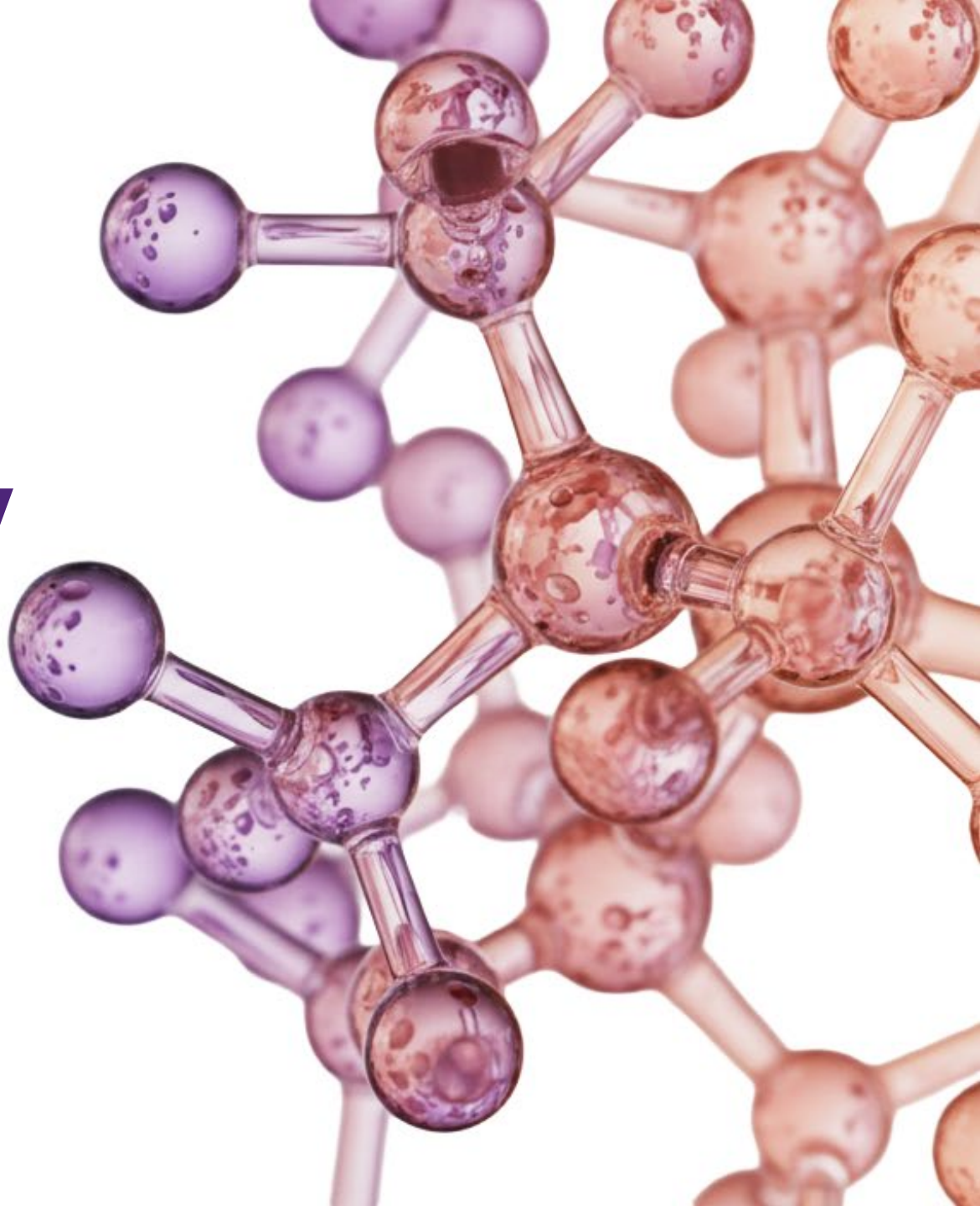
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Corporate Overview

August 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, modzatinib (ATI-2138), ATI-9494 and other 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. 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 preclinical and 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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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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Multiple Best-in-Class Opportunities. Three Data Readouts in 2026.

One Well-Funded Story.

Program | Validated Mechanism	Innovation | Competitive Advantage	2026 Expected Catalyst
Bosakitug (ATI-045) *Anti-TSLP MAb | Validated target* *TSLP: Master regulator of inflammation*	70x more potent than tezepelumab. 20–100x longer residence time on TSLP than comparators. Extended dosing potential.	Phase 2 topline results Atopic dermatitis **4Q 2026**
ATI-052 *Bispecific anti-TSLP/IL-4Rα | Combines two blockbuster mechanisms in one molecule*	4x more potent than dupilumab + tezepelumab combined. Quarterly dosing potential. $16B+ in annual sales in the mechanisms it targets.	Initial Phase 1b POC topline results Atopic dermatitis & asthma **2H 2026**
Modzatinib (ATI-2138) *ITK/JAK3 inhibitor | Inhibits TCR activation upstream + effector cytokines downstream*	Up to 44x more potent than ritlecitinib. 15–38x more potent than soquelitinib. Potential extended half-life advantage over both.	Phase 2b initiation: Lichen planus (zero approved therapies) **4Q 2026**
ATI-9494 *ITK/TXK inhibitor | Most potent ITK-selective inhibitor in development*	Designed for QD administration. Step-change gains in potency and ITK inactivation efficiency vs. soquelitinib (CPI-818).	IND submisson **4Q 2026**

$210M
Pro forma cash position* (6/30/26)

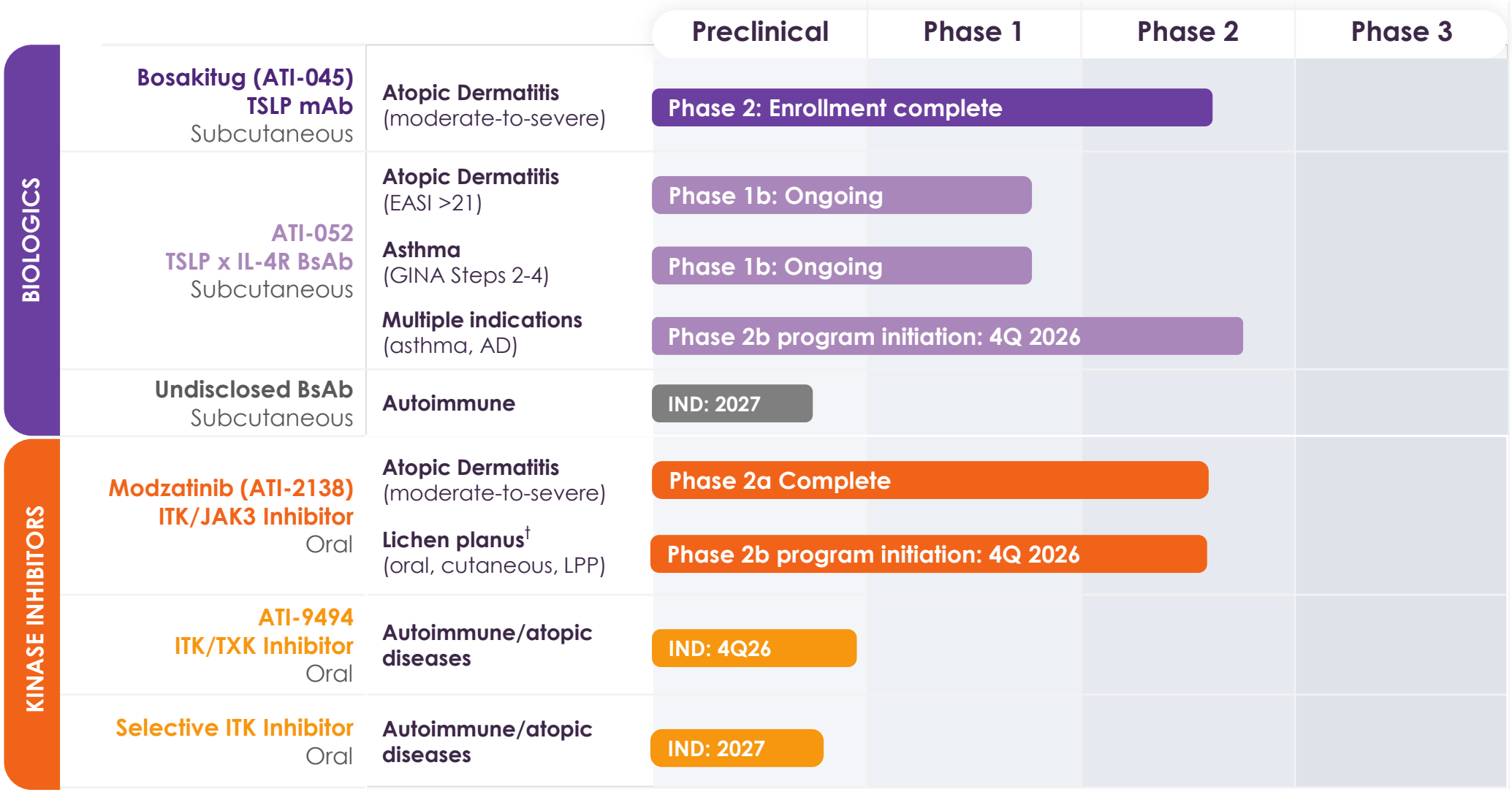
2028
Planned operations funded through 2028

5
Clinical & regulatory catalysts in 2026

* Cash position = cash, cash eq., and marketable securities; Pro-Forma: Includes cash position of $171M as of 6/30/26 + $40 million of gross proceeds from ATM sales in July 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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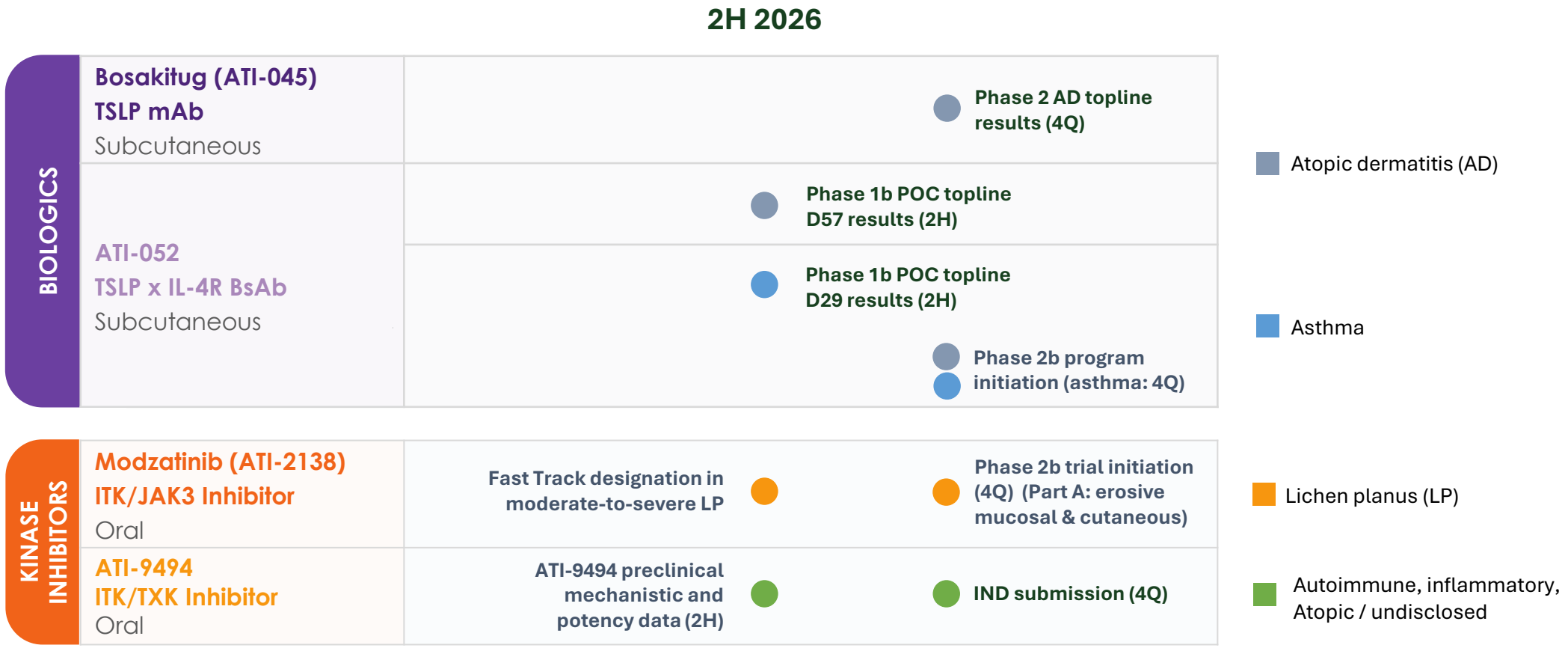
Diversified I&I Development Pipeline



† Fast Track designation in moderate-to-severe lichen planus

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

2H 2026: Key Near Term I&I Catalysts



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

Substantial Opportunities in I&I for Innovative Drugs

Dual Approach to Addressing Significant Gaps in Unsatisfied I&I Indications

Opportunities for Kinase Inhibitors

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

Opportunities for Biologics

- Potential first line therapy
- Higher efficacy ceiling
  - Faster onset, improved symptom control, durable, deeper, and more consistent effect
  - Improved ability to address breadth of inflammatory mediators involved in Th2 diseases
- Improved convenience + practical dosing schedule
  - Potential for extended dosing

Leveraging validated biology and optimized drug design
to target Th1, Th2, and Th17 pathways

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Over 1B People Live with Addressable I&I Diseases

		U.S. Patients	Global Patients
Dermatology	Atopic dermatitis (AD)	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

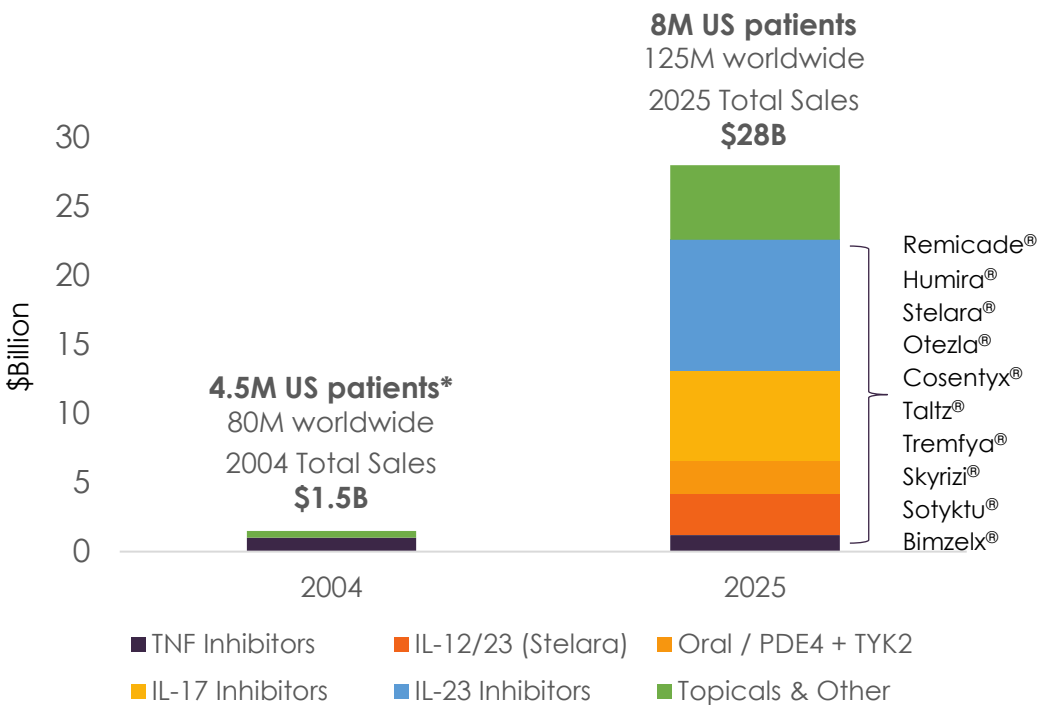
COPD = Chronic obstructive pulmonary disease; IBD = Irritable bowel syndrome; EOE = Eosinophilic esophagitis

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.

Market Expansion Over Time

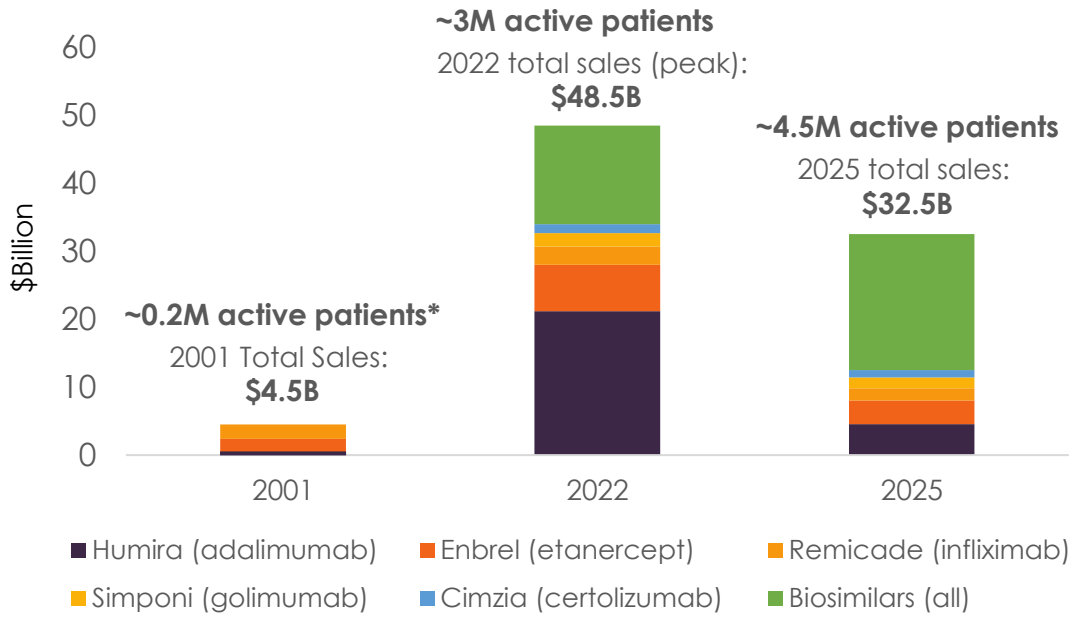
New Entrants Drive Significant Market Growth and Rapid Adoption

Evolution of Psoriasis Market



*Estimates of diagnosed patients, per year

Evolution of TNFα Market



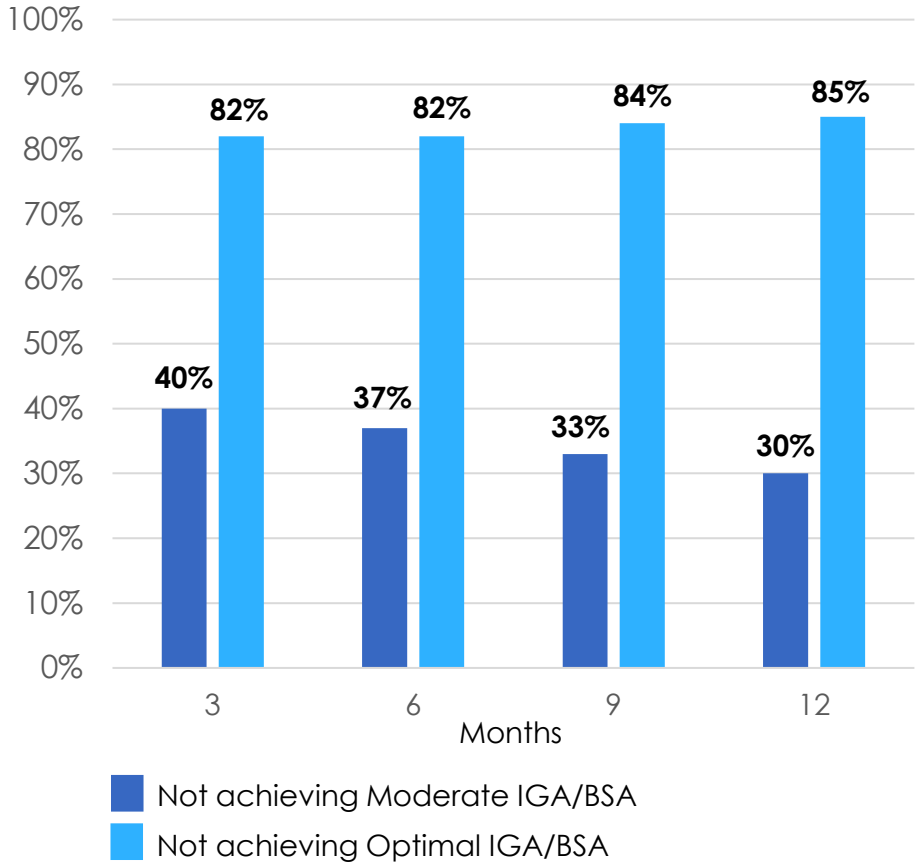
*Estimates of actively treated patients worldwide, per year

References: Drug and Device World, Managed Healthcare Executive, Nova One Advisors, Coherent Market Insights, Accio, Grand View Research, DORA, Research and Markets, DelveInsight, The American Journal of Managed Care, National Psoriasis Foundation, Government data, industry news, SEC filings, analyst reports

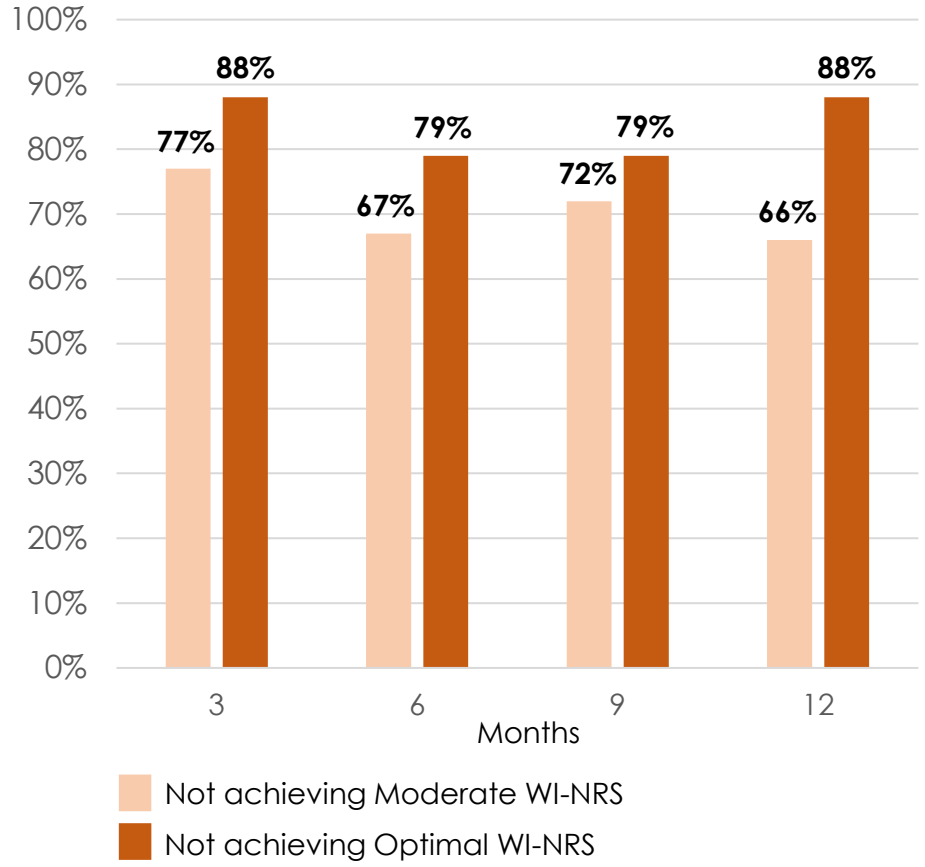
Therapeutic Inertia in I&I Indications Like AD

Lack of Optimal Symptom Control Provides Significant Opportunity for Novel Therapies

Percentage of AD patients not achieving treatment targets for skin clearance



Percentage of AD patients not achieving treatment targets for Itch



Most AD patients do not achieve optimal symptom control with first advanced systemic therapy

Adapted from Eichenfield, L. *et al.,* Persistent Inadequate Disease Control and Therapeutic Inertia in Moderate-to-Severe Atopic Dermatitis: A 12-month Longitudinal Analysis of Real-world Outcomes from the TARGET-DERM AD registry; 2024

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Targeting TSLP with Potential Best-in-Class Biologics

Bosakitug (ATI-045) and ATI-052

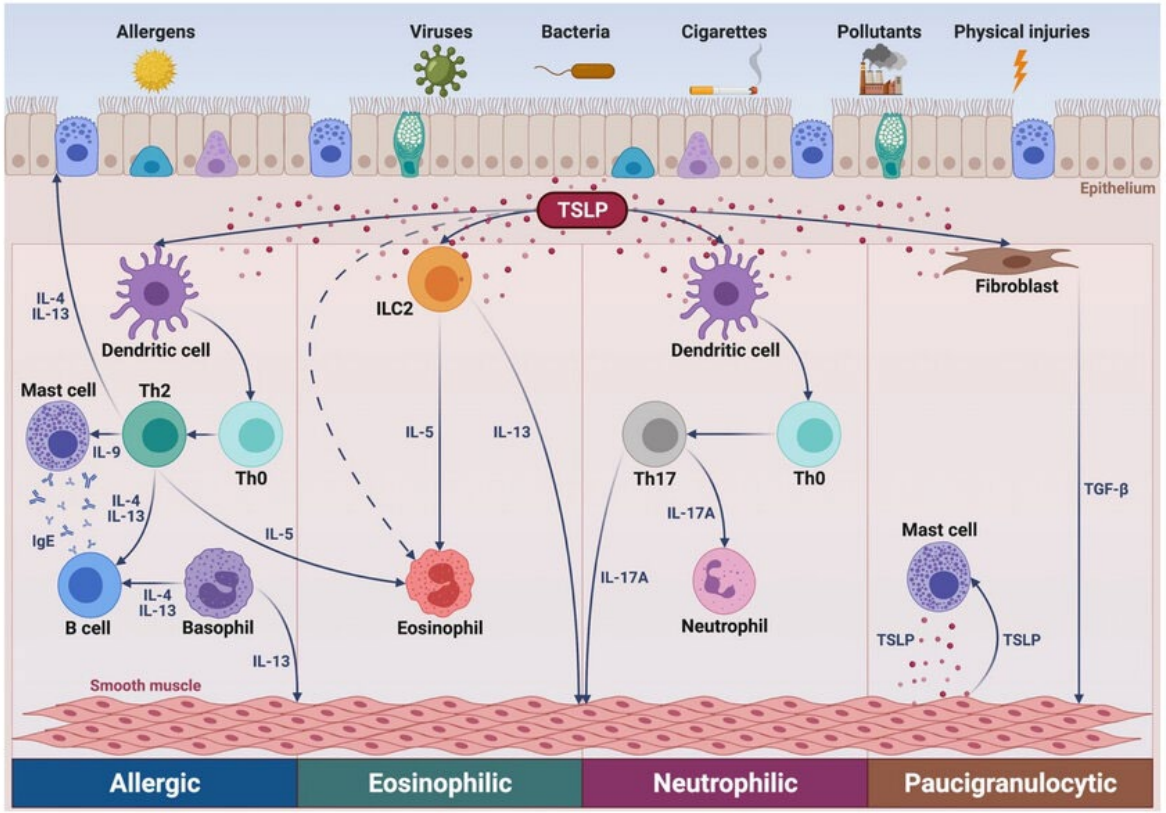
Atopic, Respiratory and Immune-Mediated Disorders

Targeting Thymic Stromal Lymphopoietin (TSLP)

Master Regulator of Inflammation and Immune Response

TSLP: Master upstream regulator of inflammation

- At the barrier surfaces of skin and the respiratory/ GI tract
- **Drives eosinophilic and neutrophilic inflammation** and acts on a wide variety of adaptive, innate, and structural cells
- **Drives disease in AD and asthma**: TSLP expression is elevated in the skin of AD patients and the airway epithelium of asthma patients; **validated as a causal driver in both**, with applicability across multiple other I&I indications
- **Proven biology with clinical precedent:** Tezepelumab (anti-TSLP) approved in asthma; validates the target across heterogeneous patient populations including non-Th2 phenotypes
- **Bosakitug and ATI-052 are designed to go further**: αTSLP interface uniquely spans from TSLP N-terminus to C-terminus; ATI-052 combines TSLP and IL-4Ra blockade for potential first-line efficacy in AD and asthma

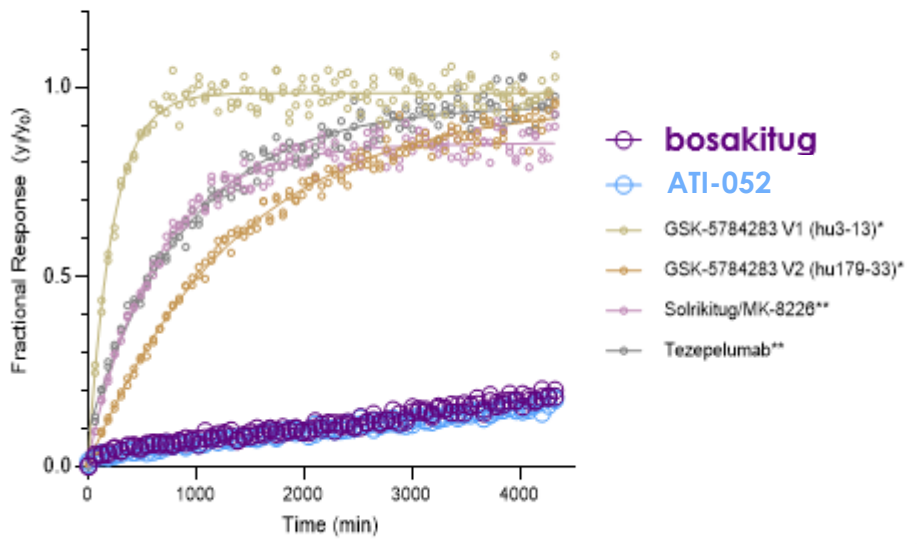


Adapted from Pelia *et al.*, Int J Mol Sci. 2021 Apr 22;22(9):4369

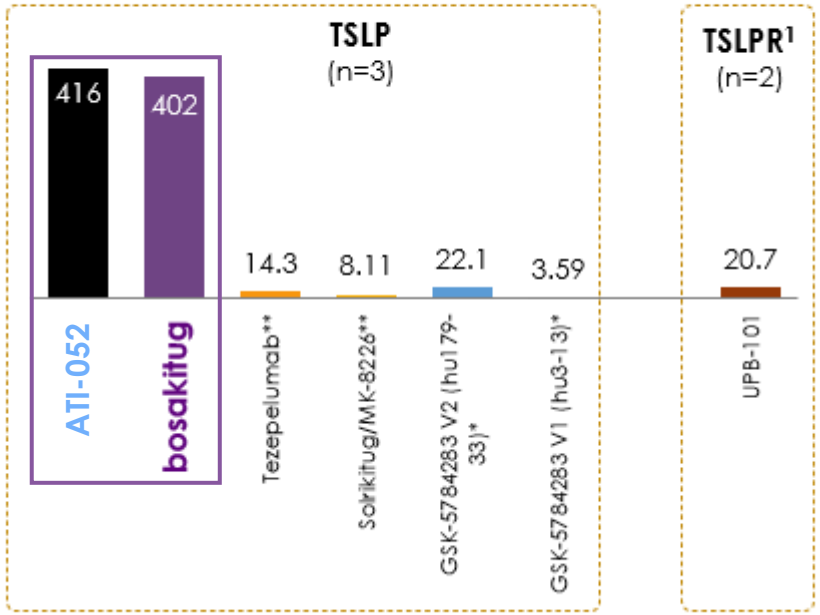
Bosakitug and ATI-052: Long Residence Time

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

Dissociation of TSLP from mAbs (TR-FRET)



Residence Time (Hours)



Bosakitug and ATI-052 demonstrate very slow dissociation kinetics from TSLP

Residence time for Bosakitug and ATI-052: ~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

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

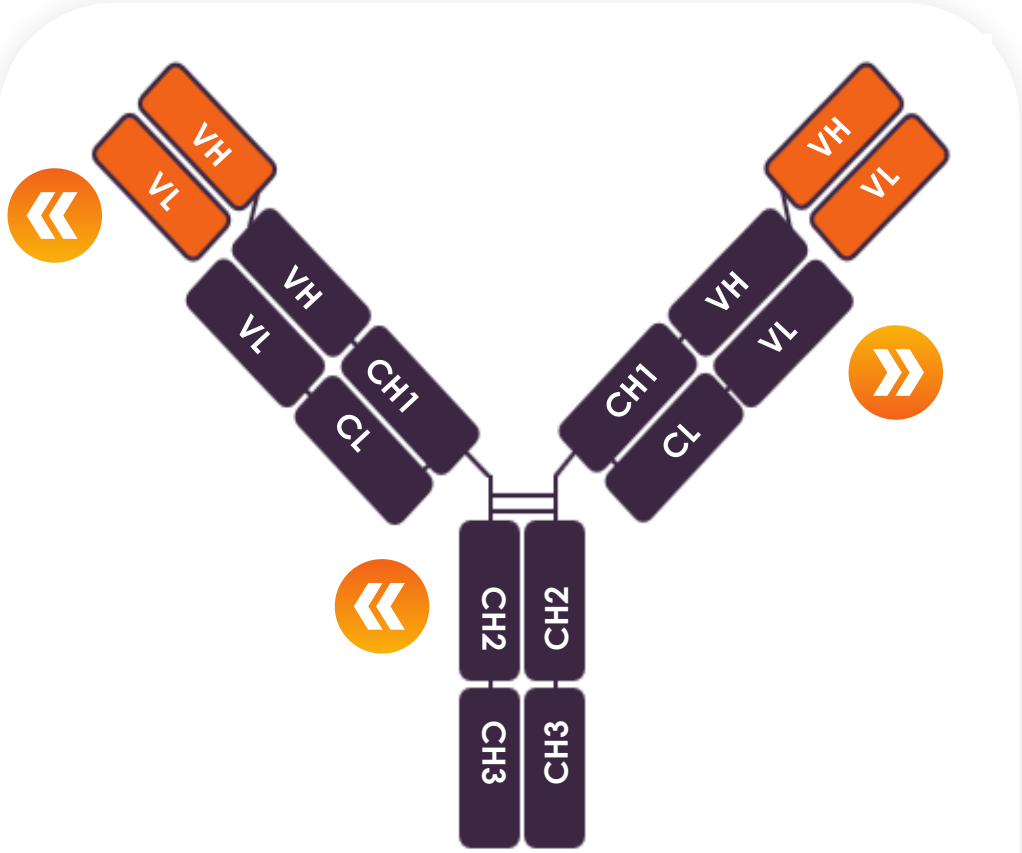
Effective Dual Binding of TSLP and IL-4Rα Provides First-Line Potential

Binds Anti-IL4Rα

Designed to inhibit immune cells <u>downstream</u> of the Th2 cascade

YTE Mutation

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



ATI-052

Binds Anti-TSLP

Designed to inhibit TSLP <u>upstream</u> of the Th2 cascade

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

Extensive Binding Interface

Binds all 6 light & heavy chain CDRs

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

High affinity for both TSLP & IL-4R

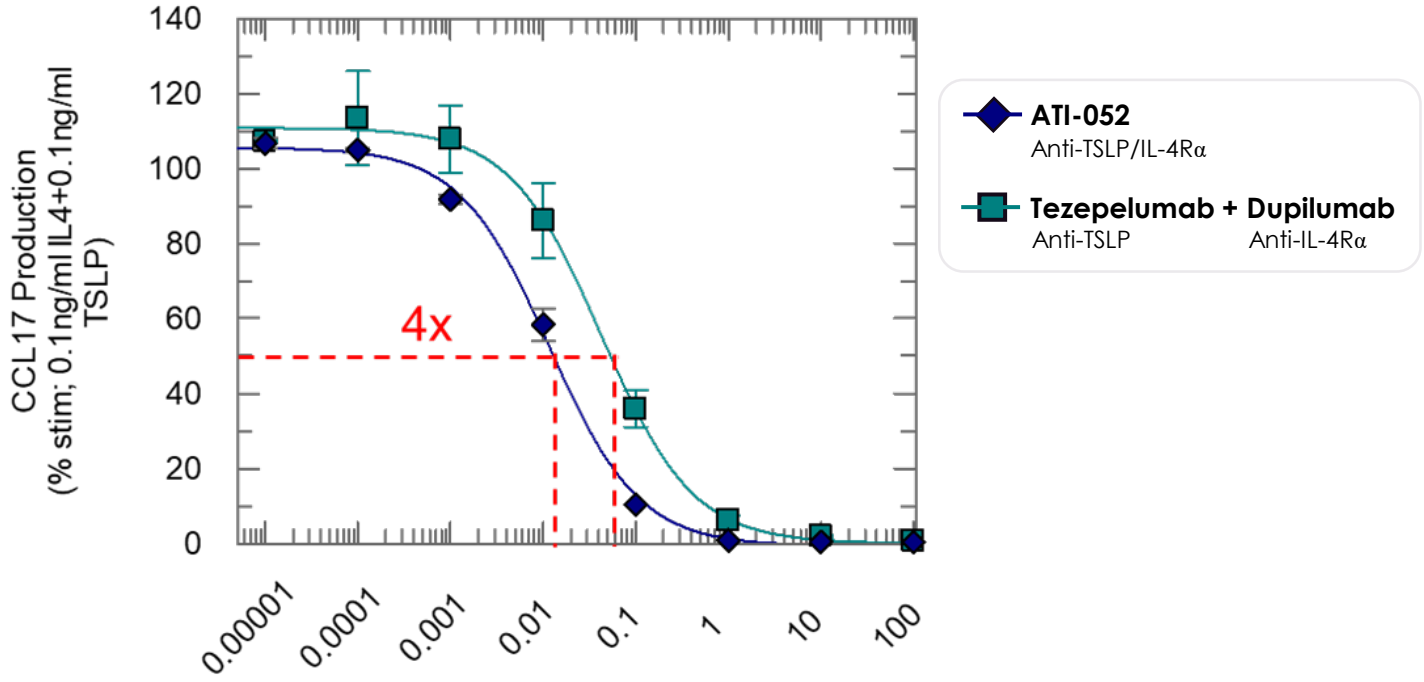
Can saturate all four independent binding sites **simultaneously**

Binding to one target does not affect affinity for the other

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ATI-052 vs Dupilumab + Tezepelumab

ATI-052 Demonstrates Greater Potency than mAb Combination

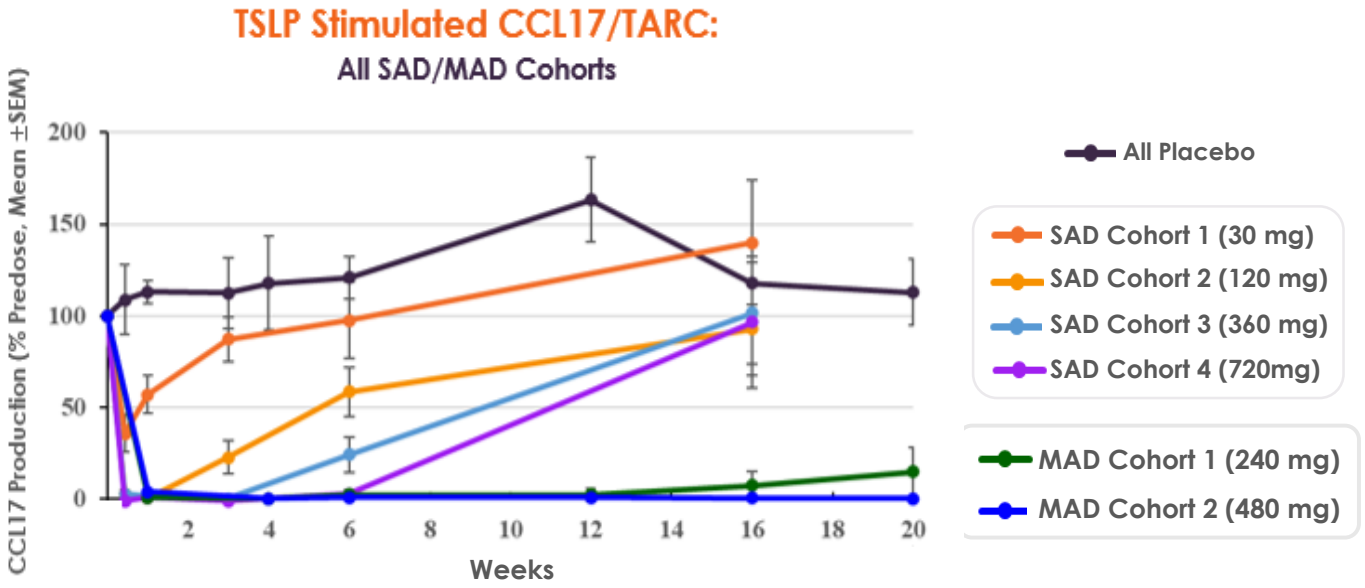


ATI-052 Combines Two Validated Blockbuster Mechanisms: Potential to Raise Efficacy Ceiling

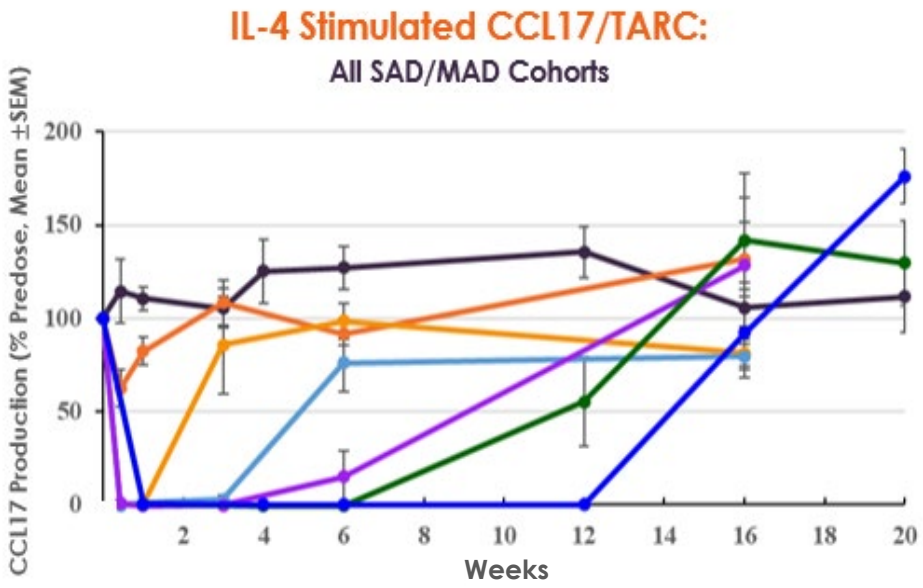
Substantially More Potent than Combination of Dupilumab and Tezepelumab

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ATI-052: Potential Extended Dosing



Sustained, complete / near complete inhibition observed for **at least 20 weeks at 240 and 480 mg MAD dose**



Sustained, complete inhibition observed for **at least 12 weeks at 480 mg MAD dose**

45-Day Half-Life[1] + Sustained Inhibition Beyond PK Profile
Provides Potential for Every 3-Month Dosing

1, Estimation based on accumulation ratio at 240 mg weekly dosing

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 profile maintained across cohorts (no ADA concerns)

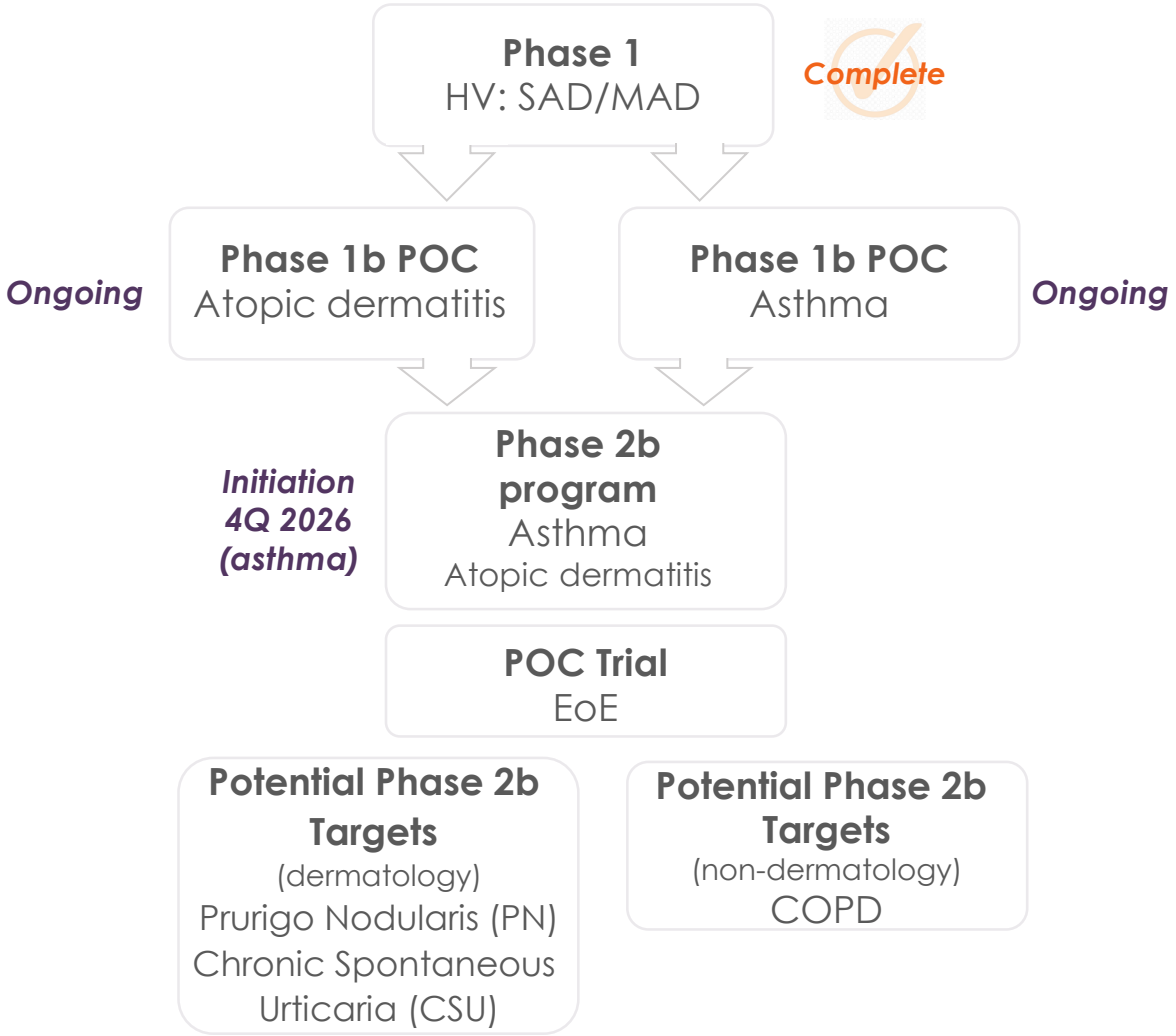
Favorable tolerability and safety profile
demonstrated across all ATI-052 SAD and MAD cohorts

ADA=Anti-drug antibody

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ATI-052: Next Steps and Near-Term Catalysts

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



Ongoing / Next Steps

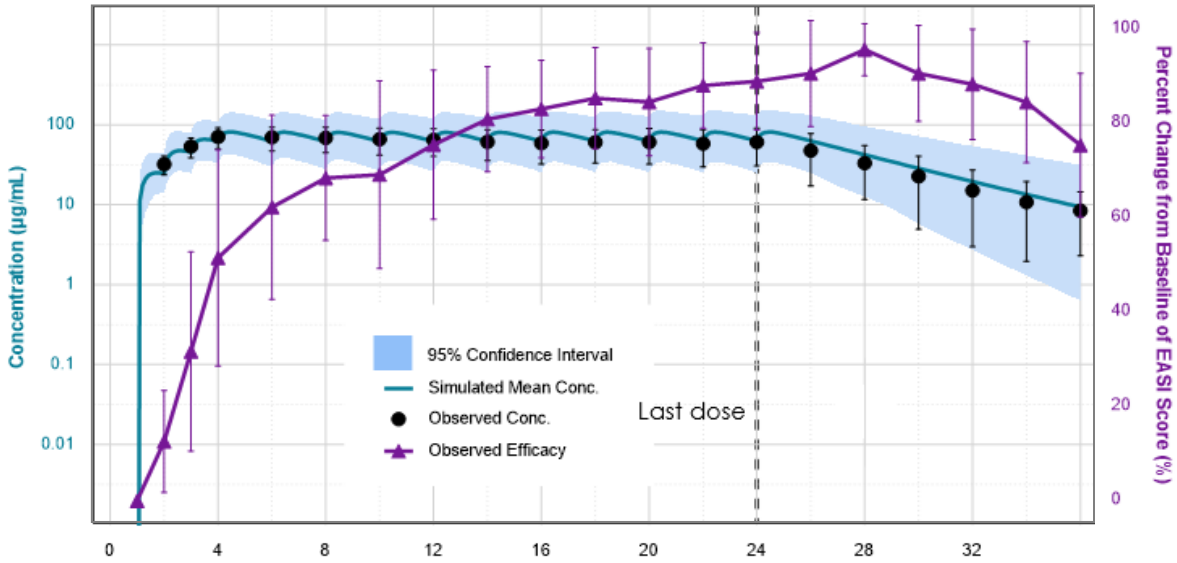
- Phase 1b Asthma and AD POC trials ongoing; dosing underway
- **Phase 1b top line POC results: 2H 2026**
- **Initiate Phase 2b program (initial target = asthma): 4Q 2026**

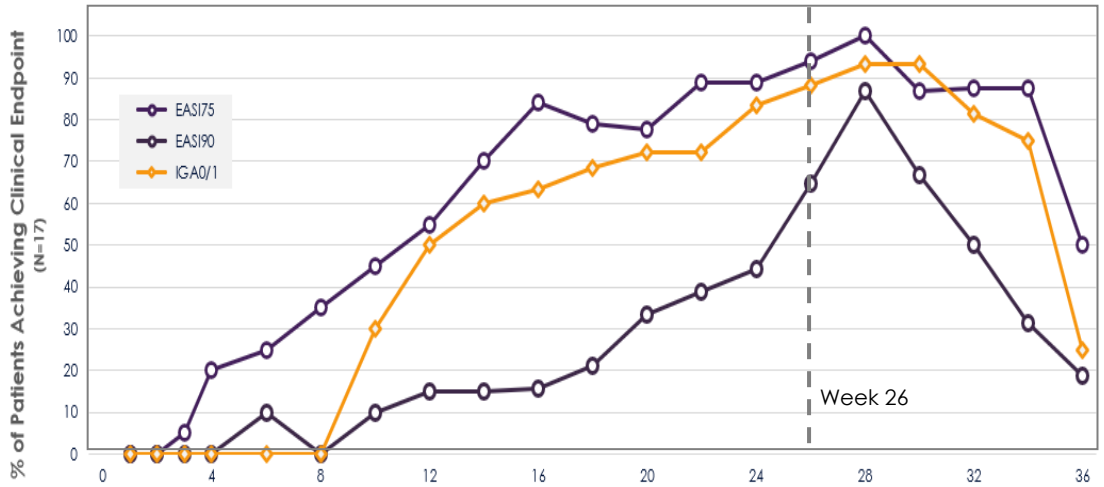
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Bosakitug: Improvements in Efficacy Measures

Validates Potential Best-in-Class Potency

- Significant improvement in disease severity (EASI)
- Sustained response after last dose (week 24)
- Favorable safety and tolerability profile
- 23-day half life and durable response potentially support extended dosing schedule





Week 26 results
2 weeks after last dose

94% EASI 75

65% EASI 90

24% EASI 100

88% IGA 0/1

Bosakitug: Next Steps and Near-Term Catalysts

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

- 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 and for combination therapy

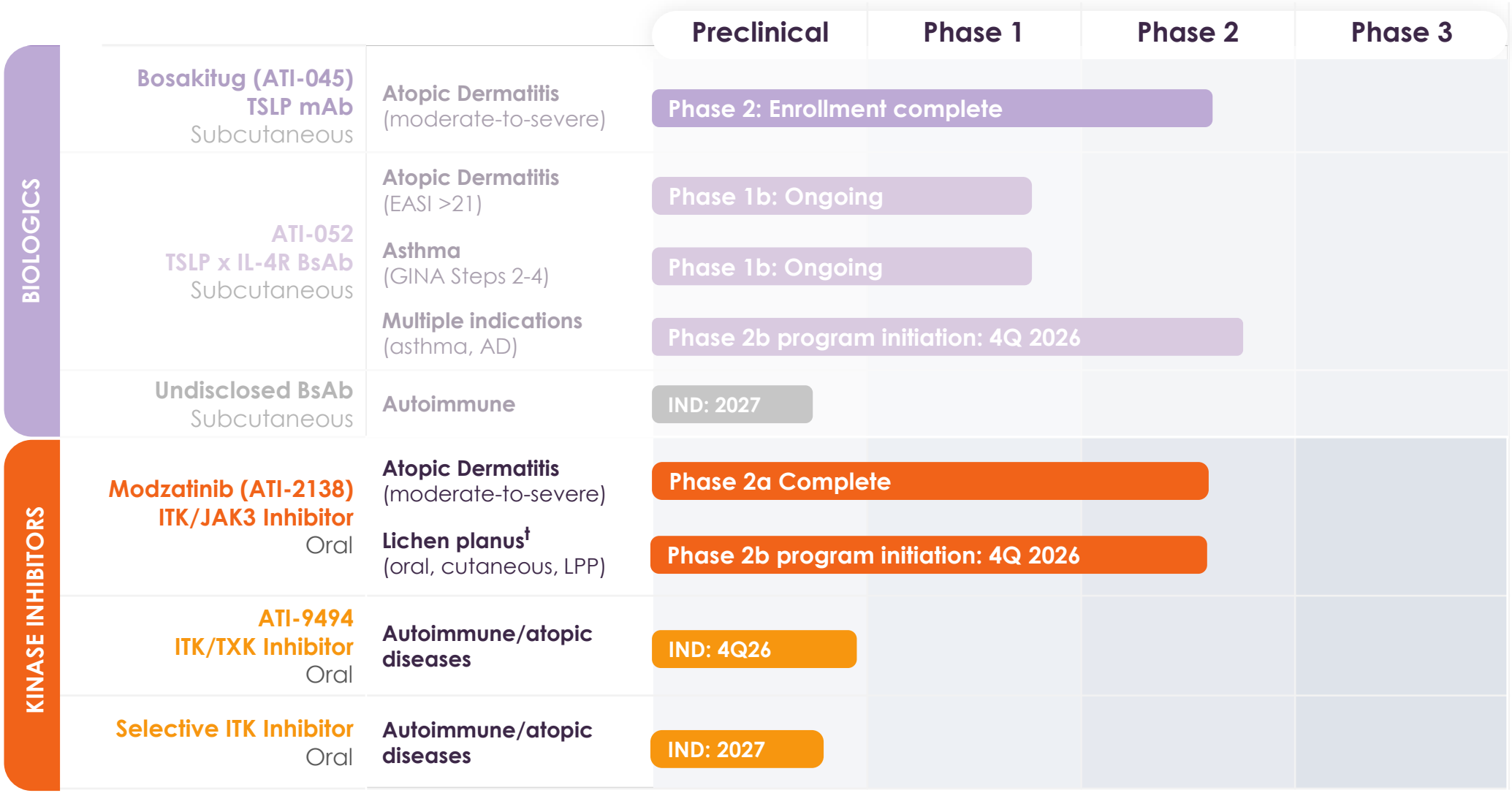


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Targeting ITK with Novel Potential Best-in-Class Oral Inhibitors

Modzatinib (ATI-2138)
and Selective ITK Inhibitors

Diversified I&I Development Pipeline



† Fast Track designation in moderate-to-severe lichen planus

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ITK Inhibition: Important in I&I Pathways

Comparative Impact of ITK Inhibition Validates Potential Broad Applicability

- ITK is a nonredundant kinase downstream of the T-cell receptor (TCR)
- Drives the differentiation, proliferation and activation of T_H1, T_H2 and T_H17 cells

	Th1		Th2				Th17			CD8 Cytotoxic T Cells	
	IFN γ	IL2	IL4	IL5	IL13	IL31	IL17	IL21	IL22	IFN γ	Granzyme B
ITK Inhibitor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
STAT6 Degrader			✓		✓						
αIL-4R			✓		✓						
αIL-13					✓						
αIL-17							✓				
αIL-31R						✓					

Blockade of ITK impacts a wide range of T-cell mediated diseases
including allergy, asthma and autoimmunity

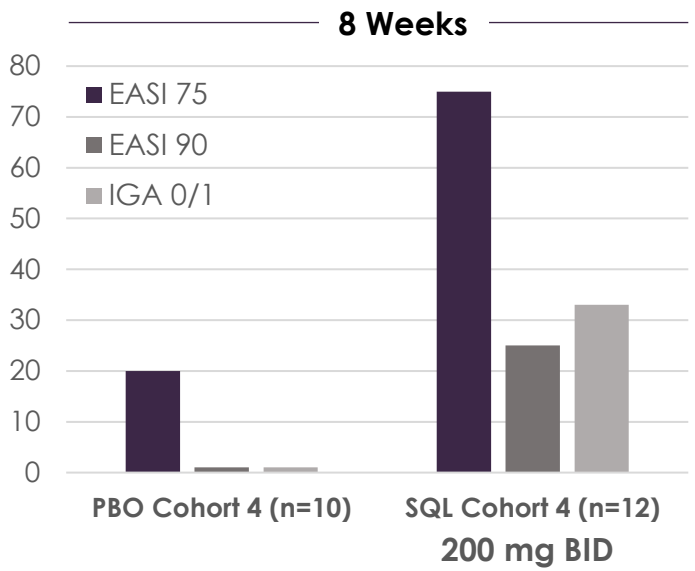
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ITK Validated as Therapeutic Target

Potential for Best-in-Class Positioning of Aclaris ITK Inhibitors

Therapeutic Potential of ITK clinically validated:

Soquelitinib (CPI-818)



Corvus Pharmaceuticals: June 3, 2026

Aclaris ITK Franchise

Highly Differentiated, Best-in-Class Potential

Higher Potency

Provides more efficient target occupancy at lower doses

Modzatinib and **ATI-9494:** **10-100x more potent** than soquelitinib

Lower Drug Burden Mitigates Risks

Modzatinib: 10mg BID resulted in positive Phase 2a results in AD and near complete ITK target occupancy

Soquelitinib: 200 mg BID

Optimized Dosing Schedule

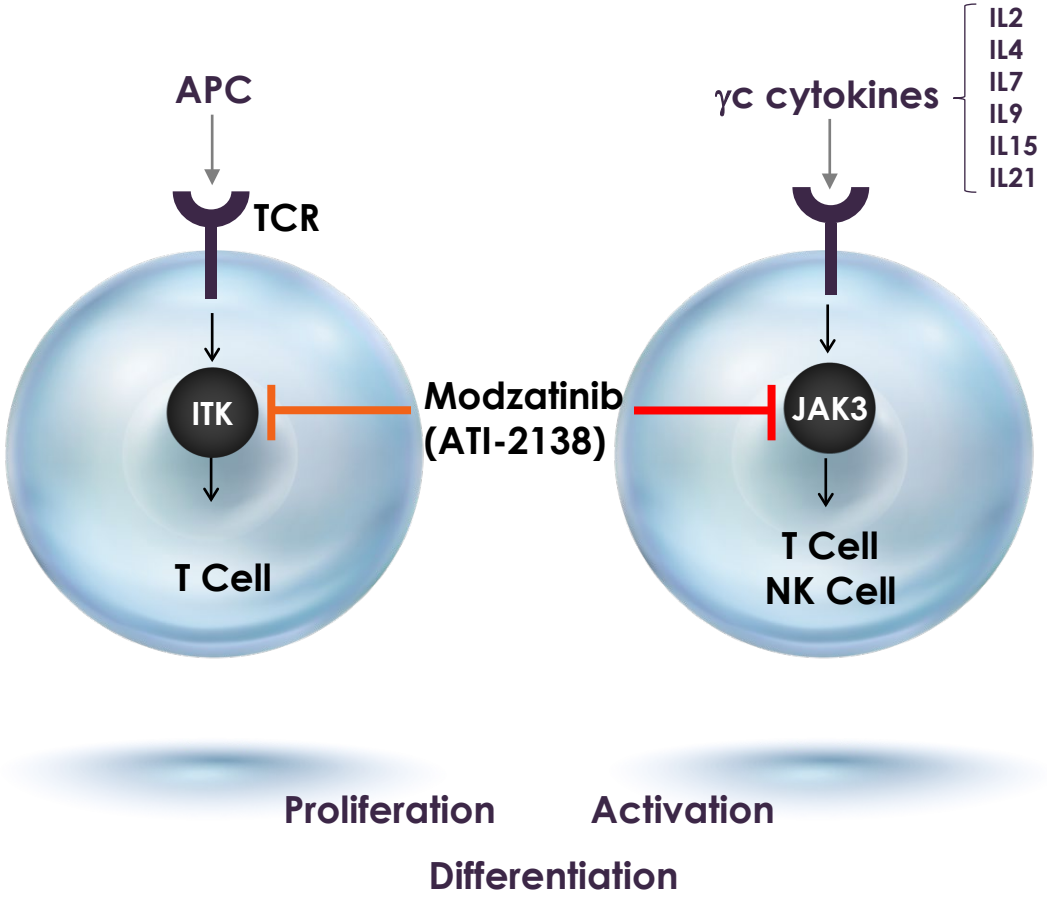
Modzatinib: Potential for once daily dosing

ATI-9494: Potential for once daily dosing

Modzatinib (ATI-2138)

Oral Small Molecule Covalent ITK & JAK3 Inhibitor for I&I Disease

- Unique dual pharmacology with best-in-class potential; provides mechanistic match for diseases like lichen planus
- Investigational oral compound that interrupts T cell receptor (TCR) signaling by inhibiting ITK and common γ chain cytokines in lymphocytes by inhibiting JAK3
- Highly potent for both ITK and JAK3 (IC_{50}: 0.2nM ITK; 0.5nM JAK3)
- > 1,000x selective against JAK1, JAK2 and TYK2
- Clinical data thus far demonstrate favorable safety and PK characteristics; positive readout in a Phase 2a AD study
- Fast Track designation granted in moderate-to-severe lichen planus including oral erosive LP, cutaneous LP, and lichen planopilaris (August 2026)



Compelling Efficacy Results in Atopic Dermatitis

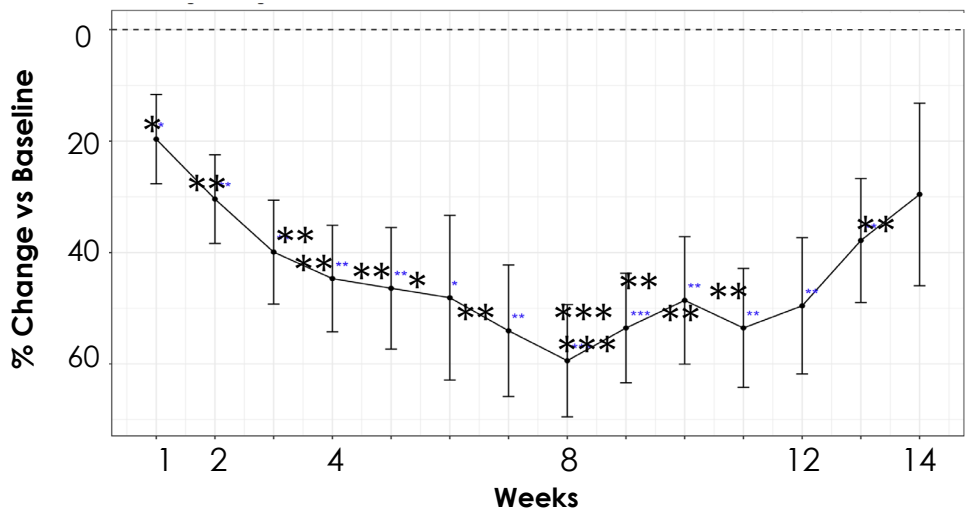
Week 12: 61% mean improvement in EASI score (median = 77%)

Rapid response after four weeks of Tx*

- **BSA** ⬇ **64%** (p<0.001)
- **EASI** ⬇ **77%** (p<0.001)
- **PP-NRS** ⬇ **45%** (p<0.01)
- Statistically significant changes sustained through study treatment

*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.

Mean Change in PP-NRS*



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

*=Change from Baseline: + : p<0.1 * : p<0.05 ** : p<0.01 *** : p<0.001

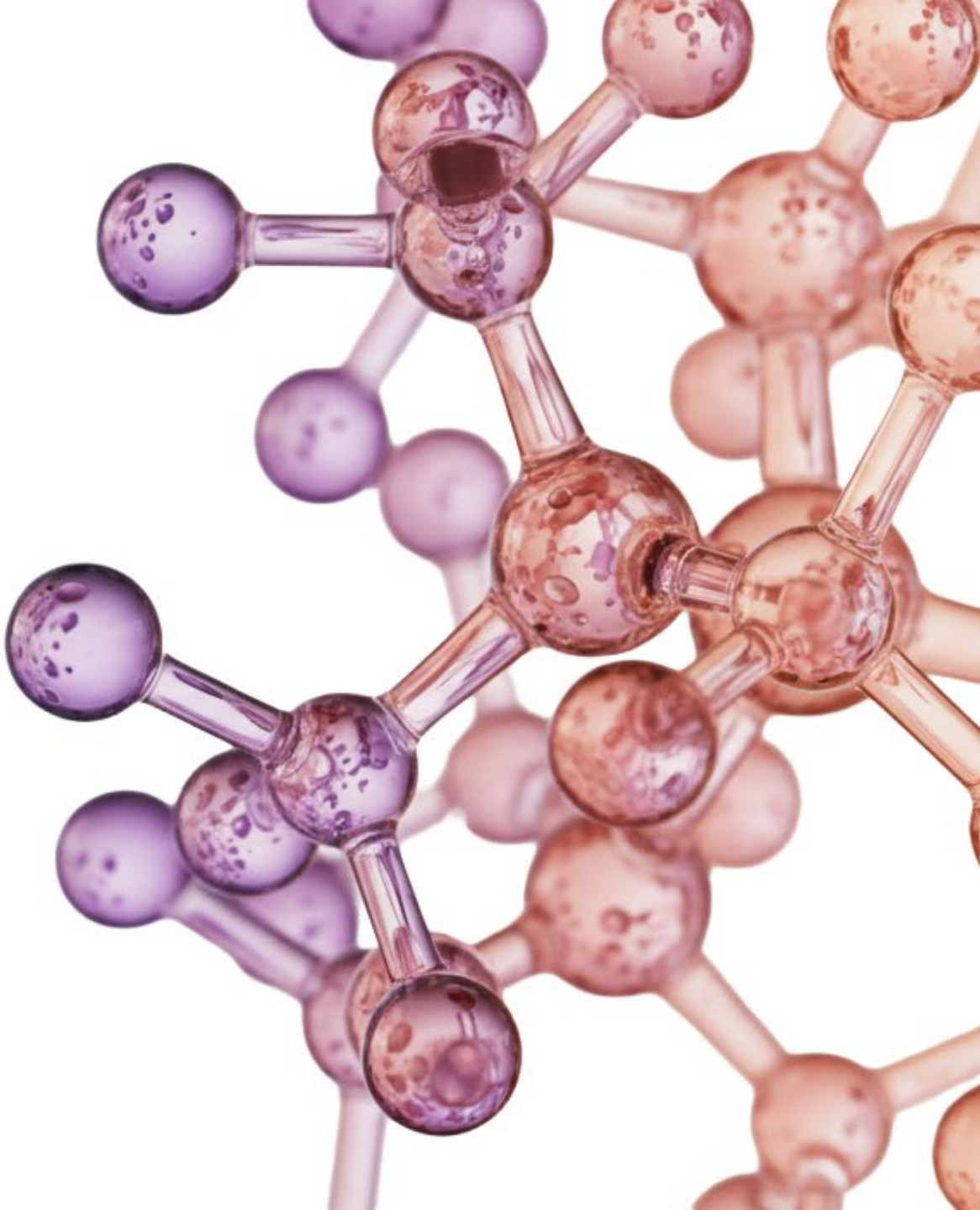
Efficacy Results Demonstrated Strong + Consistent Response to Modzatinib

Significant Itch Relief + Improvements in Disease Severity and Extent

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Lichen Planus and Unmet Medical Need



Lichen Planus

An Unaddressed Chronic, Inflammatory, Immune-Mediated Disorder



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



Modzatinib: Unique "Bispecific-Like" Mechanism

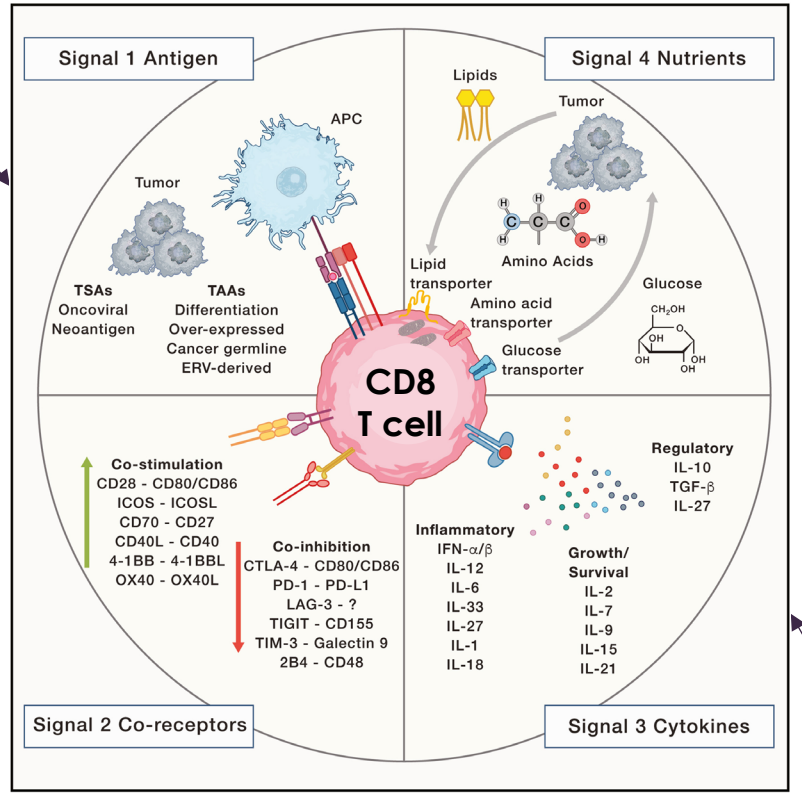
First & Only Known Drug Inhibiting TCR Activation Upstream + Effector Cytokines Downstream

ITK Inhibition

Inhibition of T Cell Receptor (TCR) Signaling (Signal 1)

- Inhibition of auto-antigen and allergen mediated T cell activation
- Inhibits cytotoxic destruction of targets by CD8 T cells
- Inhibits production of inflammatory cytokines

JAK inhibitors do not inhibit TCR activation



Modified from Giles JR et al., Immunity, 2023

Inhibition of Cytokine Signaling (Signal 3)

- Inhibits JAK3 dependent 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

Potential to Be The First Mechanistically Complete Oral Therapy for Lichen Planus and other I&I Disorders

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Lichen Planus is a Large and Unsatisfied Market

Significant "White Space" Opportunity for Modzatinib

- 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
- 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

NONCLINICAL VALIDATION

ATI-9494: Potential Best-in-Class Potency Against ITK

Strategically Positioned as Most Potent and Selective Next Gen ITK Inhibitor

Most potent ITK-selective inhibitor in development

No JAK3 engagement at pharmacologically relevant doses

Highest Potency in HWB

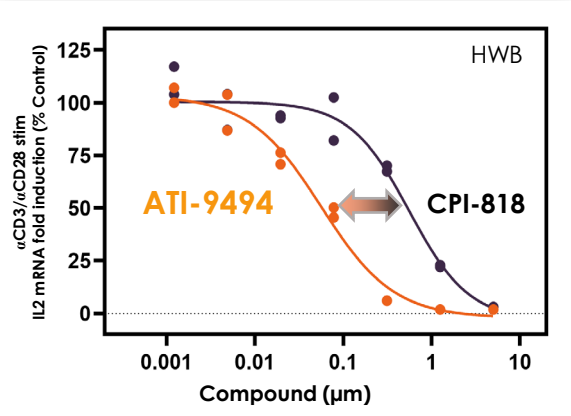
10-fold greater functional potency than soquelitinib (CPI-818)

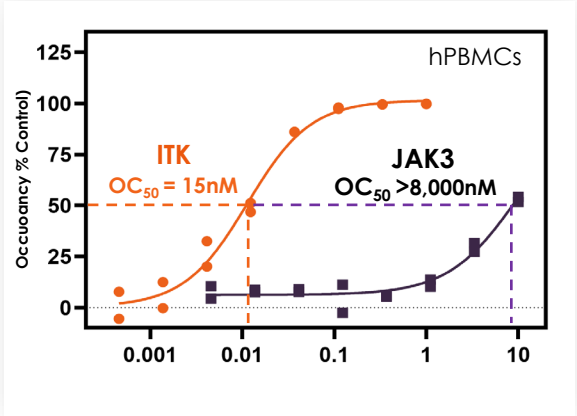
Robust Target Engagement

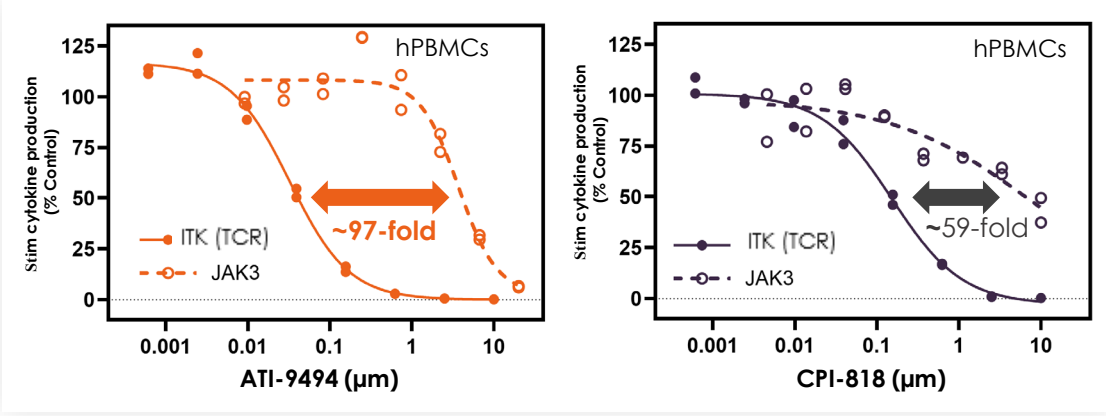
High occupancy of ITK at very low doses

Highly Selective

100-fold functional selectivity for ITK over JAK3, similar to CPI-818







Investigational New Drug (IND) Submission Expected in 4Q 2026

HWB = human whole blood ; hPBMC = human peripheral blood mononuclear cells

ITK Program: Next Steps and Near-Term Catalysts

Potential Best-in-Class ITK Inhibitor Franchise Rapidly Advancing

Modzatinib

Complete — **Severe Hair Loss (murine)** — Alopecia universalis

Phase 2a — Atopic Dermatitis — Complete

Phase 2b program — Lichen planus, Mucosal, Cutaneous, LPP — *Initiation 4Q 2026*

Potential Future Targets — Uncontrolled asthma, Alopecia areata, Vitiligo

ITK Inhibitors

	ATI-9494	Selective ITK Inhibitor	
Ongoing	**IND-Enabling Studies**	**IND-Enabling Studies**	*Ongoing*
4Q 2026	**Investigational New Drug (IND) Submission**	**IND Submission**	*2027*
	Potential Future Targets — Th1, Th2, Th17-driven diseases	**Potential Future Targets** — Th1, Th2, Th17-driven diseases	

 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

Continued Clinical Momentum in 2026 & 2027

Three Clinical Programs Ongoing; Next IND Expected in 2026

Innovation Driven

Patient Focused

ATI-052

Enrollment ongoing in asthma and AD POCs

Top line POC results in AD and asthma in 2H 2026

Phase 2b program: 4Q 2026

Bosakitug (ATI-045)

Enrollment in Phase 2 in AD complete

Top line results in 4Q 2026

Modzatinib (ATI-2138)

Lichen planus

(Fast Track designation)

Phase 2b trial: 4Q 2026

Next Generation Inhibitors

IND for ITK inhibitor ATI-9494 in 4Q 2026

Cash runway expected to enable development of pipeline through 2028

Cash, cash eq., and marketable securities of $171M (6/30/26)

+

Additional gross proceeds of $40M subsequent to 6/30/26 (via ATM)

 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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Corporate Overview

August 2026

EMPOWERING PATIENTS THROUGH

THERAPEUTIC INNOVATION

