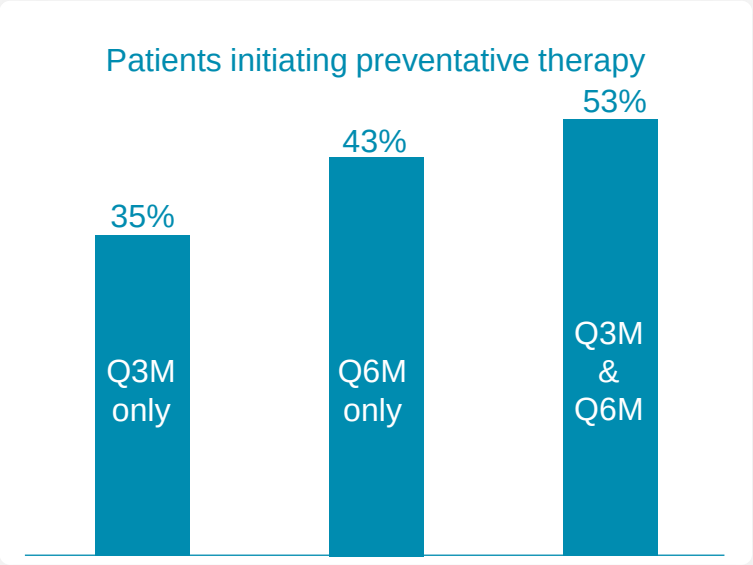
+

**Building Expected Patient Share From Both Switches and New Starts**

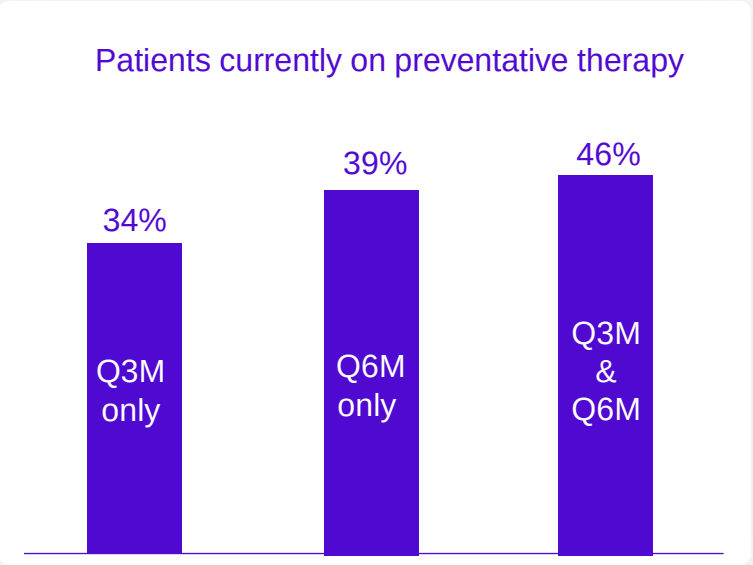
**Our goal with navenibart is to revolutionize the treatment of HAE**

# Providing Patients Both Q3M and Q6M Options Would Allow Individual Choice and Address the Needs of a Broader Population

## HCP-Anticipated Patient Share



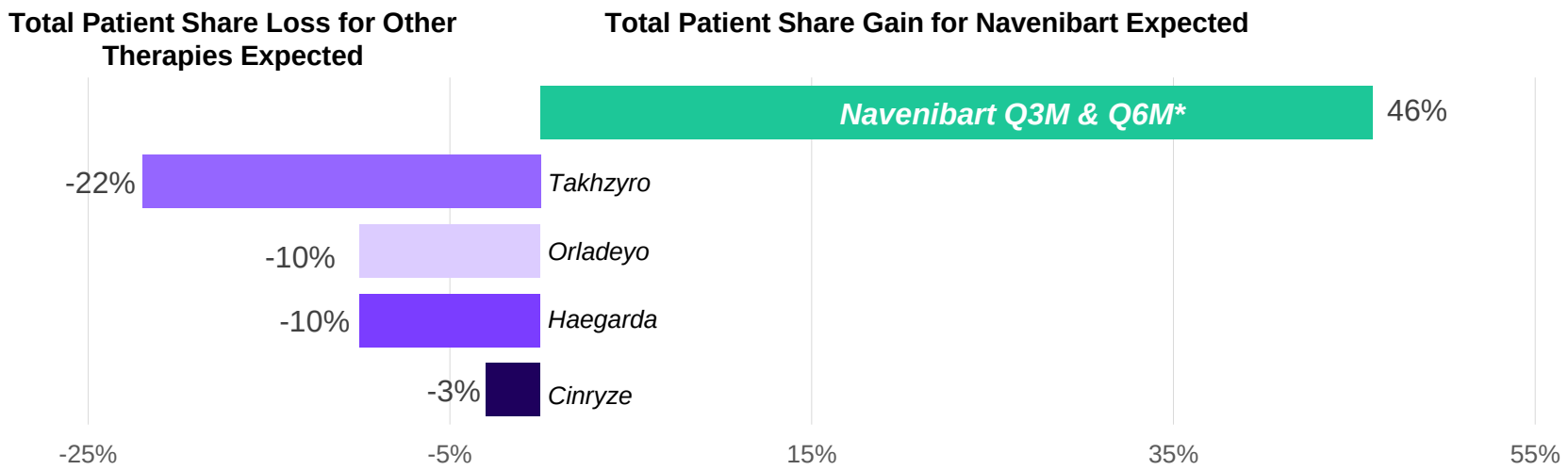

*Navenibart profile**




*Navenibart profile**

TRINITY Primary Market Research, July – August 2024; Quantitative Research with N=50 U.S. HAE Treaters; Shares reported with respect to currently available treatments
*Blinded profile shared of a monoclonal antibody inhibitor of plasma kallikrein, with efficacy comparable to TAKHZYRO, low risk of injection pain, and with dosing regimen of every 3 months and/or every 6 months.

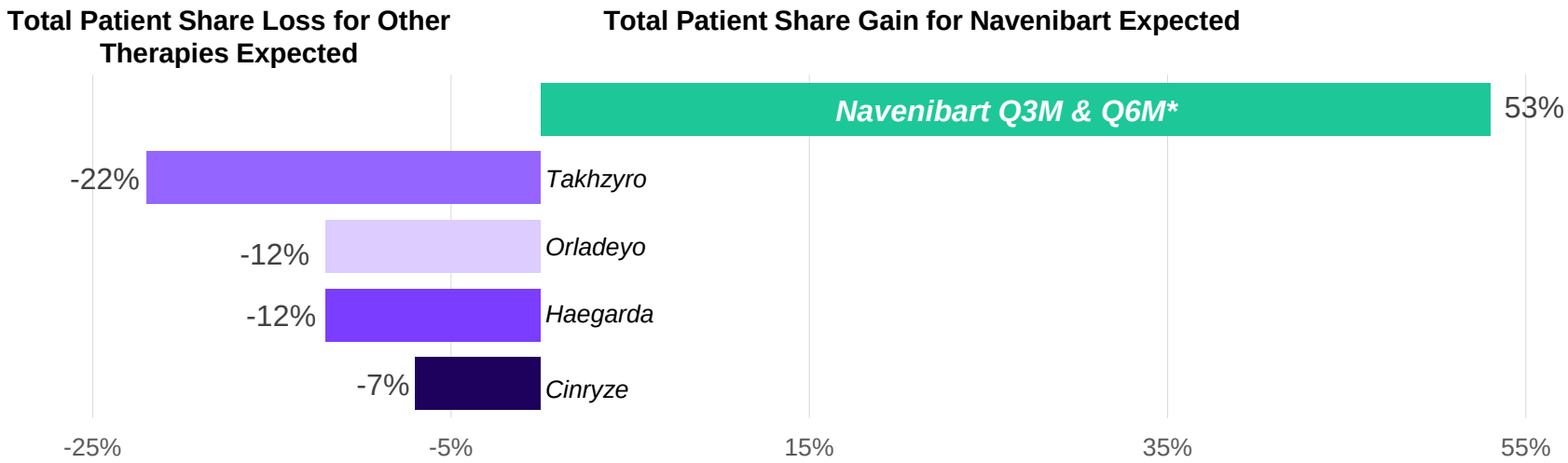
# Navenibart Expected to Draw Switches from Other Current Therapies




TRINITY Primary Market Research, July – August 2024; Quantitative Research with N=50 U.S. HAE Treaters; Shares reported with respect to currently available treatments

*Blinded profile shared of a monoclonal antibody inhibitor of plasma kallikrein, with efficacy comparable to market-leader TAKHZYRO, low risk of injection pain, and with dosing regimens of every 3 months and/or every 6 months.

# Navenibart Expected to Draw Patients From Newly Initiating Preventative Therapies



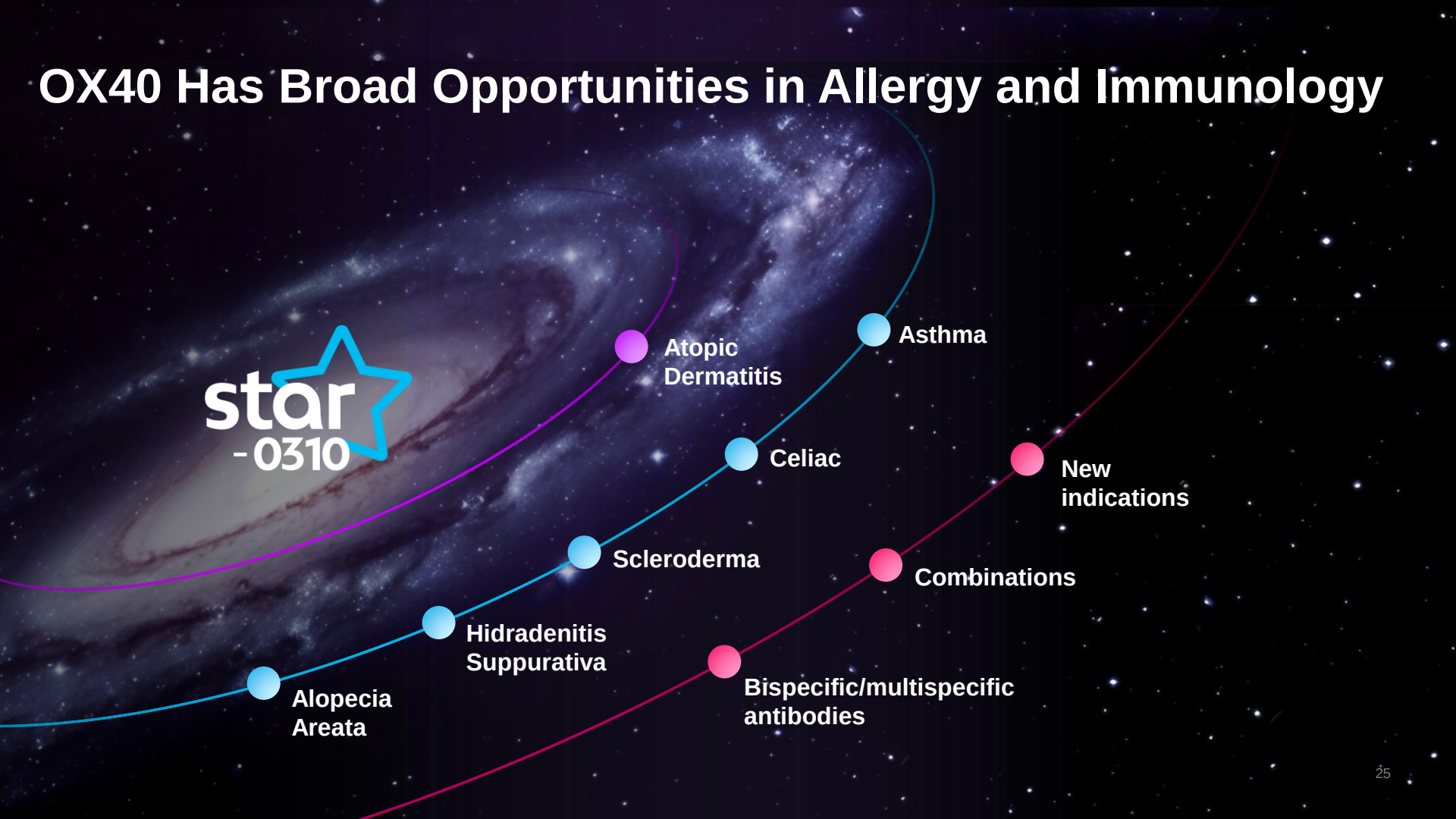

TRINITY Primary Market Research, July – August 2024; Quantitative Research with N=50 U.S. HAE Treaters; Shares reported with respect to currently available treatments

*Blinded profile shared of a monoclonal antibody inhibitor of plasma kallikrein, with efficacy comparable to market-leader TAKHZYRO, low risk of injection pain, and with dosing regimens of every 3 months and/or every 6 months.

**Taking a medication 2 or 4 times a year would mean freedom for me. That is the closest thing to a normal life that I could imagine. I could travel. I could make plans without checking the day of the week.”**

COLI

# OX40 Has Broad Opportunities in Allergy and Immunology




# Atopic Dermatitis: Opportunity for Broad Impact on Patients' Lives

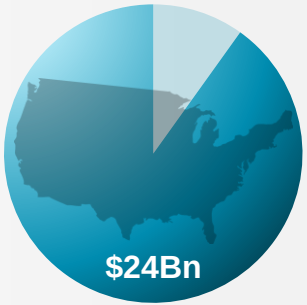
## PREVALENCE

**16 million** people in the U.S. have AD[1]
About half of those people are reported to be moderate-to-severe[1]

## COMMERCIAL OPPORTUNITY

**2023** Moderate-to-Severe AD Market
**$7B[2]**

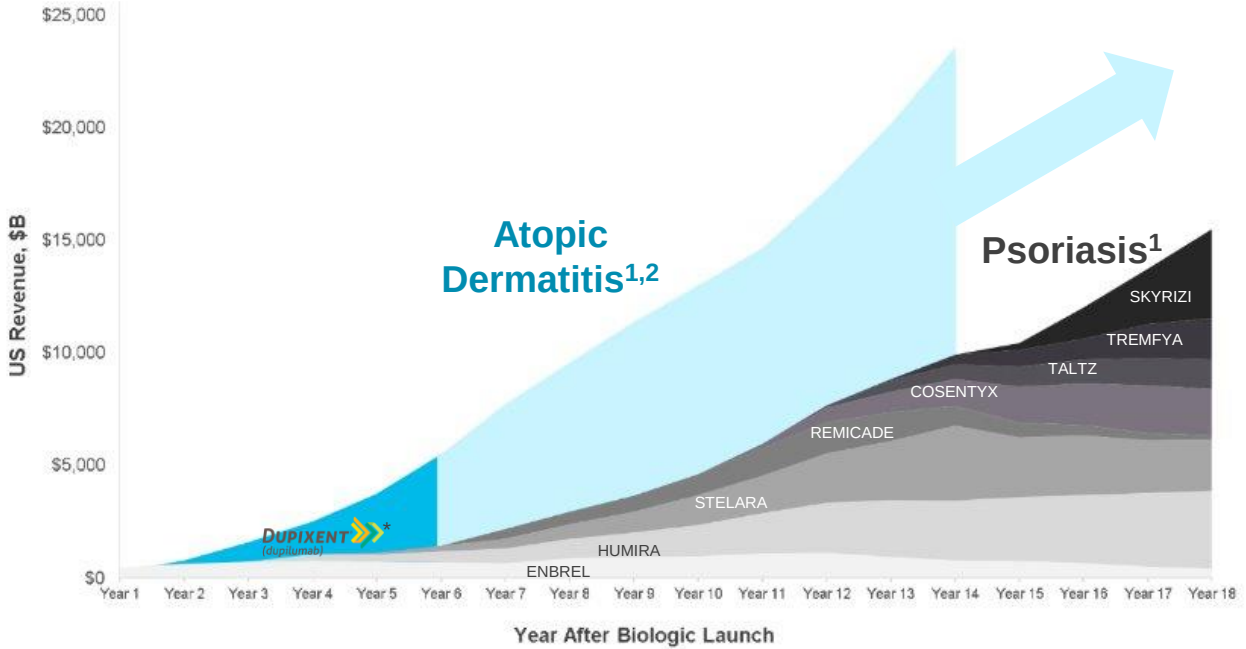

**2030** Moderate-to-Severe AD Market
**$26B[2]**




**Treatment**
- Topicals and immunosuppressants
- Advanced treatment*

1. Barbarot S, et al. Allergy. 2018 Jun;73(6):1284-1293. doi: 10.1111/all.13401
2. Decision Resources Group: Atopic Dermatitis Disease Landscape & Forecast, July 2023

# Proven Precedence for Market Growth and Evolution for Targeted Dermatology Therapies




## US Prevalence

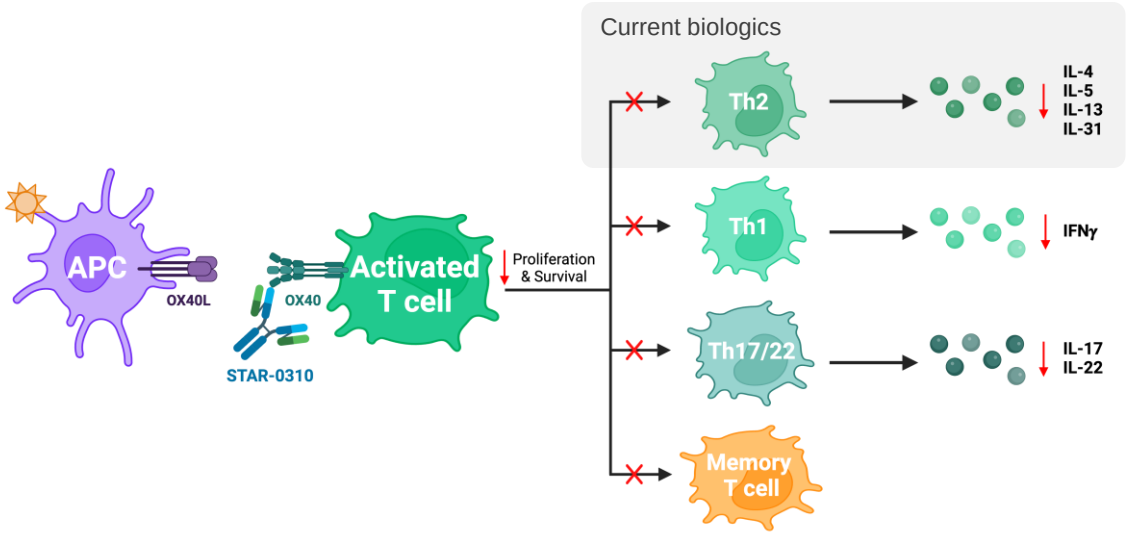
**Psoriasis: 2-3%[3]**

**Atopic Dermatitis: 5%[4]**

* Includes Cibinqo and Rinvoq.


1. Evaluate Pharma Consensus Sales by Indication in the US
2. Decision Resources Group: Atopic Dermatitis Disease Landscape & Forecast, July 2023
3. Damiani, G. et al. Front Med (Lausanne) 2021 Dec 16:8:743180. doi: 10.3389/fmed.2021.743180
4. Barbarot S, et al. Allergy. 2018 Jun;73(6):1284-1293. doi: 10.1111/all.13401

# Targeting OX40 Has Potential for Disease Modification




- AD is driven by a diversity of T cells, including Th1, Th2 and Th17/22
- Current biologics target only the Th2 pathway
- **Targeting OX40 impacts Th cells broadly and may result in higher rates of clinical response**

# STAR-0310 Shows Potential for Differentiation from Late-Stage OX40/OX40L Programs

## Anti-OX40 Monoclonal Antibodies

**Precise Targeting of Activated T Cells**

## Anti-OX40L Monoclonal Antibody

**Widely Targeting Inflammatory Cells**

### STAR-0310

- Fully humanized, IgG1
- Full antagonist
- Low ADCC and T cell preserving
- YTE half-life extended
- **STAR-0310 is optimally designed to target the receptor with high affinity, high potency, and long half-life**

### Rocatinlimab[2,3,6]

- Fully human, afucosylated, IgG1
- Depletes T cells via enhanced ADCC
- T cell depletion leads to cytokine release (pyrexia and chills) and potential increased risk of infection
- Top-line data from 1st Phase 3 trial shared

### Amlitelimab[1,2,5]

- Fully human, IgG4
- OX40L is widely expressed on APCs
- Binding OX40L may increase risk for upper respiratory infection, nasopharyngitis, respiratory, and vascular AEs
- Positive Phase 2a and 2b results in AD
- Ph 3 in AD ongoing

APCs=antigen presenting cells. These include epithelial, endothelial, smooth muscle, mast and B cells. AEs= adverse events

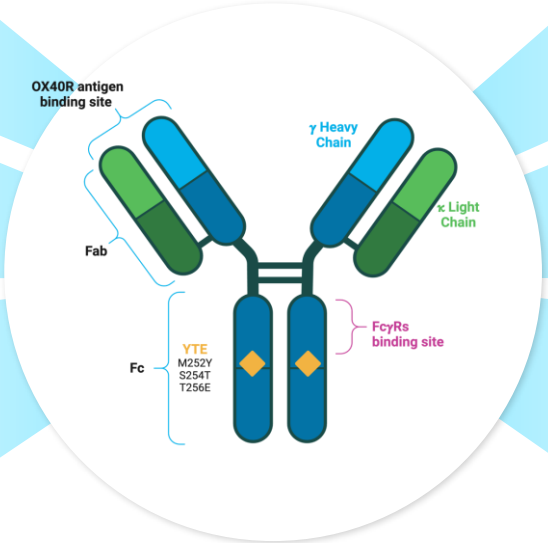

1. Weidinger et al, 2023; Br J Dermatol.
2. Le A, Torres T. 2022; Pharmaceutics. 2022, Dec 8; 14(12):2753
3. Guttman-Yassky et al 2023; Lancet. 2023, Dec 9; 401:204-14
4. Rewerska et al 2023; AAAAI. 2023, Nov 22.
5. Clinicaltrials.gov NCT05131477
6. Clinicaltrials.gov NCT05651711

# STAR-0310:
# Engineered to Differentiate on Efficacy, Safety, and Treatment Burden

**High Affinity, Next Generation** Anti-OX40 antibody

**Selective Potency** for Activated T-Cells

**Potential Best-in-Class Safety Profile** Designed for low ADCC and to be T cell preserving




**Extended Half-Life with YTE technology**

**Potential for Low Volume, Infrequent SC Delivery**

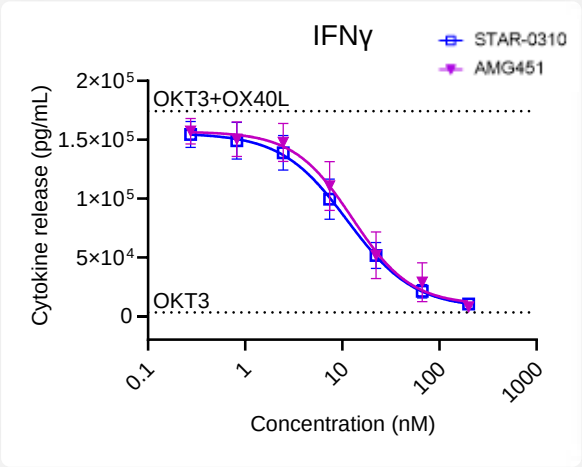
**Patent Pending Technology** U.S. provisional patent application filed, potential patent expiry 2044[3]


1. Dall'Acqua WF, Kiener PA, Wu H. Properties of human IgG1s engineered for enhanced binding to the neonatal Fc receptor (FcRn). J Biol Chem. 2006 Aug 18;281(33):23514-24.
2. Booth BJ, Ramakrishnan B, Narayan K, Wollacott AM, Babcock GJ, Shriver Z, Viswanathan K. Extending human IgG half-life using structure-guided design. MAbs. 2018 Oct;10(7):1098-1110.
3. U.S. provisional patent application filed October 2023 covering STAR-0310 and its use in AD and other disorders. If converted, nationalized and approved, expect the patent to expire in 2044, excluding potentially applicable patent term extension.

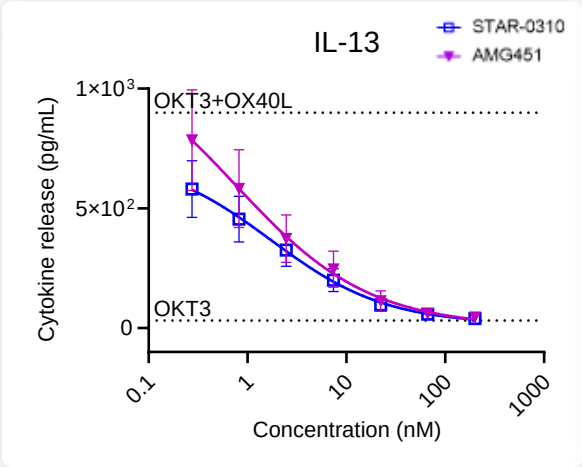
# STAR-0310 Has High Potency for OX40

## STAR-0310 and Rocatinlimab Have Similar Potency on Effector T (Th) Cells

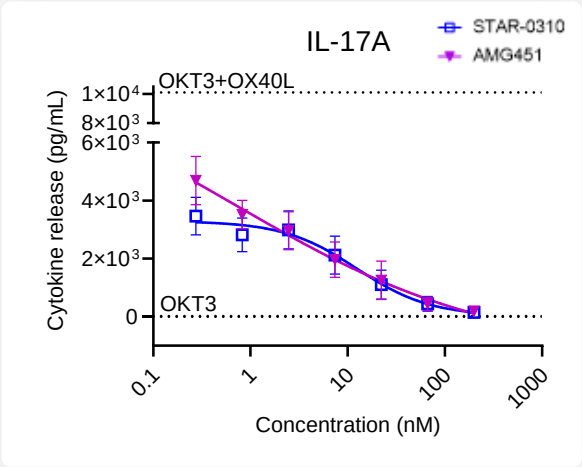
### Th1 cytokine




### Th2 cytokine




### Th17 cytokine

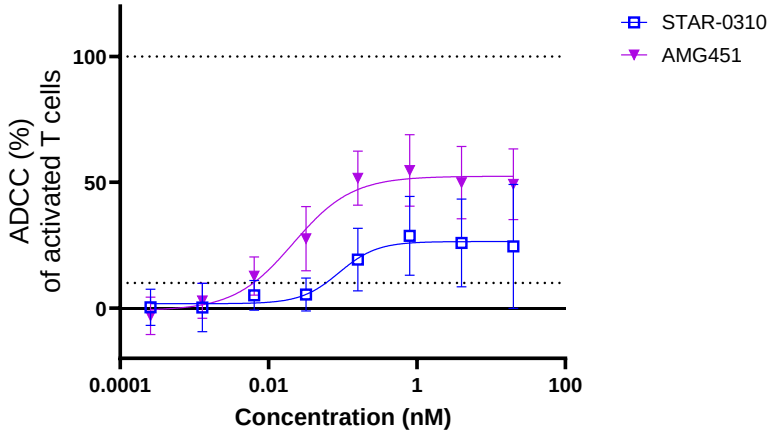



1. Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

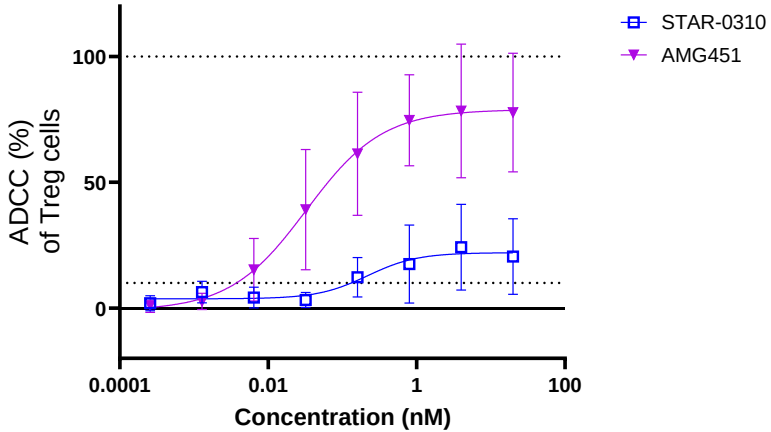
# STAR-0310 Is Engineered for Low ADCC

## STAR-0310 Has Lower ADCC than Rocatinlimab

### ADCC on Activated T Cells




### ADCC on Regulatory T Cells

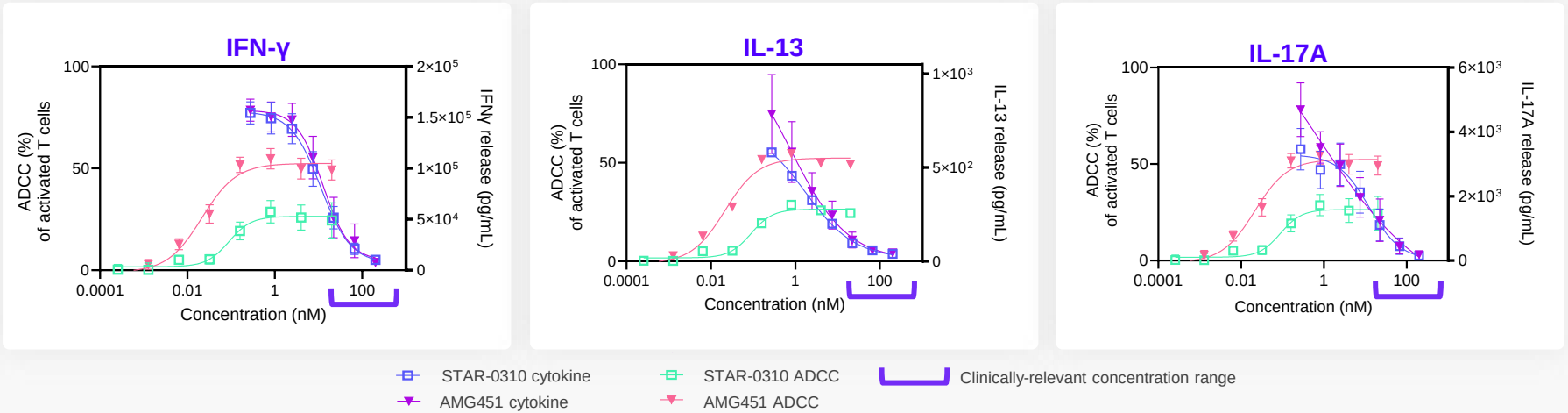



1. Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

# STAR-0310 Has Potential for Best-in-Class Efficacy

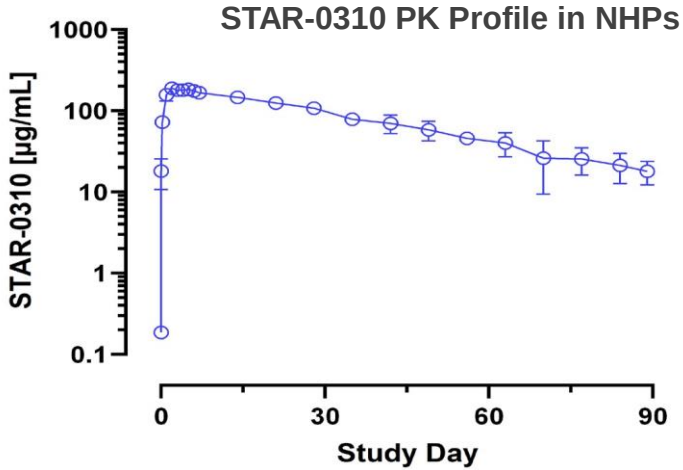
## STAR-0310 Has a Potentially Wider Therapeutic Window

### In vitro Activated T Cell ADCC (%) Compared to Potency for Th1, 2, and 17/22 Cytokines




1. Figures represent a cross-experiment comparison
2. Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

# STAR-0310 Has Potential to be the Least Frequently Administered OX40




- **Extended half-life with YTE technology**
  - Estimated mean half-life of 26 days
    - Average 10-14 days in non-half-life extended IgG antibodies
  - Expected 2-5 fold increase in half life in humans

- **Potential for administration as infrequently as once every 6 months due to long half-life and potential for disease modification**

NHP = Nonhuman primate

Single dose in vivo pharmacokinetic data from cynomolgus monkeys dosed with STAR-0310 via subcutaneous (SC, N= 3) route at 20 mg/kg.

Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

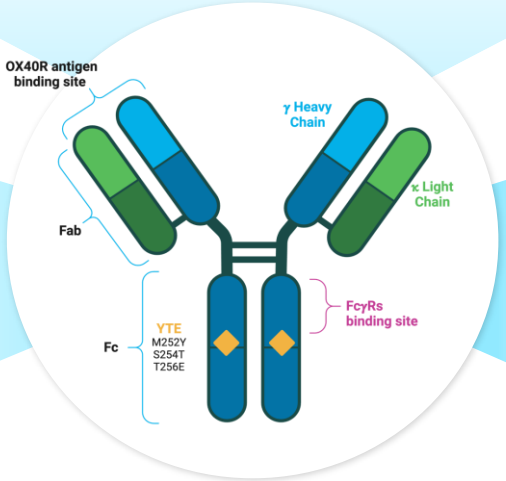
# STAR-0310:
# Potential First-Choice for Moderate-to-Severe AD

Phase 1a Initiation Anticipated in Q1 2025

**Best-in-Class Efficacy**

**Better Safety and Tolerability**

**Least Frequently Administered OX40**



# Recent and Expected Milestones

navenibart

HEREDITARY ANGIOEDEMA

- Q1 2024: Initial POC results from ALPHA-STAR
- Q3 & Q4 2024: Orphan Drug and Orphan Medicinal Product Designations
- Q4 2024: Final ALPHA-STAR target enrollment results
- Q1 2025: Initiate Phase 3 trial
- Mid-2025: Long-term treatment results from ALPHA-SOLAR

star-0310

ATOPIC DERMATITIS

- Mid 2024: Present preclinical profile
- YE 2024: IND submission
- Q1 2025: Initiate Phase 1a healthy subject trial
- Q3 2025: Phase 1a results
- Q3 2025: Initiate Phase 1b trial

# Strong Financial Foundation

## Astria (Nasdaq: ATXS)

- Cash, cash equivalents, and short-term investments as of 12/31/2024 of over $325M
- Cash expected to support current operating plan[1] into mid-2027

## Equity Summary

| | Common | Preferred Stock as Common Equivalents | Pre-Funded Warrants | Total OS Common Equivalents |
|---|---|---|---|---|
| Outstanding as of 9/30/24 | 56,434,219 | 5,184,591 | 1,571,093 | 63,189,903 |

1. The Company expects that its cash, cash equivalents and short-term investments as of September 30, 2024 will be sufficient to fund its operations into mid-2027, including all navenibart program activities through the completion of a planned Phase 3 pivotal trial as well as advancing the STAR-0310 OX40 program through submission of an IND and early proof-of-concept results from a Phase 1a clinical trial.


astria
THERAPEUTICS