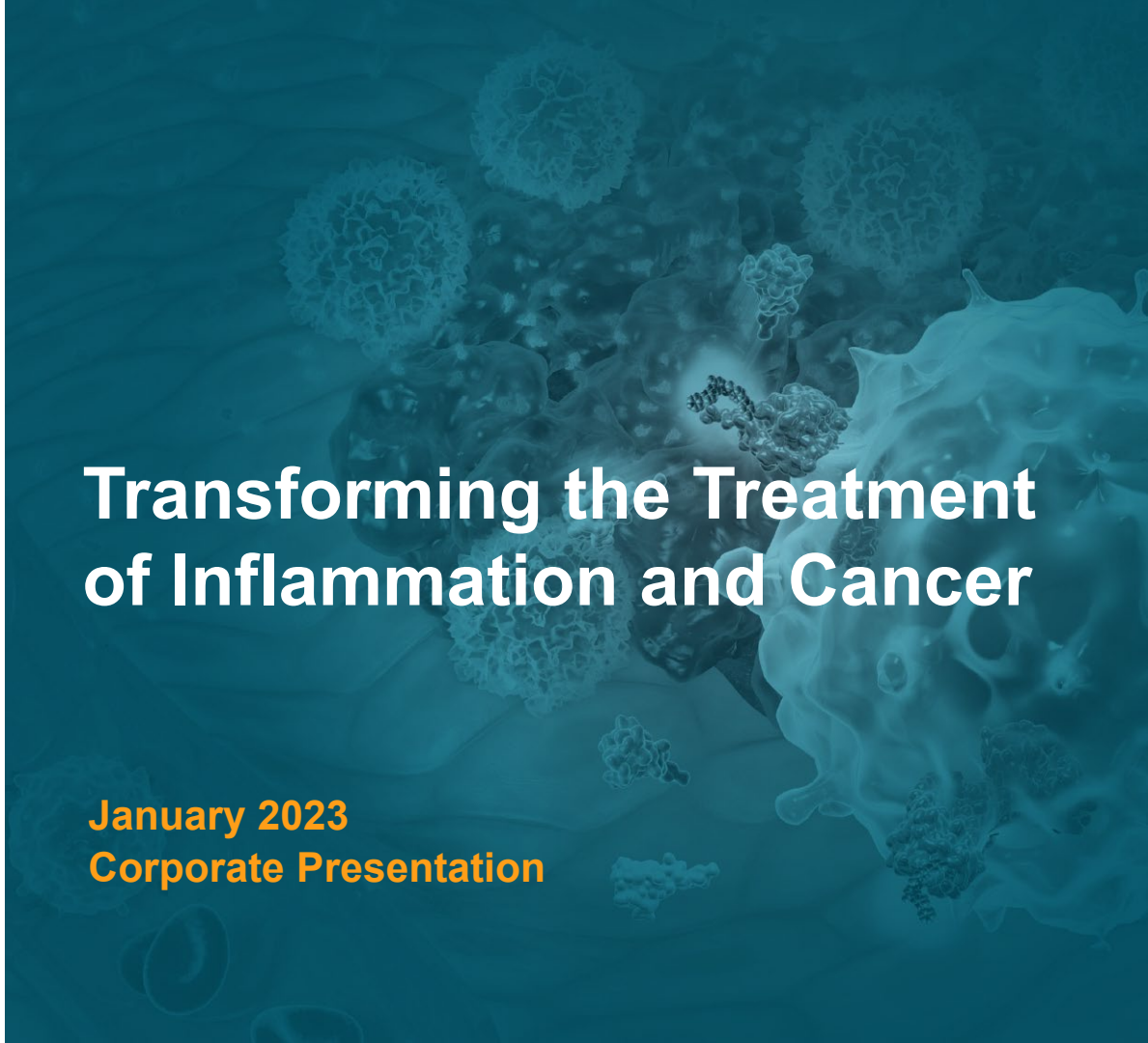
RAPT THERAPEUTICS

Transforming the Treatment of Inflammation and Cancer



January 2023
Corporate Presentation

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This Presentation discusses drug candidates that are under clinical study and which have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of any drug candidates for any use for which such drug candidates are being studied.

Oral Drugs Targeting Critical Immune Drivers of Disease

- Proprietary discovery engine
- Diversified pipeline
- Large market opportunities
- Clinically de-risked assets
- Strategic collaborations

CLINICAL

RPT193 (Inflammation):

- Oral agent targeting inflammatory Th2 cells
- Phase 1b in AD: efficacy on all key exploratory endpoints with excellent safety and tolerability
- Phase 2b in AD ongoing, data expected Q4 2023
- Plan to initiate Phase 2a in Asthma Q1 2023

FLX475 (Oncology): MERCK Hanmi

- Selectively targets immunosuppressive tumor T_{reg}
- PoC in Phase 2 with mono and combo activity
- Phase 2 data update expected 2H 2023

DISCOVERY

HPK1 (Oncology)

Other inflammation and oncology targets

RAPT THERAPEUTICS

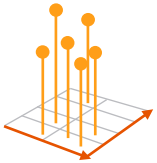
Proprietary Drug Discovery and Development Engine

R **Rapid**

- Drug discovery
- Clinical development

A **Analytics**

- Interrogating clinically-relevant big datasets to identify targets and biomarkers



P **Patient selection**

- Driven by data to improve chances of clinical success

T **Targeting**

- Critical immune drivers of cancer and inflammation

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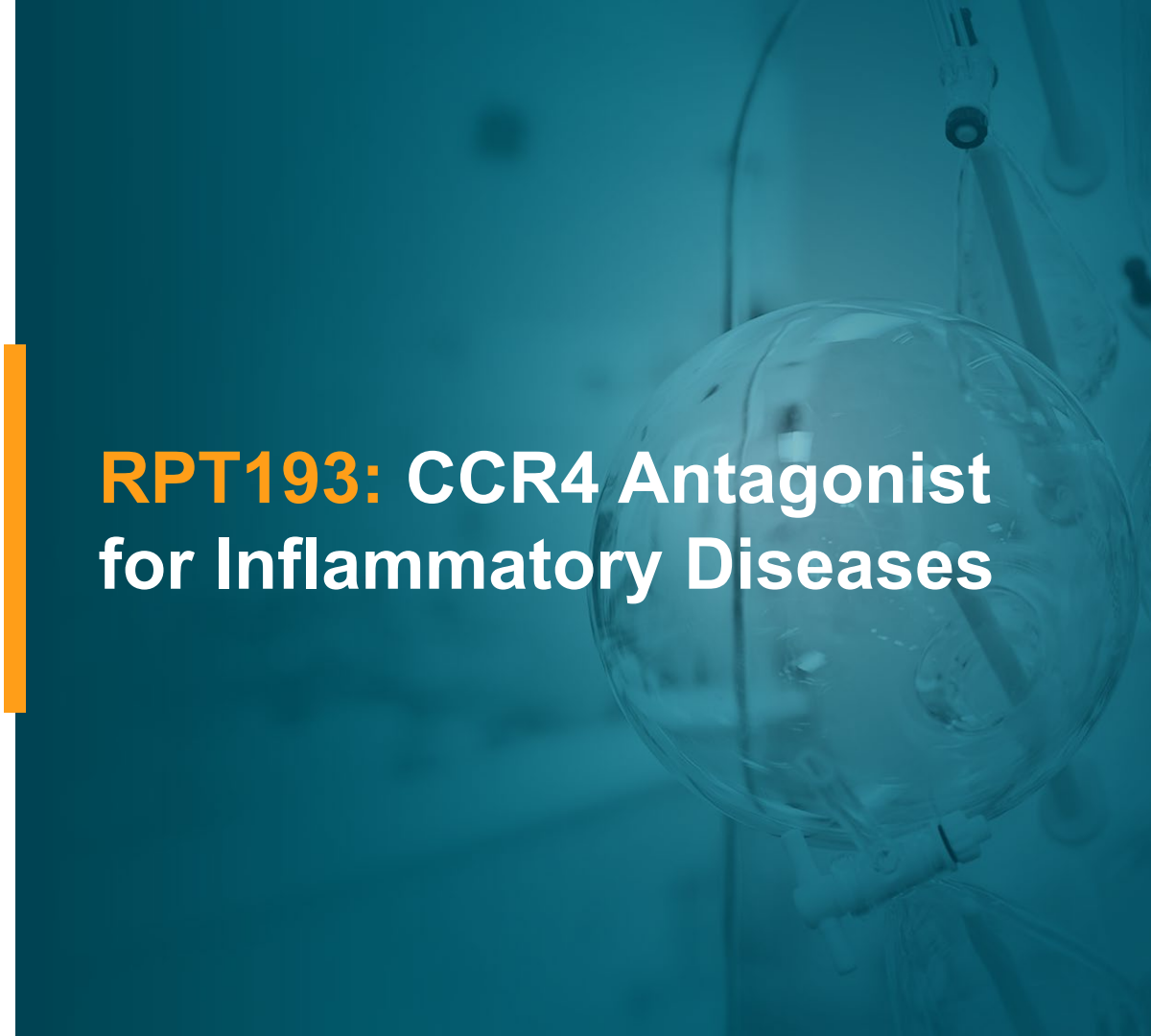
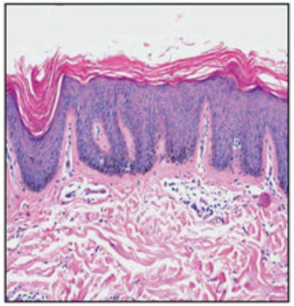
RPT193: CCR4 Antagonist for Inflammatory Diseases

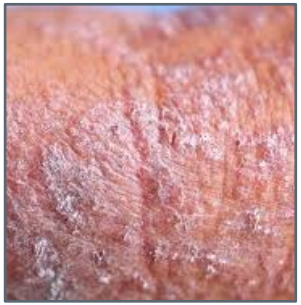


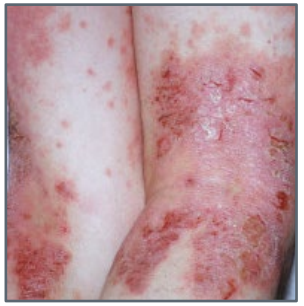
RPT193: Oral Th2 Inhibitor for Inflammatory Diseases

- **Highly potent and selective once-daily oral** CCR4 antagonist designed to safely reduce Th2-inflammation in a broad range of allergic disorders
- **Clear benefit on signs and symptoms** in Phase 1b in moderate-to-severe atopic dermatitis
- **Favorable safety and tolerability:** no laboratory safety monitoring or black box warning expected
- **Potential positioning as drug of first choice** after inadequate response to TCS and prior to injectables
- **US patent coverage through at least 2039**
- **Phase 2b AD data expected Q4 2023** and pivotal studies anticipated to start in 2024
- **Plan to initiate Phase 2a asthma trial Q1 2023**

AD Lesional Skin







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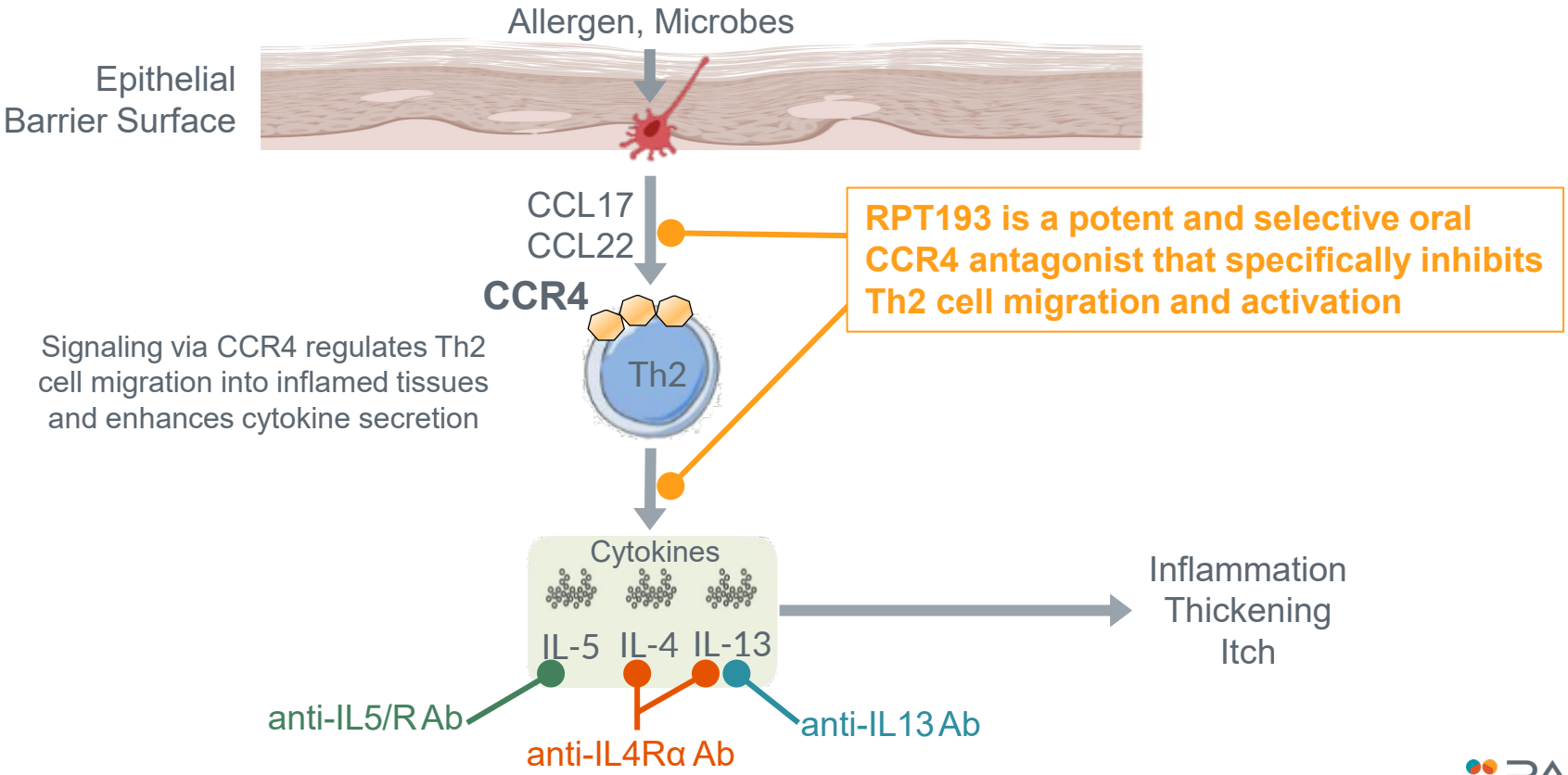
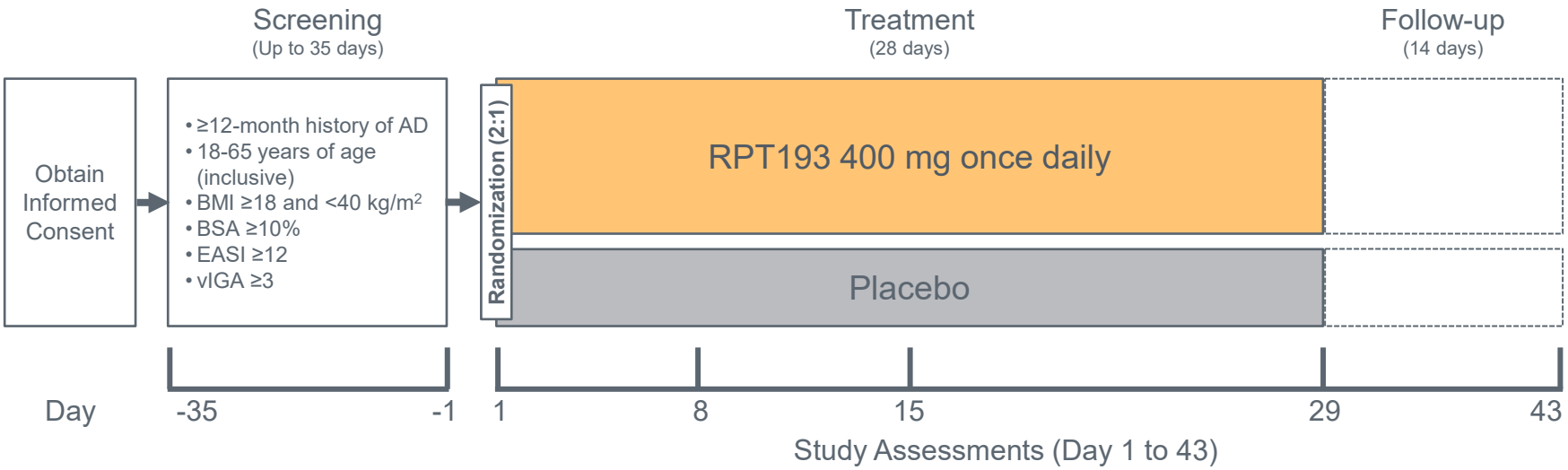
RPT193 Targets Th2 Cells: Key Drivers of Inflammation in Atopic Dermatitis, Asthma and Other Diseases



Phase 1b Trial Explored RPT193 Activity in Patients with Moderate-to-Severe Atopic Dermatitis



- Enrolled 31 patients into a double-blind, randomized trial with 2:1 allocation of RPT193 to placebo
- Monotherapy study: steroid and immunosuppressant washout period; rescue steroids not permitted through Day 43
- Not powered for any specific endpoint
- Exploratory endpoints include: EASI, Pruritus Numerical Rating Scale (NRS), SCORAD and vIGA
- Data presented are from the Intent to Treat dataset

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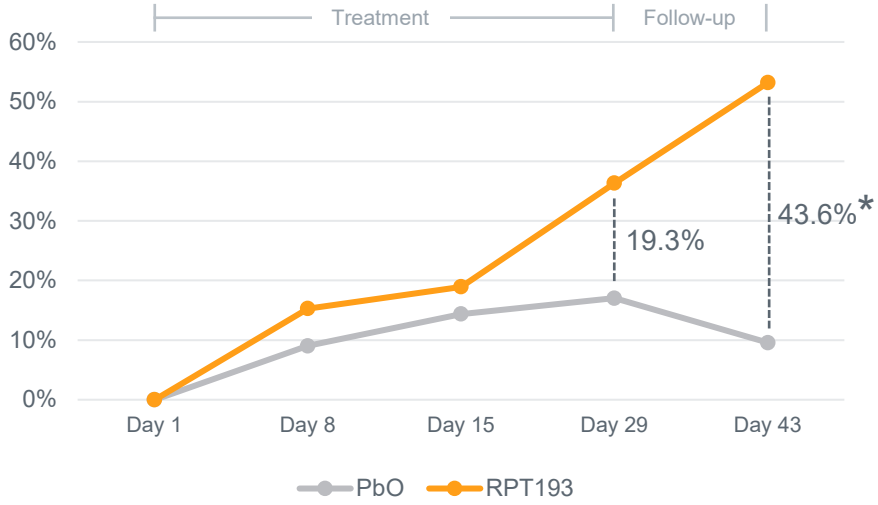
Phase 1b Baseline Demographics and Disease Characteristics

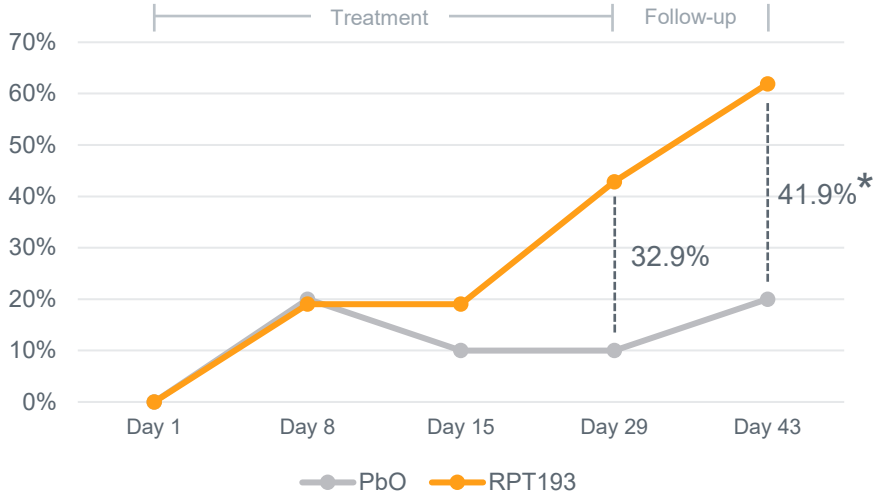
	Placebo	RPT193
N	10	21
Age, Mean (Range)	35.8 (22-64)	41.0 (19-63)
Female, n (%)	4 (40.0%)	12 (57.1%)
Baseline Characteristics		
EASI, Mean (Range)	21.07 (13.6-45.5)	18.49 (12-30)
BSA, Mean (Range)	24.5 (10-61)	23.3 (11-55)
vIGA 3, n (%)	8 (80.0%)	18 (85.7%)
Peak NRS, Mean (Range)	7.3 (3-10)	6.9 (3-10)
Peak NRS ≥4, n (%)	9 (90.0%)	20 (95.2%)

RPT193 Differentiated from Placebo for EASI and EASI-50 at Day 29 with Further Improvement at Day 43

% Improvement in EASI

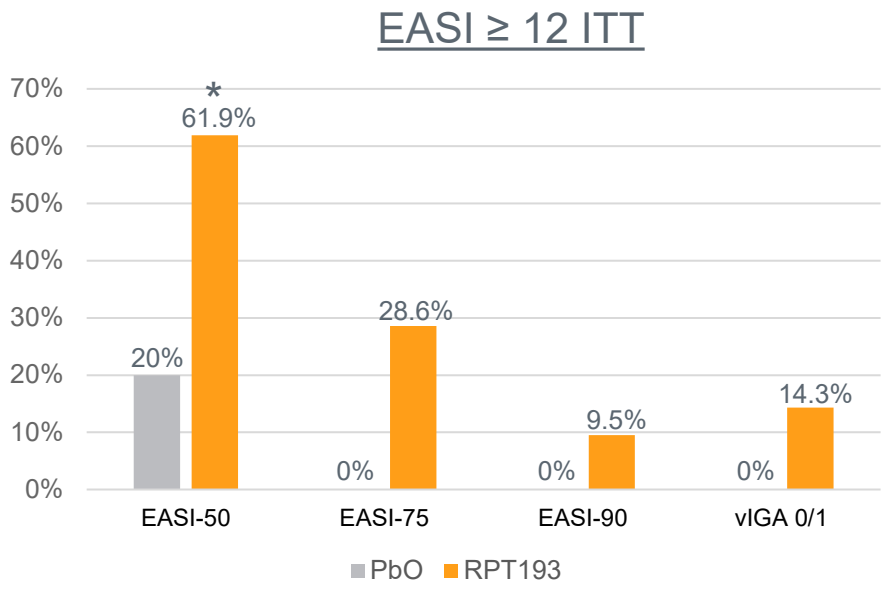


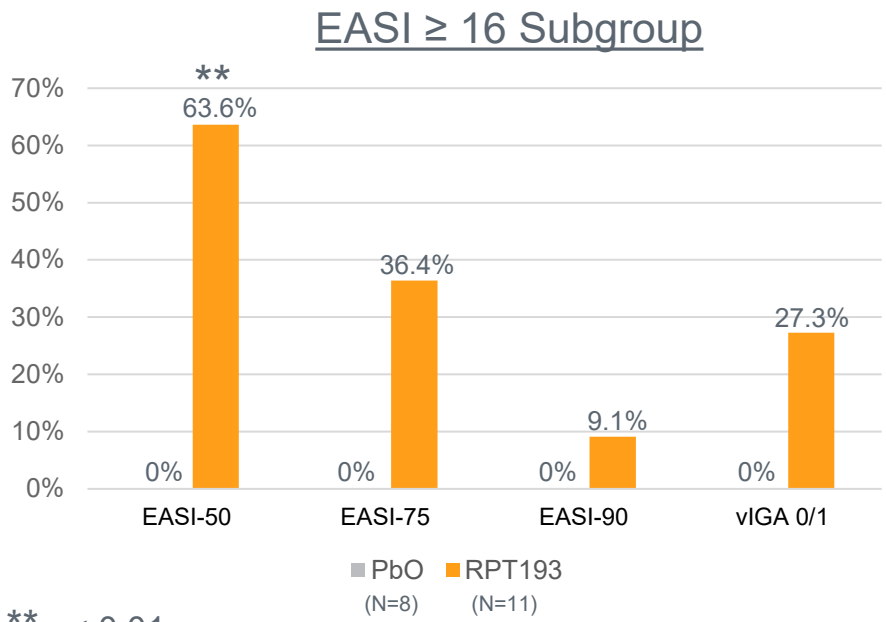
Proportion of EASI-50



*p < 0.05

RPT193 Differentiated from Placebo on EASI-75, 90 and vIGA 0/1 at Day 43

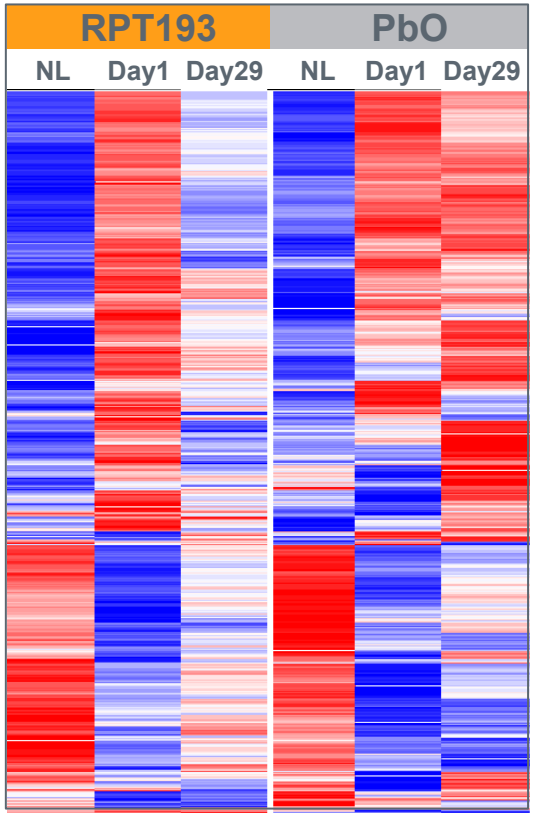




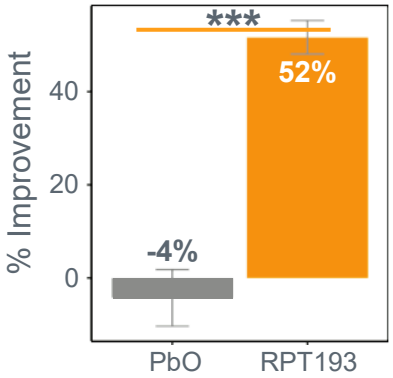
*p < 0.05 **p < 0.01

- Similar efficacy between ITT and EASI ≥ 16 Subgroup

RPT193 Demonstrated Significant Improvement in AD-Associated Gene Signatures in the Skin



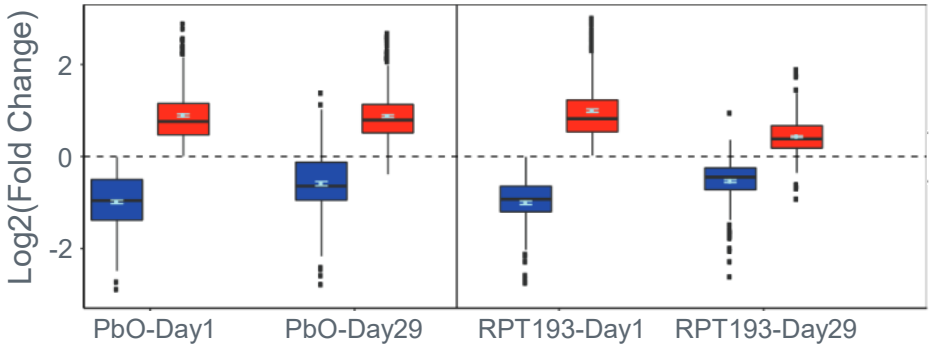
Mean % Improvement in MADAD Transcriptome



***(p<0.001)

MADAD: Meta-Analysis Derived Atopic Dermatitis score

Changes in the Lesional AD Transcriptome



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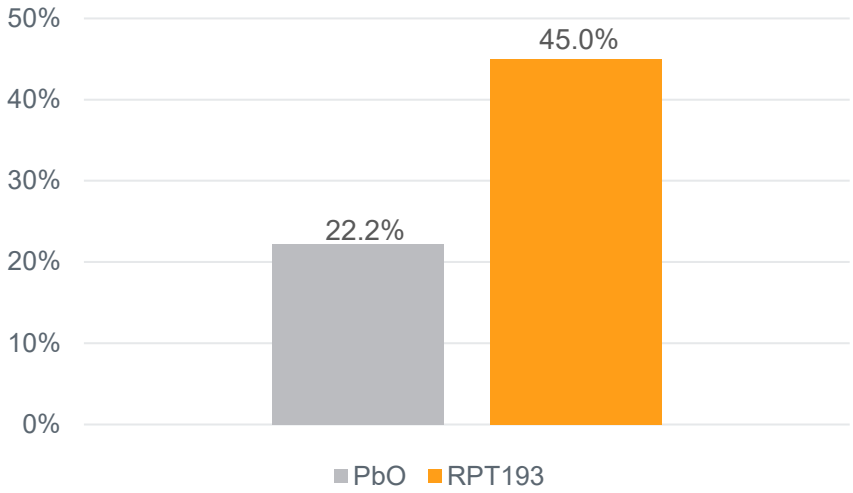
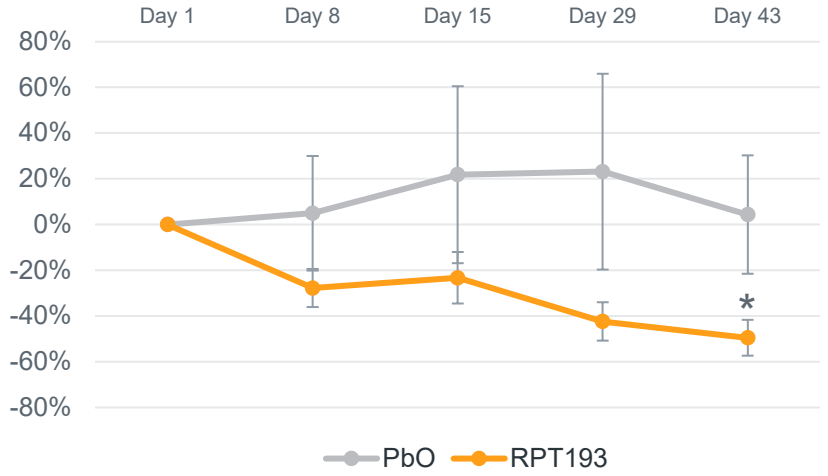
RPT193 Demonstrated Improvement in Itch and Sleep

Proportion of NRS-4†



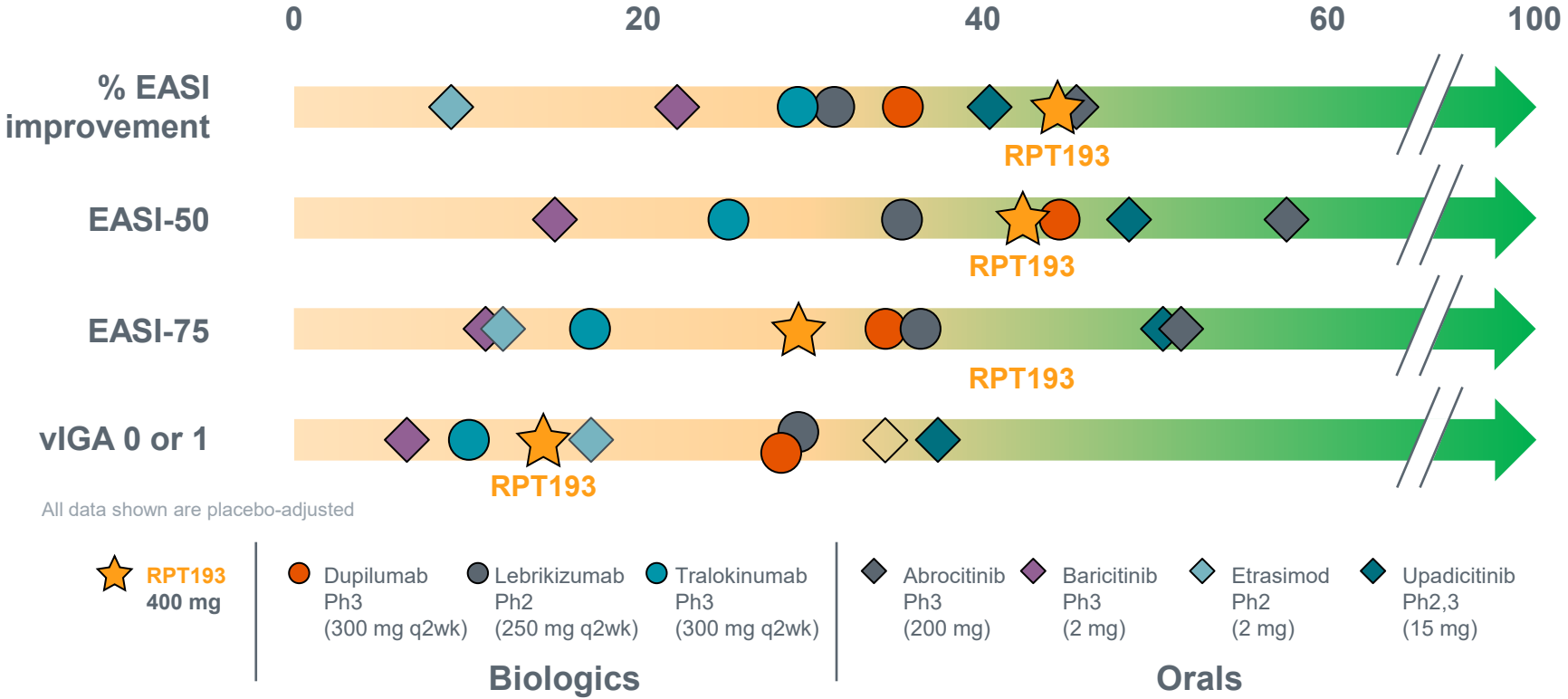
†At least a 4-point improvement among patients with a baseline pruritus NRS ≥4

% Change in Patient Oriented SCORAD (Sleep Loss + Pruritus)



*p < 0.05

RPT193 6-Week Efficacy vs. Other Drugs at 12-16 Weeks*



* Comparisons are based on published data and relative properties of other agents and do not reflect a head-to-head comparative study or clinical trial

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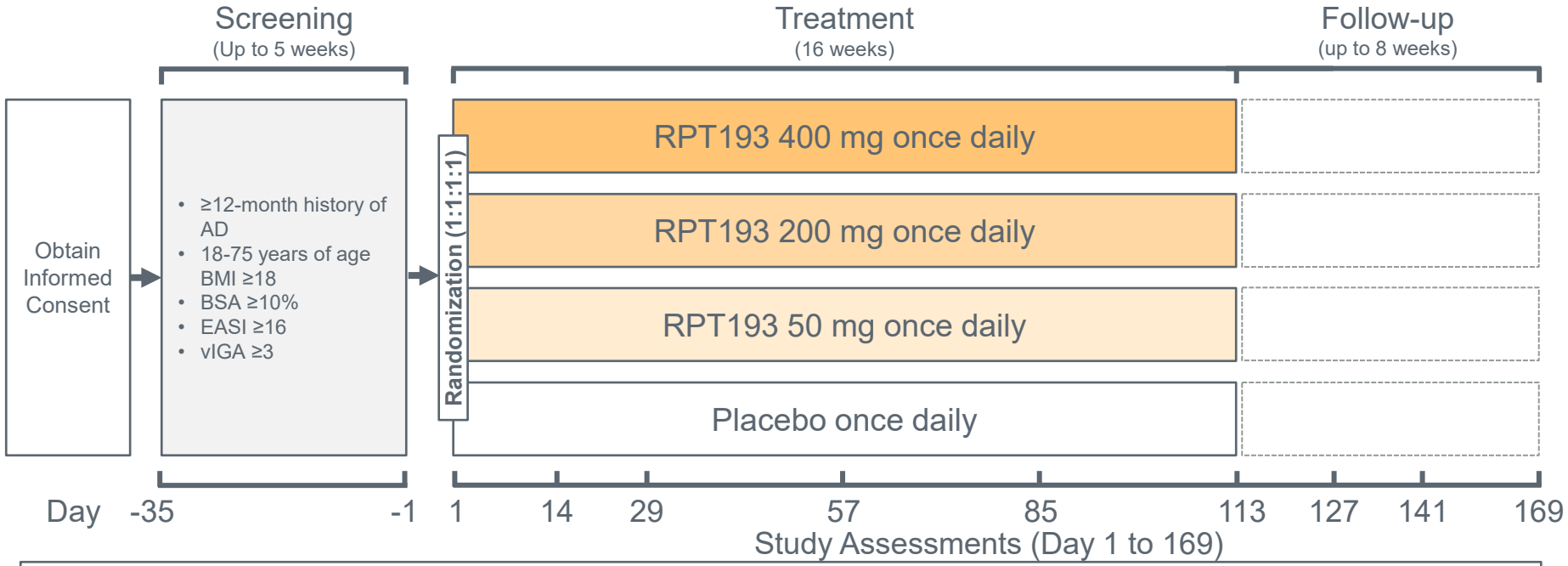
RPT193 Phase 1b Safety

- No SAEs reported
- All AEs reported were mild or moderate in intensity
- No clinically significant safety laboratory abnormalities observed
- Overall safety profile suggests a well-tolerated oral drug that should not require laboratory safety monitoring

Ongoing Dose-Finding Phase 2b Monotherapy Trial in Patients with Moderate-to-Severe Atopic Dermatitis



- **Goal enrollment**: 268 patients, ~67 per arm
- **Monotherapy study**: standard protocol to washout steroids/immunosuppressants and restrict rescue medications
- **Primary endpoint**: EASI
- **Secondary endpoints**: EASI-50/75/90, vIGA, Pruritus NRS

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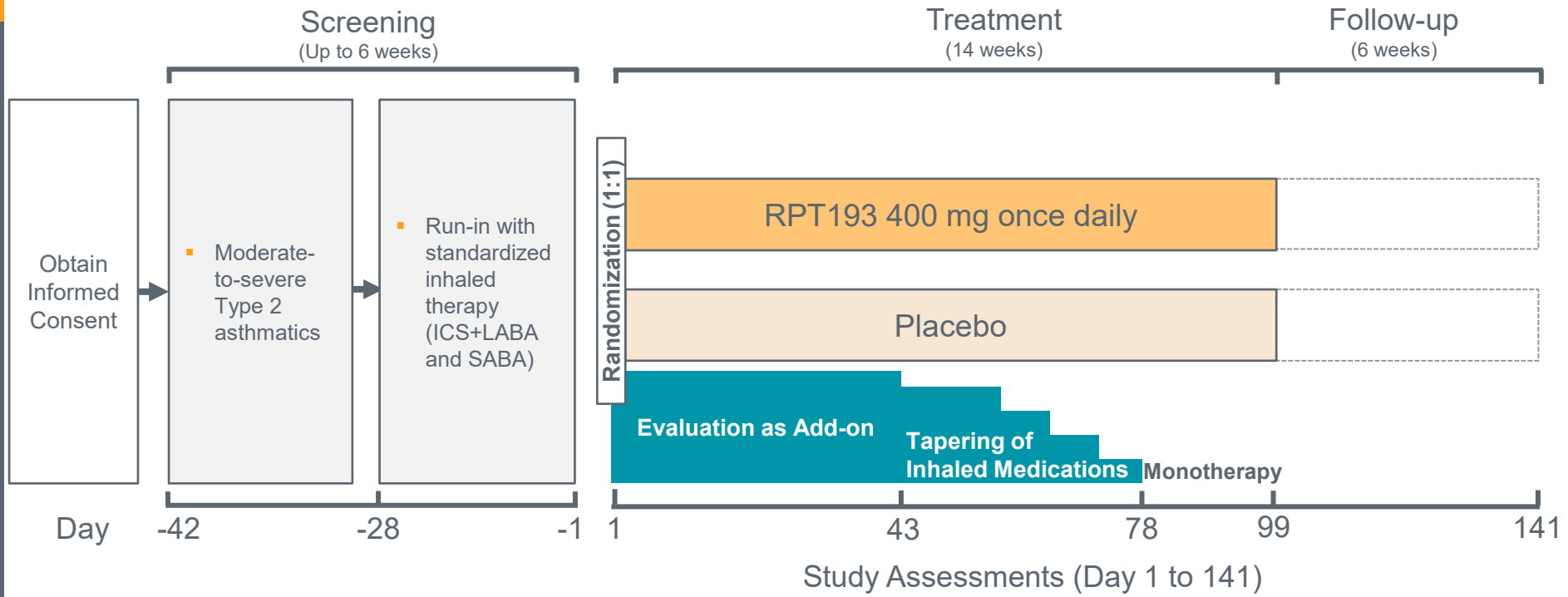
Proposed Phase 2a Asthma Trial Design



- **Goal enrollment**: ~100 patients, ~50 per arm
- **Primary Endpoint:** "Loss of Asthma Control"
- **Secondary Endpoint**: ACQ-5, FEV1, etc.

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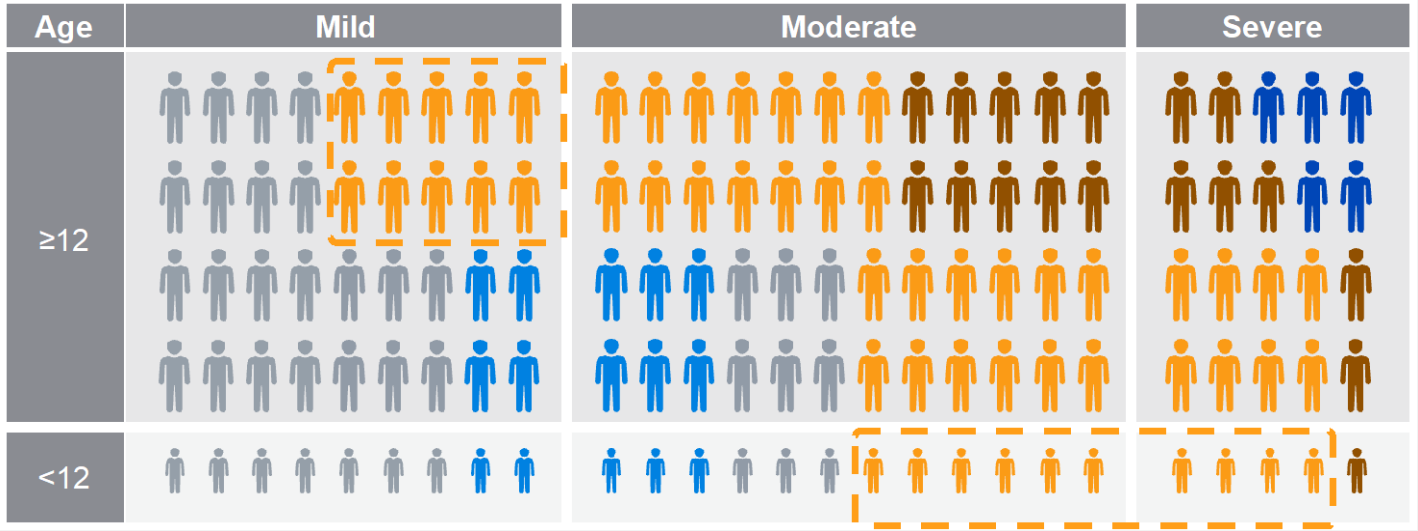
RPT193 Commercial Vision: Building a Global Blockbuster

Value Statement

Simple, once-daily oral providing symptom relief and lesion reduction
Favorable tolerability and safety from exquisite selectivity

Positioning
As the first-choice systemic therapy

- RPT193
- Injectable Biologics
- Oral JAKs
- Topical JAKs/PDE4
- TCS/TCI



Massive Opportunity in the $24B projected global AD market*

LAUNCH

- In Adults and Adolescents ≥ 12 yrs. with Mod-Severe AD

GROW and EXPAND

- In Children <12 yrs. with Mod-Severe AD
- In Adults with Mild AD
- Into the $21B Asthma Market*
- Additional Th2 Indications

Sources: GlobalData: Atopic Dermatitis Global Drug Forecast and Market Analysis to 2030 | March 2022 * Decision Resources Guide; EU, US, and Japan market

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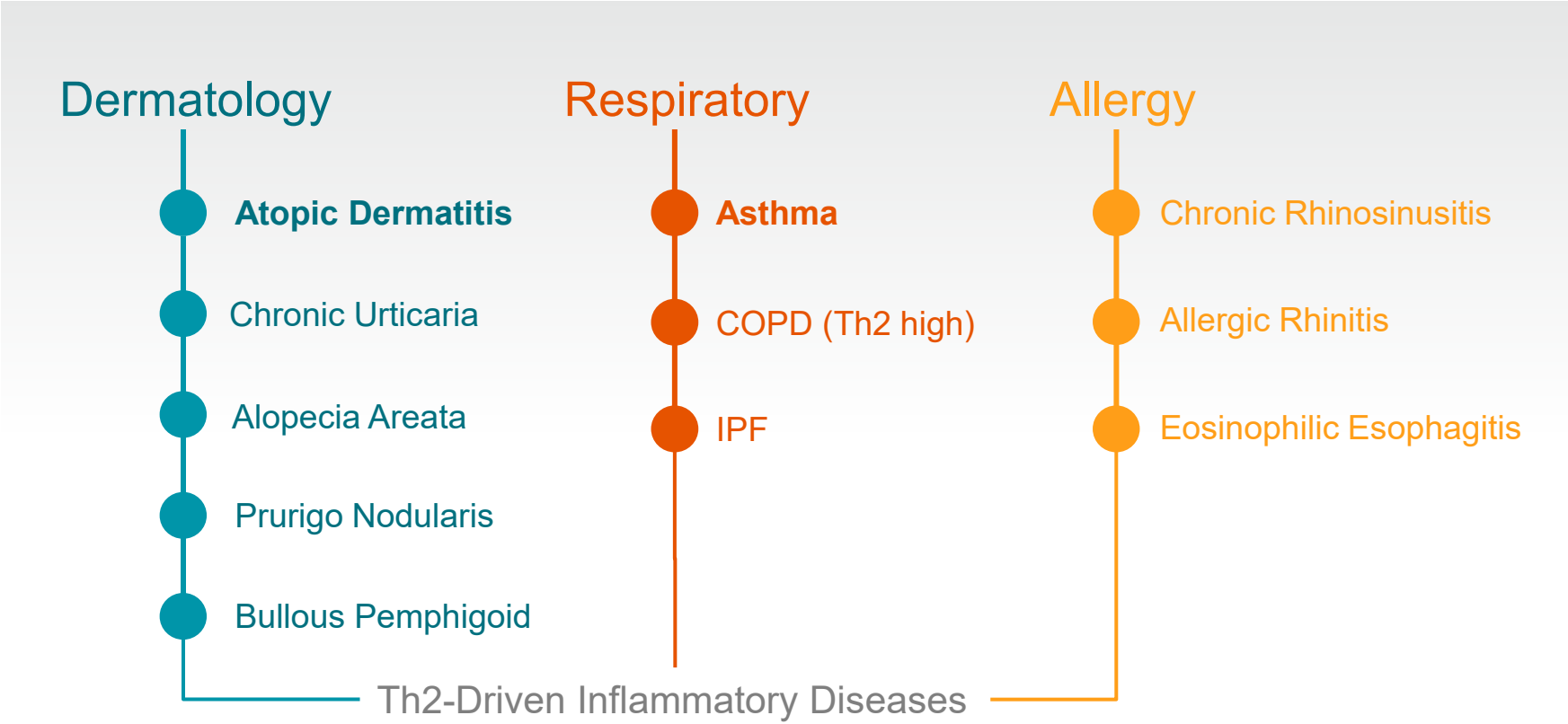
Potential “Pipeline in a Product”



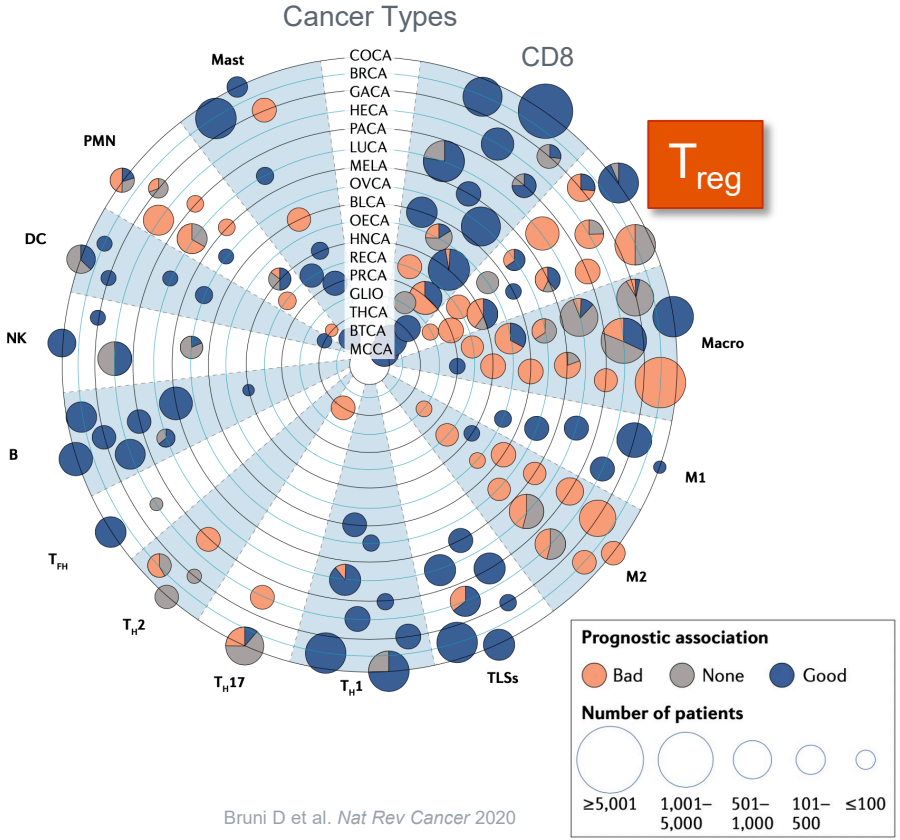
RPT193 Program Summary

- Oral selective Th2 inhibitor with clear benefit on signs and symptoms in AD
- Well tolerated with favorable safety
- Profile supports competitive positioning ahead of injectables and oral JAKs
- Massive commercial opportunity in AD, asthma and other Th2 indications
- 16-week Phase 2b study in AD ongoing, topline data expected Q4 2023
  - Biologic-like efficacy not required for commercial success
- Plan to initiate Phase 2a study in asthma Q1 2023

FLX475: CCR4 Antagonist for Oncology

T_{reg} Are Key Targets in the Tumor Microenvironment (TME)

- Correlate with poor prognosis across most cancers
- Mechanism for immune evasion by viruses and tumors
- Barrier to checkpoint inhibitor efficacy
- **Challenge**: selective inhibition of T_{reg} in the TME
  - Depleting antibodies targeting CD25, CCR4, etc. do not appear to have adequate selectivity



Bruni D et al. *Nat Rev Cancer* 2020

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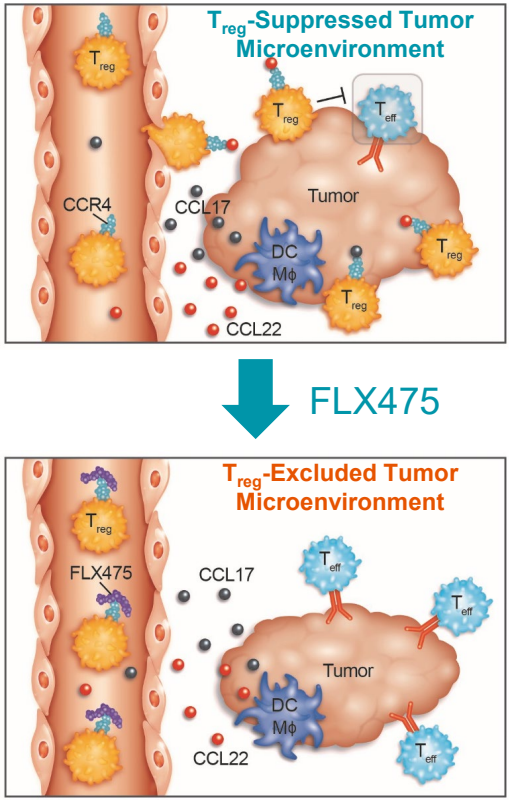
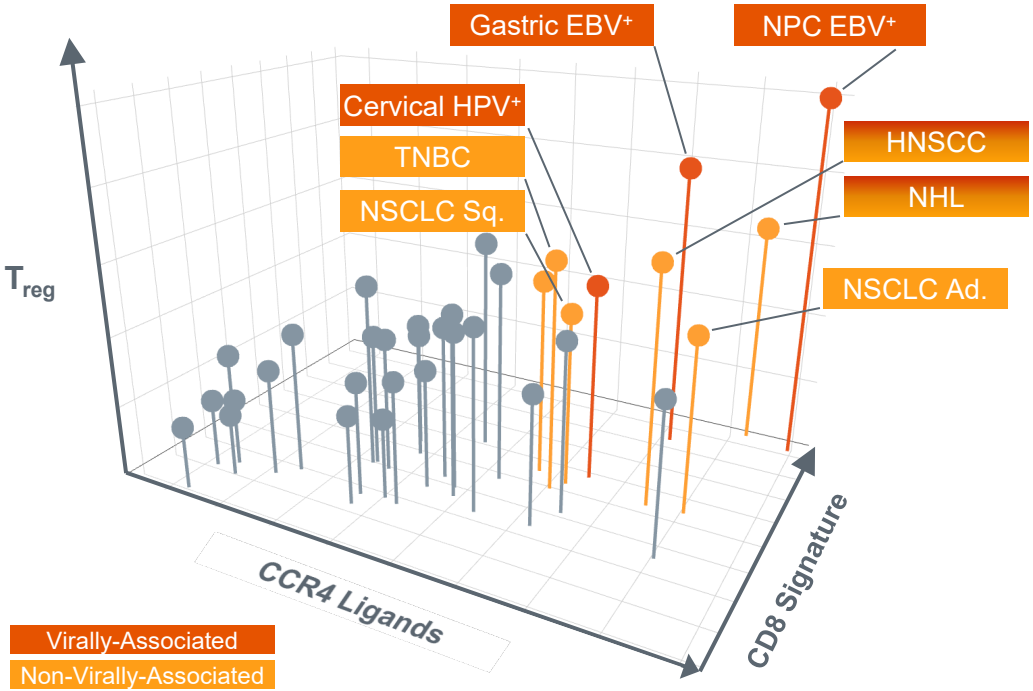
FLX475: Tumor Specific T_{reg} Inhibitor in Phase 2

- **Chemically distinct** potent and selective CCR4 small molecule antagonist
- **Selectively blocks tumor T_{reg}** while sparing normal tissues and beneficial cells
- **Potential for superior safety and efficacy** compared to depleting antibodies
- **US patent coverage through 2037**
- **Monotherapy and combination antitumor activity** in charged cancers



Identification and Characterization of Charged Tumors



Data from in-house analysis of TCGA database combined with other data sets; Confirmed in > 400 tumor microarrays
The graph above reflects a logarithmic scale on each axis
NPC Nasopharyngeal; HNSCC Head & Neck Squamous Cell Carcinoma; NHL Non-Hodgkin Lymphoma; NSCLC Non-Small Cell Lung Cancer; TNBC Triple Negative Breast Cancer

- "Charged" tumors: high CCR4 ligands, T_{reg} and CD8 T cells
- Potential for both monotherapy and combination activity
- Include cancers with high unmet need and large markets
- Phase 2 trial expansions focused on charged cancers

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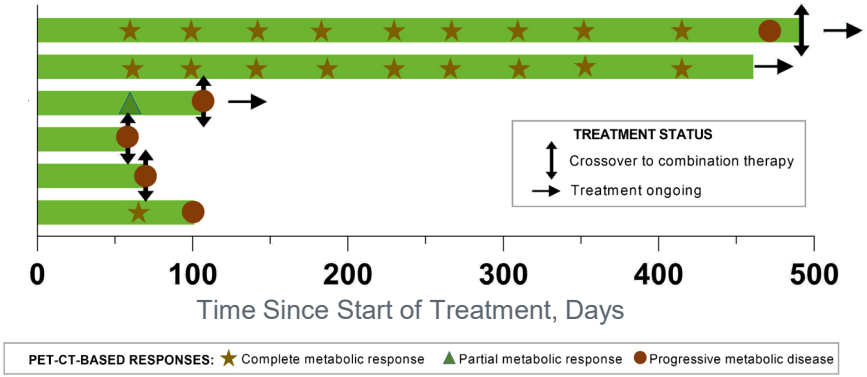
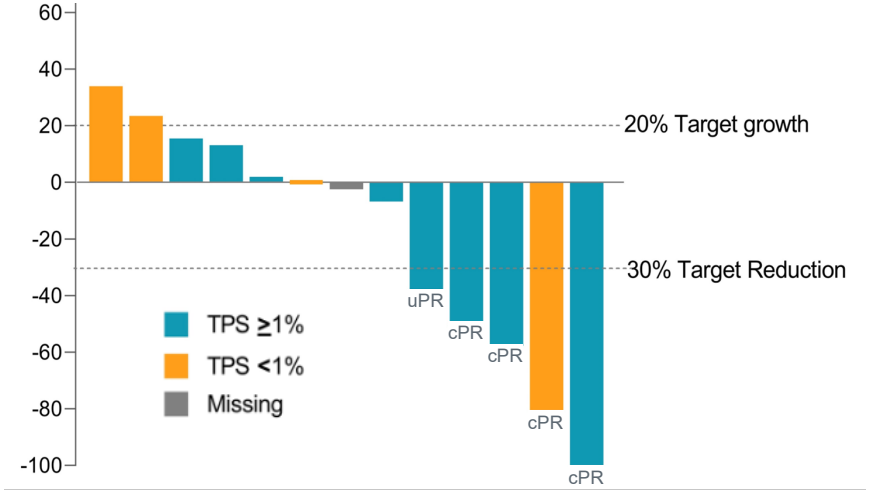
Encouraging Monotherapy and Combination Efficacy

EBV+ NK/T Lymphoma (Monotherapy)



- 4 of 6 responses to FLX475 monotherapy including 2 confirmed durable CMR

CPI-Naïve NSCLC (Combo)



- **Design**: Open-label Phase 2, Simon 2-Stage Design
- **Indications**: Charged tumors with ≥1 line of therapy
- **Dose**: FLX475 100 mg QD; pembro 200 mg Q3wk

ORR Comparison in PD-L1+* NSCLC

Pembro Mono	Pembro+TIGIT	Pembro+FLX475
18%†	31% (4/13)^	38% (3/8)

*TPS ≥ 1%; †Keynote-010; ^Niu et al. ESMO 2020

FLX475 Program Summary

- Highly selective tumor T_{reg} inhibitor differentiated from biologics
- Encouraging early efficacy as monotherapy and in combination with pembrolizumab
- Favorable safety and convenient oral dosing support broad combinability
- Enrolling Stage 2 expansions in 3 indications including CPI-naïve NSCLC
  - Partner Hanmi Pharmaceuticals is testing FLX475 + pembro in gastric cancer
- Data update expected in 2H 2023

Key Takeaways and Upcoming Milestones

- **RPT193**: safe oral agent designed for a broad range of inflammatory diseases, in a definitive Phase 2b study in AD
- **FLX475**: highly selective tumor T_{reg} inhibitor in multiple Phase 2 expansions as monotherapy and in combination with pembrolizumab
- **Planned Key Milestones**
  - **Q1 2023**: RPT193 Phase 2a asthma trial start
  - **Q4 2023**: RPT193 Phase 2b AD topline data
  - **2H 2023**: FLX475 Phase 2 data update

Thank You