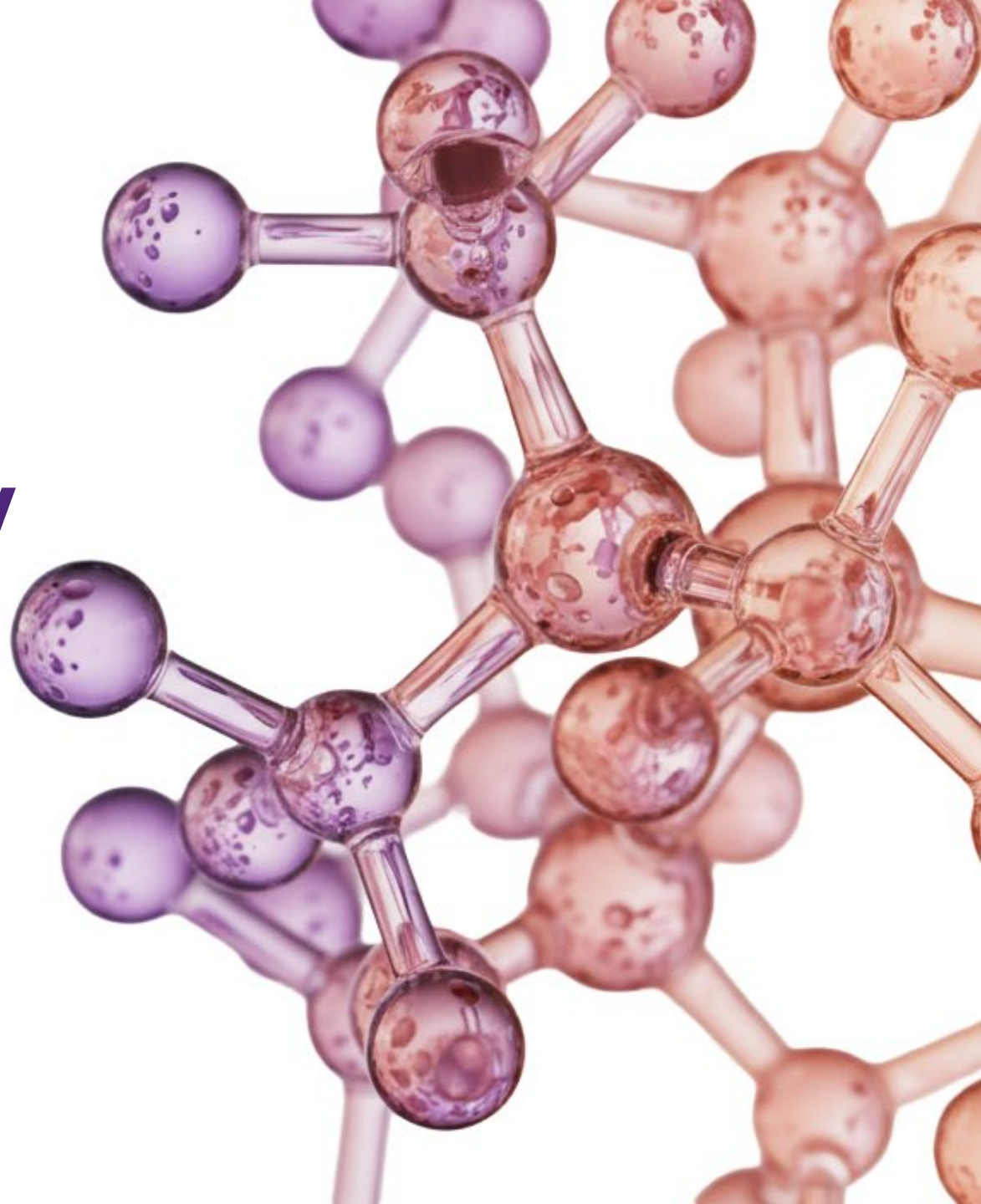
aclaris® THERAPEUTICS

Corporate Overview

May 2026

EMPOWERING PATIENTS THROUGH

THERAPEUTIC INNOVATION



Disclaimer and Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this presentation that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "anticipate," "believe," "expect," "intend," "may," "plan," "potential," "will," and similar expressions, and are based on Aclaris' current beliefs and expectations. These forward-looking statements include expectations regarding the therapeutic potential of Aclaris' product candidates, including bosakitug (ATI-045), ATI-052, ATI-2138, next generation ITK selective inhibitors, and next generation bispecific and multispecific antibodies, including the potential for such product candidates to be first- or best-in-class and have best-in-class attributes, the potential to increase the efficacy ceiling and show superior activity compared to other therapies, and the potential for bosakitug to have extended dosing and ATI-052 to have up to 3-month dosing. the development of such product candidates, including the potential targets and indications Aclaris may pursue, the timing and number of regulatory filings, the design of future clinical trials, the timing for the initiation of clinical trials, and the availability and timing of data from clinical trials, and Aclaris' cash runway, including potential to extend the cash runway through non-dilutive opportunities. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the conduct of clinical trials, potential changes to interim, topline and preliminary data as more subject data become available, Aclaris' reliance on third parties over which it may not always have full control, Aclaris' ability to enter into strategic partnerships on commercially reasonable terms, the uncertainty regarding the macroeconomic environment and other risks and uncertainties that are described in the "Risk Factors" section of Aclaris' Annual Report on Form 10-K for the year ended December 31, 2025, and other filings Aclaris makes with the U.S. Securities and Exchange Commission from time to time. These documents are available under the "SEC Filings" page of the "Investors" section of Aclaris' website at www.aclaristx.com. Any forward-looking statements speak only as of the date of this presentation and are based on information available to Aclaris as of the date of this presentation, and Aclaris assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.

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This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

All future development, clinical, and regulatory timelines are expectations, are based on current beliefs and assumptions, and are subject to change based on a variety of factors.

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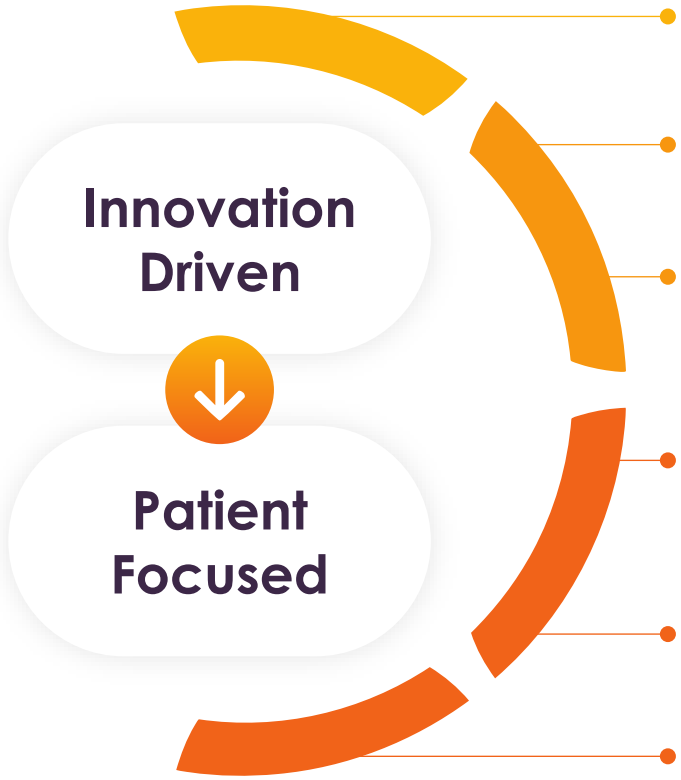
Aclaris Therapeutics



- **Multiple anticipated inflection points in 2026**
- **Three clinical programs ongoing;** additional IND expected in 2026
- **Validated targets**; positioned in the oral and antibody space
- Bispecific and ITK oral programs have the potential to be **paradigm changing in multiple indications**
- **Prudent capital management**
- Underpinned by **state-of-the-art scientific platform and world class scientific acumen**

Advancing potential industry-leading inhibitors designed to address validated, therapeutically-relevant immune targets

Over 1B People Live with Addressable I&I Diseases

		U.S. Patients	Global Patients
Dermatology	Atopic dermatitis	26M	204M
	Alopecia areata	6.7M	160M
	Vitiligo	2-3M	70M
	Lichen planus	0.6M	12M
Respiratory	Asthma	25M	340M
	COPD	16M	390M
GI	IBD	2.4M	7M
	EOE	0.5M	3.3M

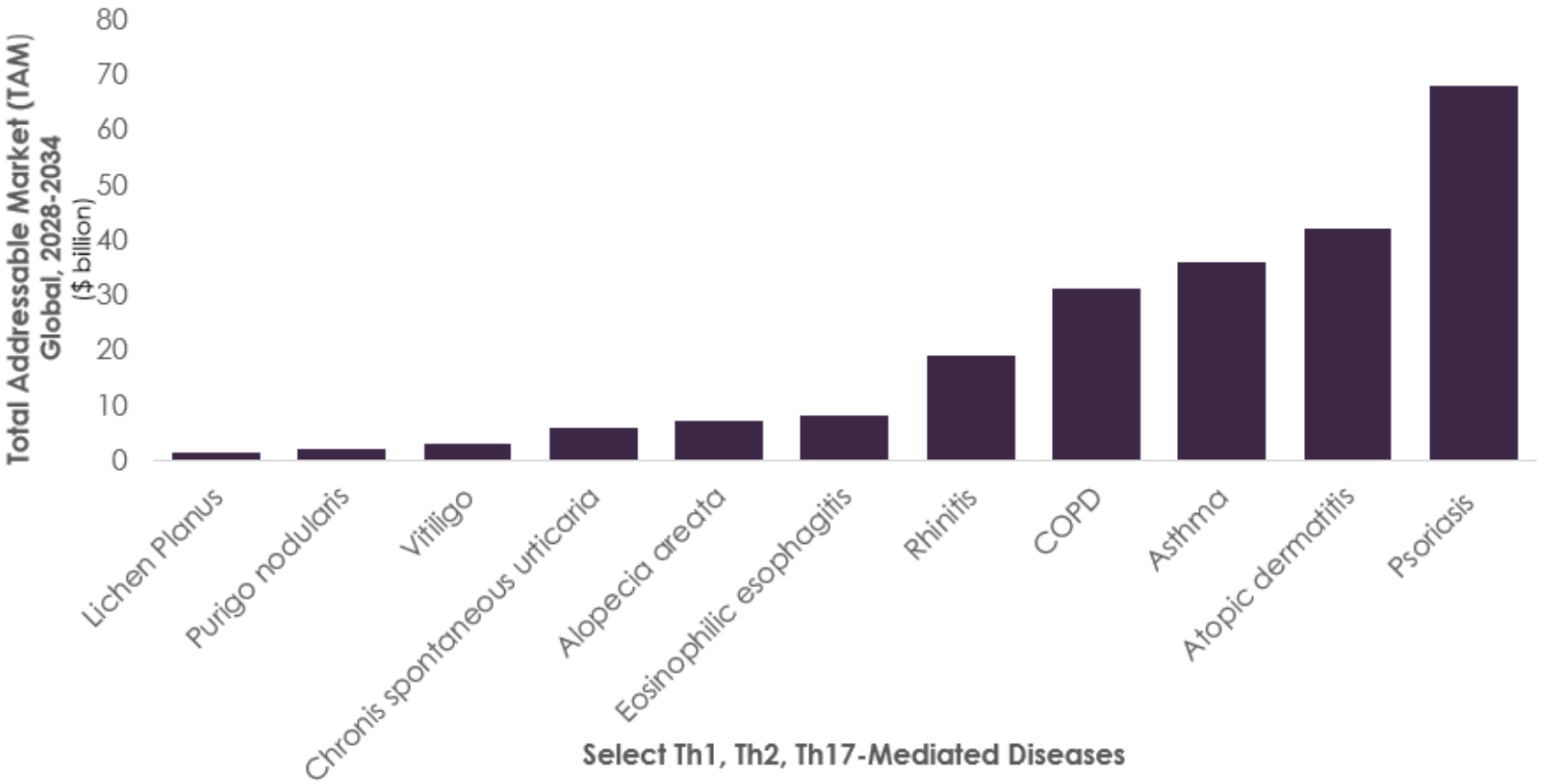
Th1, Th2, and Th17 drive dermatological, respiratory, and gastrointestinal (GI) diseases that impact millions of patients in the U.S. alone

COPD = Chronic obstructive pulmonary disease; IBD = Irritable bowel syndrome; EOE = Eosinophilic esophagitis

Sources: Eczema stats: National Eczema Association (accessed 07/31/25); National Alopecia Areata Foundation (Accessed 07/31/25); Vitiligo Facts: Global Vitiligo Foundation (accessed 07/31/25); Precedence Research; Forbes Business Insights; American Medical Association; American Lung Association; Global Initiative for Asthma; World Health Organization; Lancet Respir Med. 2022 May;10(5):447–458. doi: 10.1016/S2213-2600(21)00511-7; The Centers for Disease Control and Prevention (CDC); Cowen Categories Outlook 2024; Journal of the American Academy of Dermatology, vol 87, DOI: 10.1016/j.jaad.2021.12.013; Journal of the Academy of Dermatology, DOI: 10.1016/j.jaad.2025.05.852. Lancet Gastroenterol.Hepatol.2020,5, 17–30.

Significant Potential Future Value of I&I Diseases

Addressing Th1, Th2 and Th17-Mediated Disorders



Significant opportunity for new innovative therapeutics for Th1, Th2, and Th17-mediated dermatological and respiratory diseases including potent and well tolerated biologics and oral inhibitors

I&I = Inflammation and Immunology

Sources: Eczema stats: National Eczema Association (accessed 07/31/25); National Alopecia Areata Foundation (Accessed 07/31/25); Vitiligo Facts: Global Vitiligo Foundation (accessed 07/31/25); Precedence Research; Forbes Business Insights; American Medical Association; American Lung Association; Global Initiative for Asthma; World Health Organization; The Centers for Disease Control and Prevention (CDC); Business Research Company; peer research; Delveinsight; HBSC Global Investments Research 2026 Pharma Catalysts; Cowen Categories Outlook 2024

Substantial Opportunities in I&I for Innovative Drugs

Potential to Address Significant Gaps in Unsatisfied I&I Indications

Opportunities for Orals

- Faster onset, durable, consistent effect
- Broader efficacy across heterogenous populations
- JAK-like efficacy with no black box warning
- Improved symptom control: Anti-itch effect, FEV1
- Anti-fibrotic effect
- Optimal convenience
- Improved tolerability profile

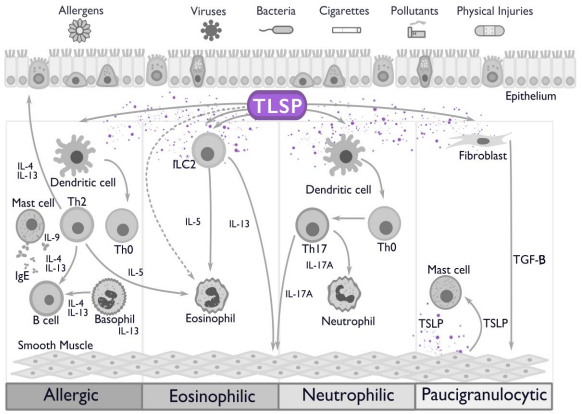
Opportunities for Antibodies

- Higher efficacy ceiling
  - Faster onset, durable, deeper, and more consistent effect
- Improved symptom control: Anti-itch effect
- Improved tolerability
- Improved convenience and practical dosing schedule

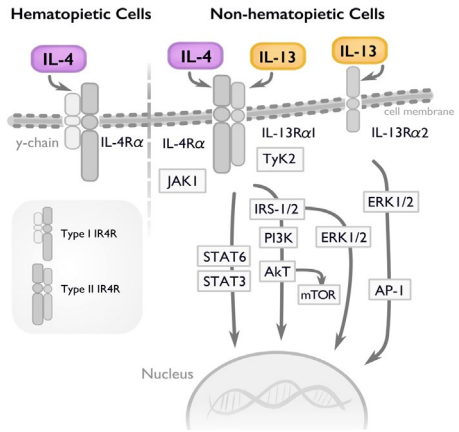
Addressing Validated Targets

With Innovative, Potent and Specific Biologics and Oral Kinase Inhibitors

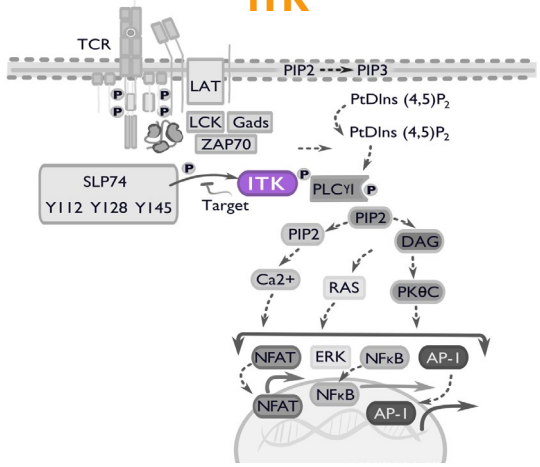
TSLP



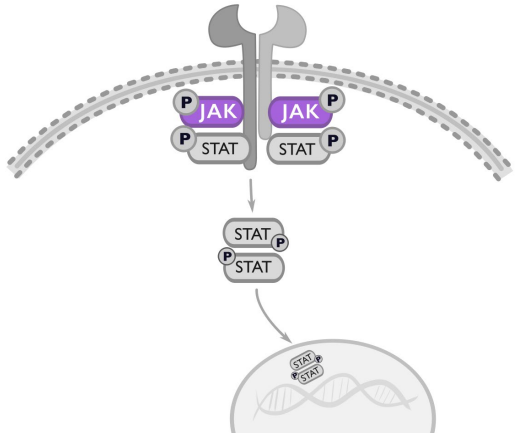
IL-4R



ITK



JAK3



Biology	Master activator of innate & adaptive immune responses at epithelial surfaces	Binds to cytokines IL-4 and IL-13, orchestrating allergic responses and immune regulation	Critical for T lymphocyte differentiation, proliferation and activation	Regulates growth, maturation and activation of many immune cells
Implication	Elevated in individuals with respiratory and skin disease	Elevated in individuals with allergic, respiratory, and skin disease	Active in individuals with respiratory and skin disease	Active in individuals with allergic, autoimmune and inflammatory disease
Utility	Th1, Th2 and Th17-driven diseases	Th2-driven diseases	Th1, Th2, and Th17-driven diseases	Th1, Th2, and Th17-driven diseases
	Validated, high conviction target	**BsAb advancing to Proof-of-Concept trials**	**Large opportunity across I&I disease**	**Proven target, ample whitespace**

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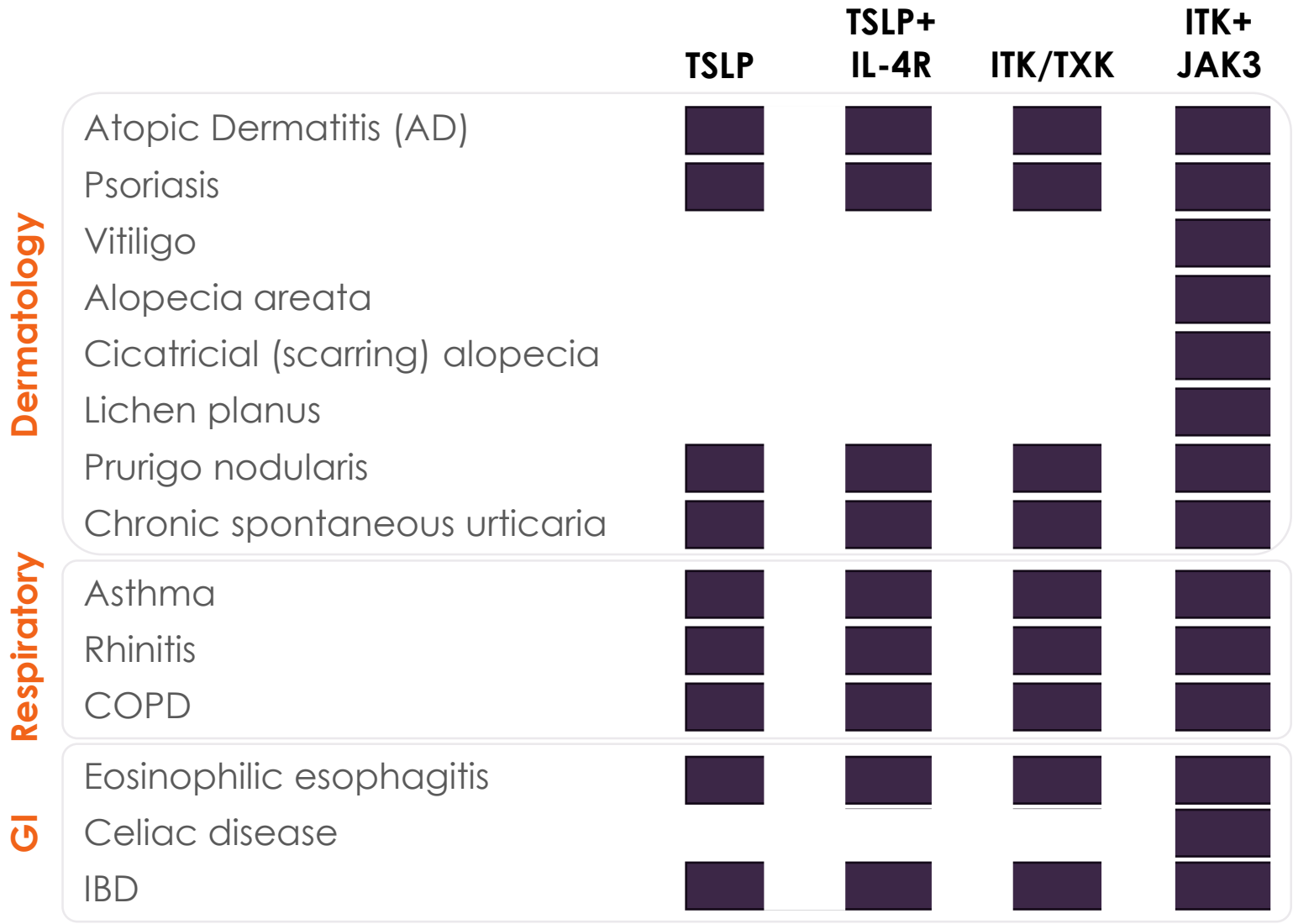
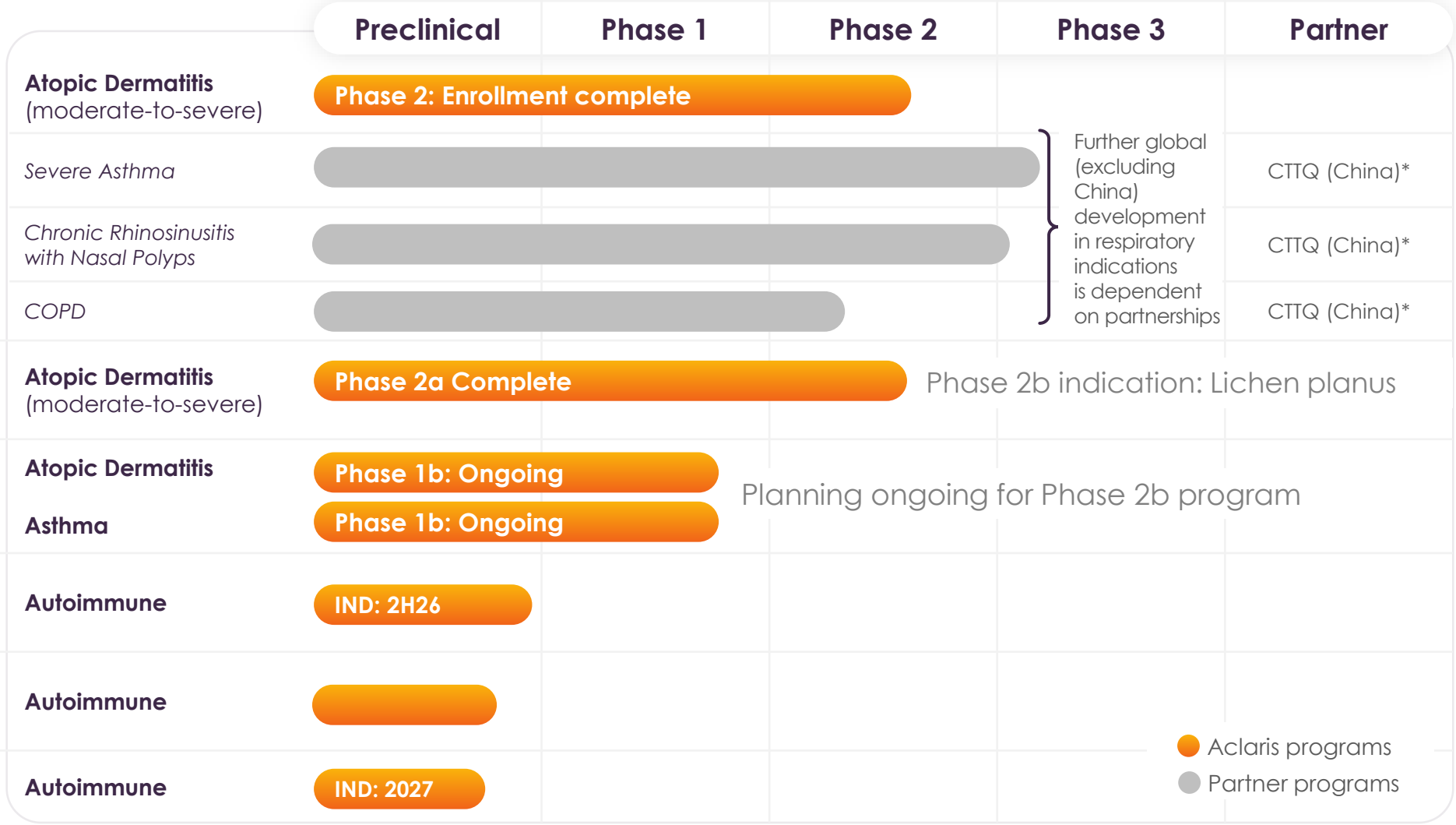
Opportunity to Impact Major I&I Indications

Assets in Development May Be Broadly Applicable to Significant Diseases

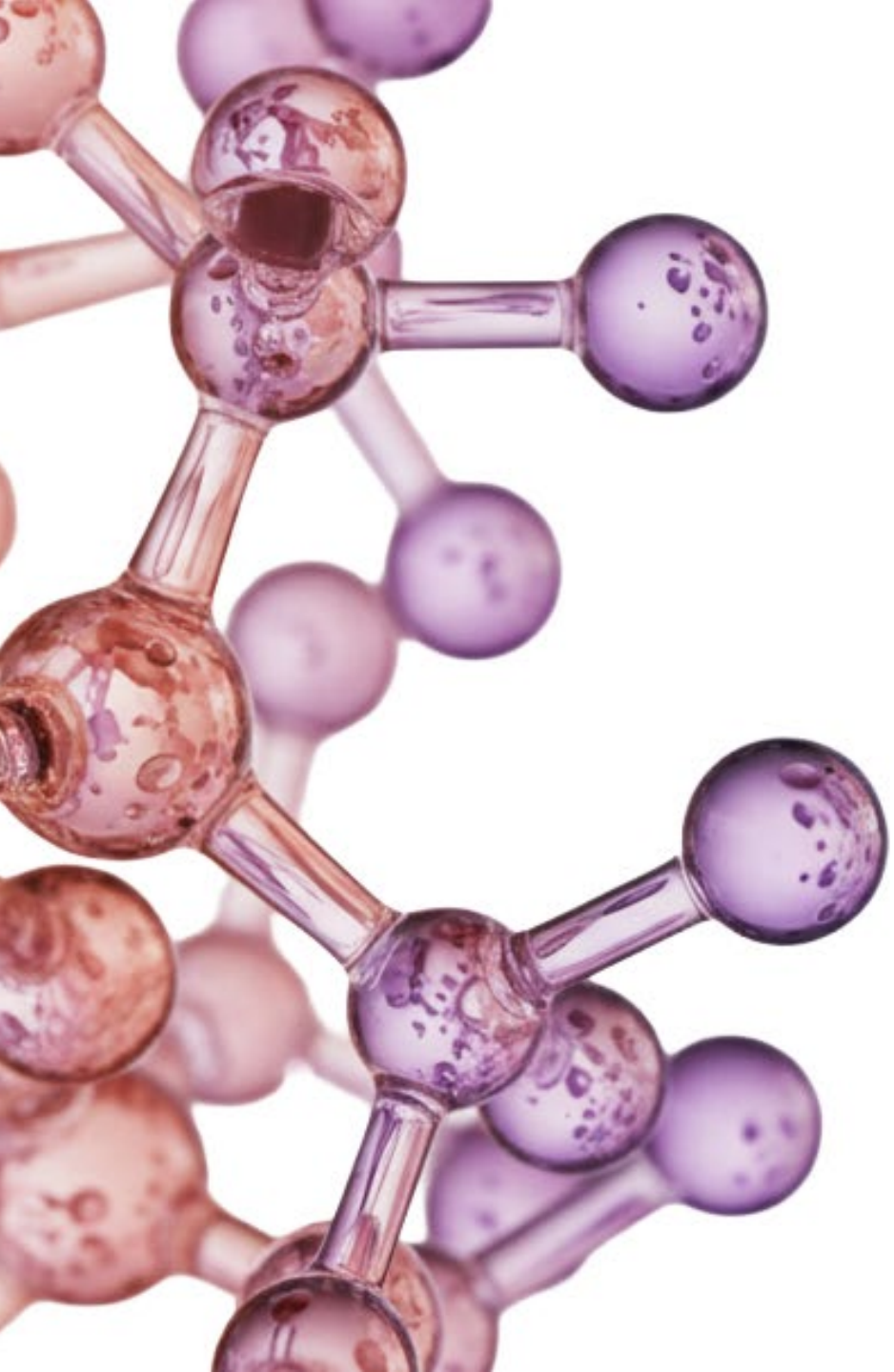


Broad I&I Development Pipeline



*This trial is sponsored and conducted by Chia Tai Tianqing Pharmaceutical Group, Co., Ltd. ("CTTQ") or its affiliates.

All future development, clinical, and regulatory timelines are expectations, are based on current beliefs and assumptions, and are subject to change based on a variety of factors



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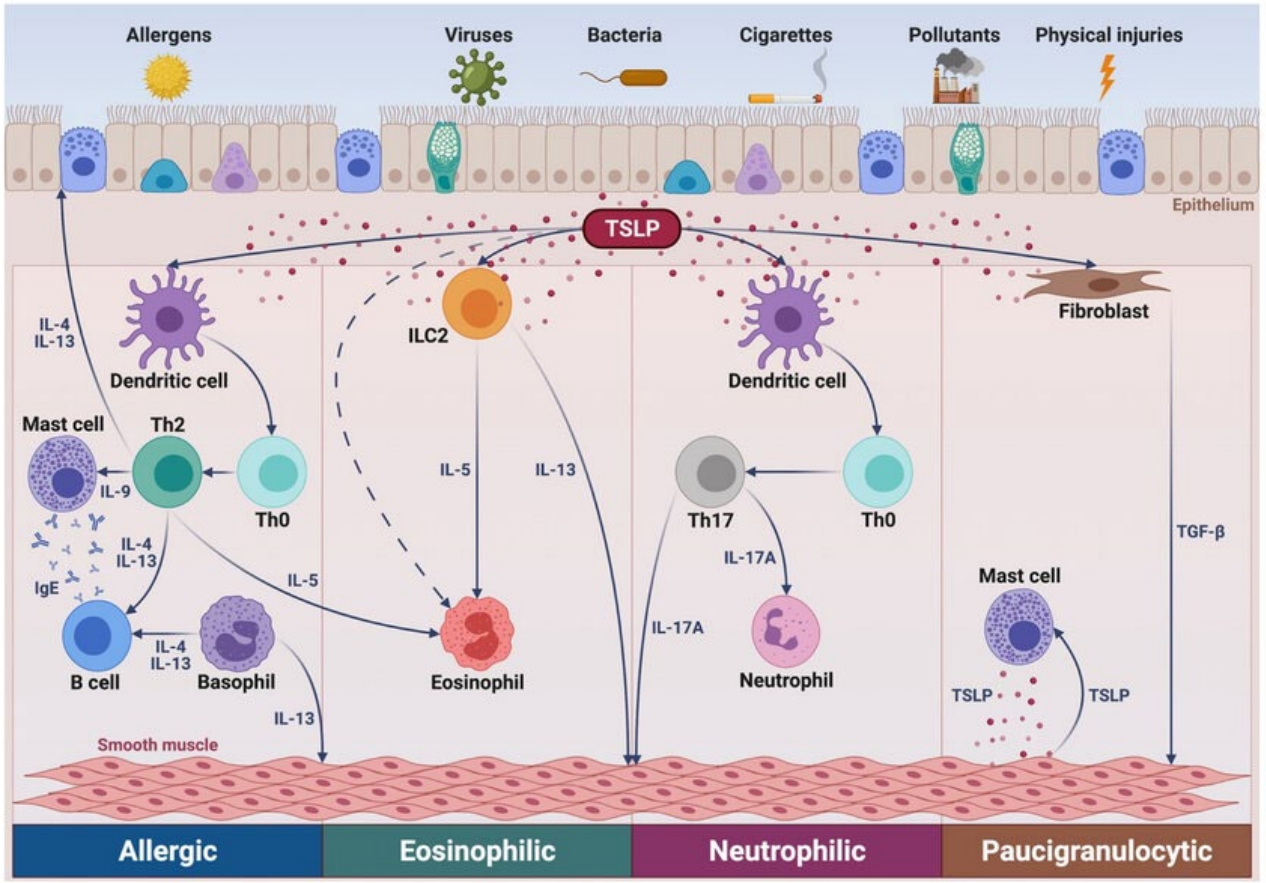
Bosakitug (ATI-045): Highly Differentiated Anti-TSLP Antibody

Investigational Product Candidate with Best-in-Class Potential

Targeting Thymic Stromal Lymphopoietin (TSLP)

Therapeutically Relevant Immune Target

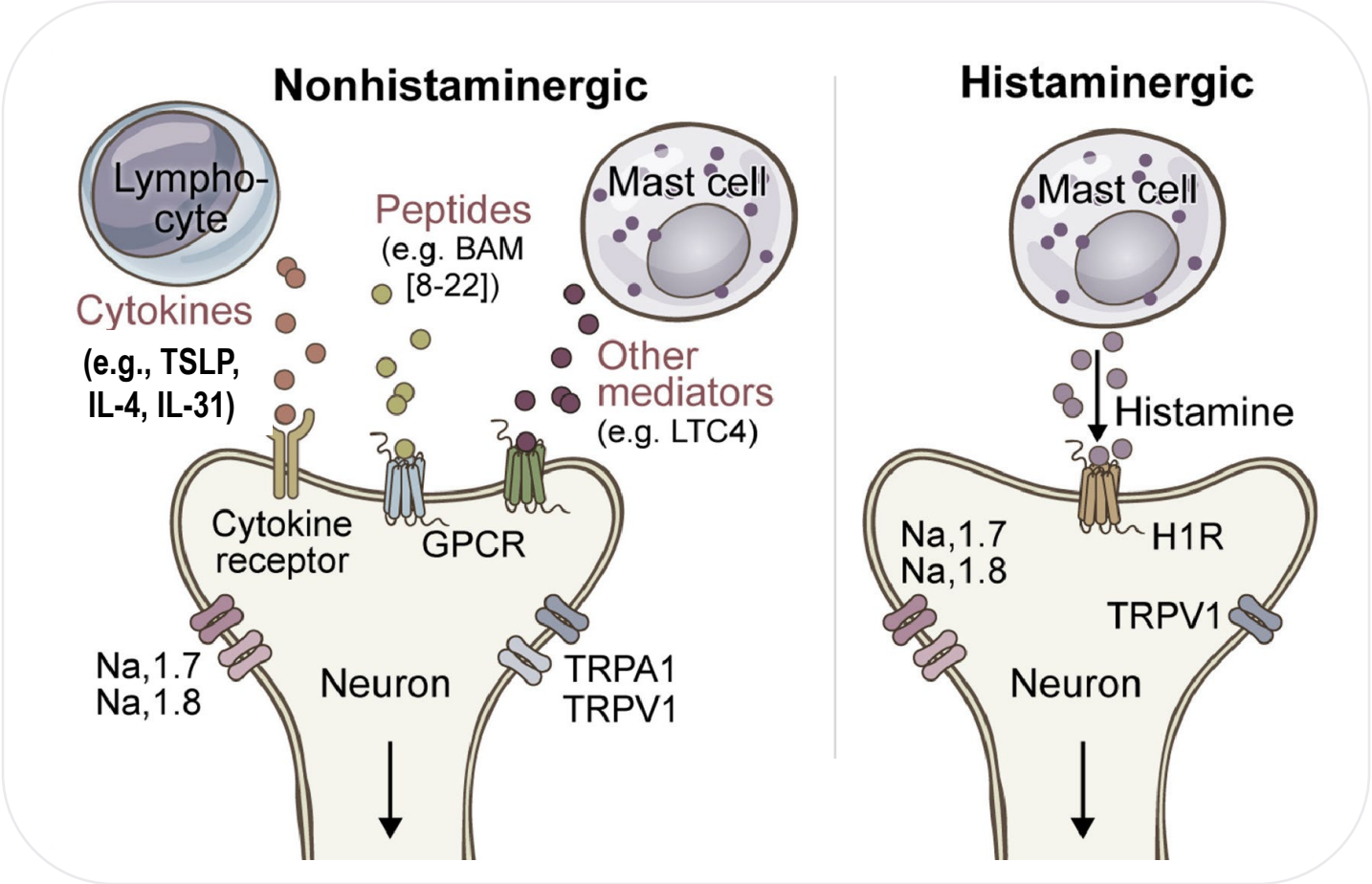
- Pleiotropic and broad activity
  - **Master regulator of type 2 (Th2) immune responses** at the barrier surfaces of skin and the respiratory/ gastrointestinal tract
  - **Drives eosinophilic and neutrophilic inflammation** and acts on a wide variety of adaptive, innate, and structural cells
  - **Broad activity:** Involved in induction phase and effector phase as well as non-Th2 processes
  - **Proven biology:** The expression of TSLP is elevated in individuals with respiratory and skin disease



Adapted from Pelia *et al.*, Int J Mol Sci. 2021 Apr 22;22(9):4369

Targeting TSLP May Impact Nonhistaminergic Itch

- Peripheral pruritus (itch) is mediated by histamine-dependent or histamine-independent mechanisms
- Nonhistaminergic itch is a significant concern in a variety of diseases including AD, CSU, PN, and others
  - Lack of response to traditional oral/topical antihistamines
- TSLP drives chronic nonhistaminergic itch, acting directly on sensory nerves and inflammatory cells

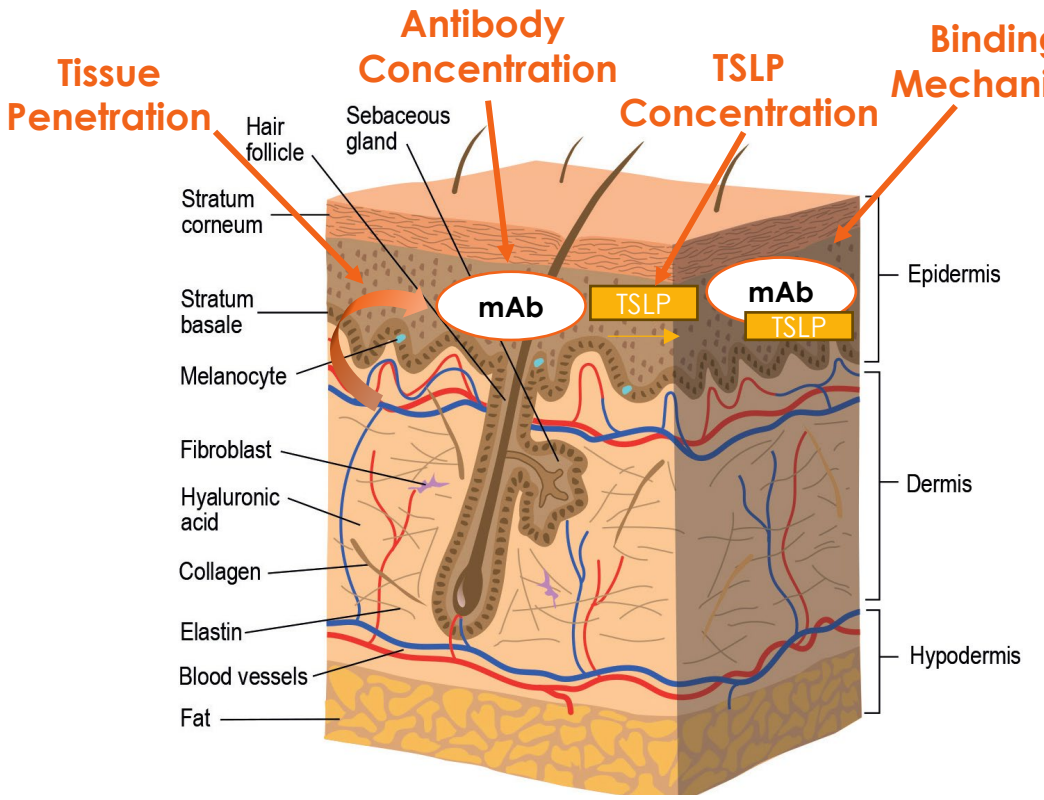


Adapted from Auyeung K, Kim B *et al.,* Annals of Allergy, Asthma, and Immunology. 2023. DOI: 10.1016/j.anai.2023.08.008

 CSU=Chronic spontaneous urticaria; PN=Prurigo nodularis

High Potency Therapeutics are Key to Effectiveness

Driving High Efficacy in Dermatological Disease



Adapted from Lavers *et al.*, Int J Aes Nursing 2017

- Abs must engage ligands at the site of action
- Key variables related to efficacy
  - TSLP concentration at site of lesion
  - Antibody concentration at site of lesion
    - Concentration of mAb in general circulation
    - Skin penetration of mAb
    - Dose
    - Potency
  - Binding Mechanism of mAb to TSLP
    - Binding affinity
    - Residence Time
  - Degree of TSLP reduction needed at site of lesion

Only 15% of mAb serum levels reach skin/site of lesion: Potency is Key to Efficacy

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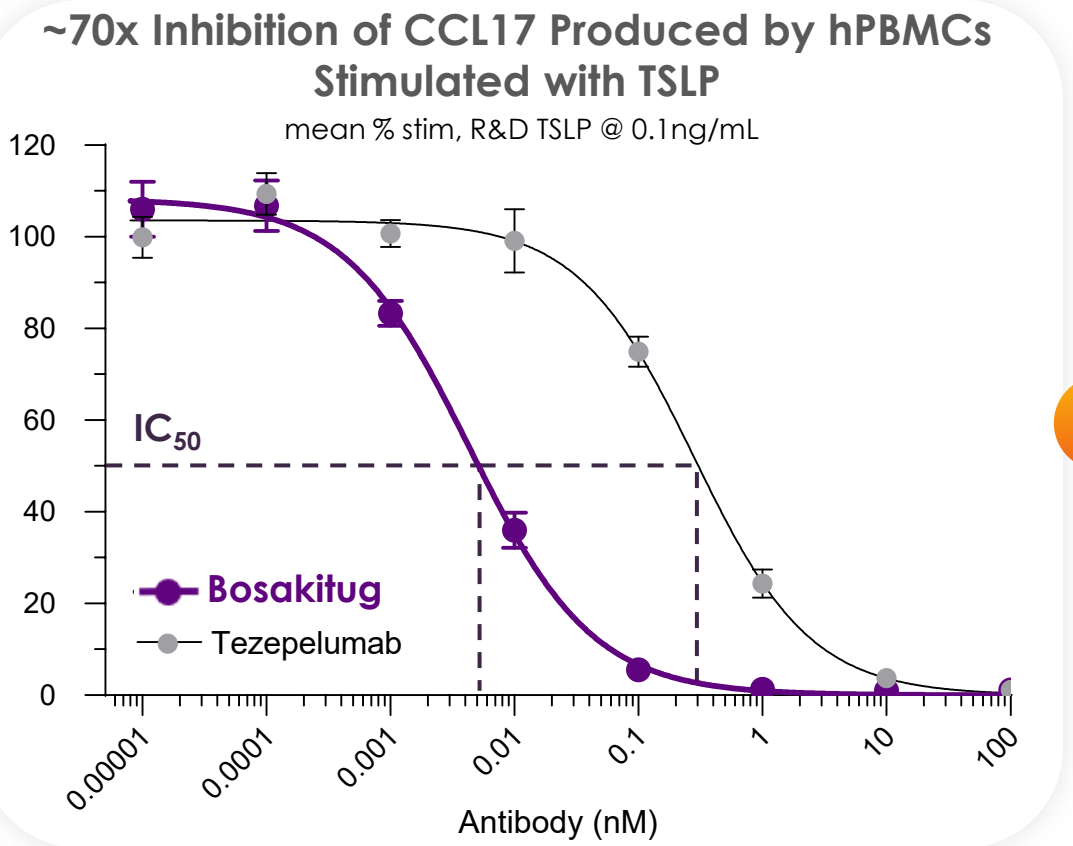
Bosakitug: High Affinity, Low Dissociation Rate



- Very high affinity to TSLP
- Extremely low dissociation rate from TSLP* leading to long residence time and enhanced neutralization activity
- Very high potency
- Unique binding characteristics to TSLP
- ~23-day half-life that can potentially support an extended dosing interval of up to 3 months

Bosakitug is ~70x More Potent than Tezepelumab, the Only Marketed Anti-TSLP mAb

* Quantification of dissociation rate limited by the surface plasmon resonance instrument sensitivity

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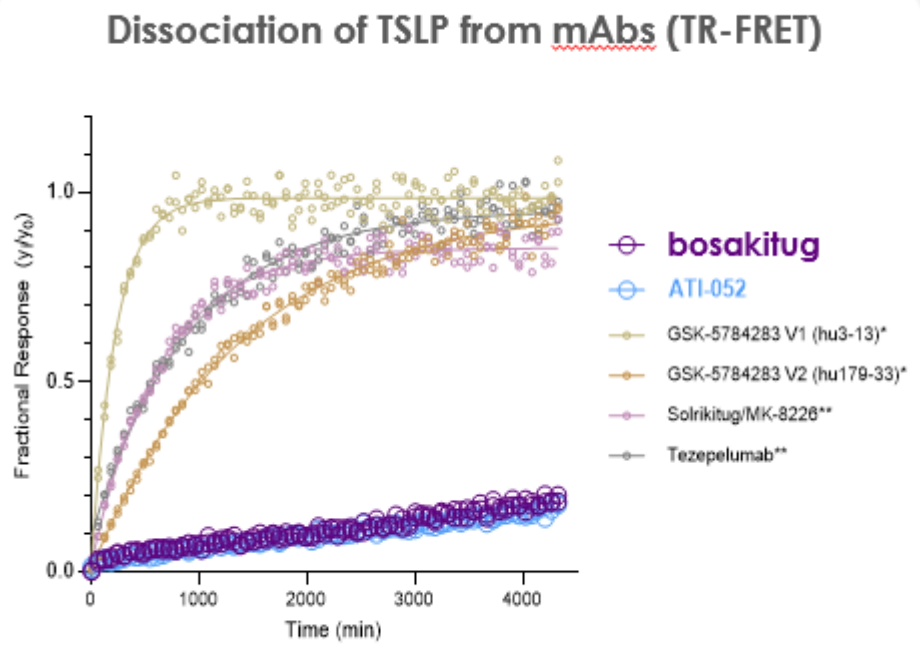
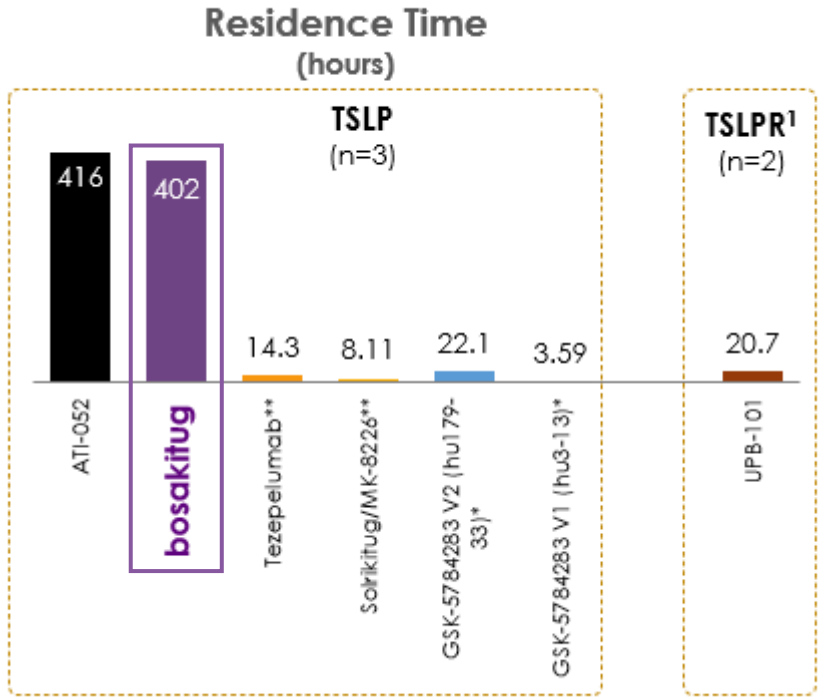
Bosakitug: Long Residence Time

Lower Dissociation Rate = Potential Best-in-Class Residence Time





Bosakitug (and ATI-052) demonstrates very slow dissociation kinetics from TSLP

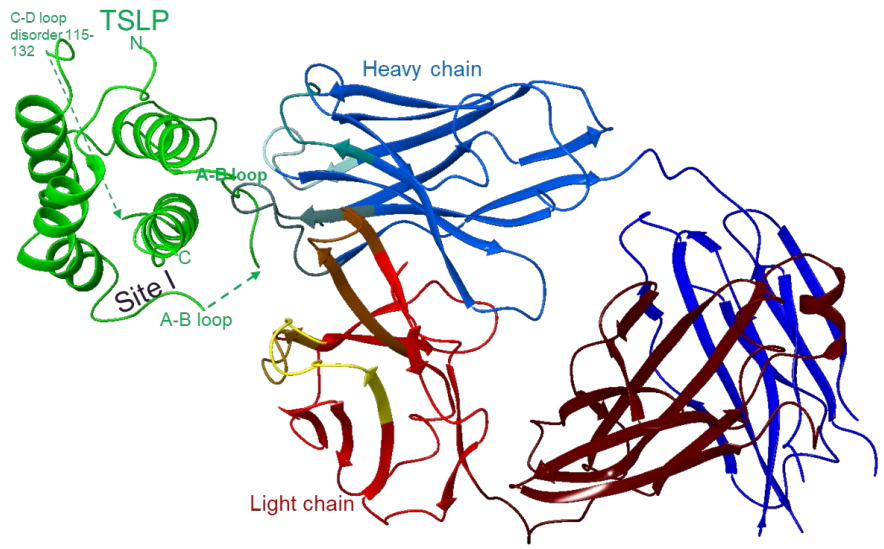
Residence time for Bosakitug (and ATI-052) is ~20-100x longer than comparator antibodies

1. SPR: Residence Time based on apparent dissociation constant (Kd) using standard TSLPR immobilization density and bivalent fit; *Analog mAb; **Biosimilar mAb

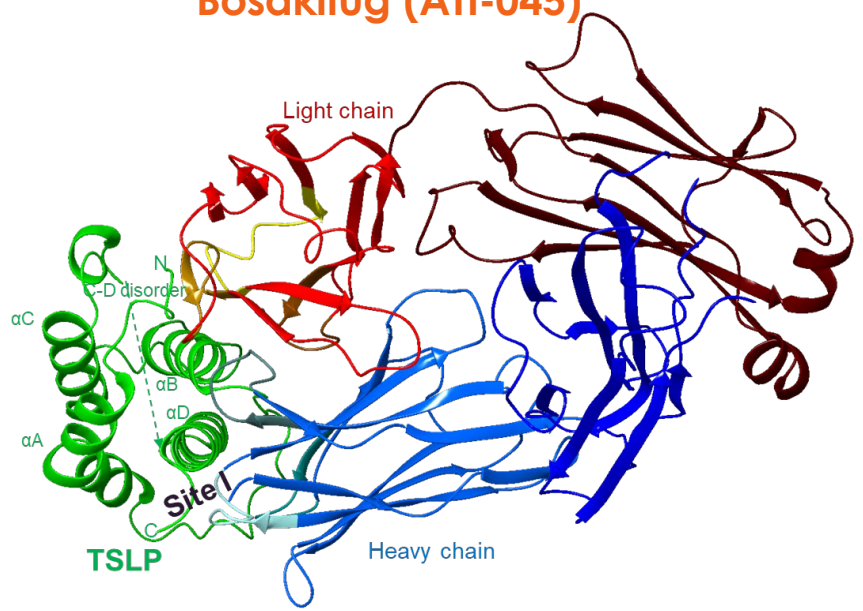
Bosakitug Extensively Binds TSLP Binding Interface

ATI-052 Has the Same Anti-TSLP Antibody Binding Regions of Bosakitug

Tezepelumab



Bosakitug (ATI-045)



Bosakitug: Extensive Binding Interface Drives Higher Retention Time and Neutralization Duration of TSLP

Only Bosakitug binds all six Light Chain and Heavy Chain CDRs

Bosakitug interface uniquely spans from TSLP N-terminal Y29 to C-terminal P154

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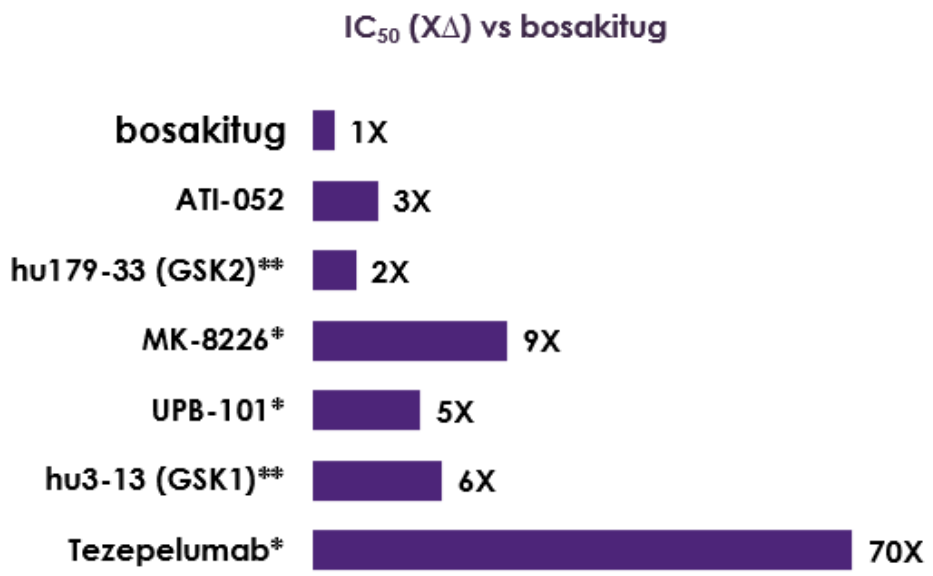
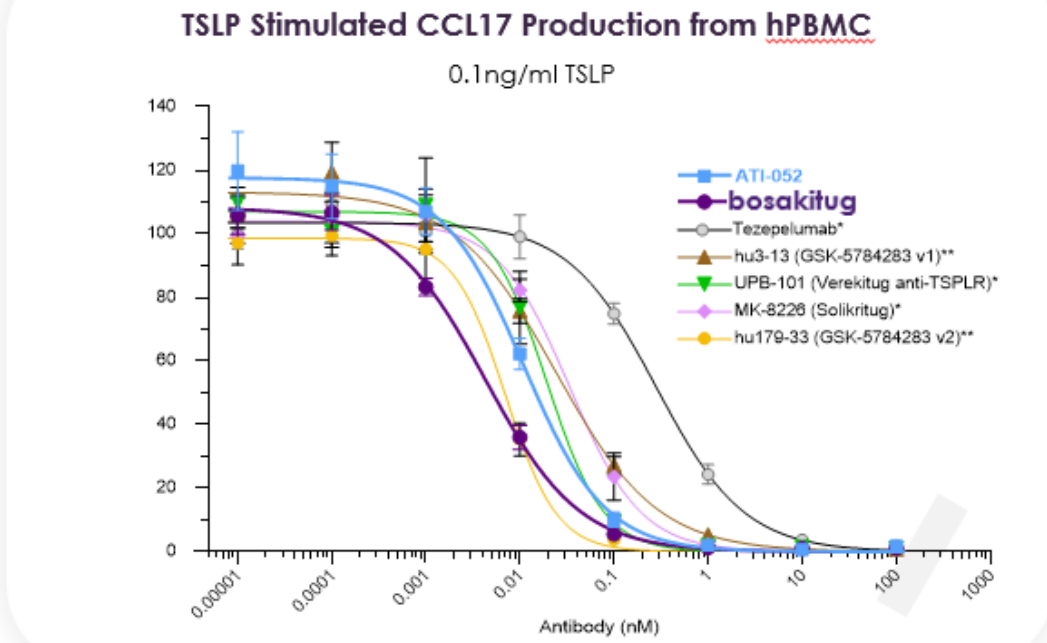
Bosakitug: Potential Best-in-Class Potency

Greater Potency Than Other TSLP/TSLPR Antibodies





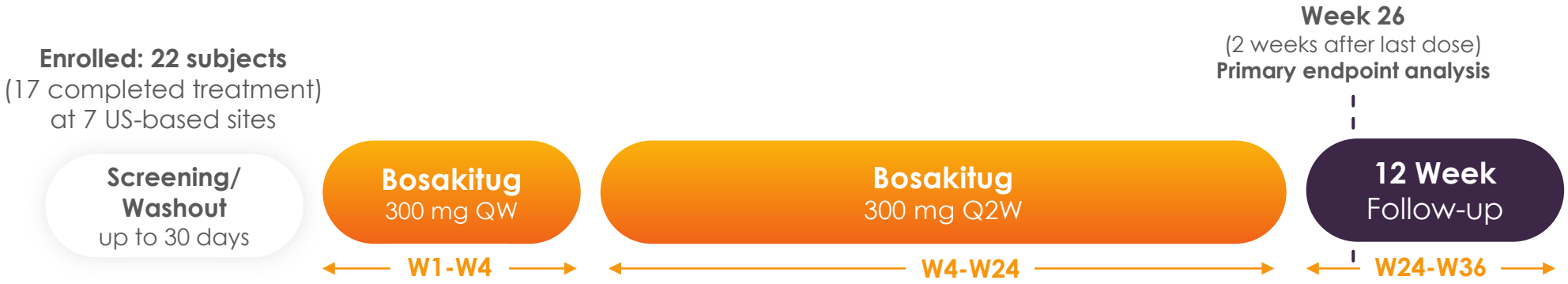
Bosakitug is the most potent of the TSLP/TSLPR antibodies evaluated in blocking CCL17 production

ATI-052 retains much of the potency for TSLP functional blockade

 *Biosimilar; **Analog

Clinical Translation: Positive Clinical Results

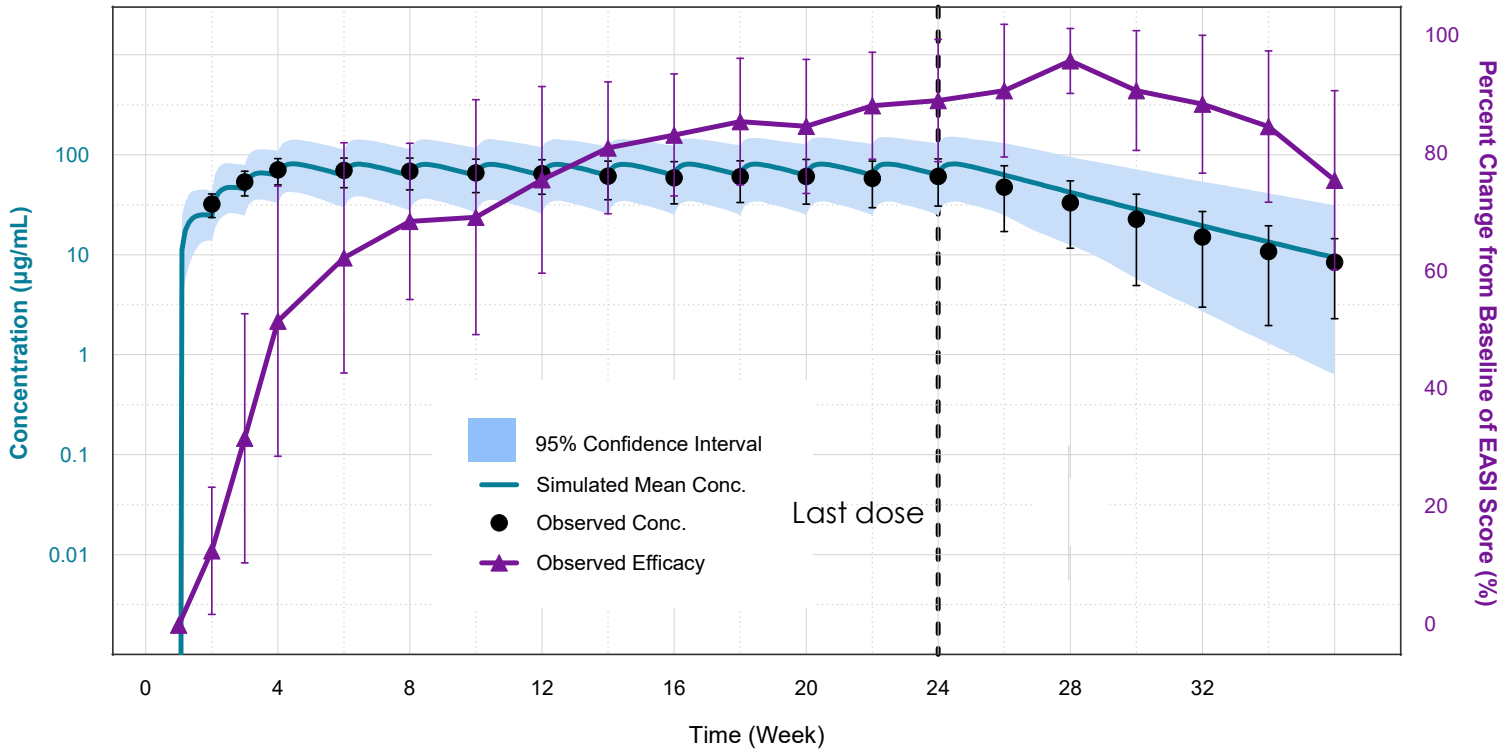
Phase 2a (US-Based) POC Monotherapy Trial



Eligibility	Diagnosis of AD (present for at least 6 months); EASI ≥12; IGA ≥3; total AD BSA ≥10%
Baseline Characteristics	Mean EASI of 17.6, Mean PP-NRS of 6.5; majority had prior medication prior to screening
Primary Objective (Week 24)	To evaluate the efficacy, safety and tolerability of bosakitug as monotherapy in subjects with moderate to severe AD
Secondary Objectives (Week 24)	To evaluate the pharmacokinetics, immunogenicity and pharmacodynamic biomarkers of ATI-045 in subjects with moderate to severe AD

Bosakitug Exposure and Efficacy Time Profile

Demonstrated Sustained Clinical Response After the Last Dose



- A time lag in efficacy response relative to exposure was observed both while the drug was onboard and after the last dose
- EASI-75 sustained response after the last dose supports the possibility of longer dosing intervals
- Favorable safety and immunogenicity profile

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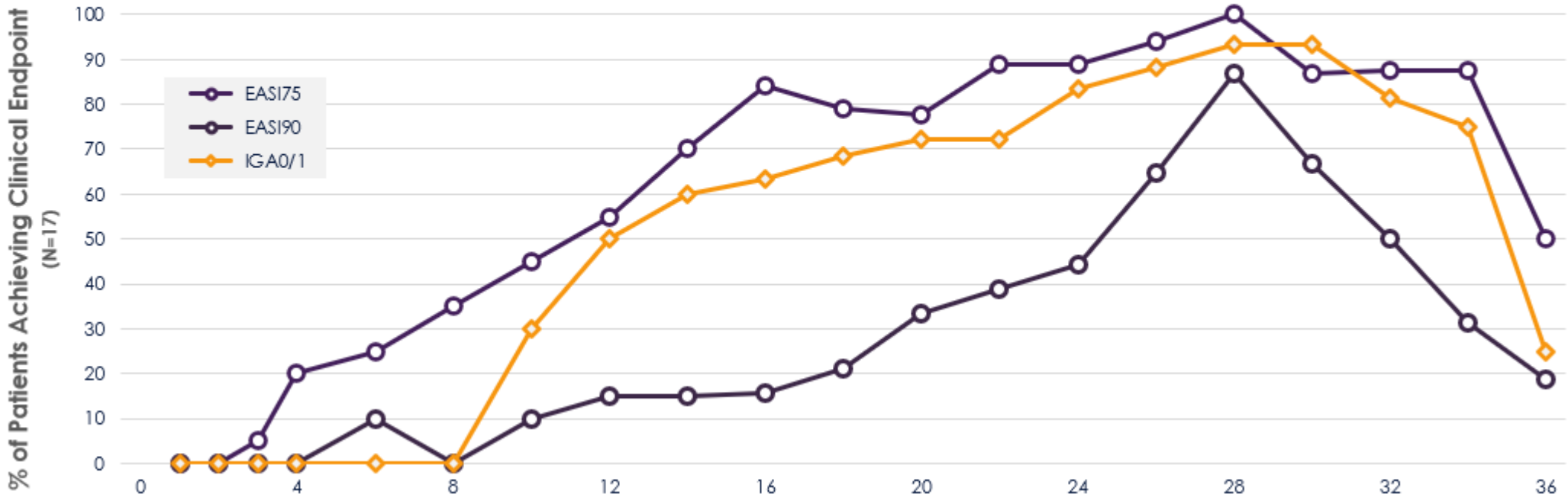
Phase 2a (US-Based) POC Monotherapy Trial

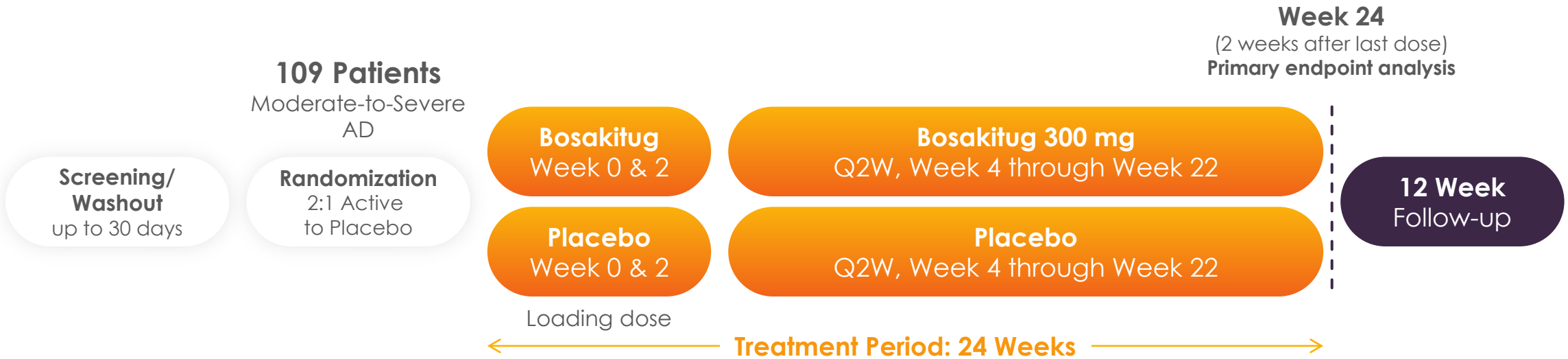
Bosakitug Demonstrated Improvement in Efficacy Measures

EASI 75 % @ Week 26	EASI 90 % @ Week 26	EASI 100 % @ Week 26	IGA 0/1 @ Week 26
94%	65%	24%	88%



Phase 2 Monotherapy Trial Ongoing

Patient Enrollment Complete



Primary Objective (Week 24)	To evaluate the efficacy of Bosakitug compared to placebo, as measured by the change in Eczema Area and Severity Index (EASI) score in patients with moderate-to-severe AD
Secondary Objectives (Week 24)	To evaluate the safety, tolerability & treatment effect of Bosakitug compared to placebo, on additional clinical outcome measures • EASI response (EASI-50, EASI-75, EASI-90) • Validated Investigator Global Assessment (IGA) response • Body Surface Area (BSA) response • Peak Pruritus Numerical Rating Scale (PP-NRS) score

Bosakitug: Next Steps

Competitively Positioned as Potential Best-in-Class TSLP mAb

Phase 1
HV: SAD/MAD
Complete

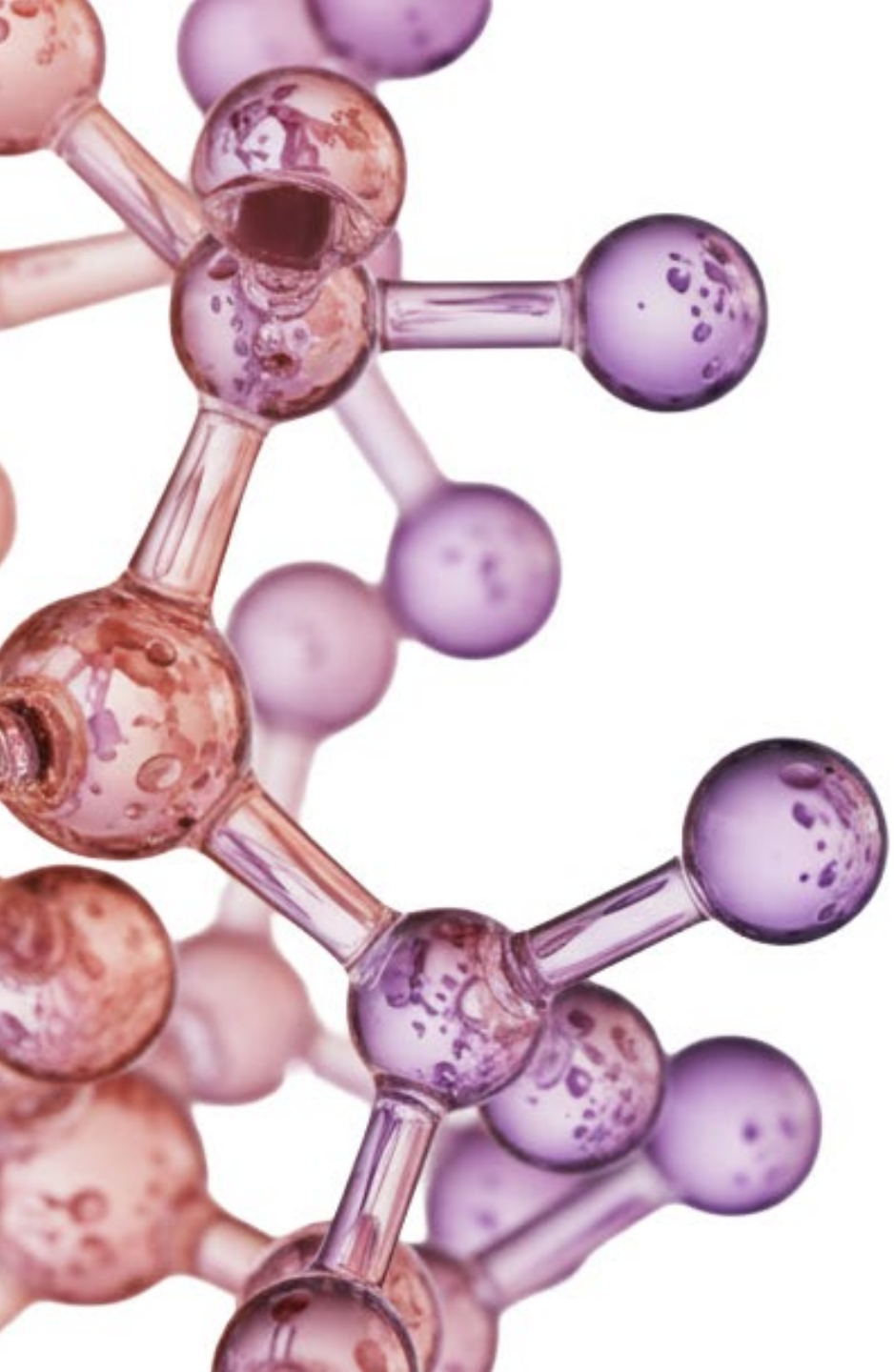
Phase 2a
Atopic dermatitis
Complete

Phase 2
Atopic dermatitis
Enrollment complete
Top line results in 4Q 2026

Potential next targets
Chronic Spontaneous Urticaria (CSU)
EOE
Asthma (via partner)

Ongoing / Next Steps

- Two-arm placebo-controlled Phase 2 trial in moderate-to-severe AD ongoing; Top line results expected in 4Q 2026
- Aclaris is seeking partners to develop bosakitug in respiratory indications; further global (excluding China) development in these indications is dependent on entering into potential partnerships



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ATI-052: Anti-TSLP x IL-4Rα First Generation Bispecific Antibody Program

Highly Potent and Bioactive Investigational Product Candidate

Opportunity to Redefine the Standard in Th2 Disease

- **ATI-052: Harnesses the power of TSLP and IL-4Rα inhibition to create a potential best-in-class bispecific**
  - Tezepelumab and Dupilumab drive multibillion dollar annual revenues across numerous indications
  - Combining mechanisms has the potential to better address the unmet needs across approved indications
- **Potential opportunities for ATI-052**
  - Potential first line therapy
  - Raise efficacy ceiling
    - Inhibition upstream and downstream of Th2 cascade
      - Faster onset, better symptom control, durable, deeper, and more consistent effect
      - Better address breadth of inflammatory mediators involved in Th2 diseases
  - Improved convenience and practical dosing schedule
    - Potential Q3 month dosing

ATI-052: Potential Best-in-Class Bispecific mAb

Effective Dual Binding of TSLP and IL-4Rα

Anti-IL4Rα scFV

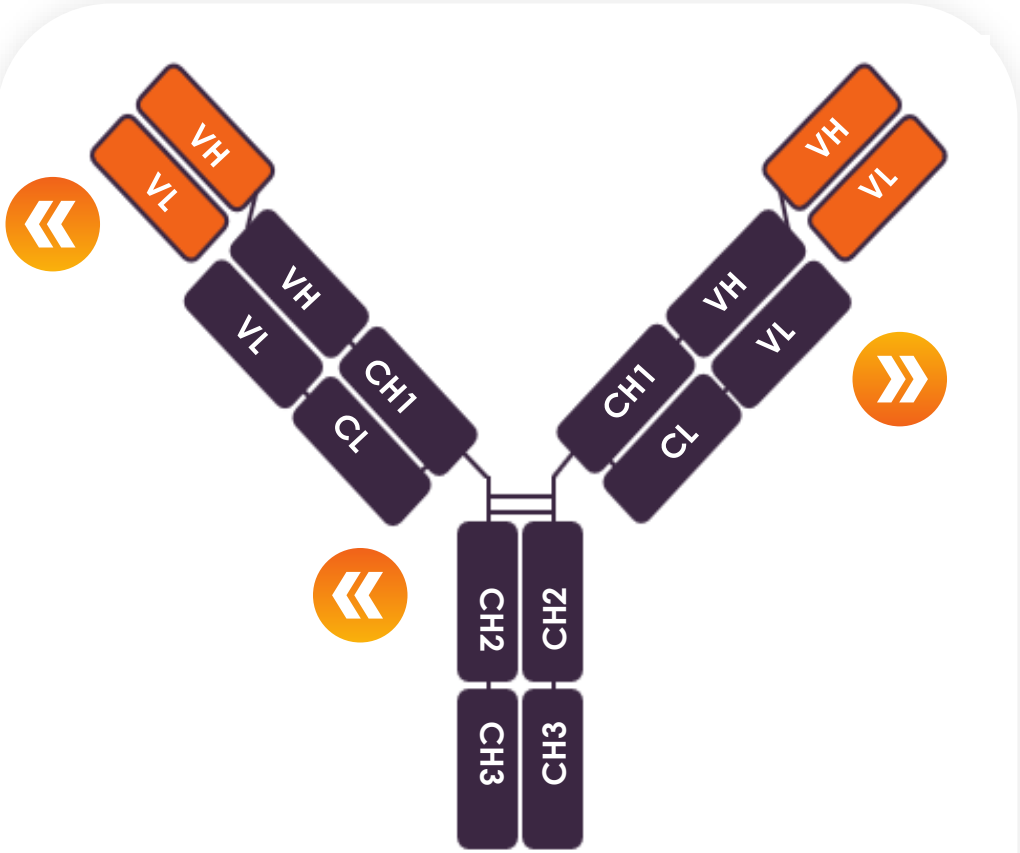
Designed to inhibit immune cells downstream of the Th2 cascade

YTE Mutation

Fc engineered to bind more tightly to FcRn, potentially extending half-life

AQQ Mutation

Fc mutation limits effector functionality, potentially reducing off-target binding and potential toxicity



ATI-052

Anti-TSLP Fab

Same anti-TSLP antibody binding regions of Bosakitug, **designed to inhibit TSLP upstream of the Th2 cascade**

- Retains dissociation kinetics, residence time, and potency advantages of bosakitug over comparator antibodies

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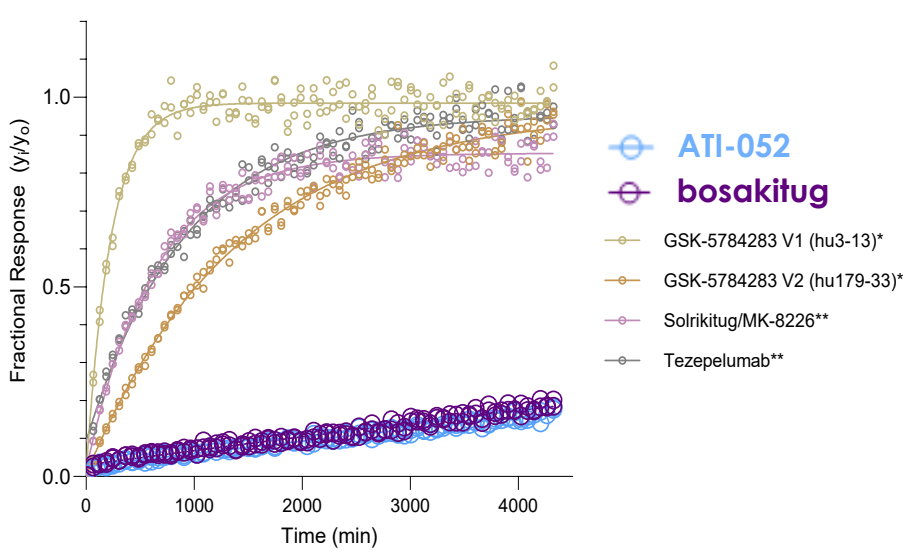
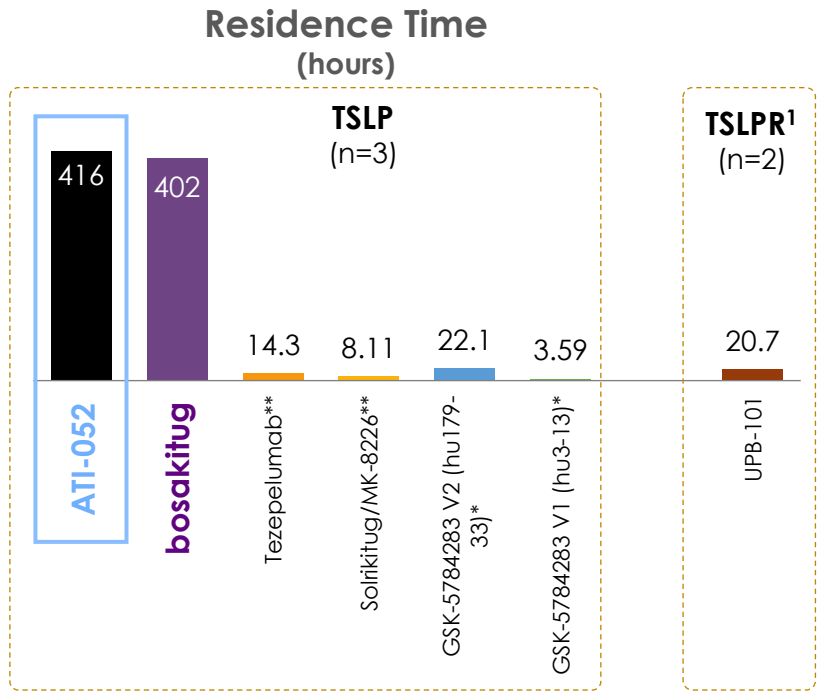
ATI-052: Longest Residence Time on TSLP

Lower Dissociation Rate Drives Longer Residence Time





ATI-052 demonstrates very slow dissociation kinetics from TSLP

Residence time for ATI-052 is ~30-116x longer than comparator antibodies

1. SPR: Residence Time based on apparent kd (dissociation constant) using standard TSLPR immobilization density and bivalent fit; *Analog mAb; **Biosimilar mAb

Concurrent Binding of TSLP and sIL-4Rα to ATI-052

Simultaneous Binding of TSLP and IL-4Rα

Binding Sequence	TSLP:ATI-052 Stoichiometry*	sIL-4Ra:ATI-052 Stoichiometry*
ATI-052 capture / sIL-4Ra dose-response	n/a	2.25
ATI-052 capture / TSLP load / sIL-4Ra dose-response	1.82	2.10
ATI-052 capture / TSLP dose-response	2.04	n/a
ATI-052 capture / sIL-4Ra load / TSLP dose-response	1.83	1.97

** determined using molecular weights based on amino acid sequence, does not account for glycosylated species*

- ~2 molecules of sIL-4Rα bound to ATI-052 in the absence (2.25:1) and presence (2.10:1) of TSLP
- ~2 molecules of TSLP bound to ATI-052 in the absence (2.04:1) and presence (1.82:1) of sIL-4Rα

ATI-052 Demonstrates High Affinity to Both Targets Simultaneously:

ATI-052 binds ~two molecules of TSLP and sIL-4Rα with the potential to saturate all 4 binding sites at the same time

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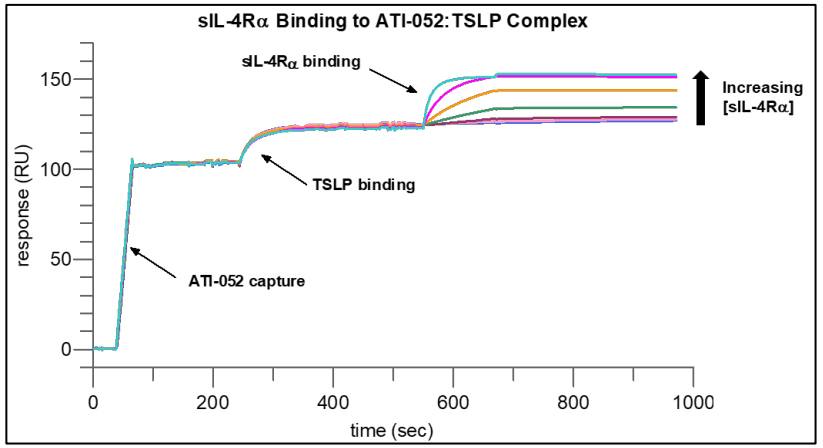
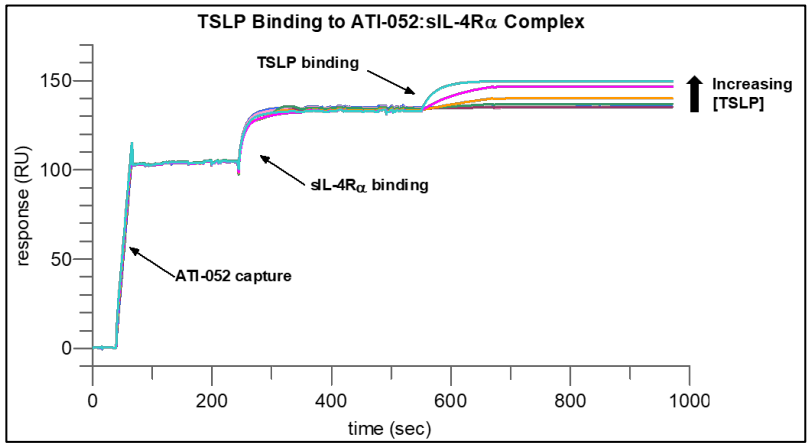
Concurrent Binding of TSLP and sIL-4Rα to ATI-052

High Affinity to Both TSLP and IL-4Rα





Comparison of Affinity for sIL-4Rα Binding to ATI-052 or ATI-052:TSLP Complex

Parameter	ATI-052	ATI-052:TSLP
K_D (pM)	348	215

Comparison of Affinity for TSLP Binding to ATI-052 or ATI-052:sIL-4Rα Complex

Parameter	ATI-052	ATI-052:sIL-4Rα
K_D (pM)	41.2	33.9

ATI-052 Binds Both Targets Effectively

High affinity to either target is not altered by the binding to the other

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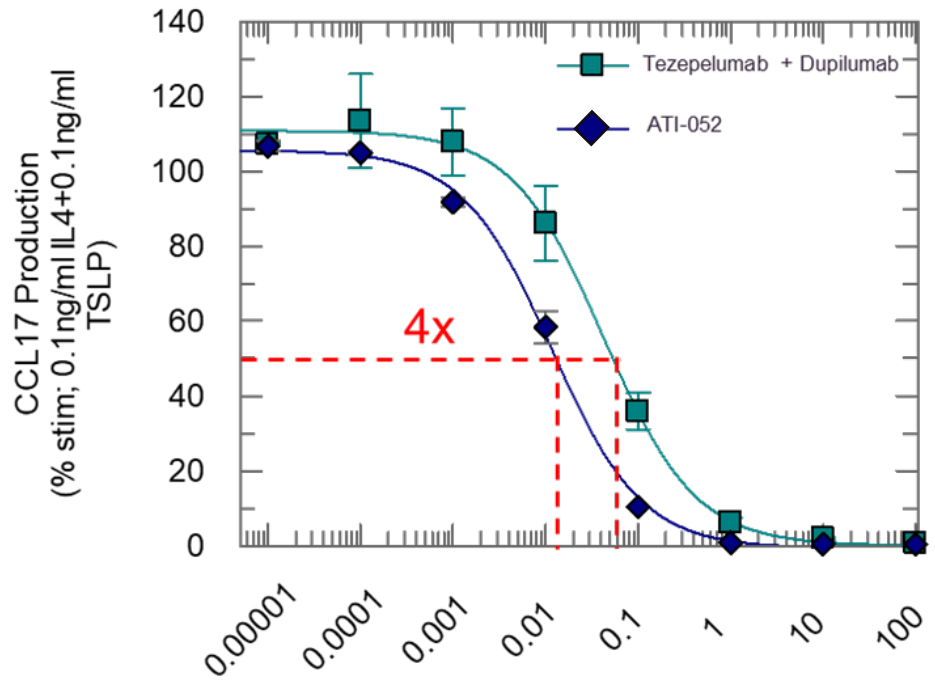
Comparison of ATI-052 vs Dupilumab + Tezepelumab

ATI-052 Demonstrates Greater Potency than the mAb Combination



mAb Concentration	
Antibody	**IC50 (nM)**
ATI-052	0.016
Dupilumab + Tezepelumab	0.069
Fold change	4.3

ATI-052 is Substantially More Potent than the Combination of Dupilumab and Tezepelumab

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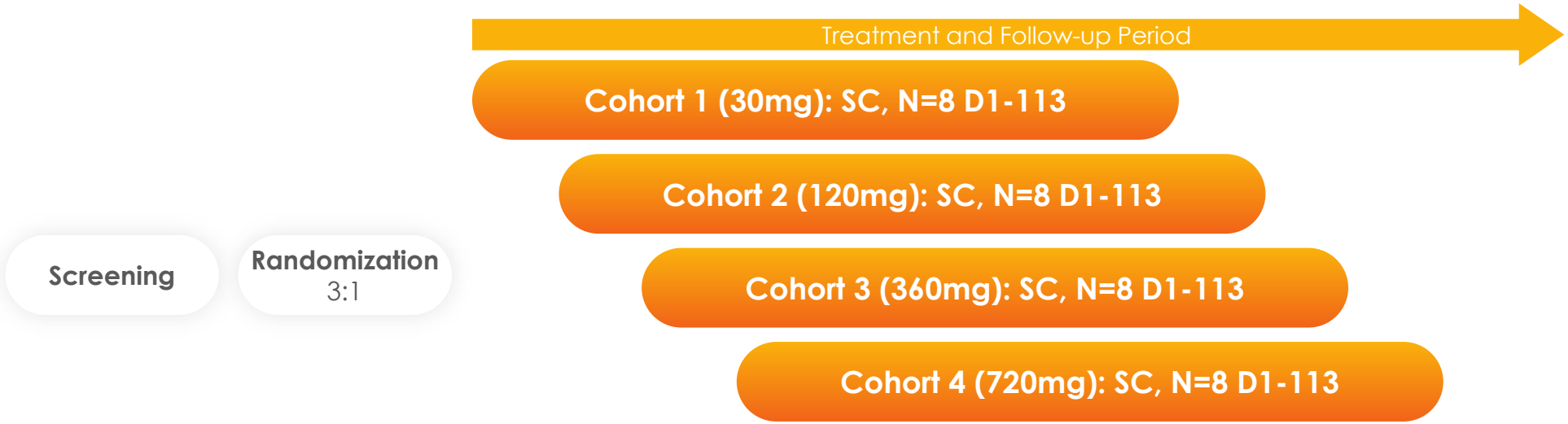
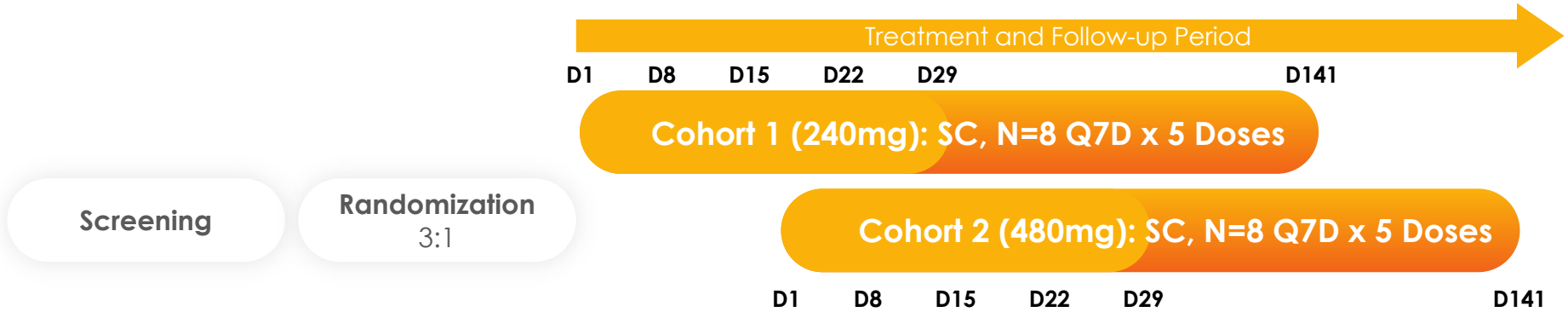
ATI-052 Placebo Controlled Phase 1a Program

Part A Single Ascending Dose (SAD) in Healthy Volunteers (HV)

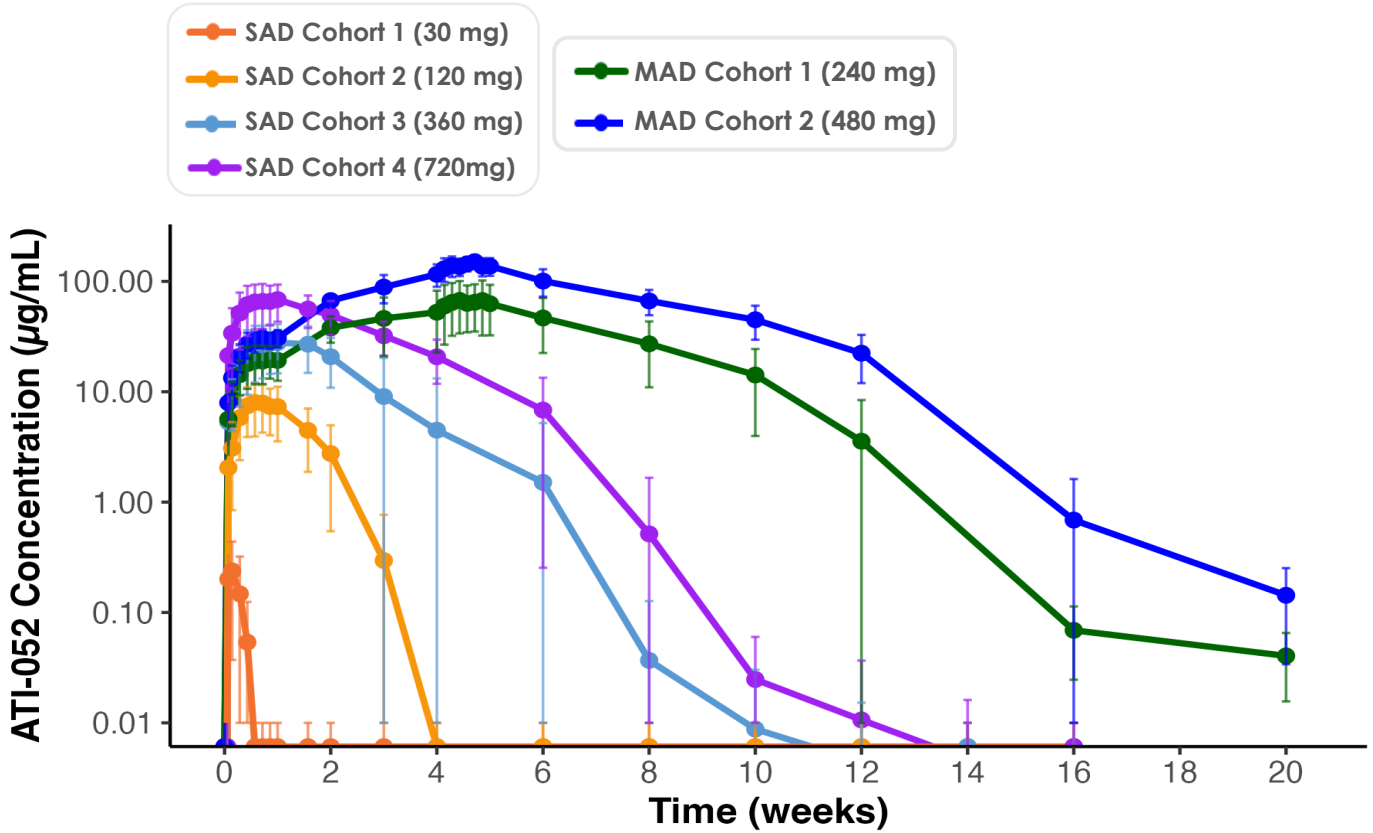


Part B Multiple Ascending Dose (MAD) in Healthy Volunteers



Potential Best-in-Class Pharmacokinetic Profile

Supports Potential for Up to Every 3-Month Dosing



Mean ± SD profiles; BLQ values imputed as zero.

Dose proportional PK observed across pharmacologic dose range

PK results provided an estimated half-life of 45 days[1]

1. Based on accumulation ratio at 240 mg weekly dosing

CLINICAL RESULTS

Ex-Vivo Stimulated PD Assay

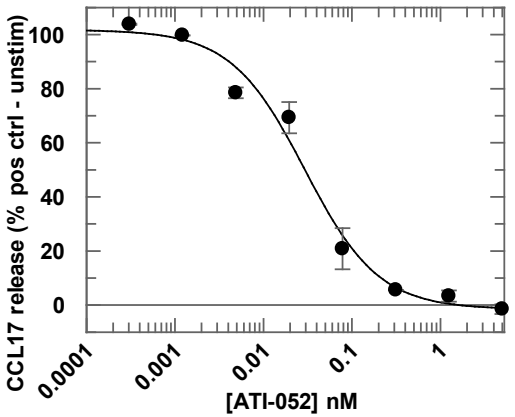
High Hurdle for Complete Inhibition

Robust PD activity ex vivo hWB closely reflects the real biological environment in patients with disease by maintaining the complex composition of fluids and cells present in circulation

- Assay in human whole blood (hWB) designed to assess the following:
  - TSLP stimulated CCL17 in whole blood
  - IL-4 stimulated CCL17 in whole blood
- hWB assay sets high biological bar: Assesses inhibition of up to 500-fold more TSLP and IL-4 than endogenous levels

hWB Assays

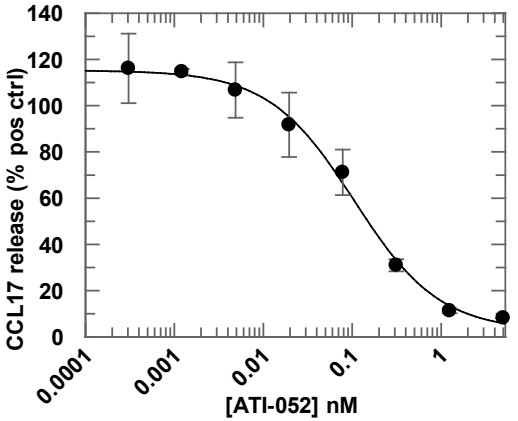
0.5 ng/mL TSLP stimulation—48 hours



IC50 (nM) ± SEM	0.025 ±0.0042
n	5
S/N	3

5 ng/ml*

2 ng/mL IL-4 stimulation—48 hours



IC50 (nM) ± SEM	0.203 ±0.039
n	6
S/N	15

41 ng/ml

*IC50 for the inhibition of TSLP-stimulated CCL17 in whole blood was lower than the Lower Limit Of Quantitation (LLOQ) for the PK analysis of ATI-052 (LLOQ is 25 ng/ml)

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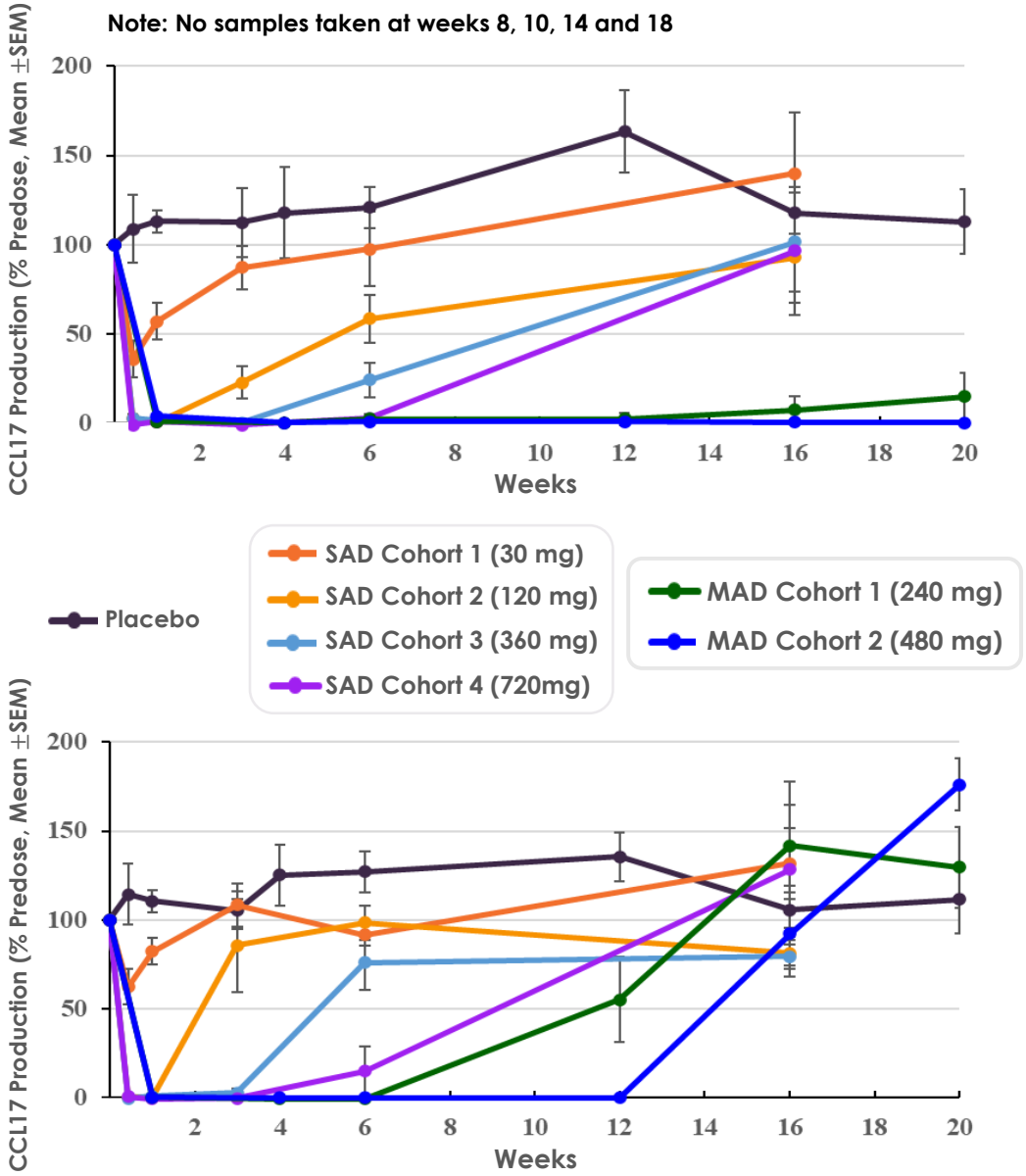
Potential Best-in-Class Pharmacodynamic Effect of ATI-052

TSLP Stimulated CCL17 (TARC):

Sustained, complete / near complete inhibition observed for **at least five months at 240 and 480 mg MAD dose**

Potential best-in-class residence time and potency



IL-4 Stimulated CCL17 (TARC):

Sustained complete inhibition observed for **at least three months at 480 mg MAD dose**

ATI-052 binds both targets effectively

with complete inhibition at pharmacologically relevant doses beyond the PK profile

Evidence of sustained inhibition of TSLP corroborate long residence time

The combination of PK duration and the strong and sustained PD effect support the potential for **up to every three-month dosing**

Exceptional Pharmacodynamic Response

Robust Target Engagement + Sustained Complete Inhibition in MAD Cohorts

ATI-052 exhibited a **potential best-in-class PD profile**:

- Dose and concentration dependent inhibition of IL-4 and TSLP-stimulated CCL17 (TARC) release observed across all SAD and MAD cohorts
- Near complete inhibition of TSLP stimulated CCL17 observed for **at least 5 months** in 240 mg MAD Cohort
- Complete inhibition of TSLP stimulated CCL17 observed for **at least 5 months** in 480 mg MAD Cohort
- 480 mg MAD Cohort results demonstrated complete and sustained inhibition of IL-4 stimulated CCL17 for **at least three months**
- PK/PD package support the potential to **raise the efficacy ceiling** and an **extended dosing schedule of up to every three months**

Observed inhibitory results **further validate the potency of ATI-052**

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Favorable Tolerability and Safety Profile of ATI-052

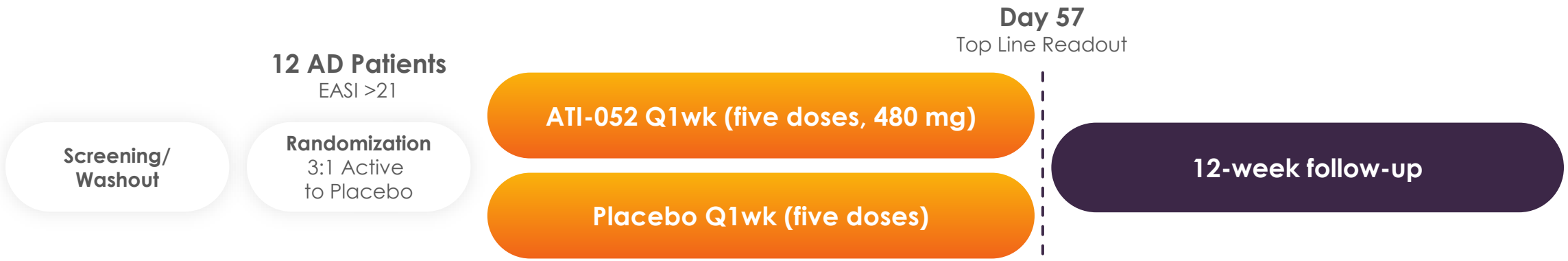
Provides Confidence in Continued Development

- Low rate of drug related treatment emergent adverse events; predominantly Grade 1
- No SAEs; no adverse events led to study discontinuation
- No Grade 3 drug-related TEAEs
- No conjunctivitis

Favorable tolerability and safety profile demonstrated across all ATI-052 SAD and MAD cohorts

Phase 1b POC Trial in Atopic Dermatitis

Enrollment and Dosing Ongoing



Patient Screening	Central photography to confirm diagnosis and extent of disease
Primary Endpoint	Safety and tolerability
Other Endpoints	AD clinical efficacy assessments (EASI, BSA, IGA, PP-NRS) PD endpoints measured by assays including lesional and non-lesional skin tape strips

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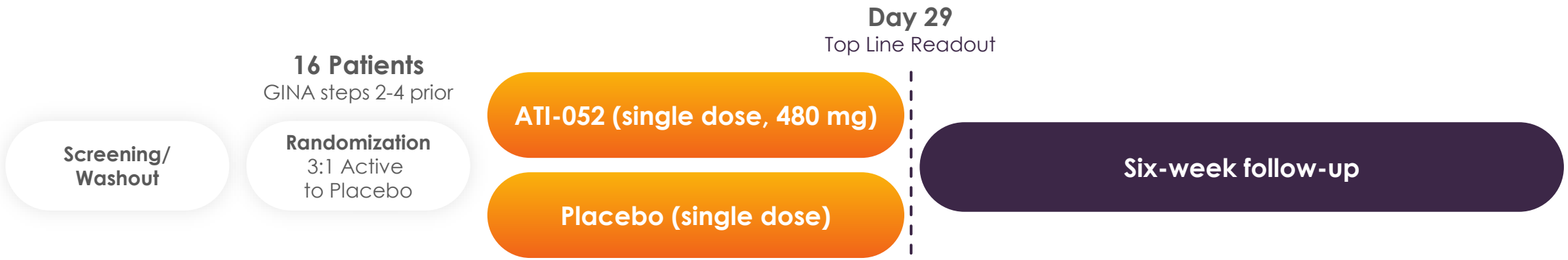
CLINICAL STRATEGY

Phase 1b POC Trial in Asthma

Enrollment and Dosing Ongoing



Patient Selection	Adult asthmatics on GINA steps 2-4 treatment prior to screening; excluding prior biologics	Type 2 asthma with active inflammation: FeNO baseline >35 ppb, Blood Eos ≥ 150
Primary Endpoint	Safety and tolerability	
Other endpoints	Key Clinical Efficacy Assessment	Emphasis on PD assessments: FeNO, FEV1, Blood Eos, TARC (CCL17), Periostin, IGE, Cytokines (IL-4,IL-5,IL-13)

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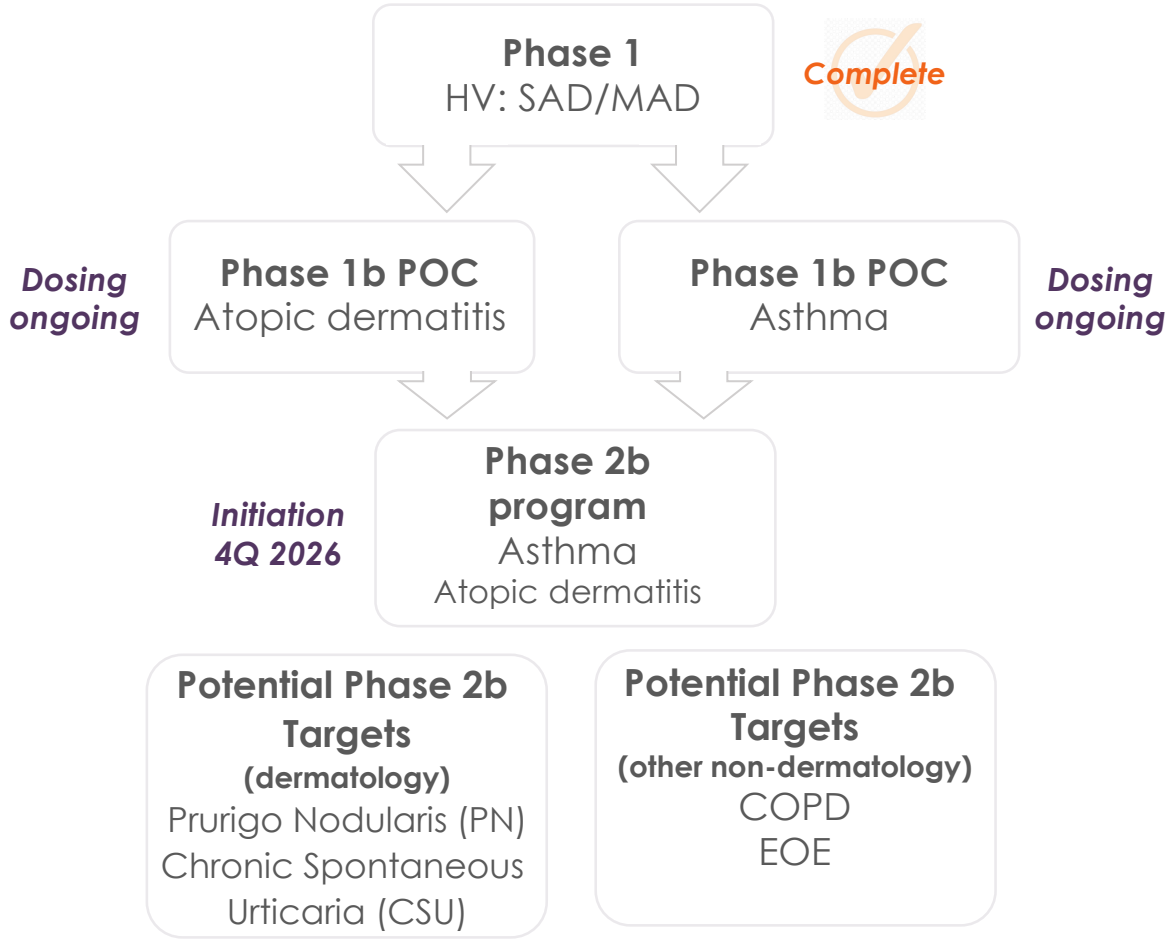
CLINICAL STRATEGY

ATI-052: Next Steps

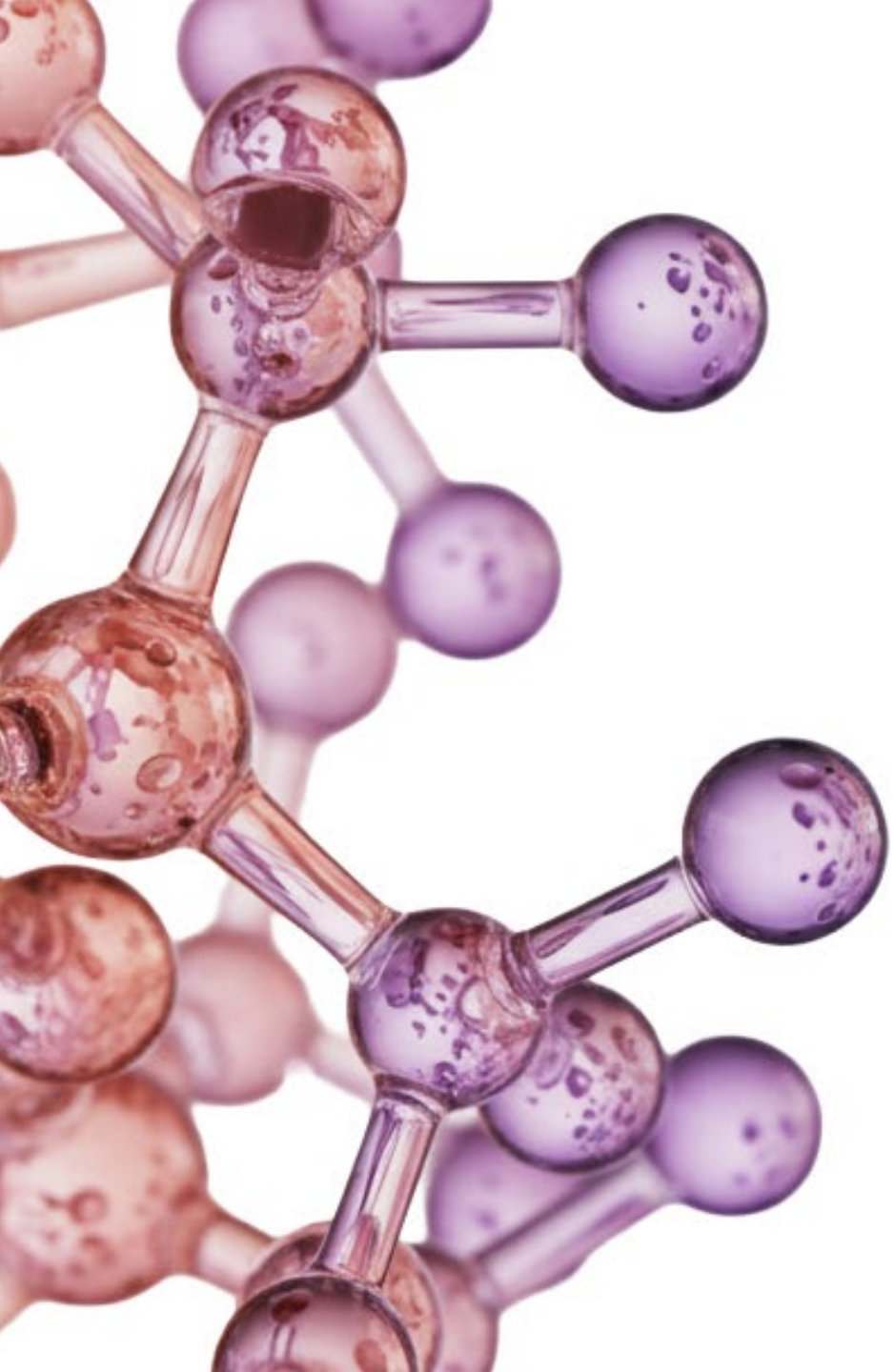
Positive SAD/MAD Results Validate ATI-052; Clinical Program Rapidly Advancing



Ongoing / Next Steps

- Phase 1b Asthma and AD POC trials ongoing; dosing underway
- Phase 1b top line POC results: 2H 2026
- Initiate Phase 2b program (initial target = asthma): 4Q 2026

 All future development, clinical, and regulatory timelines are expectations, are based on current beliefs and assumptions, and are subject to change based on a variety of factors



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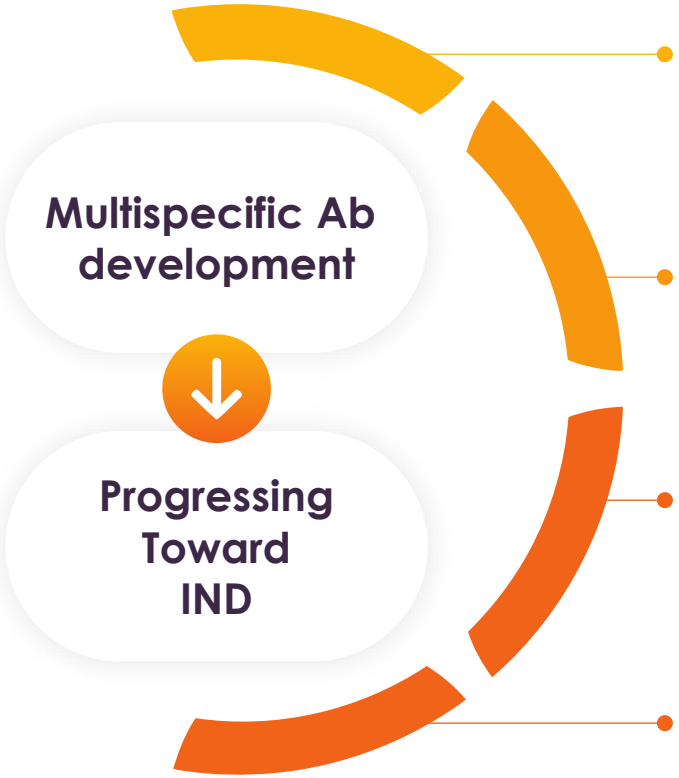
Next-Generation Multispecific Antibodies

Next Generation Bispecific Antibodies

Progressing Toward IND



- Multispecific approach enables synergistic target binding and addresses shortcomings of multi-drug administration
- Initial assessment of bispecific targets completed (αTSLP + undisclosed)
- Campaigns progressing: Hit optimization toward lead candidate selection ongoing
- Additional bispecific and trispecific modalities under initial consideration

Targeting first IND from bispecific antibody development efforts in 2027

Opportunities for Aclaris Next Generation BsAbs

Multispecific Antibodies Can Expand Therapeutic Optionality

Pruritis (Itch)

- TSLP combinations with itch mediators may have a positive impact on itch and QoL in AD and other dermatological diseases

Alarmin Combinations

- Could impact initiation of allergic response and associated downstream inflammation and enhance anti-viral immunity during respiratory virus infections

Synergistic Effect with TSLP

- May amplify immune responses, particularly the development of Type 2 inflammation, which is central to allergic diseases like asthma, AD, and others

Eosinophil-Driven Diseases

- Allergic disorders, skin conditions, fungal infections, autoimmune diseases, others
- Causes multiple disorders including eosinophilic cystitis, fasciitis, pneumonia, gastrointestinal disorders, granulomatosis with polyangiitis, hypereosinophilic syndrome

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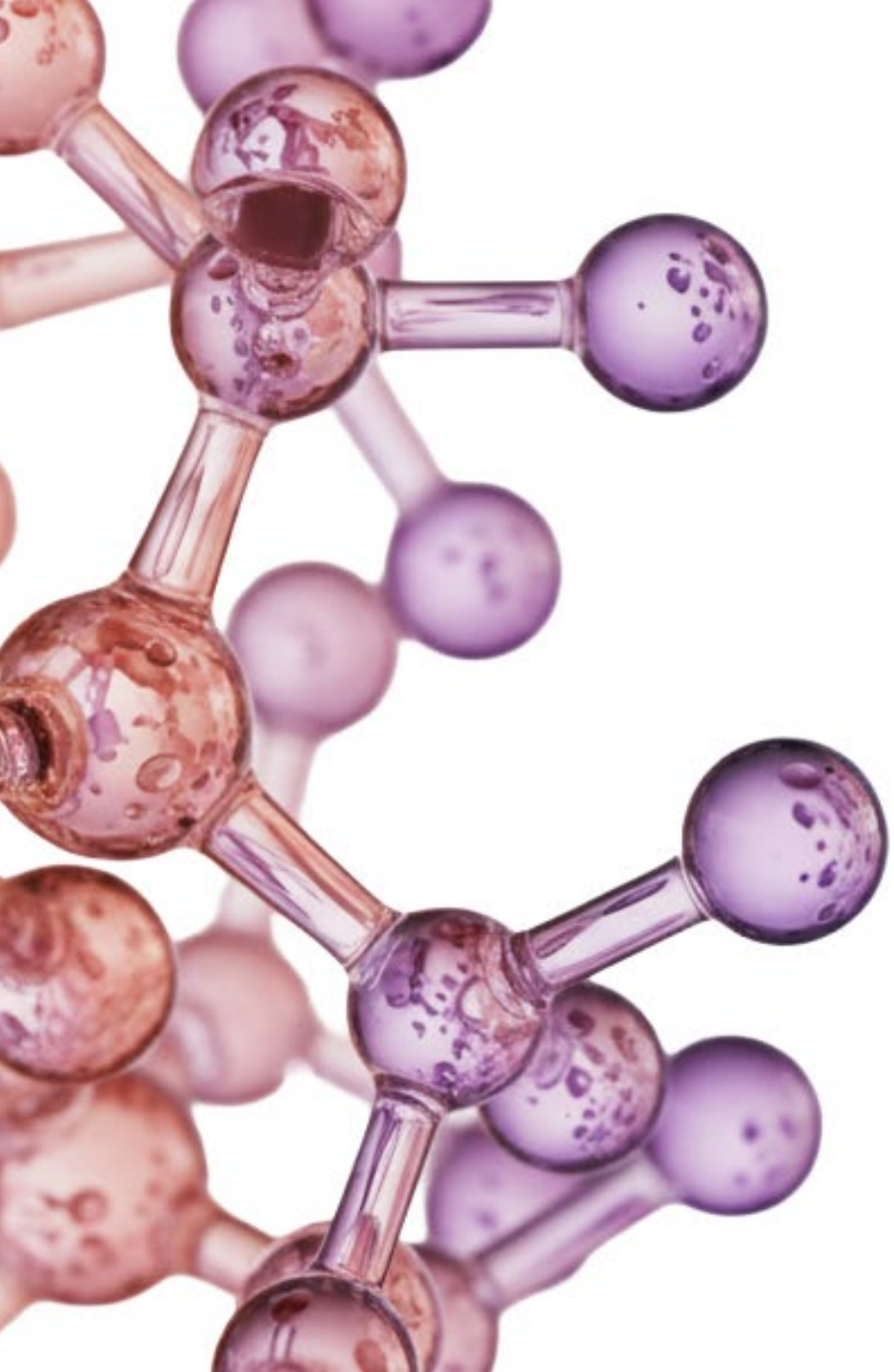

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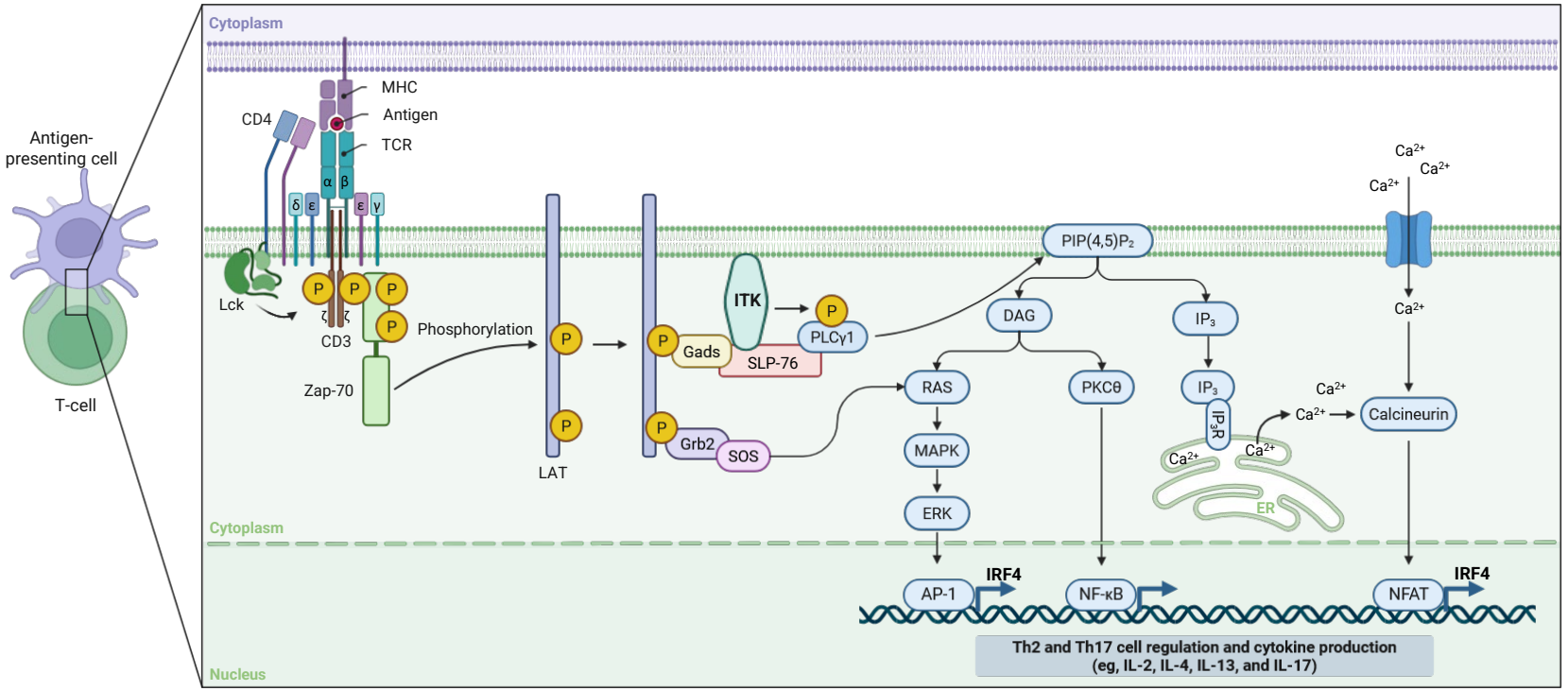
ATI-2138: A First Generation Novel ITK/JAK3 Inhibitor for T Cell-Mediated Diseases

Potent and Selective Investigational Product Candidate with Strong Tolerability Profile

Critical T Cell Receptor (TCR) Pathway

Interleukin-2-Inducible T-cell Kinase (ITK): Key Kinase Involved in TCR Signaling



- TCR activation is critical for T lymphocyte differentiation, proliferation and activation
- TCR signaling proceeds through a complex intracellular pathway resulting in the activation of key transcription factors and production of cytokines
- Central to TCR signaling is the kinase ITK

Inhibiting/downregulating ITK shuts down TCR signaling under inflamed/allergic conditions and impacts disease

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ITK Inhibition: Broadly Applicable in I&I Pathways

Comparative Impact of ITK Inhibition

	Th2				Th17			ILC2		Th1	
	IL4	IL5	IL13	IL31	IL17	IL21	IL22	IL5	IL13	IFN γ	IL2
ITK Inhibitor	✓	✓	✓	✓	✓	✓	✓	✓	✓		
ITK/TXK Inhibitor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
αIL-4R	✓		✓						✓		
αIL-13			✓						✓		
αIL-17					✓						
αIL-31R				✓							
JAK1	✓	✓	✓	✓		✓		✓	✓	✓	✓
JAK3	✓					✓					✓
STAT6 Inhibitor	✓		✓	✓					✓		

Unique Dual Pharmacology of ATI-2138

Unique Dual Pharmacology of ATI-2138 Provides Best-in-Class Potential

High potency for inhibiting both ITK and JAK3

Regulation of T cell development and function both upstream (ITK) and downstream (JAK3)

Inhibiting both pathways may provide a **more potent and complete anti-inflammatory response**

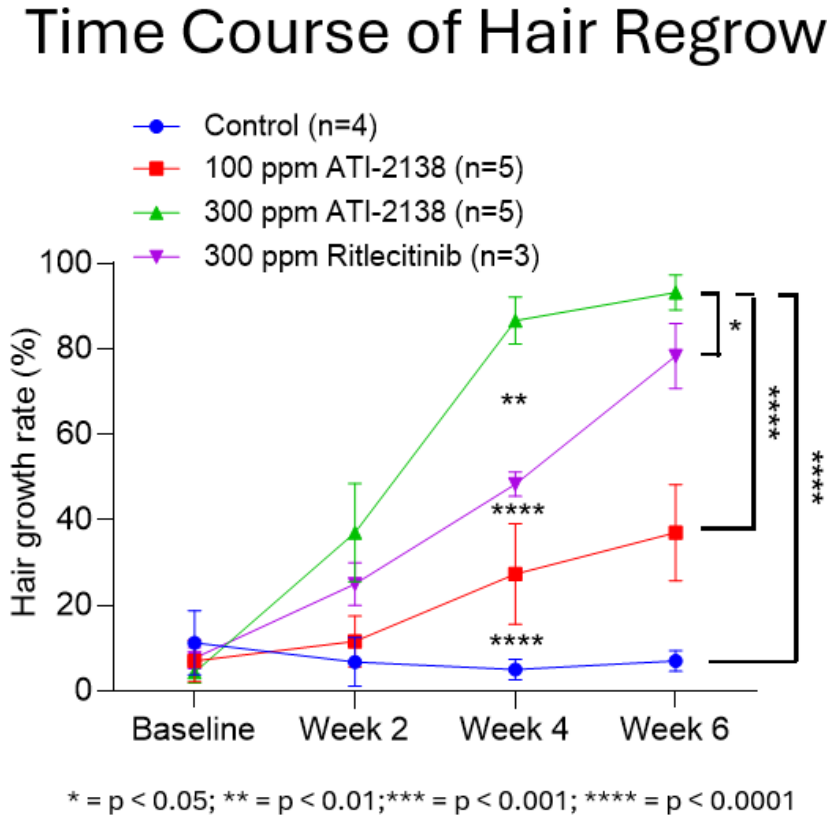
As both targets are restricted in expression to immune cells, inhibitors have the **potential for a favorable safety profile**

ATI-2138: Rapid and Sustained Hair Regrowth

Murine Reversal Model of Alopecia Areata (AA)

Rapid and sustained hair regrowth observed in mice with alopecia universalis, the most severe alopecia AA phenotype

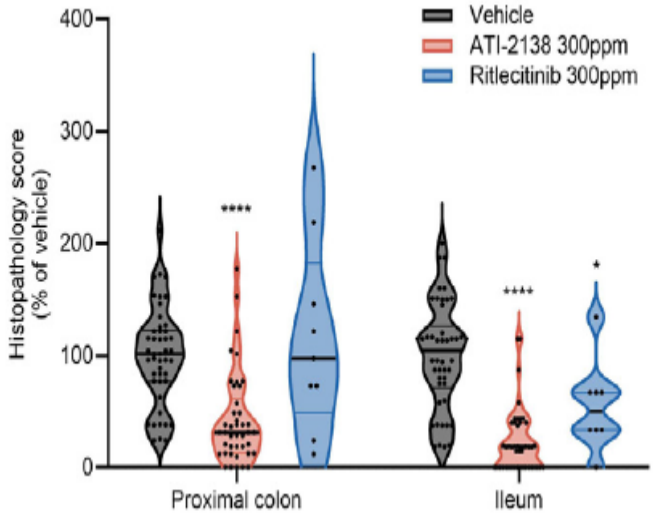
- Rapid onset of hair regrowth (week 2)
  - 37% mean hair regrowth rate for ATI-2138 (300 ppm) vs 25% for ritlecitinib (300 ppm)
- Near peak effect at week 4
  - 87% mean regrowth rate vs 48% for ritlecitinib
- Sustained effect through week 6 (end of study)
  - 93% mean regrowth rate vs 78% for ritlecitinib



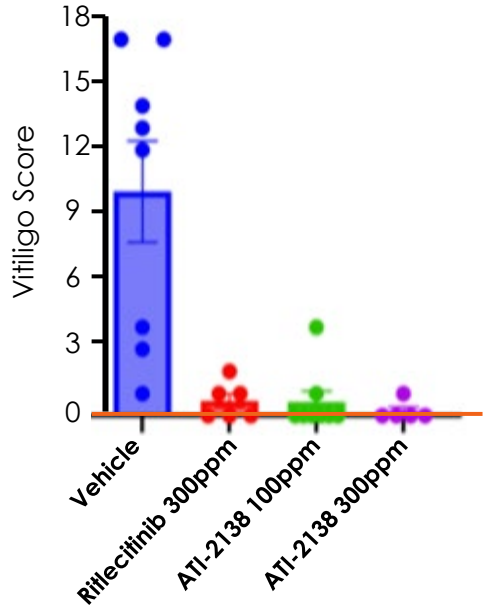
ATI-2138: Anti-Inflammatory Activity

Strong Anti-Inflammatory Activity Shown in Various Murine Models

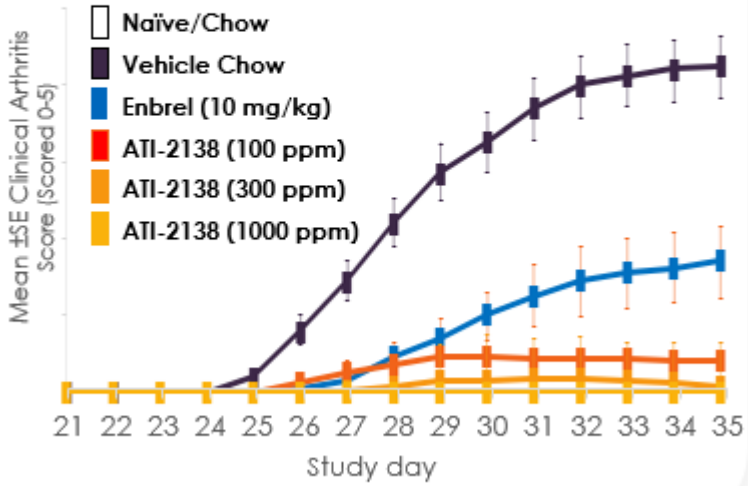
IBD
Mouse T Cell Transfer



Vitiligo
Mouse T Cell Transfer



Rheumatoid Arthritis
Mouse CIA Model



ATI-2138 has demonstrated robust anti-inflammatory activity in mouse models of disease:
Inflammatory Bowel Disease, Vitiligo, and Rheumatoid Arthritis

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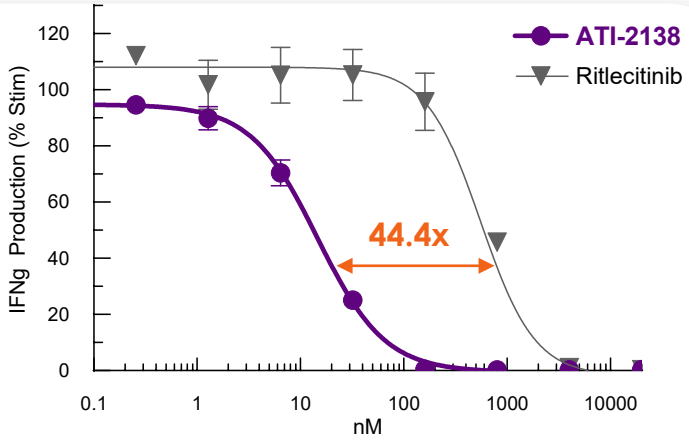
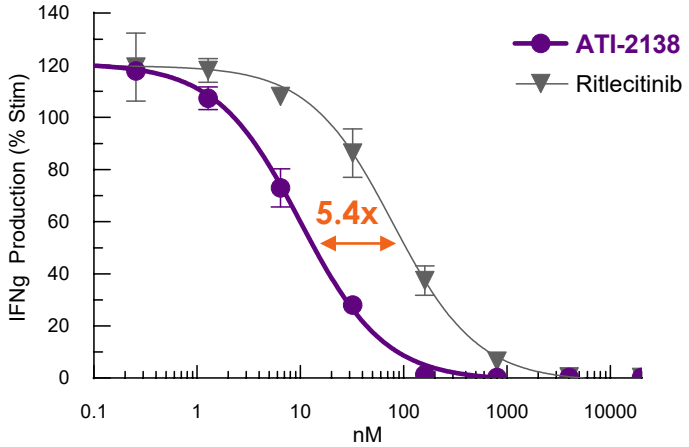
ATI-2138: Best-in-Class Potential

Unique Dual Pharmacology Creates Best-in-Class Potential

ITK: HWB αCD3 Stimulated IFNγ Release



JAK3: HWB IL2 Stimulated IFNγ Release



- **ATI-2138 is 44.4x more potent than ritlecitinib** for inhibiting anti-CD3 induced IFNγ production (ITK) and **5.4x more potent** for inhibiting JAK3 dependent IL-2 induced IFNγ production in human whole blood
- At the FDA recommended 50 mg QD dose for alopecia areata, ritlecitinib plasma levels may not impact ITK (anti-CD3 /IFNγ) for any appreciable time

ATI-2138: Validating the Potency Advantage

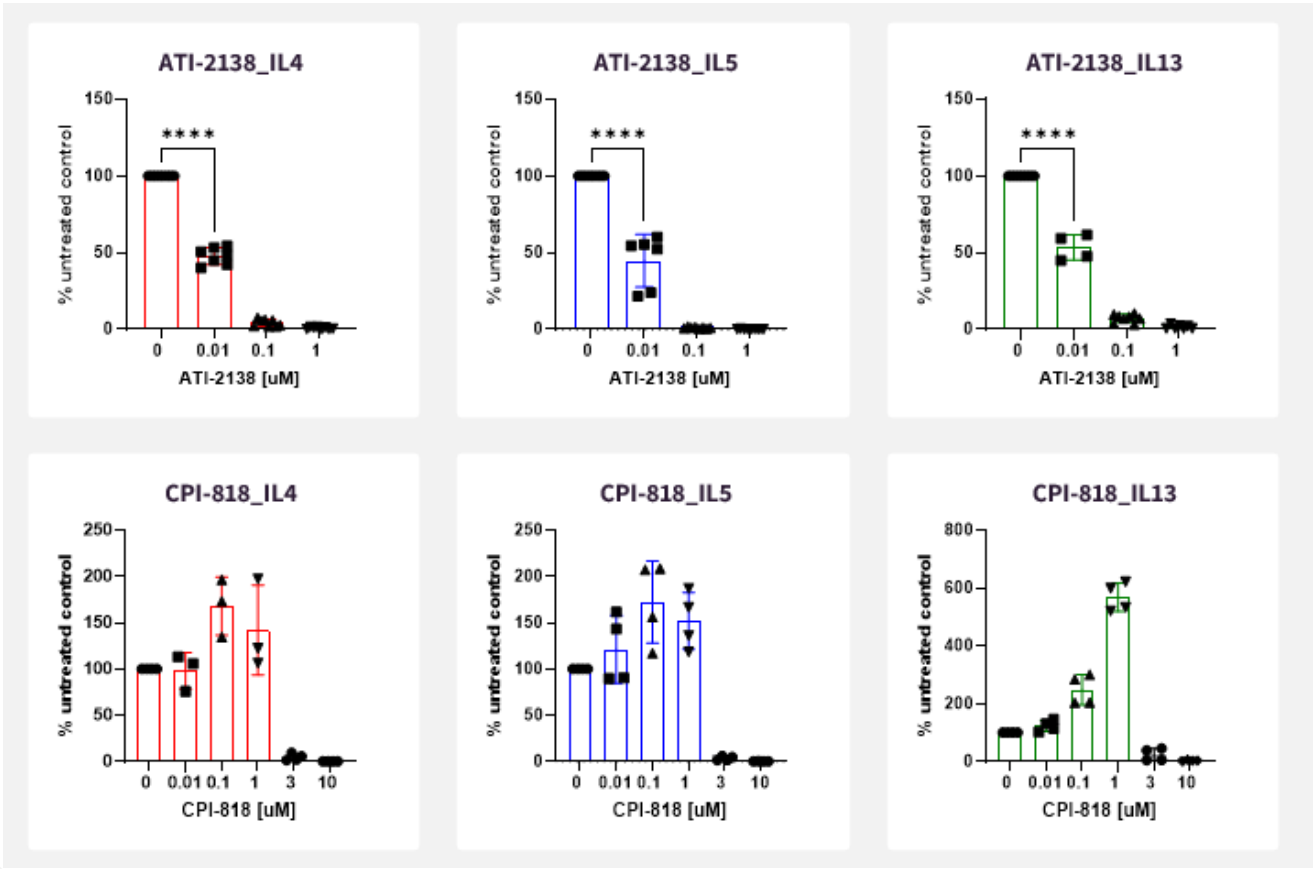
ATI-2138 Compared to CPI-818 (Soquelitinib)

ITK Biochemical Enzyme Potency

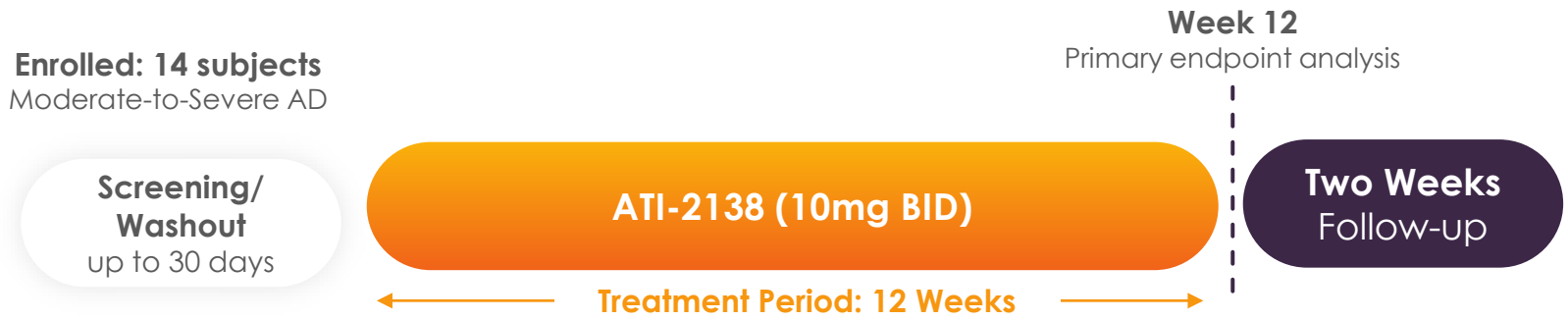
	ITK, IC50, nM	Kinact/Ki (uM-1s-1)
ATI-2138	0.25	0.34
CPI-818	9.5	0.022
Potency Ratio	**38x**	**15x**

- **ATI-2138 is 15-38x more potent than CPI-818** in inhibiting the ITK enzyme activity
- ATI-2138 is significantly more potent than CPI-818 in blocking the Th2 derived cytokines, IL-4, IL-5 and IL-13 (30-100x)

Anti-CD3/CD28-Induced Cytokines from Human Th2 Cells



Phase 2a Trial in Atopic Dermatitis (AD): Complete



Results:

- Favorable safety profile
- Efficacy across multiple measures comparable to drugs approved for AD
- Exposure similar to or slightly higher than predicted from MAD study
- PD results validate therapeutic potential of targeting ITK through:
  - Near complete and sustained inhibition and occupancy of ITK
  - Downregulation of multiple ITK-dependent immune pathways in the skin

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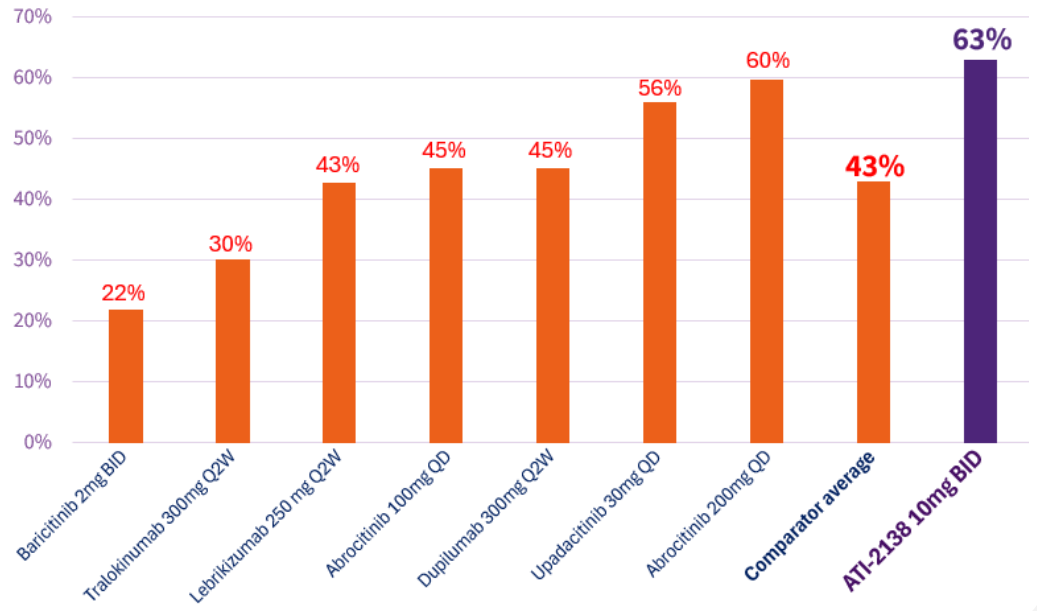
Phase 2a Trial in Atopic Dermatitis: Efficacy Results

A ≥4-point improvement in PP-NRS score is considered a clinically meaningful result

PP-NRS: % of Pts with ≥4 Point Improvement in Worst Itch over Prior 24 Hours



At week 12 (end of treatment), **63%** of patients receiving a low dose (10mg BID) of ATI-2138 experienced a ≥4-point improvement worst itch in the past 24 hours

At week 12: **60.5% mean (median = 76.8%) improvement in EASI** score in patients (n=10) receiving 10mg BID of ATI-2138

Rapid response: After four weeks of treatment*

- **BSA** decreased by **63.9%** (p<0.001)
- **EASI** scores dropped by **77.3%** (p<0.001)
- **PP-NRS** decreased by **44.8%** (p<0.01)
- These changes were statistically significant and sustained through study treatment (W12)

*Molecular and Clinical Effects of oral ATI-2138, an ITK/JAK3 inhibitor, in Moderate-to-Severe Atopic Dermatitis: Sub-study of a Phase 2a Open-Label, Single-Arm Trial. Beaziz-Tordjman, Jessica *et al.* European Academy of Dermatology and Venereology, September 17, 2026.

Efficacy Results Demonstrated Strong + Consistent Response to ATI-2138

Significant Itch Relief + Improvements in Disease Severity and Extent

Each other compound efficacy is the average percent improvement from multiple studies, at week 12 or 16 data from Phase 2 and Phase 3 published sources; head-to-head clinical studies have not been conducted. Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across studies. Data collected on 8 of 10 PP patients.

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Phase 2a Trial in Atopic Dermatitis: PD Assessments

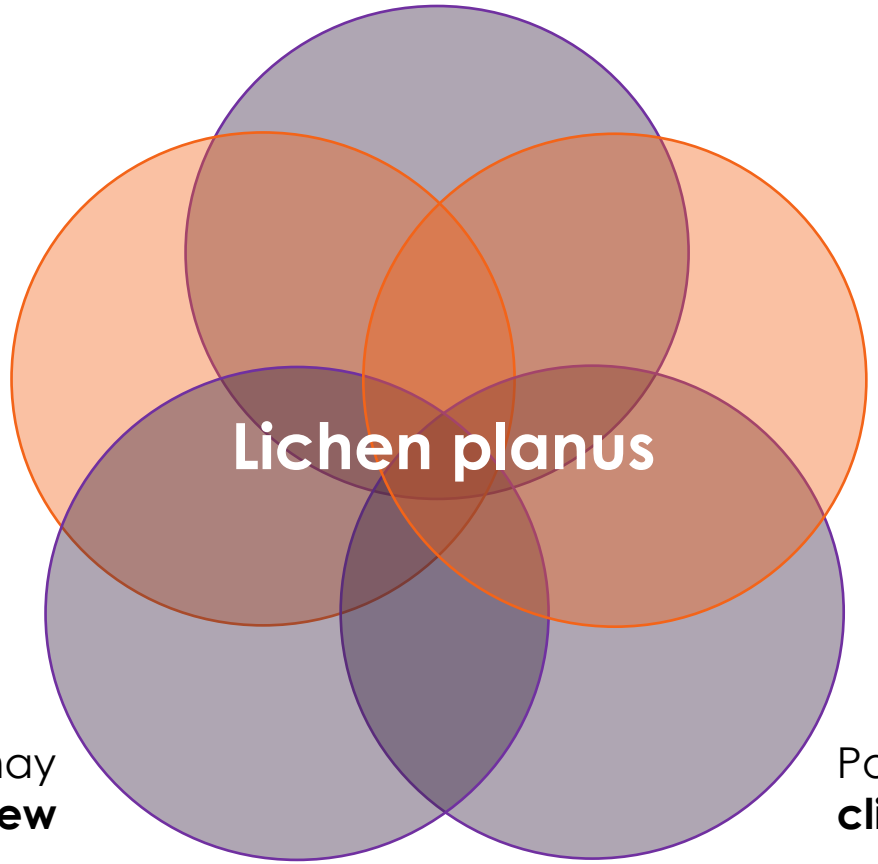
ITK Pathway Mediated Anti-Inflammatory Activity in Skin and Plasma

- Marked and sustained target occupancy and functional ITK inhibition across dosing interval
- ATI-2138 significantly downregulated multiple immune pathways in skin and plasma, with reduction of inflammation
- Strong downregulation of key ITK dependent pathway markers such as:
  - Th2 (e.g., CCL17, CCL24, IL13, TSLP)
  - Th17 (e.g., CXCL1, IL17A, IL6R)
  - TCR (ITK) Pathway (e.g., ITK, IL-13, CD3, ZAP70, LCK, PLCg1)
  - Th1 (e.g., CXCL11, CXCL9, IL2RA, TNF)
  - Fibrosis related markers (e.g., MMP9, TNFRSF9)
- Safety profile and expected incremental increase in PD with greater exposure may support higher dosing in subsequent studies

ATI-2138: The Lichen Planus Opportunity

Mechanistically well matched
JAK3 and cyclosporin provide POC

Important unmet medical need:
White space opportunity



Significant market size
and revenue potential

Regulatory pathways may
allow for **expedited review**

Potential for **cost-effective clinical trial design**

Lichen Planus

An Unaddressed Chronic, Inflammatory, Immune-Mediated Disorder

Lichen Planus

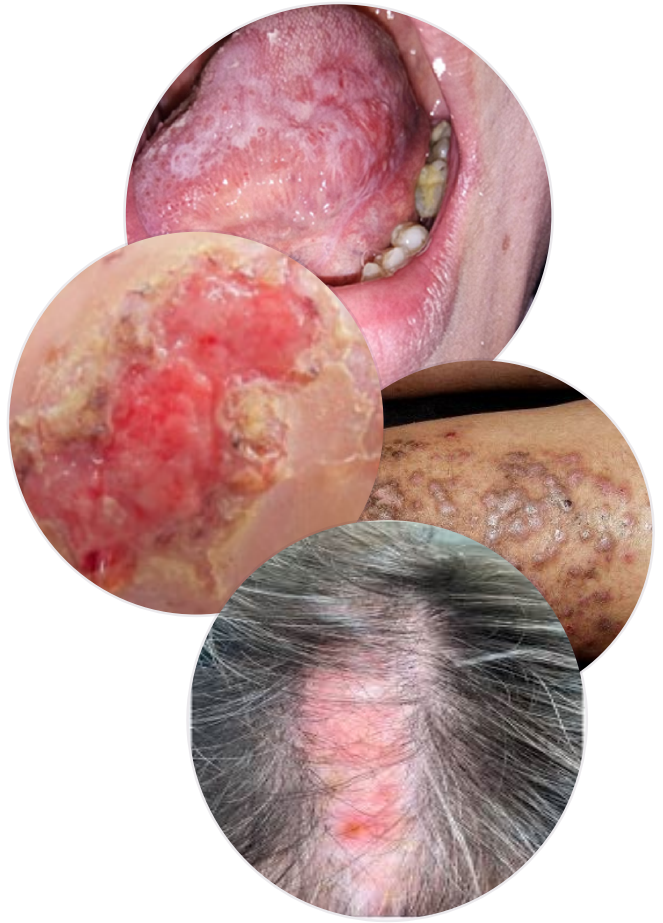
Multiple impactful clinical subtypes
Most common are erosive mucosal (oral), cutaneous, and lichen planopilaris

Typical symptoms are debilitating
Include pain, sores, severe itch, scales/plaques, hair loss, fatigue

Affects quality of life
Anxiety, depression; impact from chronic pain and severe itch

Clinically concerning
Malignant potential in oral lichen planus

Prevalence suggests large opportunity
Impacts 0.1% to 1.0% of the population



Lichen Planus is a Large and Unsatisfied Market

Significant "White Space" US Opportunity

- Prevalence of between 0.1% and 1.0% of the population
  - Up to 40% of patients seek treatment despite no FDA-approved targeted therapeutic interventions
  - ~25% of patients have moderate-to-severe disease
    - Steroid failure rate of up to 60%
- No approved therapy; unsatisfied market
  - Disease management has focused on immunosuppression and topical symptom control (TCS, tacrolimus, etc.)
- Opportunity for biologics-like pricing
- New, targeted therapeutics have the potential to:
  - Increase diagnosis rates and % of patients seeking Tx
  - Provide rapid itch relief; minimize flares
  - Address multi-site disease involvement
  - Provide more practical Tx than topical for widespread lesions

Estimated Peak U.S. revenue potential: $1B - $4B

ATI-2138: Unique "Bispecific-Like" Mechanism

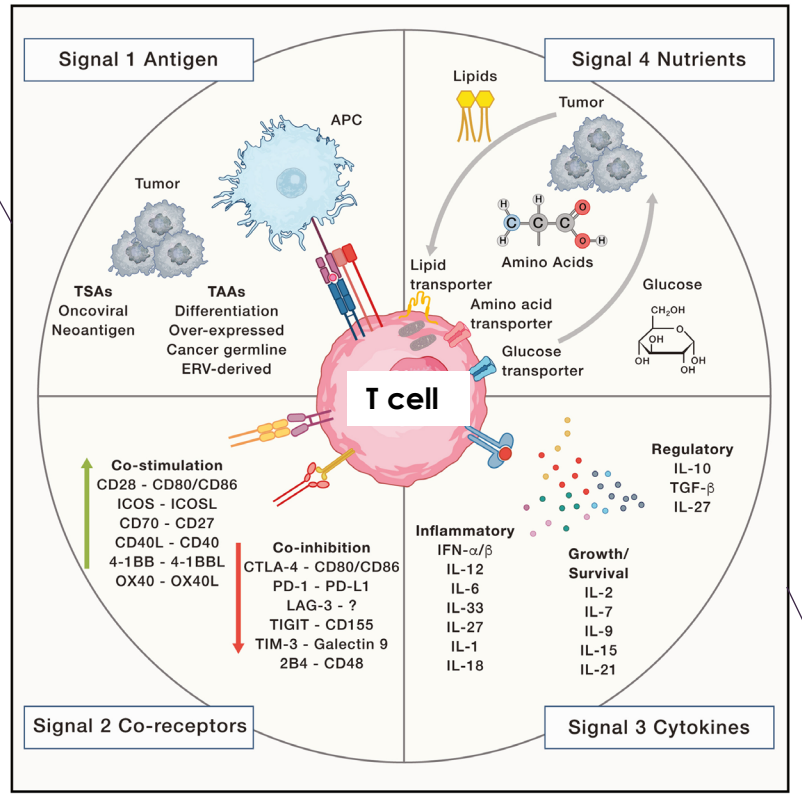
First & Only Known Drug Inhibiting TCR Activation Upstream + Effector Cytokines Downstream

ITK Inhibition

Inhibition of T Cell Receptor (TCR) Signaling (Antigen-Driven; Signal 1)

- Potent inhibition of ITK downstream of the TCR inhibits auto-antigen and allergen mediated T cell activation
- Inhibits cytotoxic destruction of targets by CD8 T cells
- Inhibits production of inflammatory cytokines (IFN-γ, IL-4, IL-13, IL-17, IL-31)

Other JAK inhibitors do not inhibit TCR activation



Modified from Giles JR et al., Immunity, 2023

Inhibition of Cytokine Signaling (Cytokine-Driven; Signal 3)

- Potent inhibition of JAK3 downstream of the IL-2 receptor common γ chain inhibits IL-2, IL-4, IL-7, IL-9, IL-15 and IL-21 signaling
- Inhibits T cell proliferation, activation and survival
- Inhibits cytotoxic activity of CD8 T-cells and Natural Killer cells (NK-cells)

JAK3 Inhibition

ATI-2138 Has the Potential to Be The First Mechanistically Complete Oral Therapy for Lichen Planus

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ATI-2138: Well Positioned in Lichen Planus

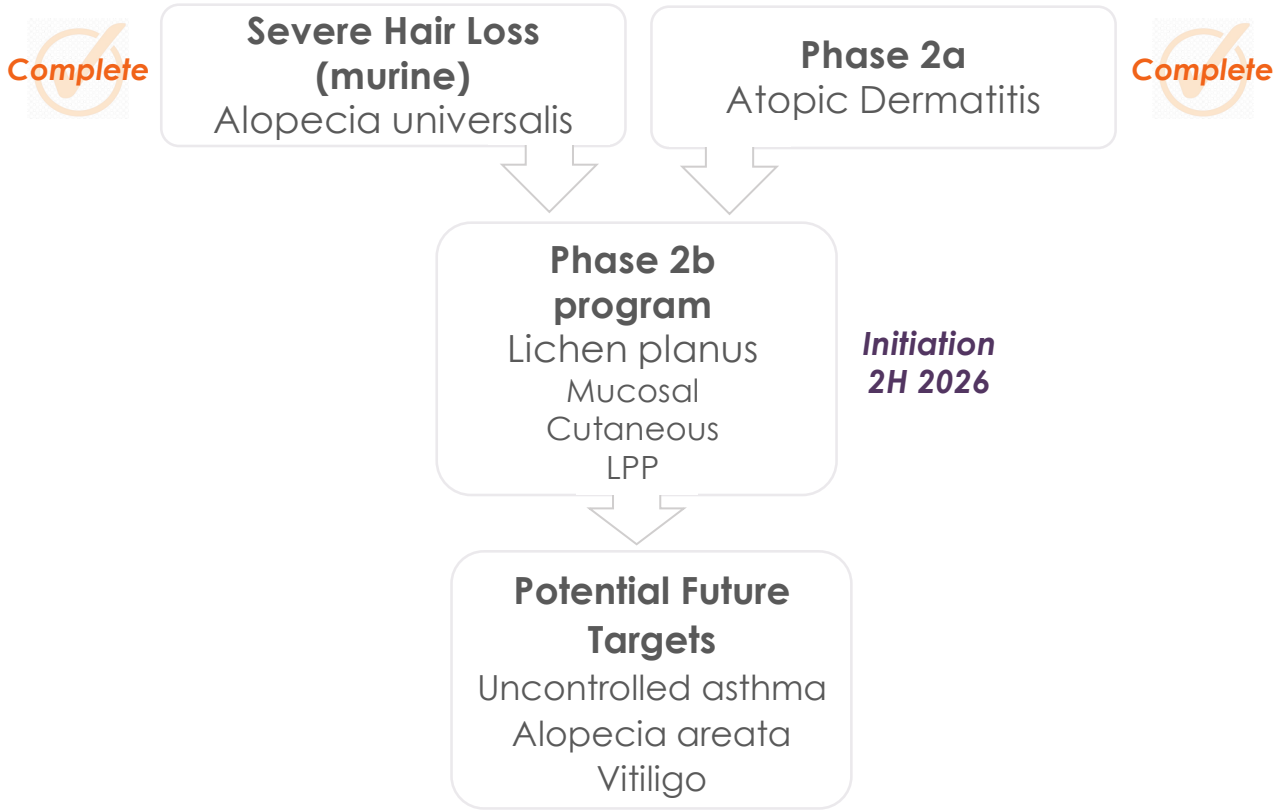
Dual Pharmacology Creates Ideal Mechanistic Fit

	Lichen planus	ATI-2138
Signal 1 *Antigen*	• CD8-driven interface dermatitis; involvement of TCR/T cells • Aberrant activation cytotoxic CD8 T cells • IFN mediated pathology in affected skin	• Modulates TCR signaling and CD8 cytotoxic T cell suppression • Inhibition of IFNy production biomarkers down-stream of IFNy
Signal 3 *Cytokine*	• Cytokine mediated disorder; severe itch associated with IL-31 up-regulation • Fibrosis common	• Inhibits proinflammatory cytokines; significant reductions in itch observed in AD • Strong downregulation of fibrosis markers
	• Th1/2/17 immunology	• Downregulation of Th1/2/17 activation markers
	Efficacy of calcineurin inhibitors in LP supports T-cell mediated pathology; JAK3 and cyclosporin provide additional POC	*Potential for broad/deep efficacy in LP; may address root inflammation and symptomology*

CLINICAL STRATEGY

ATI-2138: Next Steps

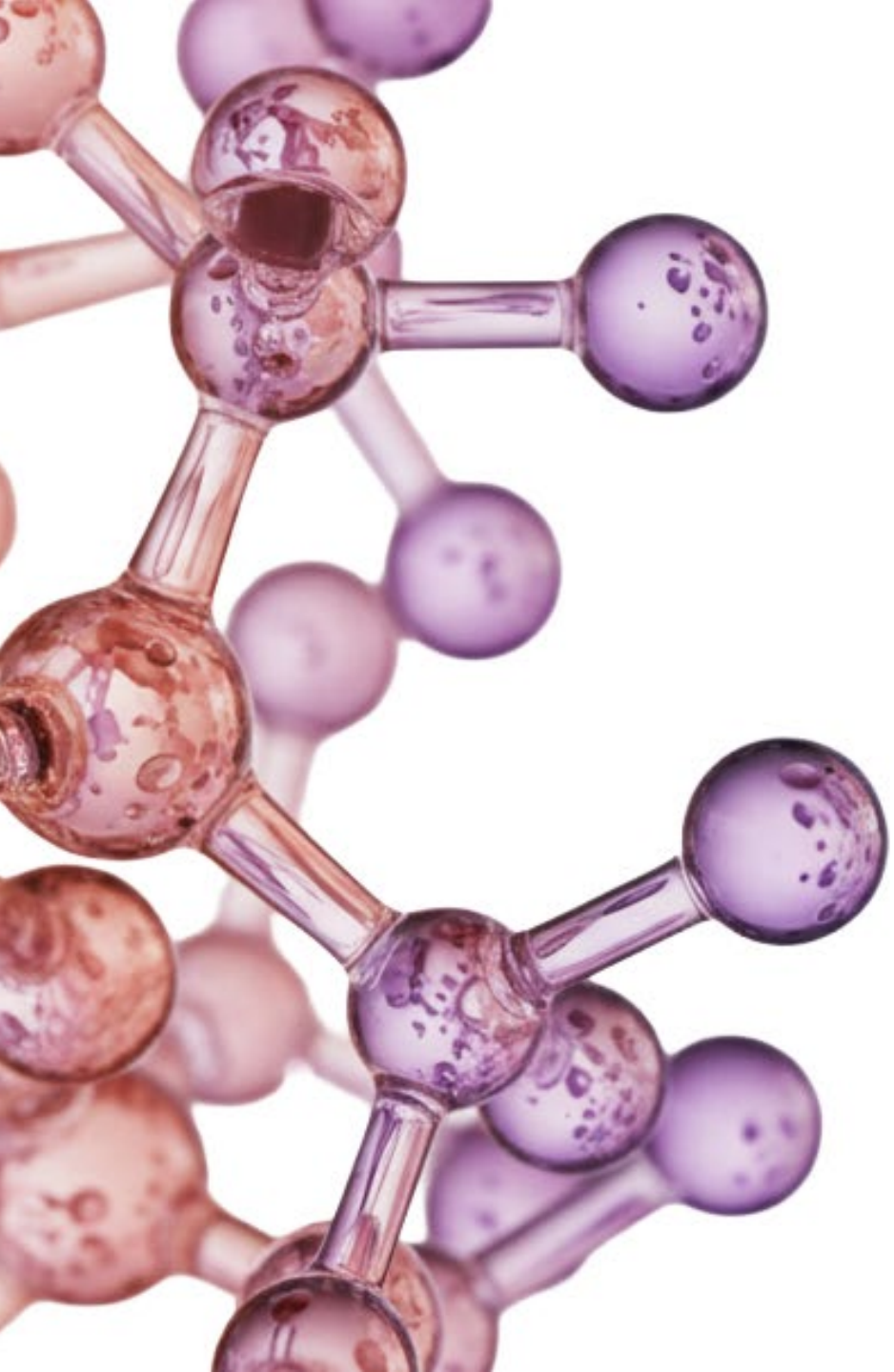
Mechanistically Fit for Lichen Planus and Other I&I Disorders



Ongoing / Next Steps

- Lichen planus selected as Phase 2b indication
- Initiate Phase 2b trial in 2H 2026
- Complete assessment of additional targets

 All future development, clinical, and regulatory timelines are expectations, are based on current beliefs and assumptions, and are subject to change based on a variety of factors



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Next Generation JAK-Sparing ITK Inhibitors

Novel Selective Inhibitors Designed to Limit JAK Inhibitory Activity

Next Generation JAK-Sparing ITK Inhibitor Program

ATI-9494 Progressing Toward IND

- Developing highly potent JAK-sparing compounds; significantly more efficient at inactivating ITK than CPI-818
- Extended half life compared to comparator molecules
- Potent blockade of Th2 function and differential modulation of Th1 activation
- Opportunity for total ITK occupancy at low doses without impacting JAK3 function

Lead ITK inhibitor candidate ATI-9494 (ITK/TXK)

Targeting IND in 2H 2026

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Significant Market Available for Next Gen ITKi

	Potential Indications	Approved Inhibitors	Select TAMs*
ITK/TXK Potentially beneficial in Th1, Th2, and Th17-driven diseases	• Psoriasis • Celiac disease • IBD • Alopecia • SO Transplant Rejection • Eosinophilic esophagitis • Vitiligo • Prurigo nodularis	IL-4R: Dupixent® (dupilumab) IL-13: Ebglyss® (lebrikcizumab) Adbry® (tralokinumab) IL-31R: Nemluvio® (nemolizumab) IL-17A: Cosentyx® (secukinumab) Taltz® (ixekizumab) Bimzelx® (bimekizumab) Siliq® (brodalumab) JAK1: Oluminant® (baricitinib) Renvoq® (upadacitinib) Cibinqo® (abrocitinib) JAK1/2: Opzelura® (ruxolitinib) JAK3: Litfulo® (ritlecitinib)	Psoriasis: $60B Asthma: $36B COPD: $31B Atopic dermatitis: $31B Rhinitis: $19B Alopecia areata: $7B CSU: $6B EoE: $5B Vitiligo: $3B Prurigo nodularis: $2B
ITK Potentially beneficial in Th2-driven atopic and allergic diseases	• Asthma • COPD • Atopic Dermatitis • Rhinitis • CSU • Others		

*TAM=Total Addressable Markets: Estimates, 2028-2034

Sources: Eczema stats: National Eczema Association (accessed 07/31/25); National Alopecia Areata Foundation (Accessed 07/31/25); Vitiligo Facts: Global Vitiligo Foundation (accessed 07/31/25); Precedence Research; Forbes Business Insights; American Medical Association; American Lung Association; Global Initiative for Asthma; World Health Organization; The Centers for Disease Control and Prevention (CDC); Business Research Company; peer research; Delveinsight; Cowen Categories Outlook 2024

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Company Summary

Commitment to Patients

Focus on addressing the needs of patients with immuno-inflammatory diseases who lack satisfactory treatment options

State-of-the-Art Discovery Platform

Integrated approach to small and large molecule discovery enables targeted design of novel product candidates from concept through lead optimization

Diversified Pipeline

Executing on multiple therapeutic programs from discovery to clinical development

Multiple milestones expected in 2026 and beyond

Executive Team

Proven track record of R&D, business development, and scientific leadership in immuno-inflammatory diseases

Intellectual Property

Global IP estate

Financial Strength

Cash, cash eq., and marketable securities as of March 31, 2026 of $191M

Provides expected cash runway through end of 2028*

* Without giving effect to additional business development transactions, financing activities and trial execution costs associated with trials in our pipeline as notated as in planning

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Corporate Overview

May 2026

EMPOWERING PATIENTS THROUGH

THERAPEUTIC INNOVATION