Corporate Presentation

December 2024

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of applicable securities laws and regulations including, but not limited to, statements regarding; our expectations of the potential significance of the results from the Phase 1b/2 ALPHA-STAR clinical trial of navenibart; the expected timing of initiation and receipt of topline results from the planned navenibart Phase 3 program; the expected timing of release of initial safety and efficacy data from the ALPHA-SOLAR trial; our goal of developing two dosing options for navenibart; the estimated size of the HAE market and potential for navenibart in the HAE market, including potential to be the market leading treatment and have the best-in-class profile in HAE, the potential therapeutic benefits of navenibart as a treatment for HAE and our vision and goals for the program; the potential for OX40 to be disease modifying; the potential for STAR-0310 to have the best-in-class OX40 inhibitor profile for the treatment of AD and the potential therapeutic benefits and potential attributes of STAR-0310 as a treatment for AD; the estimated size of the AD market and the potential for STAR-0310 and OX40 in the AD market; expectations regarding the potential for STAR-0310 and OX40 in additional indications and to be developed as combination product or as a bispecific or multi-specific antibody; expectations regarding the timing of initiation and planned design of clinical trials for STAR-0310; expectations regarding the timing and nature of anticipated data from planned trials of STAR-0310; our goals and vision for STAR-0310 and OX40; anticipated cash runway; and the goal of bringing life changing therapies to patients and families affected by allergic and immunological diseases and to become a leading allergy and immunology company. 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 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 and clinical results of the 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 the following risks and uncertainties: 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, including of navenibart and STAR-0310, may not be replicated in clinical trials, that the preliminary 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 navenibart Phase 1a clinical trial and the results from the ALPHA-STAR trial, may not be replicated in later stage clinical trials of navenibart, including the planned Phase 3 development program, 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 may not commence, continue or be completed on time, or at all; decisions made by, and feedback received from, the U.S. Food and Drug Administration and other regulatory authorities on our regulatory and clinical trial submissions 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, and devices for such product candidates; our ability to manufacture sufficient quantities of drug substance and drug product for navenibart, STAR-0310, and any other future product candidates, and devices for such product candidates, on a cost-effective and timely basis, and to develop dosages and formulation for navenibart, STAR-0310, and any other future product candidates that are patient-friendly and competitive; our ability to develop biomarker and other assays, along with the testing protocols therefore; 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 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 with respect to the ability of STAR-0310 to compete in AD and the anticipated position and attributes of STAR-0310 in AD based on its preclinical profile; 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

Building a Leading Allergy and Immunology Company

	Transforming science that **works**…	…into therapies that patients **want**
navenibart HEREDITARY ANGIOEDEMA	• Fc engineered monoclonal antibody inhibitor of plasma kallikrein	• Trusted mechanism and modality • Potential for Q3M and Q6M administration
star-0310 ATOPIC DERMATITIS & BEYOND	• Fc engineered monoclonal antibody antagonist of OX40	• Clinically-validated mechanism • 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	EXPECTED MILESTONES
NAVENIBART (STAR-0215) *Anti-plasma kallikrein Fc engineered mAb*	**Hereditary Angioedema**					✓ **Q4 2024:** Final results from Phase1b/2 ALPHA-STAR trial ◆ **Q1 2025:** Phase 3 trial initiation ◆ **Mid-2025:** Initial results from ALPHA-SOLAR
STAR-0310 *Anti-OX40 Fc engineered mAb*	**Atopic Dermatitis** **Undisclosed Indications**					✓ **Year-End 2024:** IND submission ◆ **Q1 2025:** Phase 1a initiation ◆ **Q3 2025:** Phase 1a results

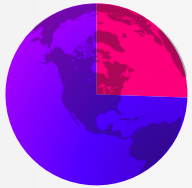
HAE: Significant Opportunity to Improve Lives

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



2027 Estimated HAE Market[5,6]
$4.5B

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. N Engl J Med. 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. Company-reported sales (Takeda, CSL Behring, Pharming, BioCryst)
6. Analyst consensus forecasts compiled by Clarivate's Cortellis, Astria company research and analysis

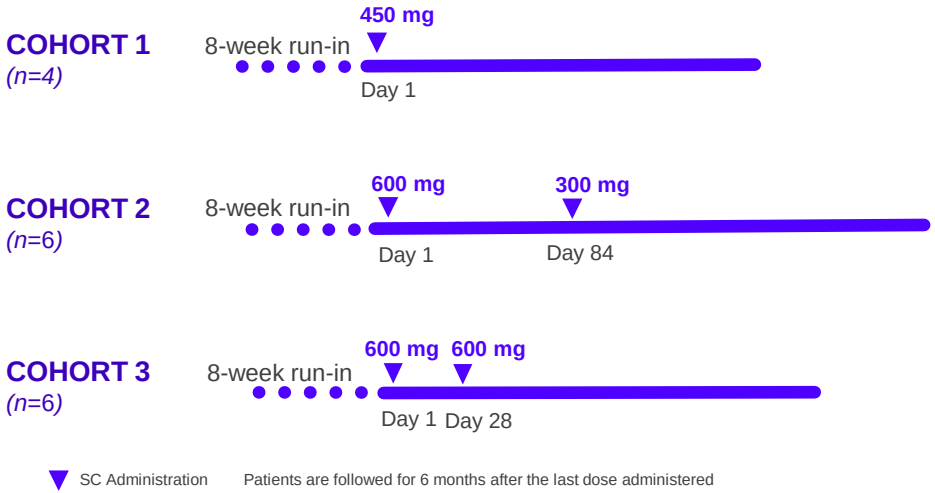
Navenibart Designed for Best Patient Experience

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

Design of ALPHA-STAR Informs 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
- Results demonstrate 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)

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%	**25-67%**	**95-96%**	**91-94%**	**0%**	**2 or 4**
6-Month Attack Rate Reduction (mean)	6-Month Attack-Free Rate	6-Month Reduction in Moderate and Severe Attack Rate	6-Month Reduction in Attacks Requiring Rescue Medication	Injection Site Pain	Doses Per Year[1]

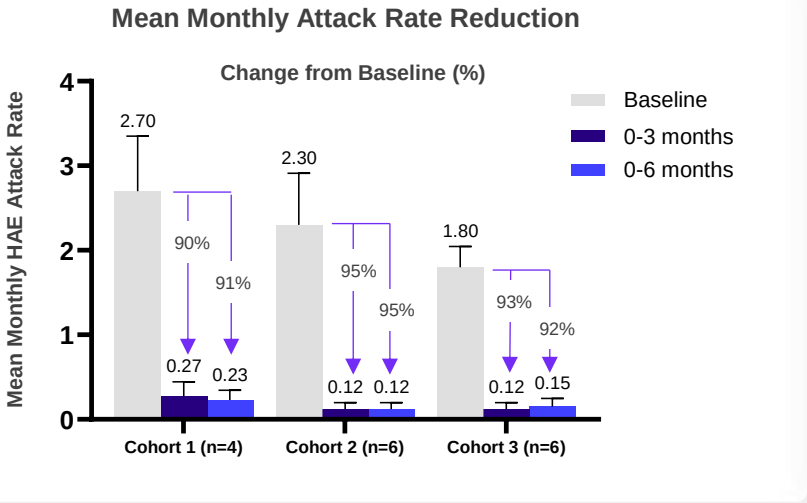
Phase 3 Results Summaries[2,3,4,5,6,7]

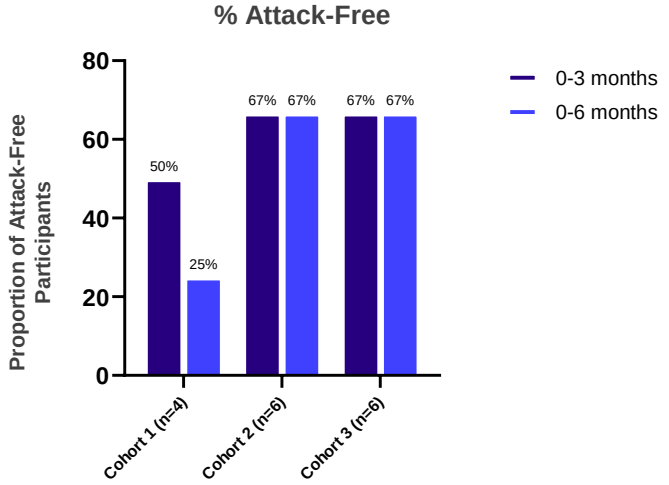
Lanadelumab 300 mg Q2W	87%	44%	83%	87%	52%	26
Berotralstat 150mg QD	44%	8%	40%	49%	N.A.	365
Garadacimab 200mg Q4W	89%	72%	90%	88%	N.R.	13
Donidalorsen 80mg Q4W	81%	53%	89%	92%	N.R.	12

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. 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 Inform ation (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

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

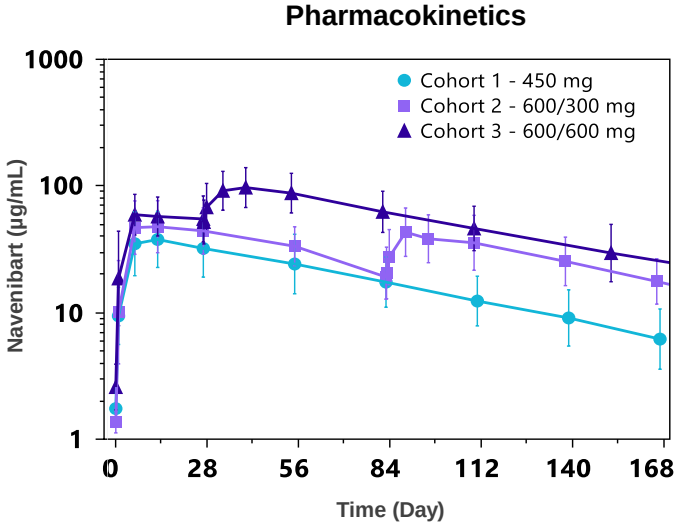
	Cohort 1 (N=4)	Cohort 2 (N=6)	Cohort 3 (N=6)	Total (N=16)*
Participants with at least 1 Treatment-Emergent Adverse Event (TEAE)	4	5	6	**15**
TEAEs occurring in ≥ 2 participants				
Nasopharyngitis	1	1	2	**4**
Sinusitis	–	1	1	**2**
Headache	2	–	–	**2**
Participants with at least 1 related TEAE[1]	–	1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

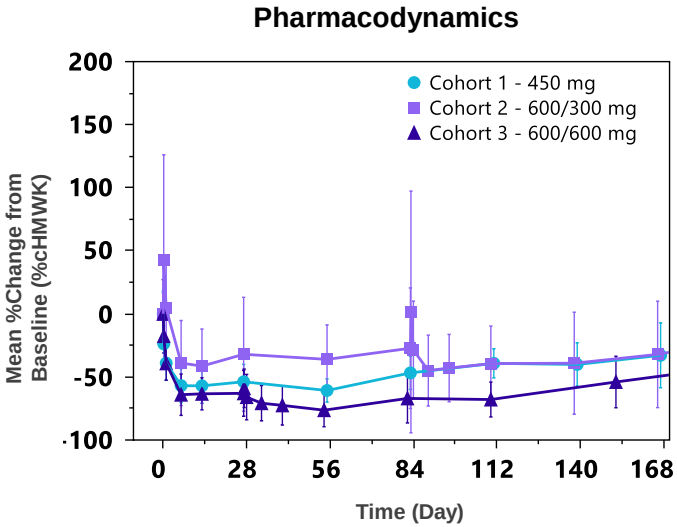
No serious adverse events (SAEs) and no discontinuations due to TEAE

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





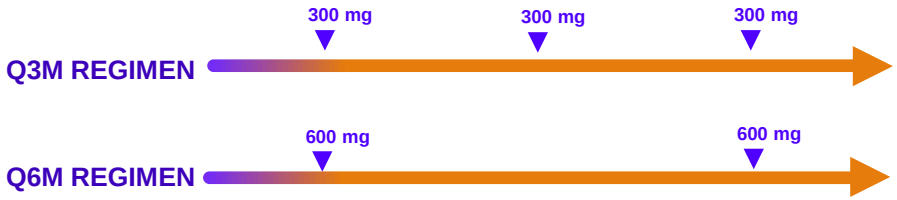
Maximum lanadelumab effect -53.7% [1]

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).

ALPHA-SOLAR Trial Enables Understanding of Long-Term Benefit of Navenibart

alpha-solar



- Assesses repeated Q3M and Q6M long-term dosing
- All original 16 target enrollment patients from ALPHA-STAR have enrolled in ALPHA-SOLAR

Initial safety and efficacy **data from Q3M and Q6M dosing expected mid-2025**

Navenibart Phase 3 Intended to Support Global Registration

Initiation Anticipated Q1 2025

PROGRAM GOAL

Allow patients to choose what works best for them and develop both Q3M and Q6M dosing regimens

Global Phase 3 trial design pending regulatory feedback:

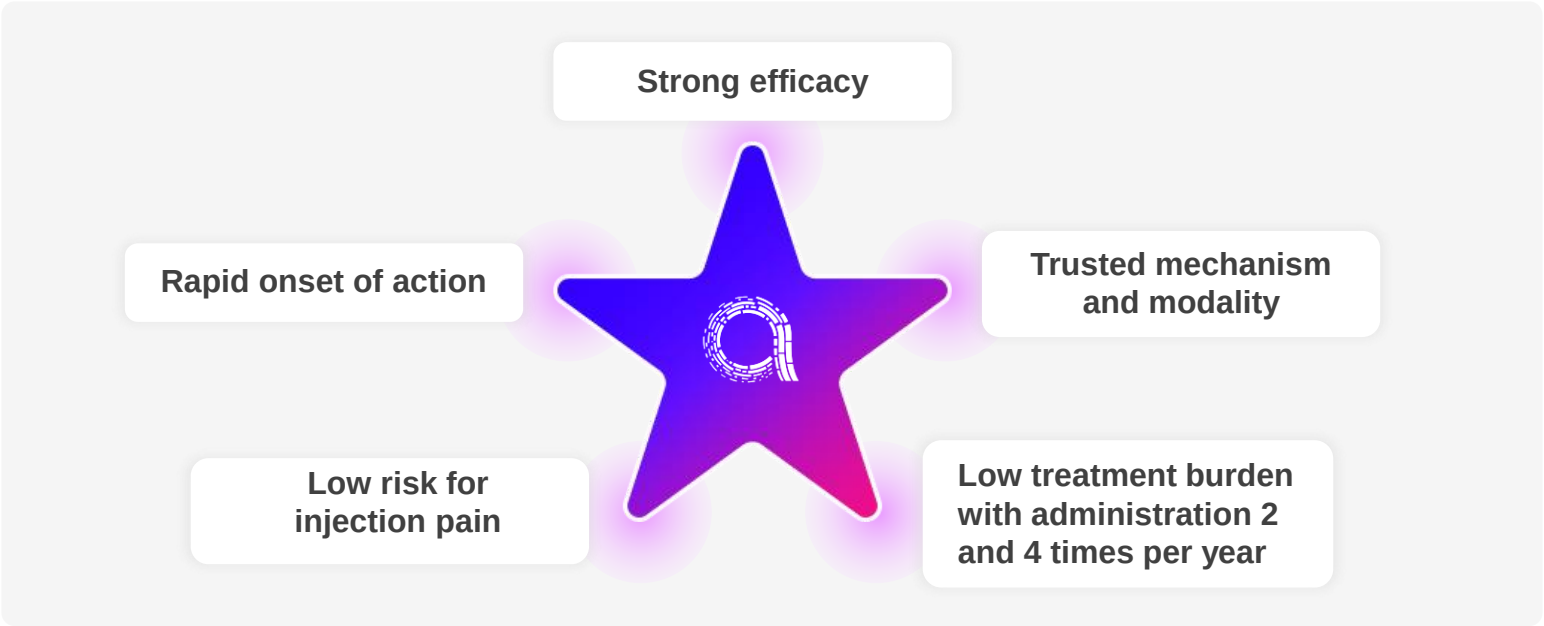
- Intended to support registration in US, EU, Japan
- Initiation expected Q1 2025, top-line results expected by YE 2026
- HAE Types 1 and 2, age ≥ 12 years old
- Placebo-controlled
- Primary Endpoint at 6 months: time-normalized monthly HAE attacks
- Key Secondary Endpoint: proportion of people attack-free at 6 months

Not having to think about taking a medication except for 2 or 4 times per year would be incredible. The opportunity to pick a dosing frequency is something I never thought could happen.

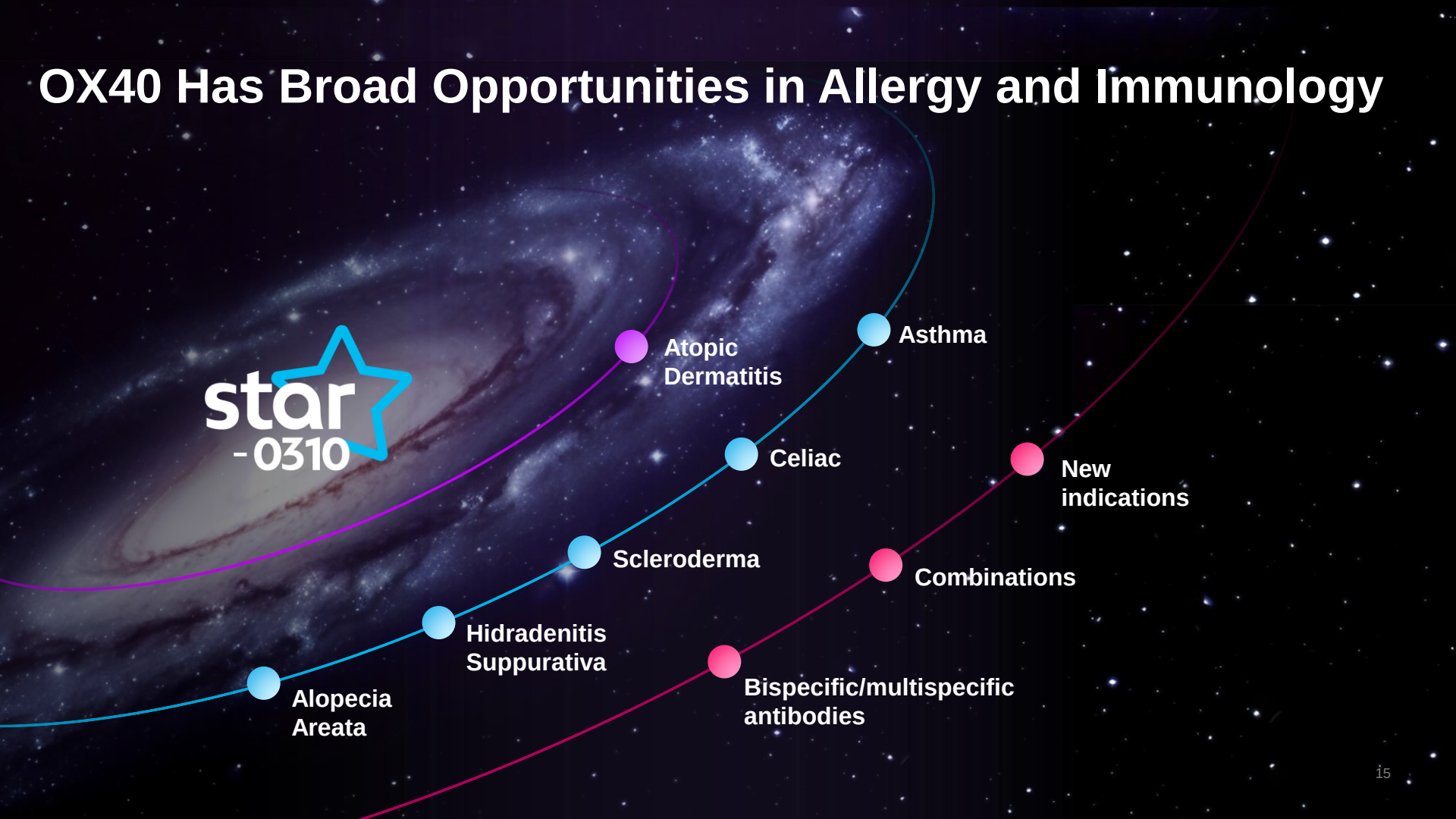
*–**Kim,** Living with Type 2 HAE, Texas, USA*

Navenibart Has Potential to be the Market-Leading HAE Treatment

Navenibart is Well-Positioned to Become the Only Therapy to Achieve:



OX40 Has Broad Opportunities in Allergy and Immunology



Atopic Dermatitis: Opportunity for Broad Impact on Patients' Lives

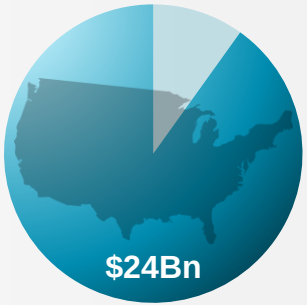
PREVALENCE

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]

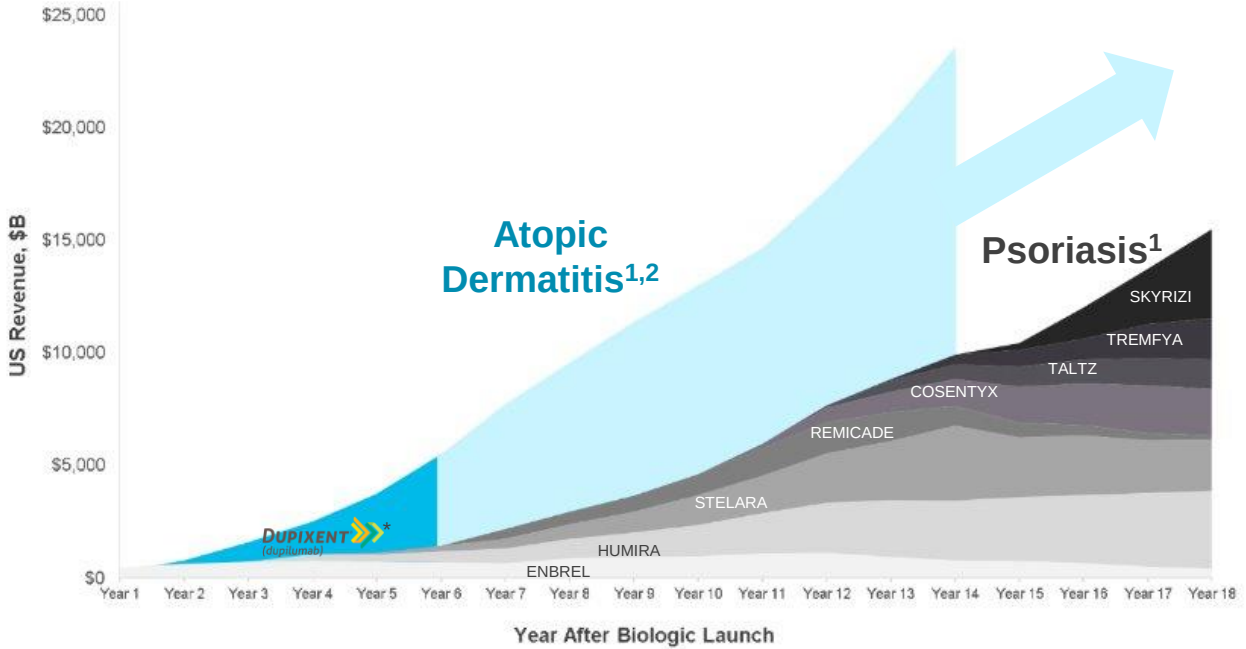
2030 Moderate-to-Severe AD Market
$26B[2]



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

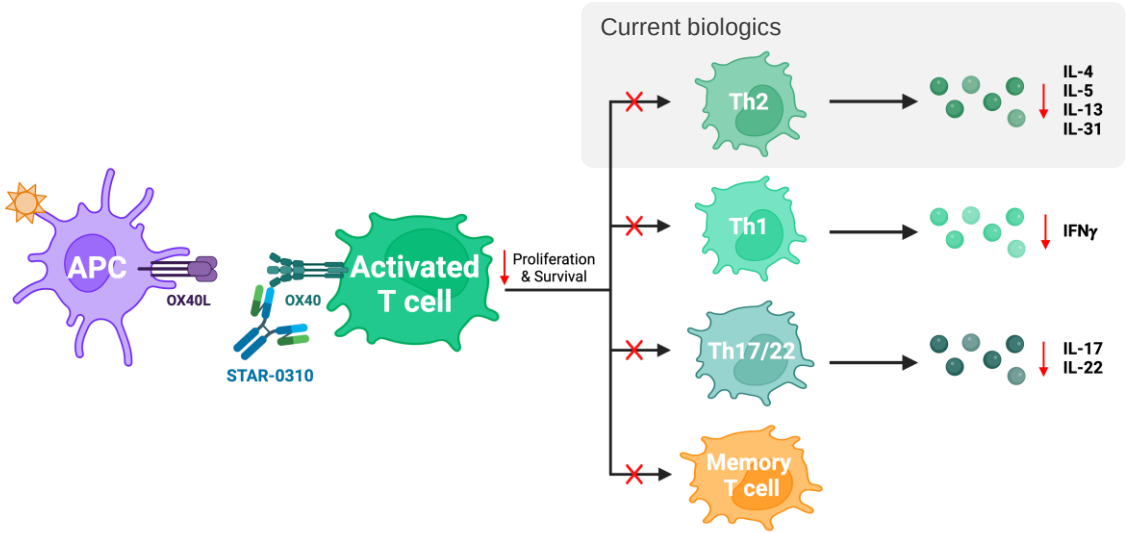
Psoriasis: 2-3%[3]

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

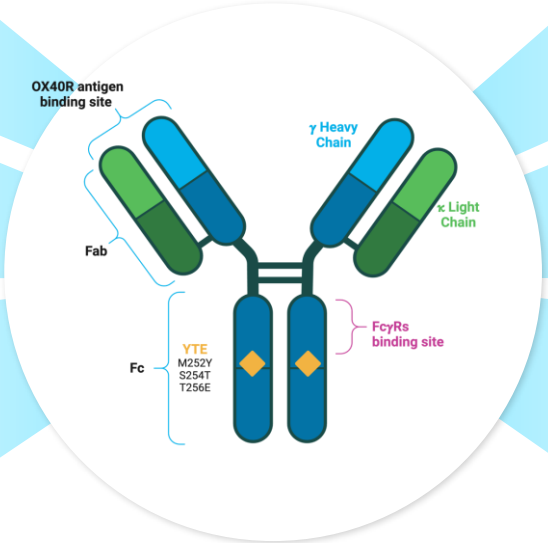
1. Weidinger et al, 2023
2. Guttman-Yassky et al 2022; Pharmaceutics. 2022, Dec 8; 14(12):2753
3. Guttman-Yassky et al 2023; Lancet. 2023, Dec 9; 401:204-14
4. Rewerska et al 2023; AAAAI. 2023, Nov 22.
5. Clinicaltrials.gov NCT05131477
6. Clinicaltrials.gov NCT05651711

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

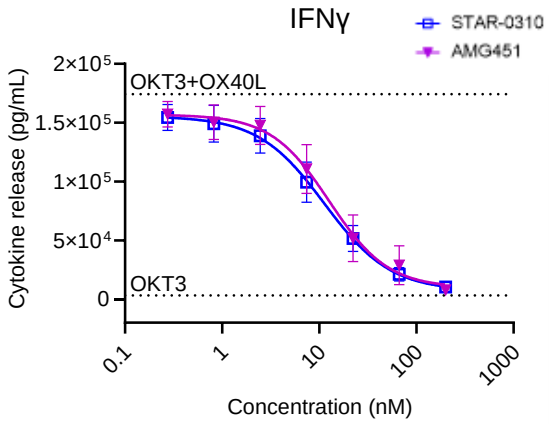
Patent Pending Technology U.S. provisional patent application filed, potential patent expiry 2044[3]

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.

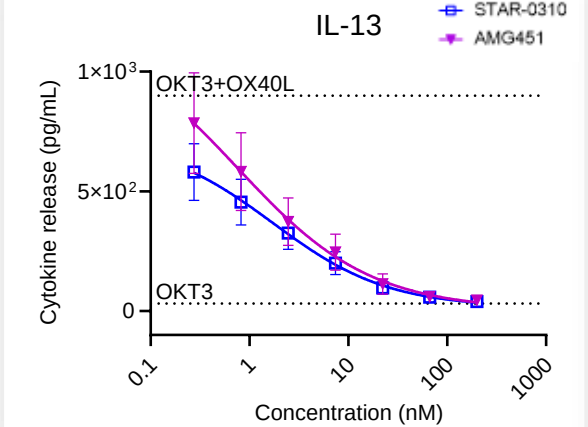
STAR-0310 Has High Potency for OX40

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

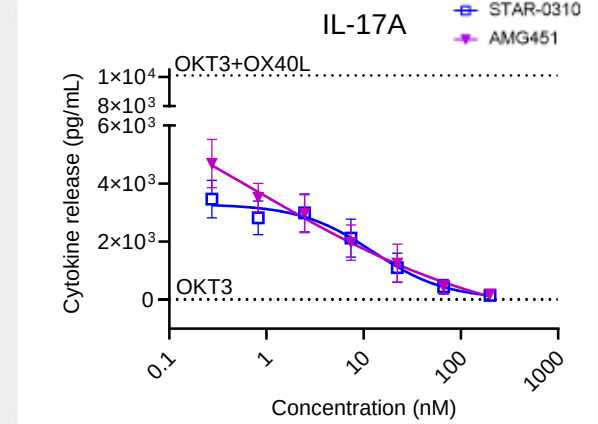
Th1 cytokine



Th2 cytokine



Th17 cytokine

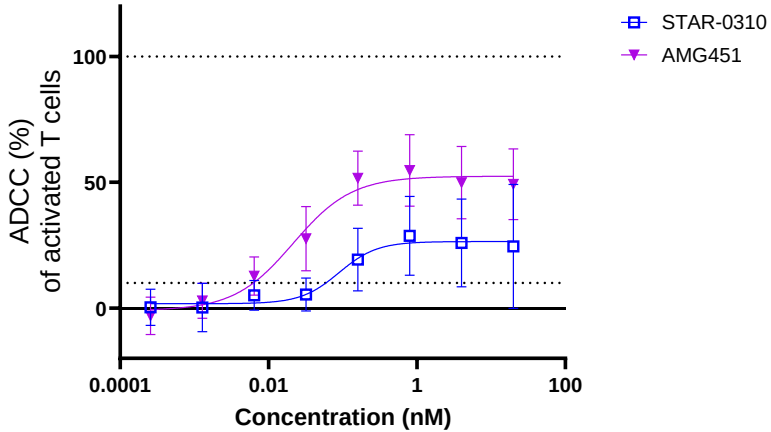


1. Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

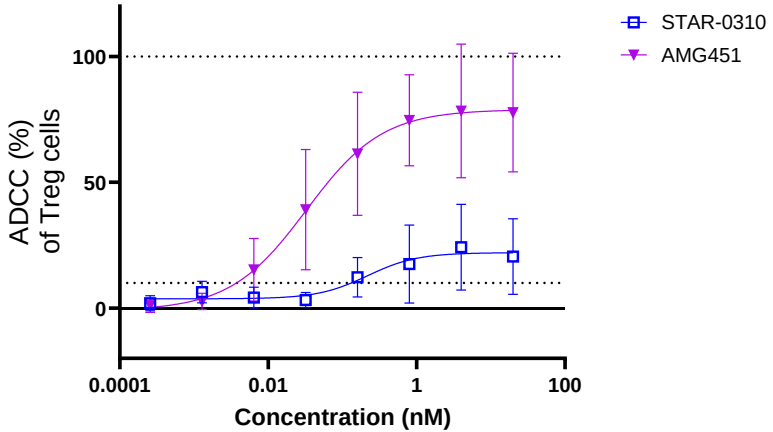
STAR-0310 Is Engineered for Low ADCC

STAR-0310 Has Lower ADCC than Rocatinlimab

ADCC on Activated T Cells



ADCC on Regulatory T Cells

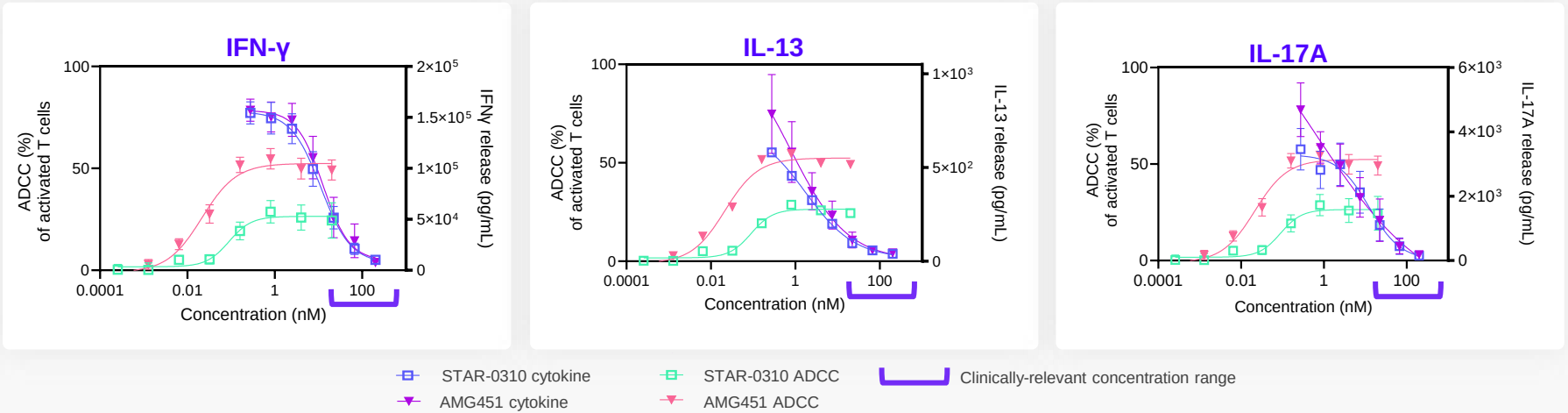


1. Biris, et al. "Development and characterization of STAR-0310: a novel OX40 antagonistic monoclonal antibody. EAACI May 2024.

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

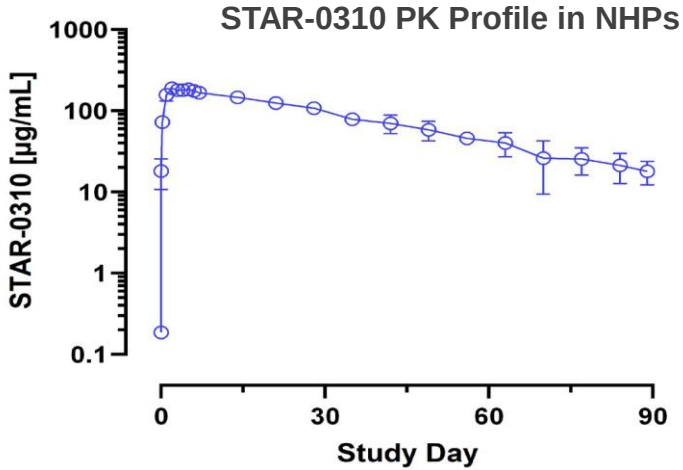
STAR-0310 Has a Potentially Wider Therapeutic Window

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.

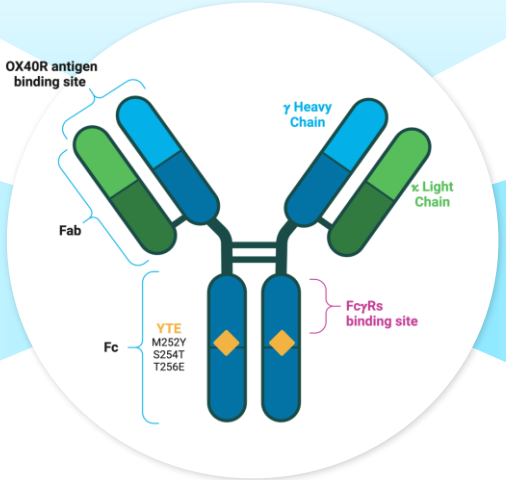
STAR-0310:
Potential First-Choice for Moderate-to-Severe AD

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 9/30/2024: $344.3 million
- 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