



**NEKTAR<sup>®</sup>**

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NEW PATHWAYS TO  
SMARTER MEDICINE™

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**42<sup>nd</sup> Annual  
J.P. Morgan Healthcare  
Conference**

January 2024

# Forward-looking Statements

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*This presentation includes forward-looking statements regarding Nektar's proprietary drug candidates, the timing of the start and conclusion of ongoing or planned clinical trials, the timing and outcome of regulatory decisions, unaudited year-end cash and investments and sufficiency of working capital and future availability of clinical trial data. Actual results could differ materially and these statements are subject to important risks detailed in Nektar's filings with the SEC including the Form 10-Q filed on November 8, 2023. Nektar undertakes no obligation to update forward-looking statements as a result of new information or otherwise.*

# Nektar Therapeutics: Targeting Immunology and Inflammation with Immune Modulating Therapies



## Deep Understanding of Immunology

Novel approaches to address the imbalance and dysfunction of T regulatory cells (Tregs) to restore the body's self-tolerance mechanisms and achieve immune homeostasis



## Novel Targets and Differentiated Candidates

Lead candidate (Ph2), REZPEG, is a first-in-class IL-2 pathway agonist selective Treg therapy

Preclinical TNFR2 agonist antibody (NKTR-0165) is designed to potentiate suppressive effects of Tregs



## Compelling Proof-of-Concept Data

Promising Phase 1b data for REZPEG in atopic dermatitis suggest potential as a differentiated remittive and disease modifying therapy



## Large Indications with High Unmet Need

REZPEG is being studied in two large, randomized Phase 2b studies in atopic dermatitis and alopecia areata with data expected in first half of 2025




## Well Capitalized Through Upcoming Catalysts

Ended the year with \$329M in cash and cash equivalents



Cash runway into the middle of 2026

# Immunology Focused Pipeline & Oncology Assets

Program	Indication	Stage	Preclinical	Phase 1	Phase 2	Phase 3	Partner
REZPEG	Atopic Dermatitis	Initiating Phase 2b Trial in Q4 2023					
REZPEG	Alopecia Areata	Initiating Phase 2b Study in Q1 2024					
NKTR-0165	Multiple Sclerosis & Other Autoimmune Indications	Preclinical	<div>Preclinical</div>				
PEG-CSF1	Fibrotic Diseases & Other Indications	Preclinical	<div>Preclinical</div>				

REZPEG: IL-2 T Regulatory Cell Stimulator

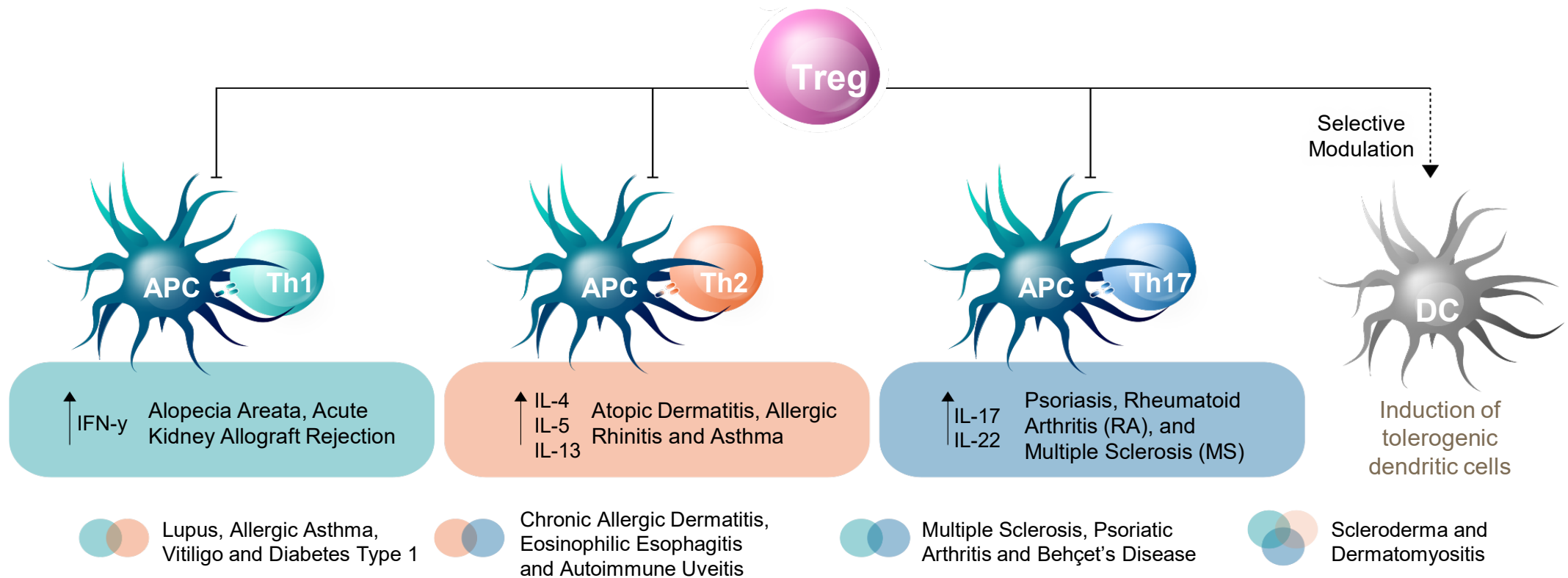
NKTR-0165: Bivalent Agonistic Antibody Targeting TNFR2

Program	Indication	Stage	Preclinical	Phase 1	Phase 2	Phase 3	Partner
NKTR-255	Oncology	Multiple partnered and investigator-sponsored trials ongoing in various indications	Exploring Partnership Options				<div> Darmstadt, Germany</div> <div></div>
NKTR-288	Oncology	Preclinical	Preclinical				

NKTR-255: IL-15 Receptor Agonist

NKTR-288: PEG-conjugate of Interferon Gamma

# The Central Role of T Regulatory Cells in Immune Homeostasis

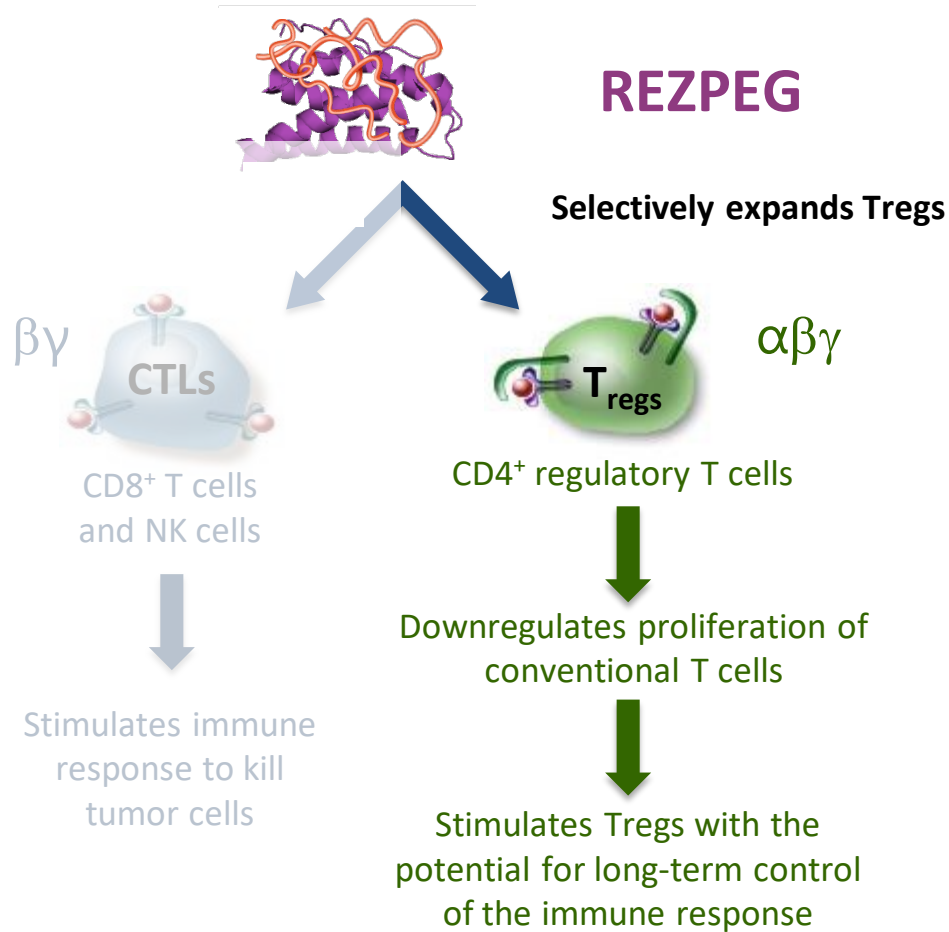


**Tregs are crucial for immune homeostasis and the prevention of autoimmune conditions.<sup>1</sup>**

- *IL-2 pathway agonism*

- *TNFR2 agonism*

# REZPEG: IL-2 Pathway Agonist that Selectively Induces Tregs and their Suppressive Activity



## Compared with native IL-2, REZPEG has:<sup>1</sup>

- An altered binding profile, eliciting a lower binding affinity for IL-2R $\beta$  and a different binding bias for IL-2R $\alpha$  and IL-2R $\beta$
- Selectivity for the stimulation of regulatory T cells (Tregs) over conventional T cells (Tcons)
- An increased half-life

## REZPEG has shown:

- Activity in animal models of systemic lupus erythematosus (SLE)<sup>2</sup> and cutaneous hypersensitivity<sup>3</sup>
- Selective stimulation of Tregs in healthy volunteers and patients with lupus<sup>4</sup>
- Clinical efficacy in Atopic Dermatitis, Psoriasis, and SLE

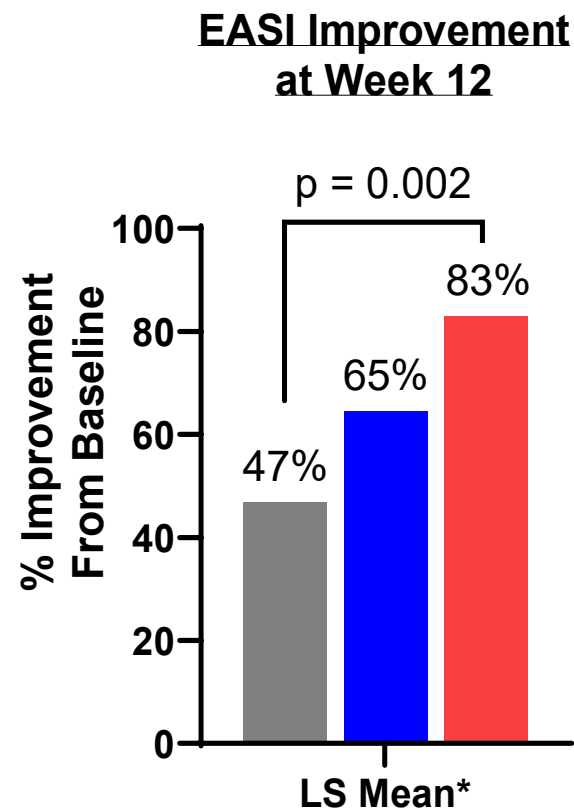
# 9 Clinical Trials Conducted for the REZPEG Program Provide a Roadmap for Development Success

- 382 patients with autoimmune conditions and 210 healthy volunteers have received REZPEG
- Consistent and highly-predictable Treg pharmacology observed across 9 clinical studies
- Clear evidence of clinical benefit in skin-related autoimmune conditions observed across 3 randomized placebo-controlled studies (atopic dermatitis, psoriasis & cutaneous lupus)
- Well tolerated biologic agent with minimal side effects

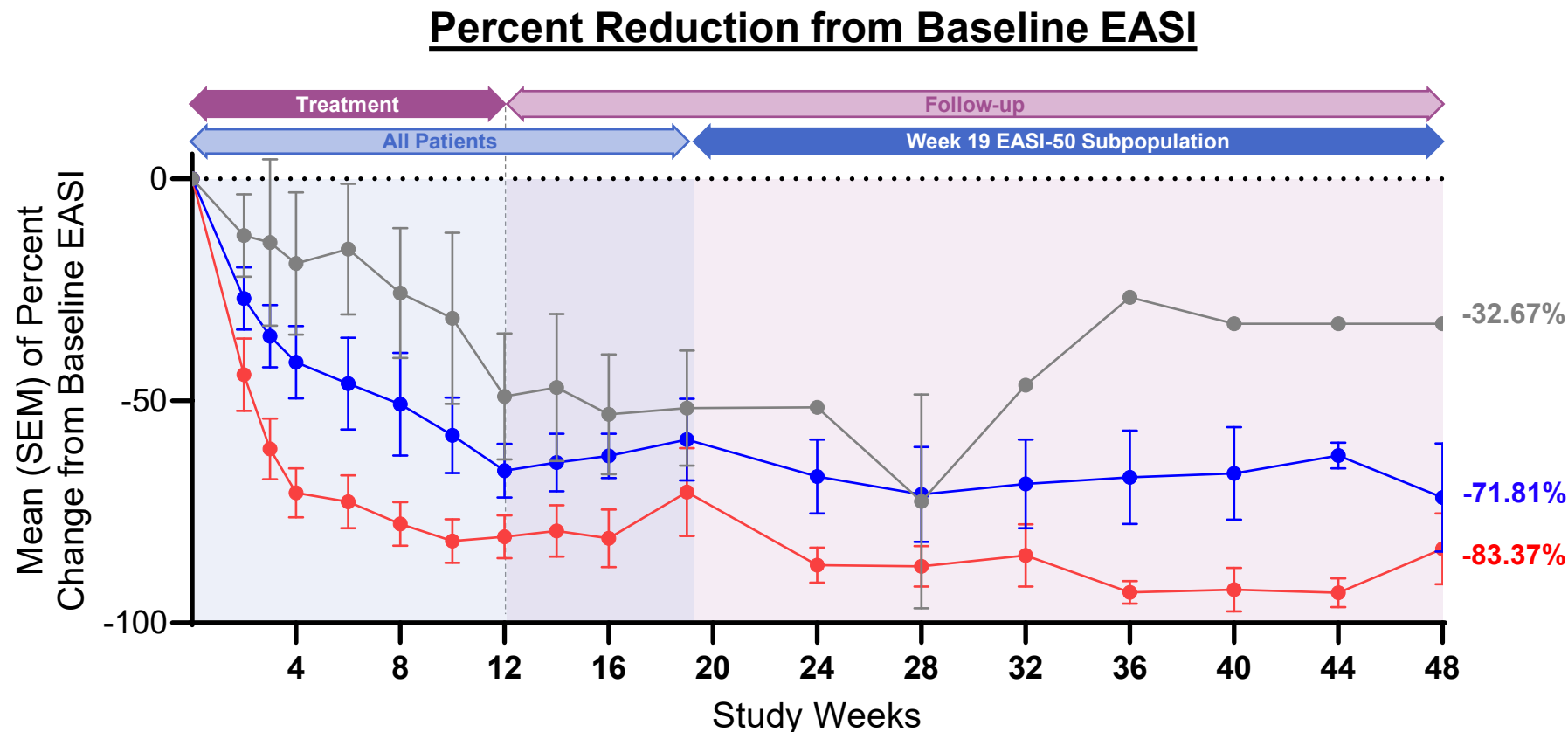


# Percent Change From Baseline EASI Score

Statistically Significant and Sustained Improvement At Highest Dose



- Placebo
- REZPEG 12 µg/kg
- REZPEG 24 µg/kg



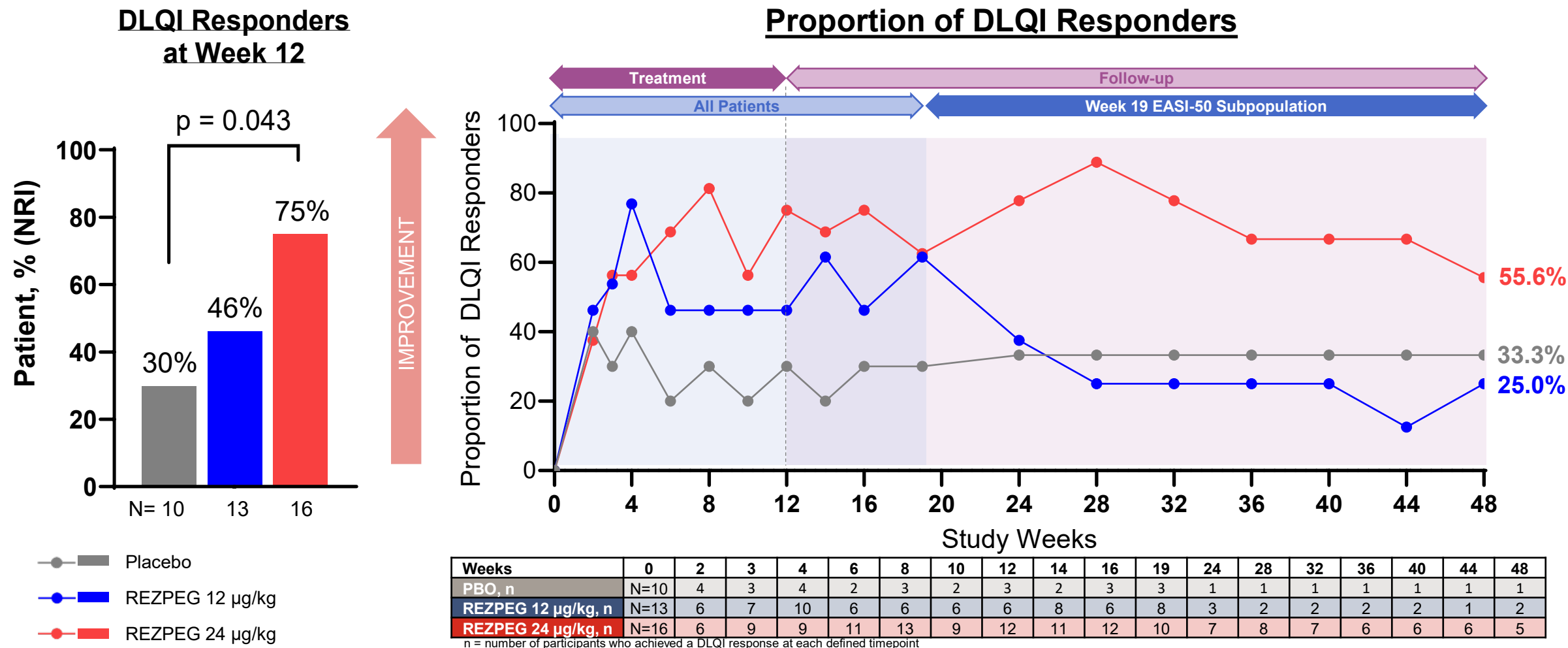
Weeks	0	2	3	4	6	8	10	12	14	16	19	24	28	32	36	40	44	48
PBO, n	10	8	6	8	6	8	5	7	5	5	6	1	2	1	1	1	1	1
REZPEG 12 µg/kg, n	16	16	15	15	14	14	12	12	12	12	12	7	5	5	5	4	3	4
REZPEG 24 µg/kg, n	17	16	16	15	15	14	13	12	13	13	13	8	9	9	7	7	7	7

n = number of participants who were evaluated at each defined timepoint



# DLQI (Dermatology Life Quality Index)

Statistically Significant And Durable Improvement From Baseline



*“We’ve never really been sure if the T reg hypothesis is true or not or if it was an epi phenomenon. These may be some of the most compelling data to-date for the field, proving at a high level, that if you causally increase T reg cells that you will take down inflammation and improve a disease state. To me, this is a proof of concept for so many things and an important finding for all of immunology.”*

*- Dr. Jonathan Silverberg, Professor of Dermatology at The George Washington University School of Medicine and Health Sciences and Director of Clinical Research and Contact Dermatitis*

# Atopic Dermatitis: Multi-Billion Dollar Market Opportunity Ahead

## *Still High Unmet Need, Especially For New Therapies With Remittive Effect*

**Atopic dermatitis (AD)** is a chronic autoimmune conditions that causes inflammation, redness and irritation of the skin. Moderate-to-severe AD is associated with unbearable itching that can result in significant disease burden and impacts to quality of life.



**~30 million<sup>1</sup>**

Adults with AD in U.S.



**~220 million<sup>2</sup>**

Adults with AD globally



**~50%<sup>3</sup>**

Adults with AD have moderate-to-severe disease



**~8%<sup>4</sup>**

Patients with moderate/severe AD are treated with a biologic

***High unmet need for a new therapy employing a new mechanism of action to:***

1. Induce a deep and potentially therapy-free remission
2. Offer dosing schedules without rebound effect
3. Favorable safety and tolerability profile for ease of use

Dupixent®: current market leader in atopic dermatitis exceeding \$6.2B in annual sales, **but 50% of patients fail on therapy<sup>5, 6</sup>**

# Why We Need Additional Therapies for Atopic Dermatitis

## Current systemic treatment options fall short on safety and long-term disease control

- Majority of patients do not achieve adequate disease control by the end of the induction period<sup>1</sup>
- Currently available systemic therapies may be limited by their safety and efficacy profile:
  - IL-13 Biologics**
    - Side effects include conjunctivitis, facial erythema\*, arthralgia\*<sup>2</sup>
    - No dose flexibility
    - Lack of efficacy with 50% of patients failing Dupixent® therapy<sup>1</sup>
    - Lack of long-term disease control with patients rebounding once off treatment
  - JAK Inhibitors**
    - Multiple black box warnings<sup>3</sup> (e.g. Serious infections, cardiovascular death, myocardial infarction, stroke, lymphoma, blood clots)
    - Lab monitoring
    - While treatment leads to rapid improvement in disease, once off therapy, patients rebound quickly
- Even patients with a favorable response experience loss of disease control following cessation of therapy<sup>4-5</sup>
- The limited armamentarium of approved drugs with an adequate benefit–risk ratio represent major challenges in the field<sup>6</sup>
- New strategies aimed at inducing deep and potentially therapy-free remission are needed<sup>7</sup>

\* Reported with dupilumab; **Sources:** <sup>1</sup>Silverberg JI, et al. *Dermatol Ther (Heidelb)* (2022) 5:1181-1196; <sup>2</sup>Torres T, et al. *J Dermatolog Treat* (2022) 33(5): 2554-2559; <sup>3</sup>Mikhaylov D, et al. *Ann Allergy, Asthma, Immuno* (2023) 130(5) 577-592; <sup>4</sup>Gooderham et al. *JAMA Derm* (2019) 155(12): 137101379; <sup>5</sup>Blauvelt et al. *Am J Clin Dermatol*. (2022) 23(3): 365-383; <sup>6</sup>Bieber T. *Nature Reviews Drug Discovery* (2022) 21: 21–40; <sup>7</sup>Bieber T. *Nature Reviews Drug Discovery* (2023) 22: 662–680.







# Efficacy Comparison of Biologics in Patients with Atopic Dermatitis – Phase 2 Clinical Trials Vs. Nektar Phase 1b

Endpoint	DUPIXENT (dupilumab) 300 mg Q2W <sup>1</sup>  Regeneron	ADBRY (Tralokinumab) 300mg Q2W <sup>2</sup>  Leo Pharma	Lebrikizumab 250mg Q2W <sup>3</sup>  Lilly	Nemolizumab 30mg Q4W <sup>4</sup>  Galderma	Rocatinlimab 300mg Q2W <sup>5</sup>  Amgen	Amltelimab 250mg Q4W LD <sup>6</sup>  Sanofi	Rezpegaldesleukin (Phase 1b) 24 µg/kg Q2W  Nektar
Mechanism of Action	IL-4 & IL-13 antagonist	IL-13 antagonist	IL-13 antagonist	IL-31 antagonist	OX40 antagonist	OX40 antagonist	IL-2Rα agonist
Drug: EASI LS Mean % reduction from baseline	68%	58%	72%	69%	61%	62%	83%
Placebo: EASI LS Mean % reduction from baseline	18%	41%	41%	52%	15%	29%	47%
EASI-75	~53% <sup>#</sup>	43% <sup>&amp;</sup>	51%-61% <sup>+</sup>	46%	54%	43%	58% (OBS) 41% (NRI)
EASI-90	~30% <sup>#</sup>	Not available	44%	30%	37%	Not available	33% (OBS) 24% (NRI)
IGA/vIGA-AD ≥ 2 pt (0, 1) Responders	30%	27%	45%	37%	31%	23%	42% (OBS) 29% (NRI)
Itch NRS ≥ 4 pt Responders	36-41% <sup>**</sup>	20-25% <sup>**</sup>	70%	~50% <sup>^^</sup>	56%	27%	64%* (OBS) 47%* (NRI)

\*Analysis on patients with baseline score >=4; \*\*Based on Phase 3 studies. # estimated from Figure 3 in manuscript 1. & excluded data after rescue medication and uses last observation carry forward (LOCF). +patients without baseline were excluded and missing data were imputed using Markov Chain Monte Carlo (MI-MCMC). ^^estimated from Figure 4 in manuscript 4

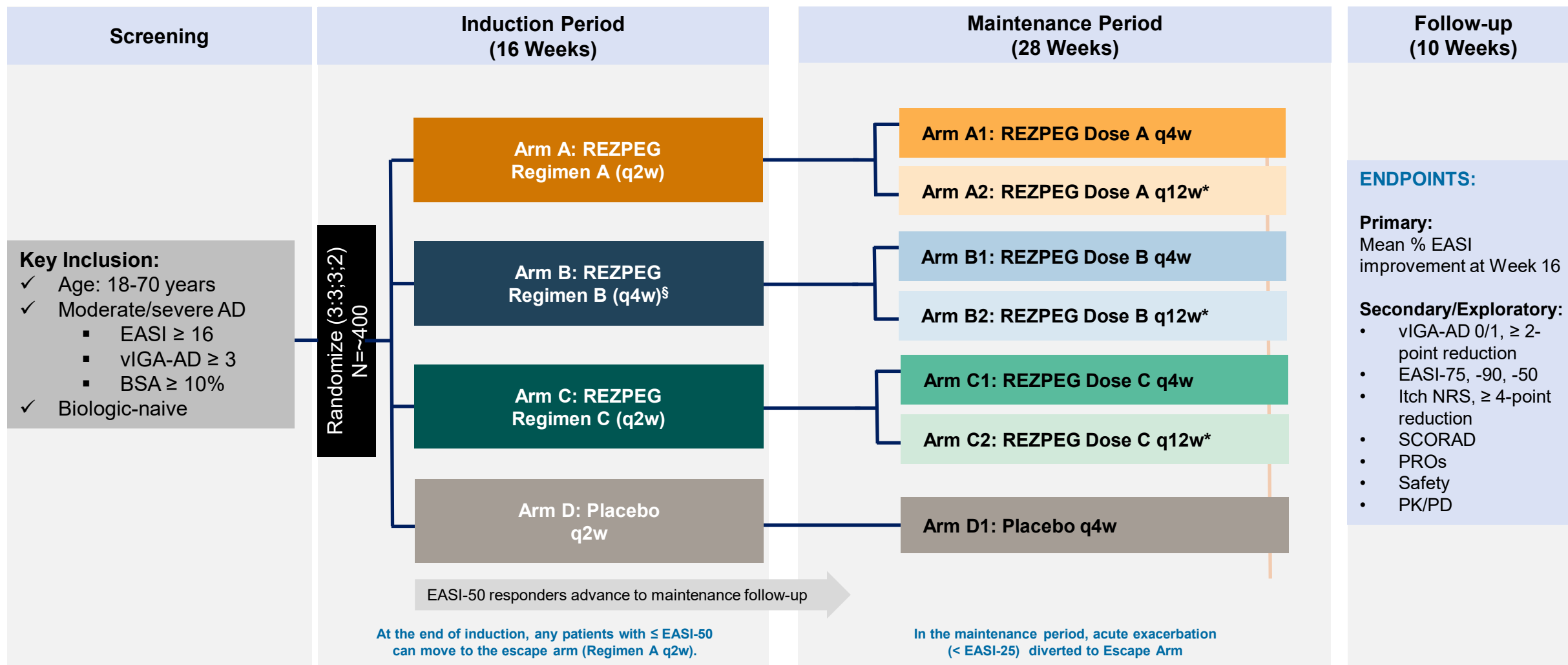
Acronyms: EASI = Eczema Area and Severity Index; LS = least squares; IGA = investigator global assessment; vIGA = validated investigator global assessment; pt = point; NRS = numerical rating scale; Q2W = every two weeks; Q4W = every four weeks; OBS = as observed; NRI = non-responder imputation. UNK=unknown. References: <sup>1</sup>Thaçi et al. *Lancet* (2016) 387(10013): 40-52; <sup>2</sup>Wollenberg et al. *J Allergy Clin Immunol* (2019) 143(1): 135-141; <sup>3</sup>Guttman-Yassky et al. *JAMA Dermatol.* (2020) 156(4): 411-420; <sup>4</sup>Silverberg et al. *J Allergy Clin Immunol.* (2020) 145(1): 173-182; <sup>5</sup>Guttman-Yassky et al. *Lancet* (2023) 401(10372): 204-214; <sup>6</sup>Weidinger et al. *Br J Derm* (2023), epub ahead (July 18, 2023)

# Phase 1b Data Suggest Potential for REZPEG as Differentiated Remittive Therapy

					
<b>Consistent clinical effects</b>	<b>Rapid onset of effect</b>	<b>Dose dependent responses</b>	<b>Differentiated efficacy</b>	<b>Durability of response</b>	<b>Favorable safety profile</b>
observed across all physician-assessed and patient-reported outcomes	with significant benefits in outcomes observed after just two doses of REZPEG	suggest potential flexibility of dosing schedules	that is highly competitive with currently available systemic treatments	across all outcomes 36 weeks after end of REZPEG dosing suggests potential as a remittive therapy	with no serious or severe adverse events, no conjunctivitis and no ADA

# REZPEG Phase 2b Study Initiating in Q4 2023

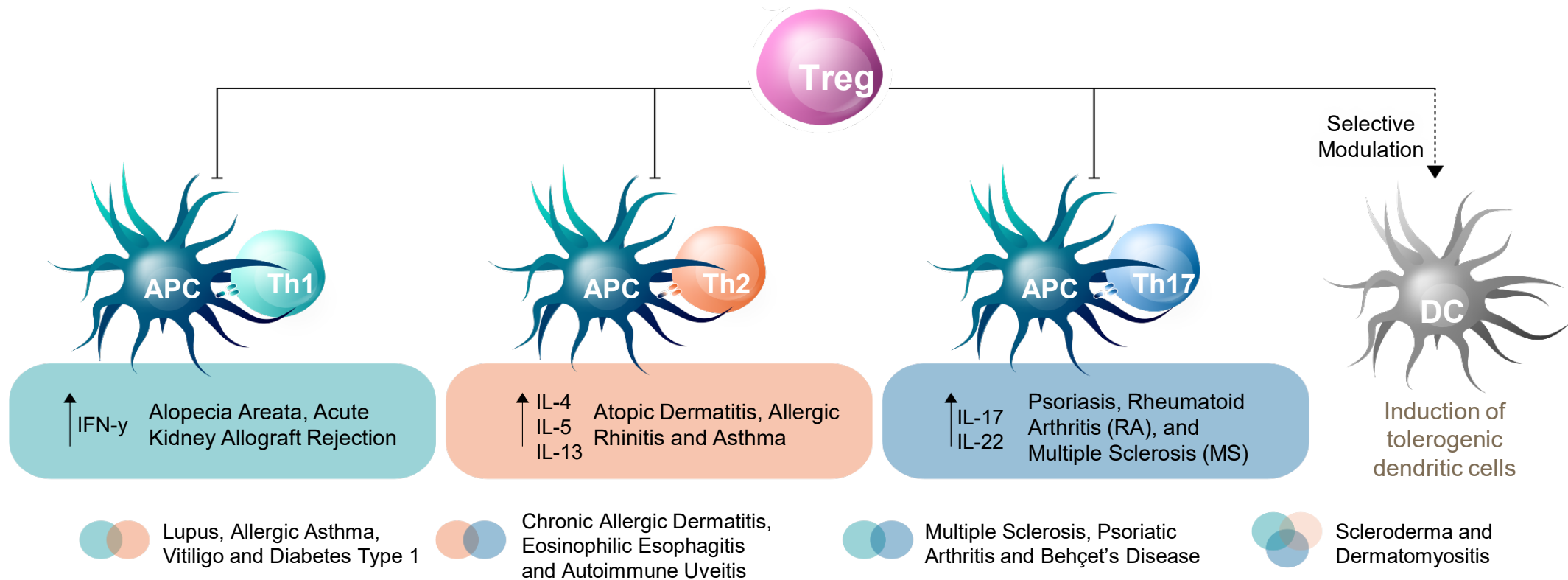
## Moderate-to-Severe Atopic Dermatitis





# Rezpegaldesleukin (REZPEG)

## *The Central Role of T Regulatory Cells in Immune Homeostasis*



**Tregs are crucial for immune homeostasis and the prevention of autoimmune conditions.<sup>1</sup>**

# REZPEG In Alopecia Areata

*Phase 2b Clinical Study Expected To Initiate In Q1 2024*

**Alopecia areata (AA)** is a disease that happens when the immune system attacks hair follicles and causes hair loss<sup>1</sup>

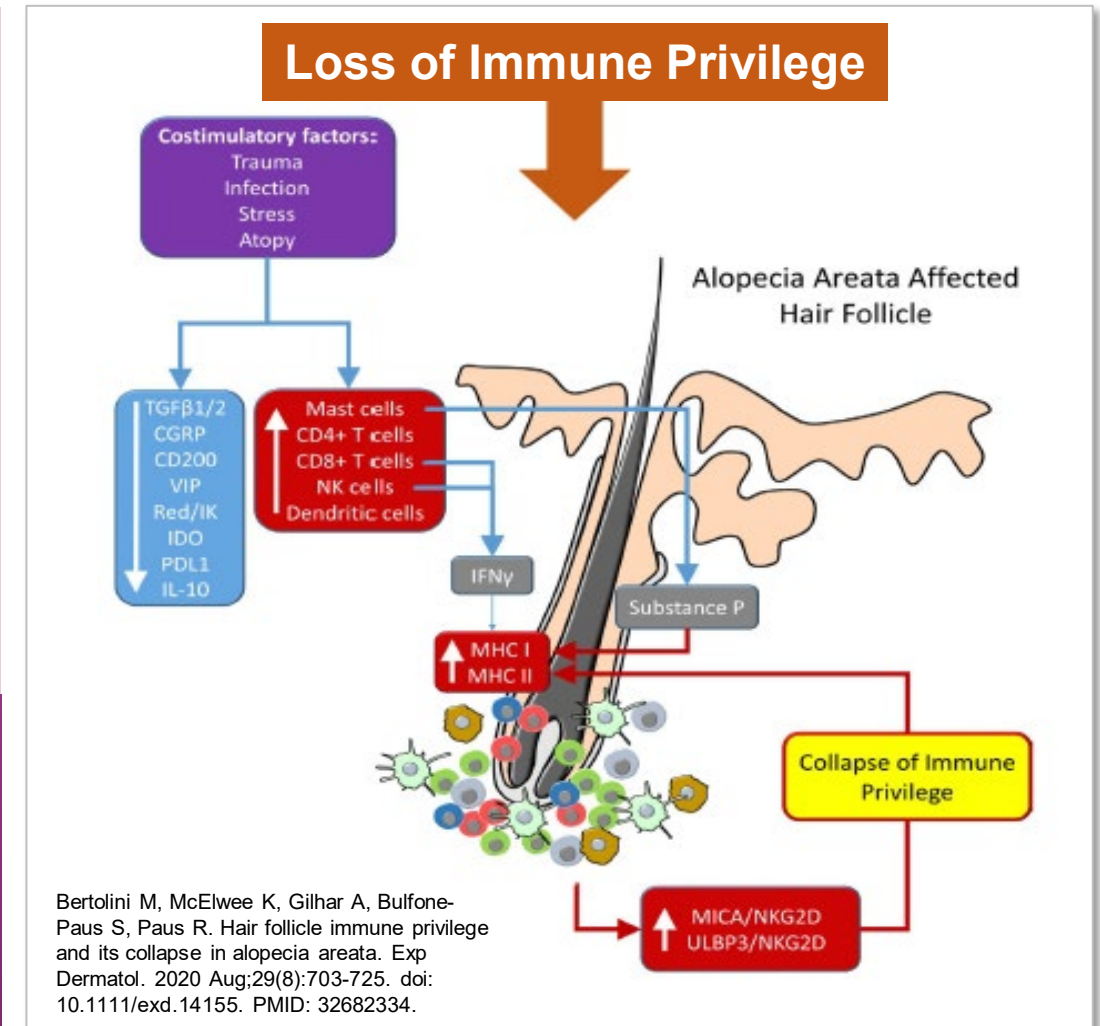
- Nearly 6.7 million people in the US have had it or will have it in their lifetime. ~700,000 people currently have alopecia areata in US. <sup>2</sup>
- ~160 million people worldwide have alopecia areata or have had, or will have it<sup>2</sup>
- 80% of patients show signs of alopecia before 40<sup>2</sup>
- Many patients are refractory to available therapies, and long-term use is associated with troublesome side effects and safety risks<sup>3</sup>
- Only systemic treatments approved for alopecia are JAK inhibitors with multiple Blackbox warnings. High relapse rates upon discontinuation of these therapies<sup>3</sup>

***Represents additional opportunity to expand REZPEG***

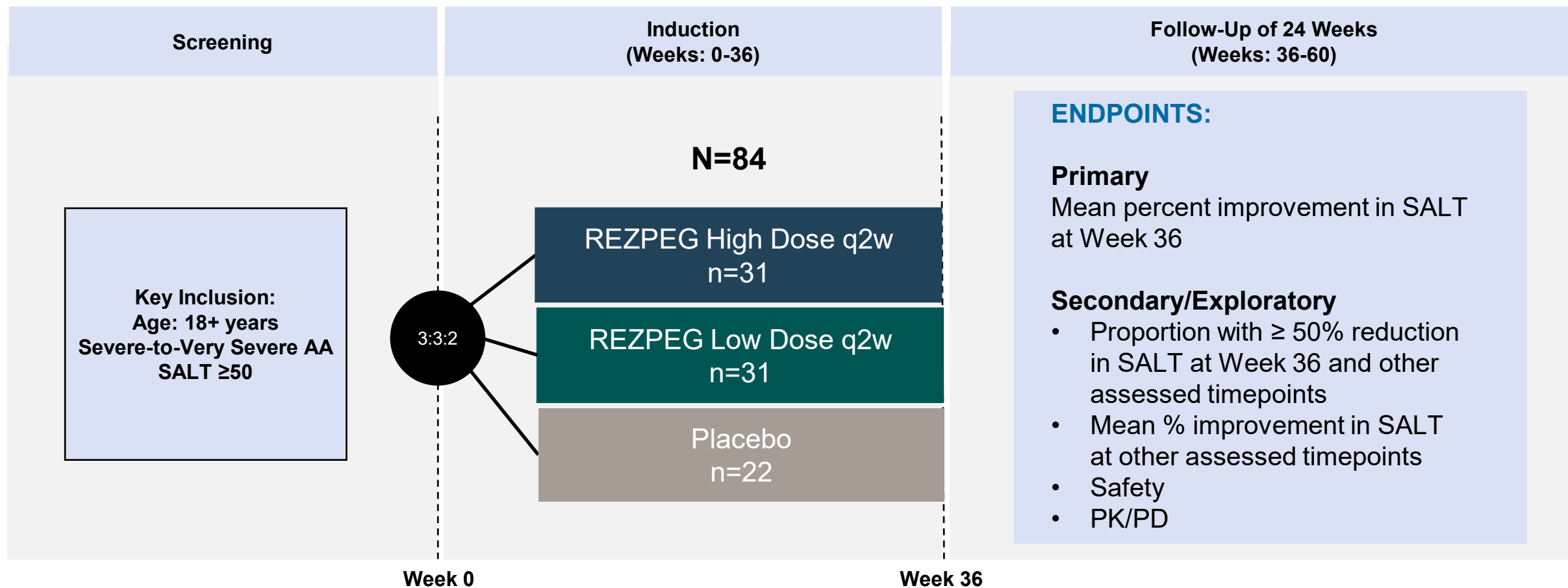
# Anagen Hair Follicles Reside in a State of Immune Privilege

## Loss of Immune Privilege

- Increase in expression of MHC Class I and MHC Class II, upregulation of danger ligands (such as NKG2D activating ligands MICA and ULBP molecules), increased levels of proinflammatory cytokines, and a robust immune cell infiltrate
  - Immune cell infiltrates are predominantly CD4<sup>+</sup> and CD8<sup>+</sup> T cells. CD8<sup>+</sup> T cells in close association with the hair follicle were found to express NKG2D, an activating receptor commonly associated with the natural killer (NK) cell lineage and IFN gamma
- ***REZPEG preferentially stimulates expansion of Tregs without activation of effector T-cells***
  - ***Rebalances immune system by increasing Treg population and function***



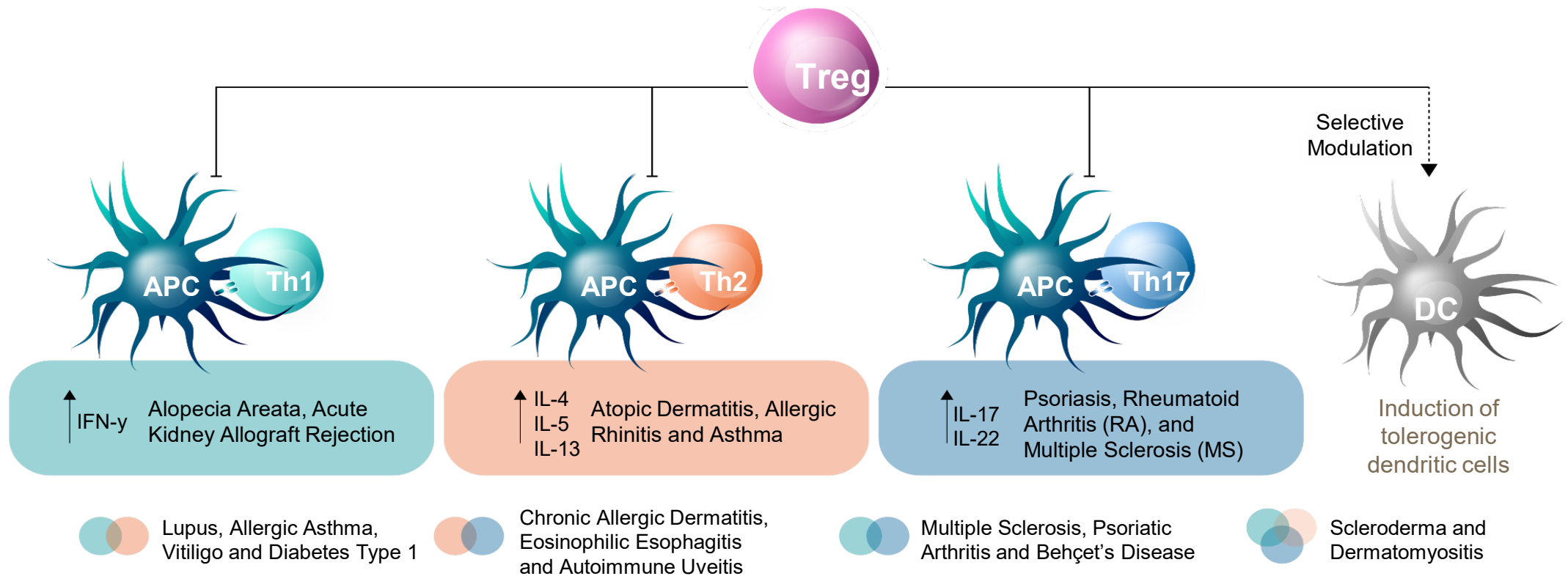
# Phase 2b Study for Patients with Alopecia Areata



SALT: The Severity of Alopecia Tool is widely used to assess the extent of scalp-hair loss in patients with alopecia areata. Guidelines define treatment success as a 50% improvement in scalp hair.

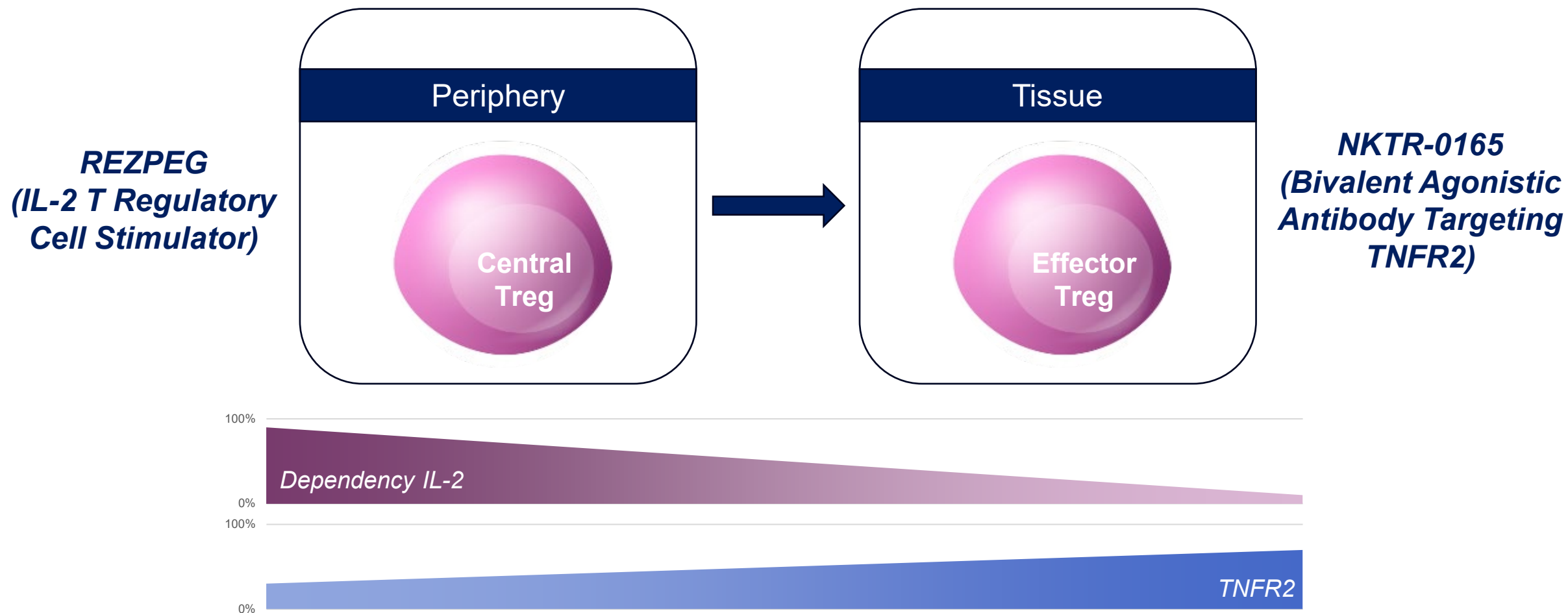
# NKTR-0165: TNFR2 Agonist Antibody Program

## *The Central Role of T Regulatory Cells in Immune Homeostasis*



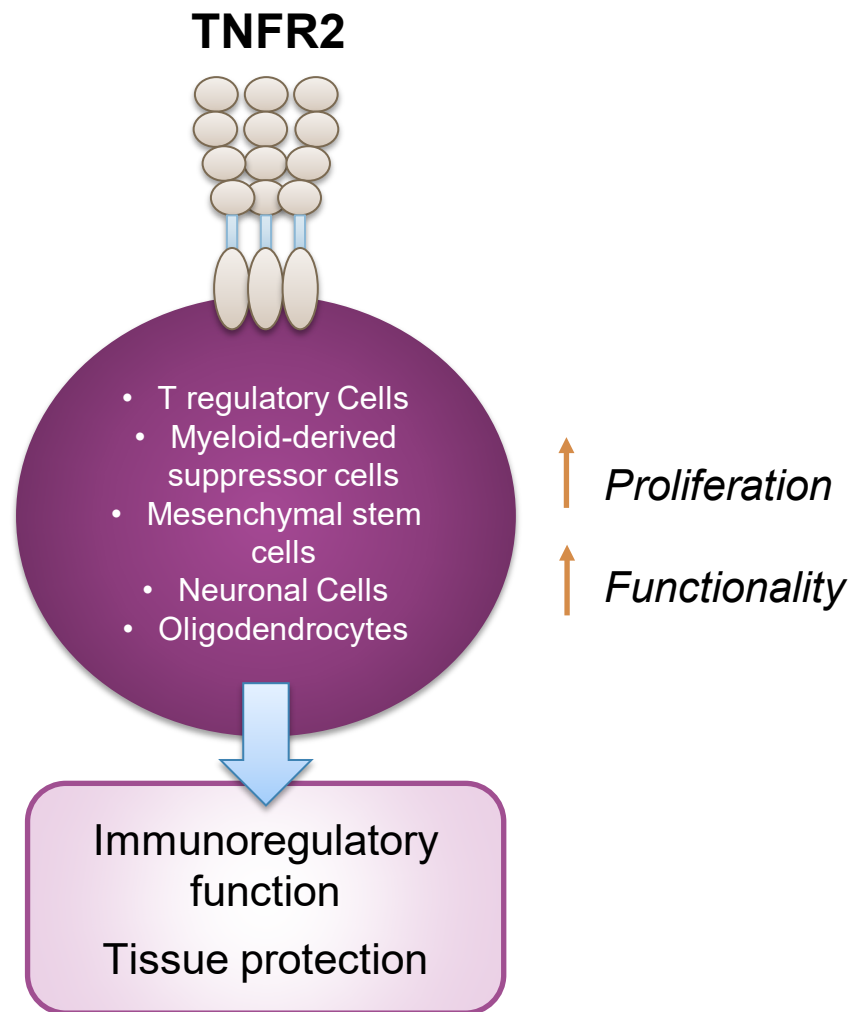
**Tregs are crucial for immune homeostasis and the prevention of autoimmune conditions.<sup>1</sup>**

# Nektar's Programs Addressing Treg Biology



# NKTR-0165: TNFR2 Agonist Antibody Program

*Targeting TNF Receptor 2 (TNFR2) For The Treatment Of Autoimmune Conditions*

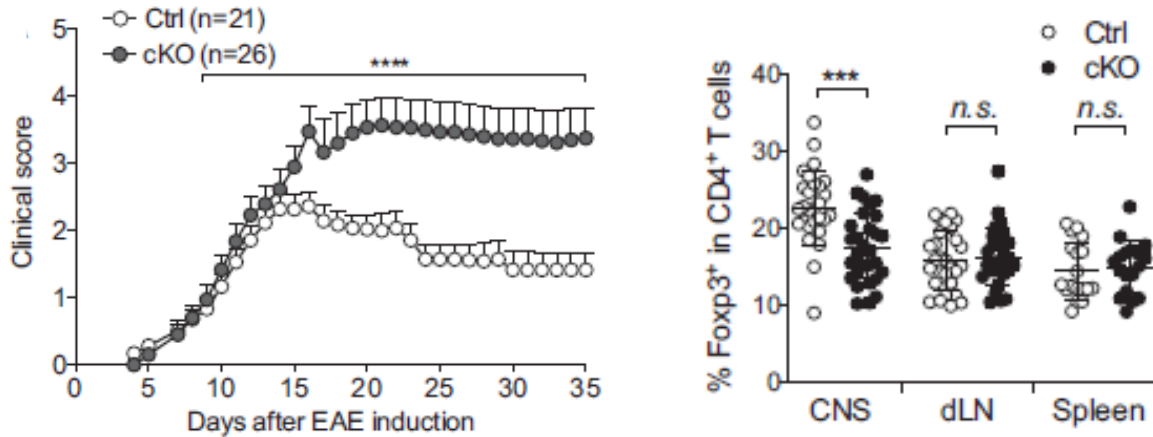


- TNFR2 signaling drives immunoregulatory function could provide direct protective effect for tissue cells
- Unique Nektar antibody candidates show selective T regulatory cell binding and signaling profiles enabling it to be developed for the treatment of autoimmune conditions
- Program targets multiple MOAs including suppression of inflammation, regrowth of myelin after demyelination (MS) and promotion of immune resolution.
  - Examples include Ulcerative Colitis, Multiple Sclerosis (i.e. myelin regrowth), Vitiligo and other autoimmune conditions
- Targeting IND enabling studies for NKTR-0165 in Q4 2024



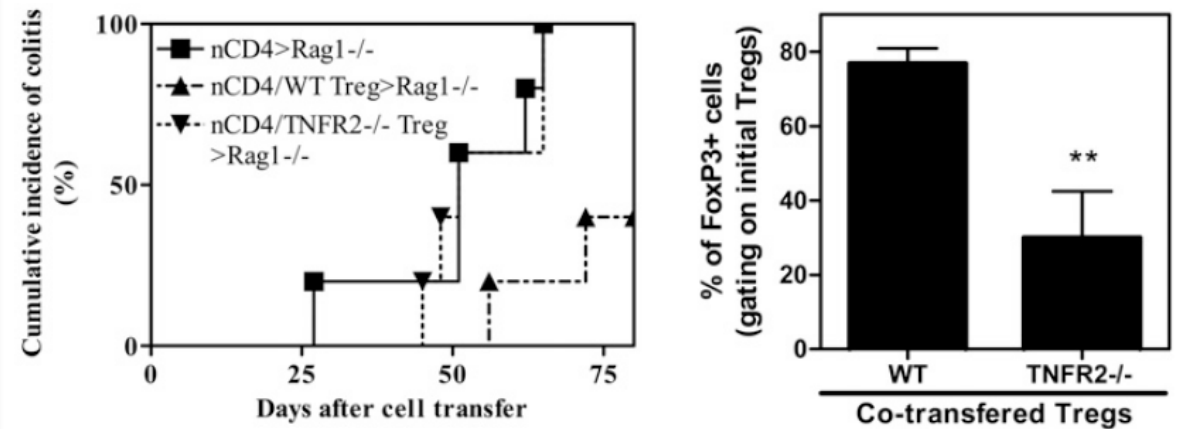
# Research Showing Importance of TNFR2 Expression on Regulatory T Cells in Mouse Disease Models

## EAE Model



*Proc Natl Acad Sci U S A. 2021 Mar 30;118(13)*

## Colitis Model



*J Immunol. 2013 Feb 1;190(3):1076-84*

**TNFR2 expression on regulatory T cells is critical to maintain the population and their immunosuppressive function in mouse disease models**

# Disease Prevalence of Ulcerative Colitis, Multiple Sclerosis & Vitiligo

## Ulcerative Colitis

- Estimated **5.8 million** diagnosed cases of Ulcerative Colitis worldwide with 40% of these cases in major US and EU markets.
- Number of diagnoses forecast to increase by **21%** from 2021-2031.

## Multiple Sclerosis

- Estimated **2.9 million** diagnosed cases of MS worldwide with 46% of these cases in major US and EU markets.
- Number of diagnosed cases worldwide forecast to increase by **19%** between 2022-2032.

## Vitiligo

- Estimated **24 million** diagnosed cases of vitiligo worldwide with 10% of these cases in major US and EU markets.
- The number diagnosed cases forecast to increase by **20%** over 2023-2033.

# NKTR-255: Ongoing Studies

*IL-15 Receptor Agonist Designed To Boost Anti-Cancer Immunity*

## In Combination with CD-19 CAR T-Cell Therapies for LBCL

- Dose-escalation in two Phase 2 studies with approved CD19 CAR-T therapies YESCARTA® & BREYANZI®
- Phase 3 dose recommendation in mid-2025

## In Combination with TIL Therapy for 2L NSCLC

- Open-label study sponsored by Abel Zeta combining NKTR-255 with TIL therapy for patients with metastatic NSCLC who do not respond to chemotherapy and immune checkpoint inhibition in the first line setting

## In Combination with BAVENCIO (Anti PD-L1) for Bladder Cancer

- Randomized, controlled clinical trial led by Merck KGaA combining NKTR-255 with BAVENCIO® as maintenance therapy for patients with locally advanced or metastatic bladder cancer

## In Combination with IMFINZI (Anti PD-L1) for Stage 3 Unresectable NSCLC (IST)

- Clinical trial combining NKTR-255 with IMFINZI® to rescue the absolute lymphocyte count in patients with Stage 3, unresectable NSCLC whose disease has not progressed following concurrent chemo-radiation.

**Continuing select development studies of NKTR-255**

in combination with cell therapies and checkpoint inhibitors while seeking strategic development partner

# Key Upcoming Milestones

<b>Q1 2024</b>	Initiation of REZPEG Phase 2b study in alopecia areata
<b>H2 2024</b>	Interim results of NKTR-255 from the JAVELIN Bladder Medley Study
<b>Q4 2024</b>	IND enabling studies for NKTR-0165 (TNFR2 Agonist Antibody)
<b>2024</b>	Preclinical data for NKTR-0165 to be presented at medical conference
<b>2024</b>	Additional data for NKTR-255 from cell therapy studies
<b>H1 2025</b>	Topline data from REZPEG Phase 2b atopic dermatitis study
<b>H1 2025</b>	Topline data from REZPEG Phase 2b alopecia areata study

**Ended the year with \$329M in cash and cash equivalents**  
**Cash runway into at least the middle of 2026**