



Transforming the Treatment of Cancer and Inflammation

January 2022
Corporate Presentation

Legal Disclaimers

Statements in this Presentation that are not statements of historical fact are forward-looking statements. Such forward-looking statements include, without limitation, statements regarding RAPT Therapeutics, Inc.'s (the "Company," "we," or "us") research and clinical development plans; current and future drug candidates; business strategy and plans; regulatory pathways; and our ability to complete certain milestones. Words such as "believe," "anticipate," "plan," "expect," "will," "may," "upcoming," "milestone," "potential," "target" or the negative of these terms or similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. These forward-looking statements are based on the current beliefs of the Company's management with respect to future events and trends and are subject to known and unknown risks and uncertainties, including those described in the "Risk Factors" section of our most recent Form 10-Q filed with the Securities and Exchange Commission, and any current and periodic reports filed thereafter, that may cause our actual performance or achievements to be materially different from any future performance or achievements expressed or implied by the forward-looking statements in this Presentation. These forward-looking statements should not be taken as forecasts or promises nor should they be taken as implying any indication, assurance or guarantee that any assumptions on which such forward-looking statements have been made are correct or exhaustive or, in the case of such assumptions, fully stated in the Presentation. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date this Presentation is given. Although we believe that the beliefs and assumptions reflected in the forward-looking statements are reasonable, we cannot guarantee future performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Presentation.

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 targets inflammatory Th2 cells
- PoC in Phase 1b achieved in atopic dermatitis (AD): efficacy on all key exploratory endpoints with excellent safety and tolerability

FLX475 (Oncology): MERCK

- Selectively targets immunosuppressive tumor T_{reg}
- PoC in Phase 2 with monotherapy and combo activity observed

DISCOVERY

HPK1 (Oncology)

Other Targets

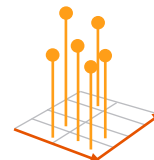
Proprietary Drug Discovery and Development Engine



- Drug discovery
- Clinical development to POC



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



- Driven by data to improve chances of clinical success



- Critical immune drivers of cancer and inflammation



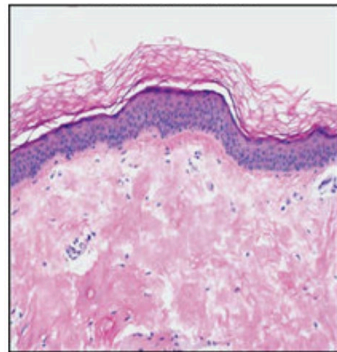


RPT193: CCR4 Antagonist for Inflammatory Diseases

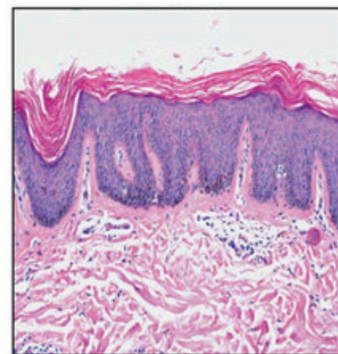
RPT193: Oral CCR4 Antagonist for Inflammatory Diseases

- RPT193 is a highly potent and selective once-daily oral CCR4 antagonist that targets inflammation more specifically than JAK inhibitors and acts upstream of many injectables
- Phase 1b trial demonstrated clear benefit in patients with moderate-to-severe AD, with favorable safety and tolerability
- No laboratory safety monitoring or black box warning expected
- Next steps: Phase 2b trial in AD and a Phase 2a trial in asthma

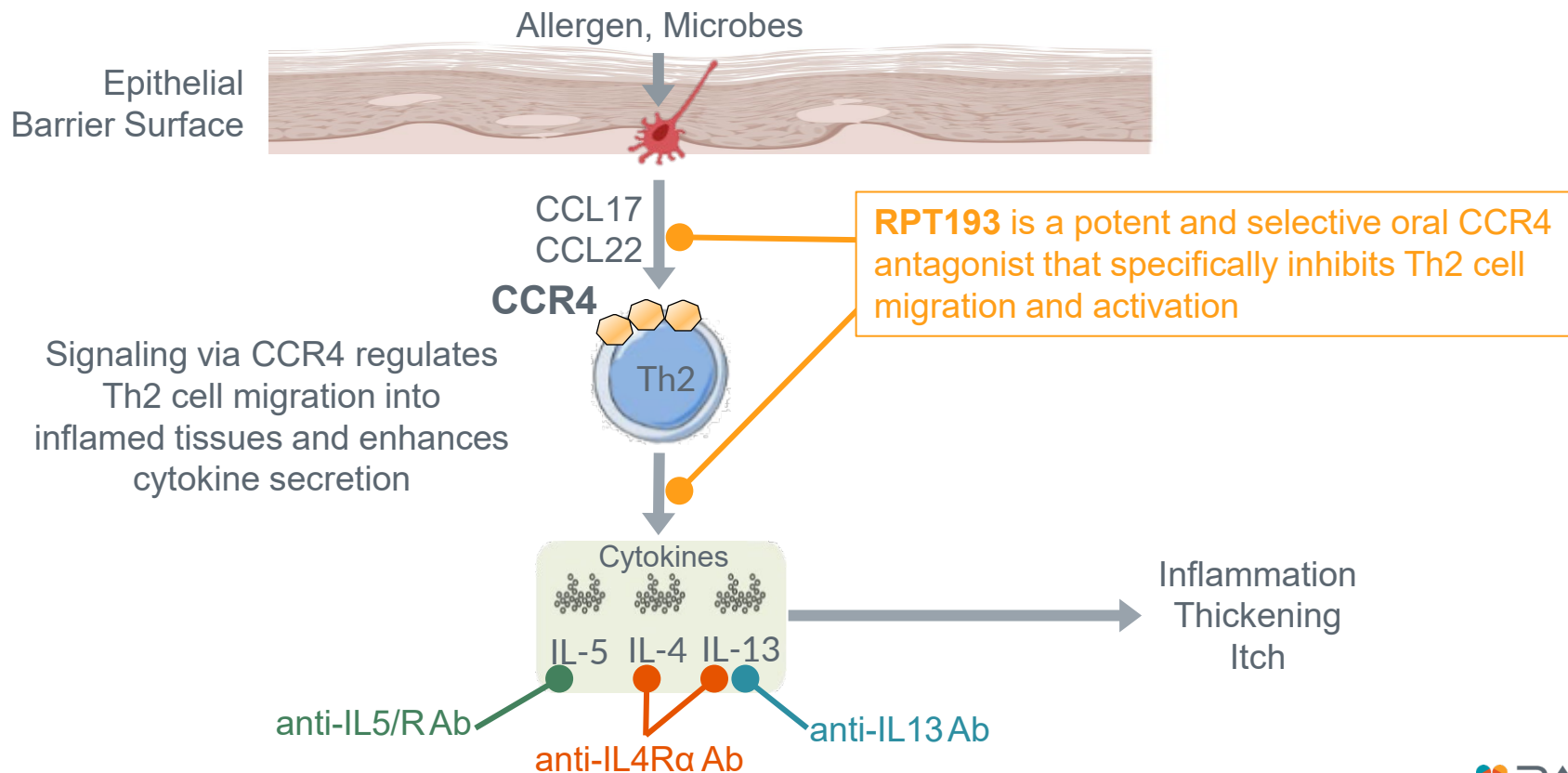
Normal Human Skin



AD Lesional Skin



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



Atopic Dermatitis and Asthma Represent Major Markets

- **Atopic Dermatitis (AD)**

- Common disease affecting ~19M adults and ~10M children in the US
- \$24B projected market by 2029*

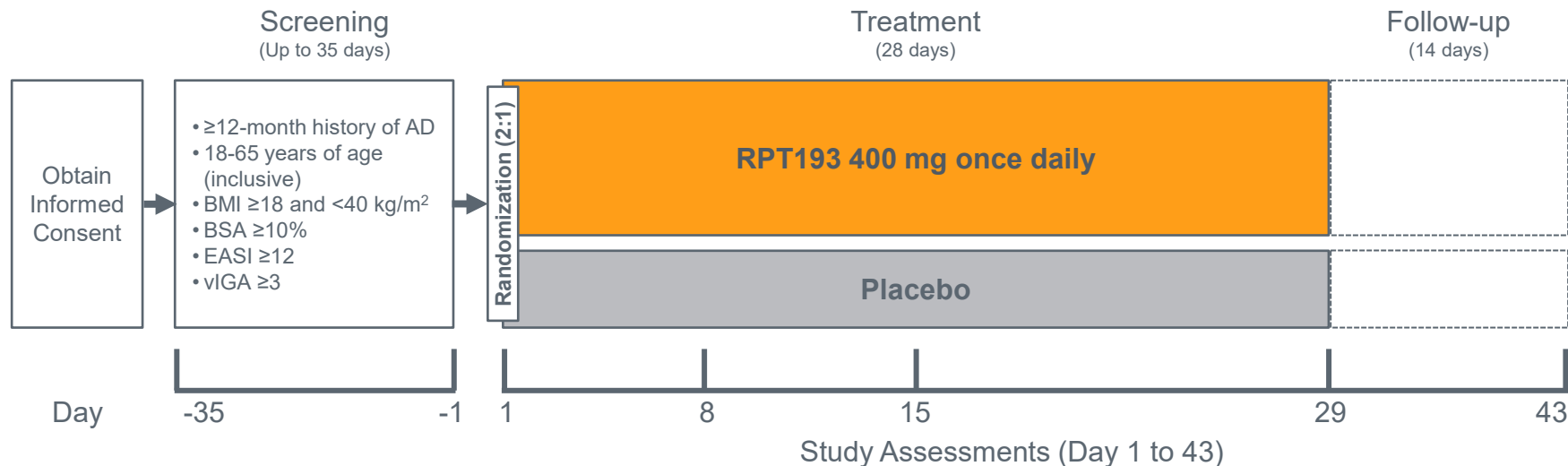
- **Asthma**

- Asthma affects ~15M adults and children in the US
- \$21B projected market by 2029*

- **High unmet need:** a well-tolerated, safe and effective, oral drug that does not require laboratory safety monitoring
- **RPT193 has the potential to address this unmet need**

* Decision Resources Guide; EU, US, and Japan market

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



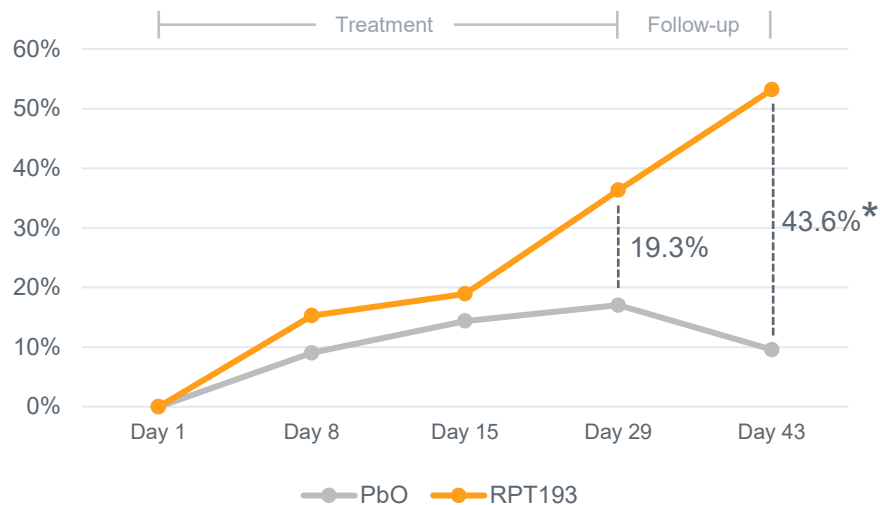
- Enrolled 31 patients into a double-blind, randomized trial with 2:1 allocation of RPT193 to placebo
- Monotherapy study: steroid and immunosuppressant washout period; rescue steroids not permitted through Day 43
- Trial was not powered for any specific endpoint
- Exploratory endpoints include: EASI,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

Phase 1b Baseline Demographics and Disease Characteristics

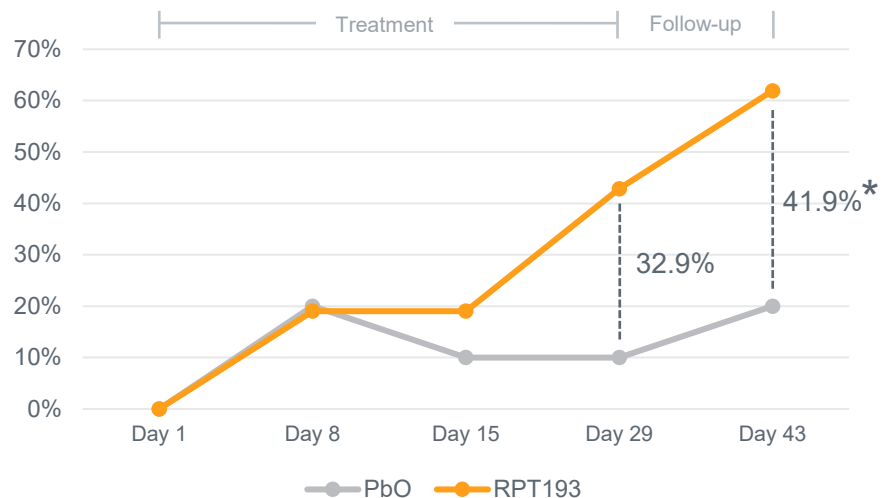
	Placebo	RPT193
N	10	21
Age, Mean (Range)	35.8 (22-64)	41.0 (19-63)
Female, n (%)	4 (40.0%)	12 (57.1%)
Baseline Characteristics		
EASI, Mean (Range)	21.07 (13.6-45.5)	18.49 (12-30)
BSA, Mean (Range)	24.5 (10-61)	23.3 (11-55)
vIGA 3, n (%)	8 (80.0%)	18 (85.7%)
Peak NRS, Mean (Range)	7.3 (3-10)	6.9 (3-10)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



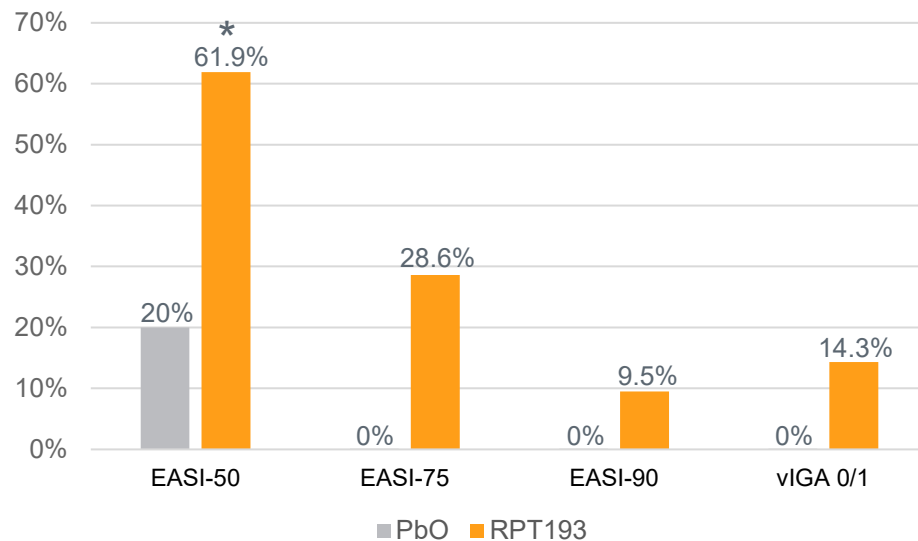
Proportion of EASI-50



*p < 0.05

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

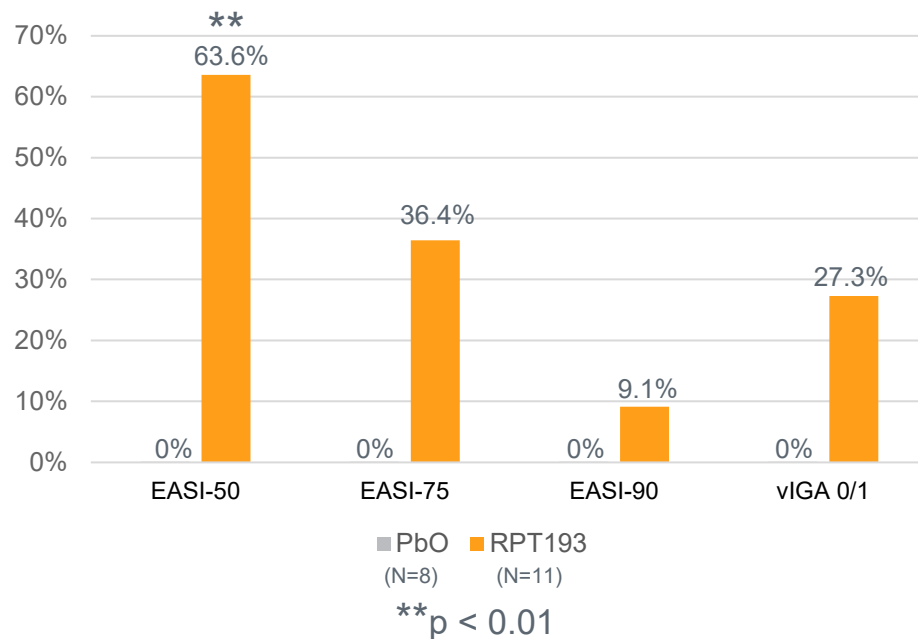
Proportion of EASI-50, 75, 90 and vIGA 0/1 (Clear/Almost Clear)



*p < 0.05

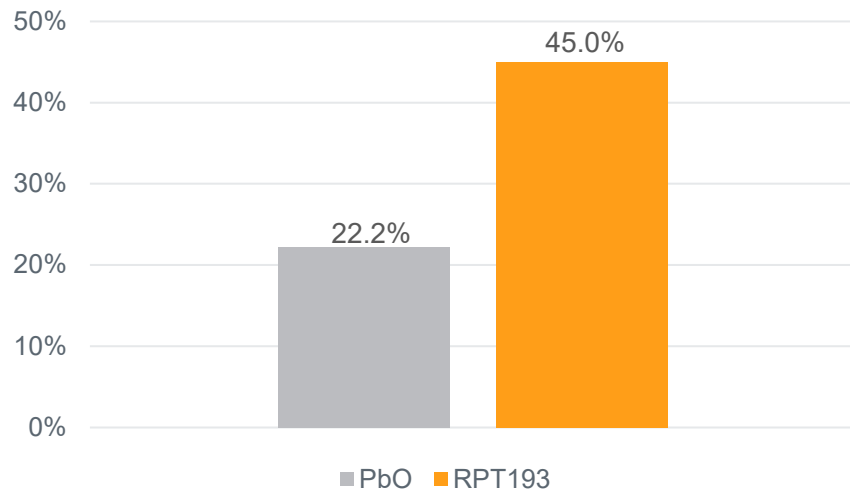
RPT193 Differentiated from Placebo in Patients with Baseline EASI \geq 16 at Day 43

Proportion of EASI-50, 75, 90 and vIGA 0/1 (Clear/Almost Clear)



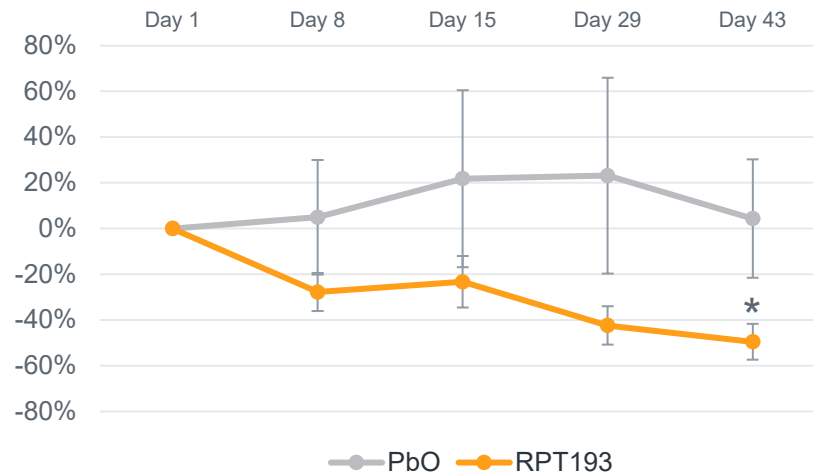
RPT193 Demonstrated Improvement in Itch and Sleep

Proportion of NRS-4[†]



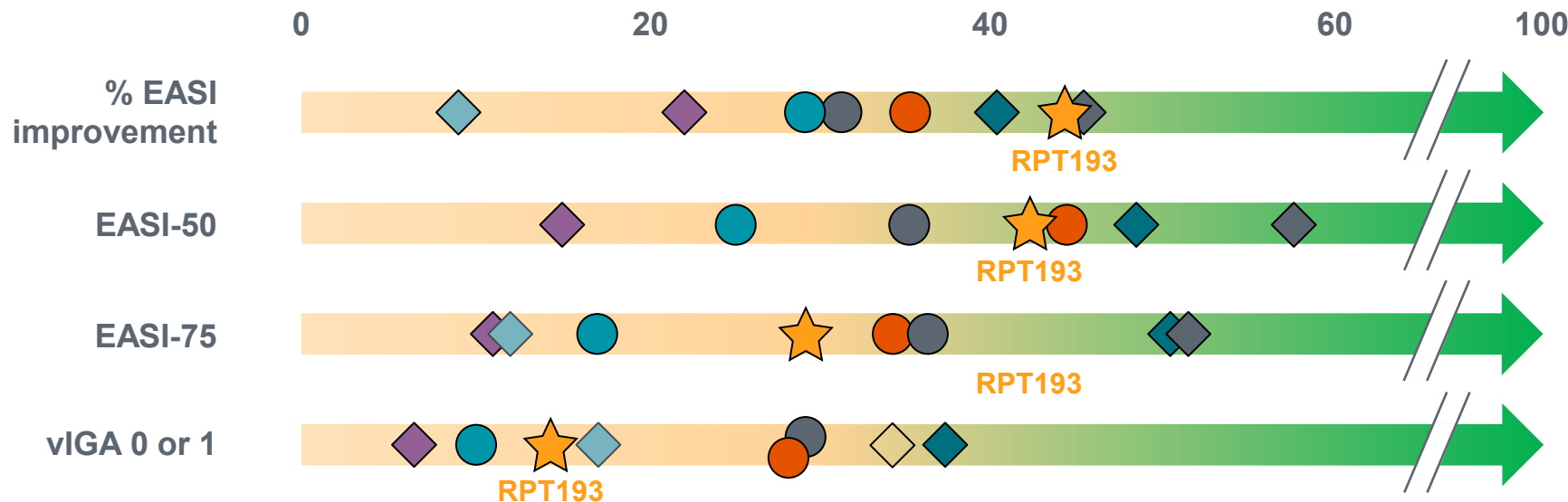
[†]At least a 4-point improvement among patients with a baseline pruritus NRS ≥ 4

% Change in Subjective SCORAD
(Sleep Loss + Pruritus)



*p < 0.05

RPT193 6-Week Efficacy Compared to Other Drugs at 12-16 Weeks*



All data shown are placebo-adjusted

★ RPT193
400 mg

● Dupilumab Ph3 (300 mg q2wk)
● Lebrizikumab Ph2 (250 mg q2wk)
● Tralokinumab Ph3 (300 mg q2wk)

Biologics

◆ Abrocitinib Ph3 (200 mg)
◆ Baricitinib Ph3 (2 mg)
◆ Etrasimod Ph2 (2 mg)
◆ Upadacitinib Ph2,3 (15 mg)

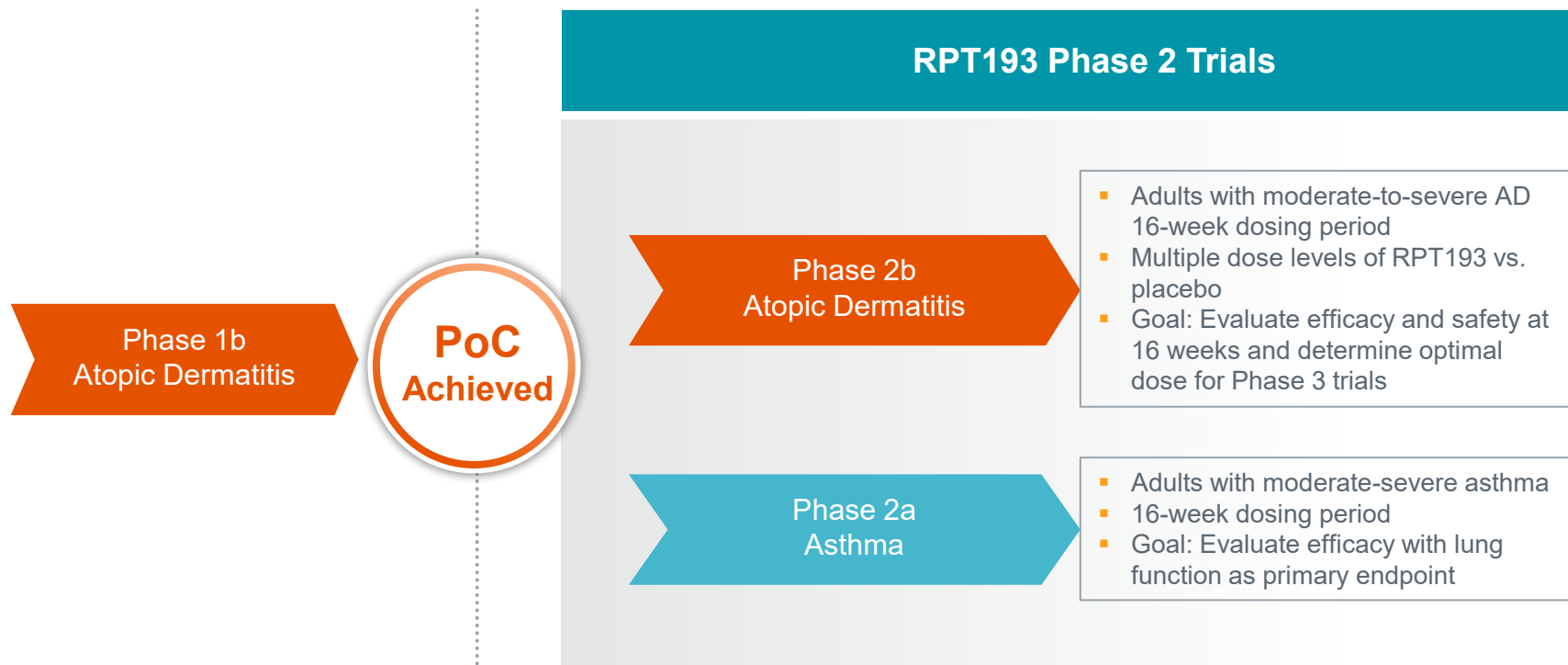
Orals

* 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

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 to date suggests a well-tolerated oral drug that should not require laboratory safety monitoring

Next Steps for the RPT193 Program



Potential “Pipeline in a Product”

Dermatology

- Atopic Dermatitis
- Chronic Urticaria
- Alopecia Areata
- Prurigo Nodularis
- Bullous Pemphigoid

Respiratory

- Asthma
- COPD (Th2 high)
- IPF

Allergy

- Chronic Rhinosinusitis
- Allergic Rhinitis
- Eosinophilic Esophagitis

Th2-Driven Inflammatory Diseases

RPT193 Program Summary

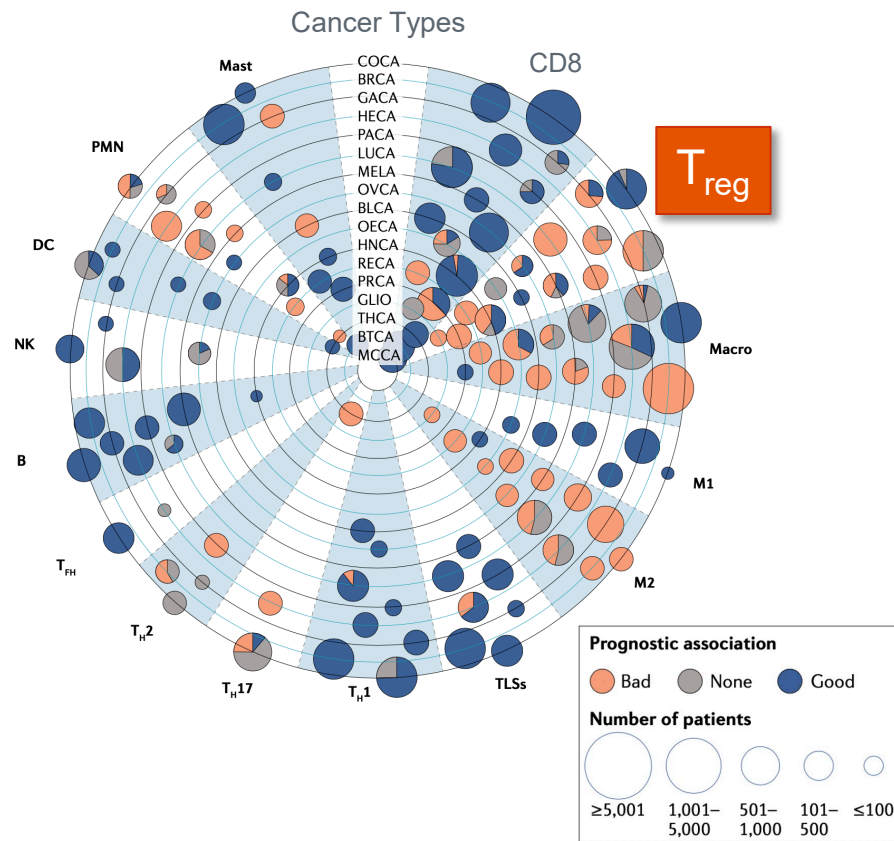
- Data from the Phase 1b study in patients with atopic dermatitis demonstrated clear benefit on all key exploratory clinical endpoints including EASI and vIGA
- Continued deepening of responses through 2-week follow-up period suggests higher levels of efficacy could be achieved in longer studies
- Profile suggests an effective, well-tolerated oral molecule not needing laboratory safety monitoring, with positioning ahead of injectables and JAK inhibitors
- Next steps: 16-week Phase 2b study in patients with moderate-to-severe AD and a Phase 2a study in patients with asthma



FLX475: CCR4 Antagonist for Oncology

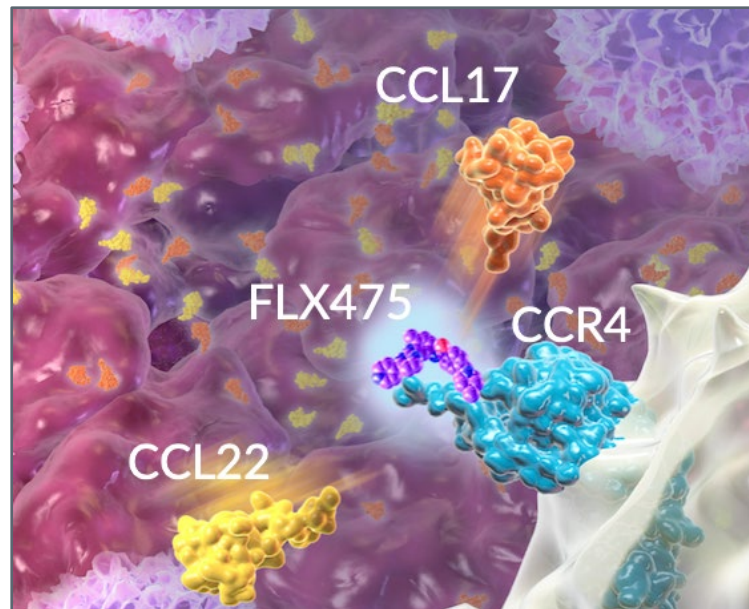
T_{reg} are Key Targets in the Tumor Microenvironment (TME)

- 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



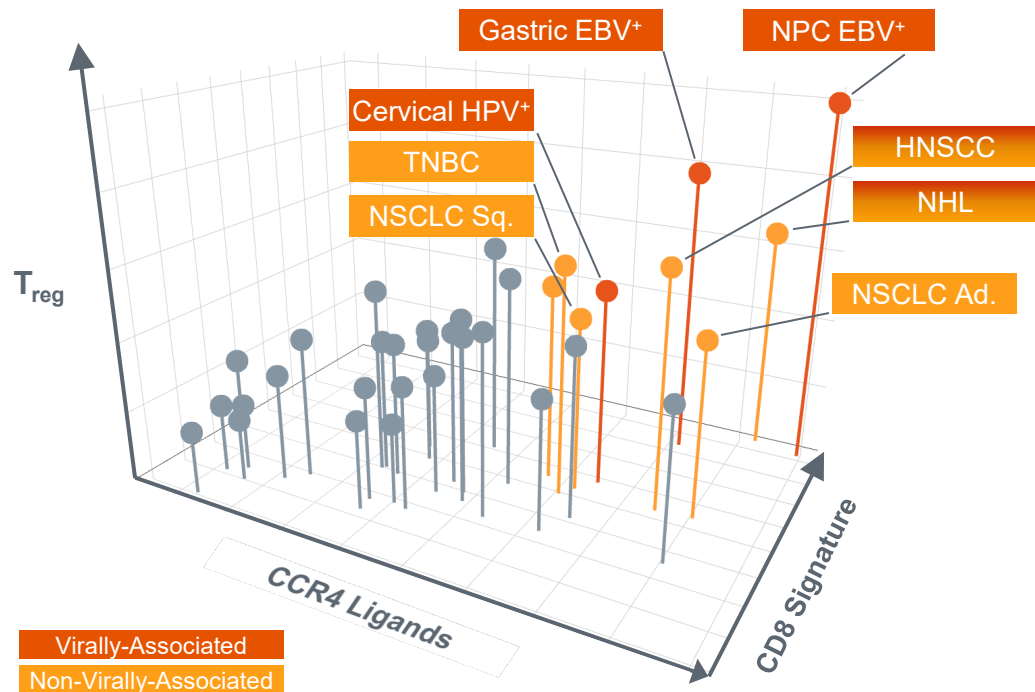
FLX475: Oral CCR4 Antagonist in Phase 2

- Highly 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
- Issued U.S. composition of matter patent with coverage through 2037
- Monotherapy and combination antitumor activity in charged cancers



Blocks interaction with CCR4 ligands
CCL22 and CCL17 on T_{reg}

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

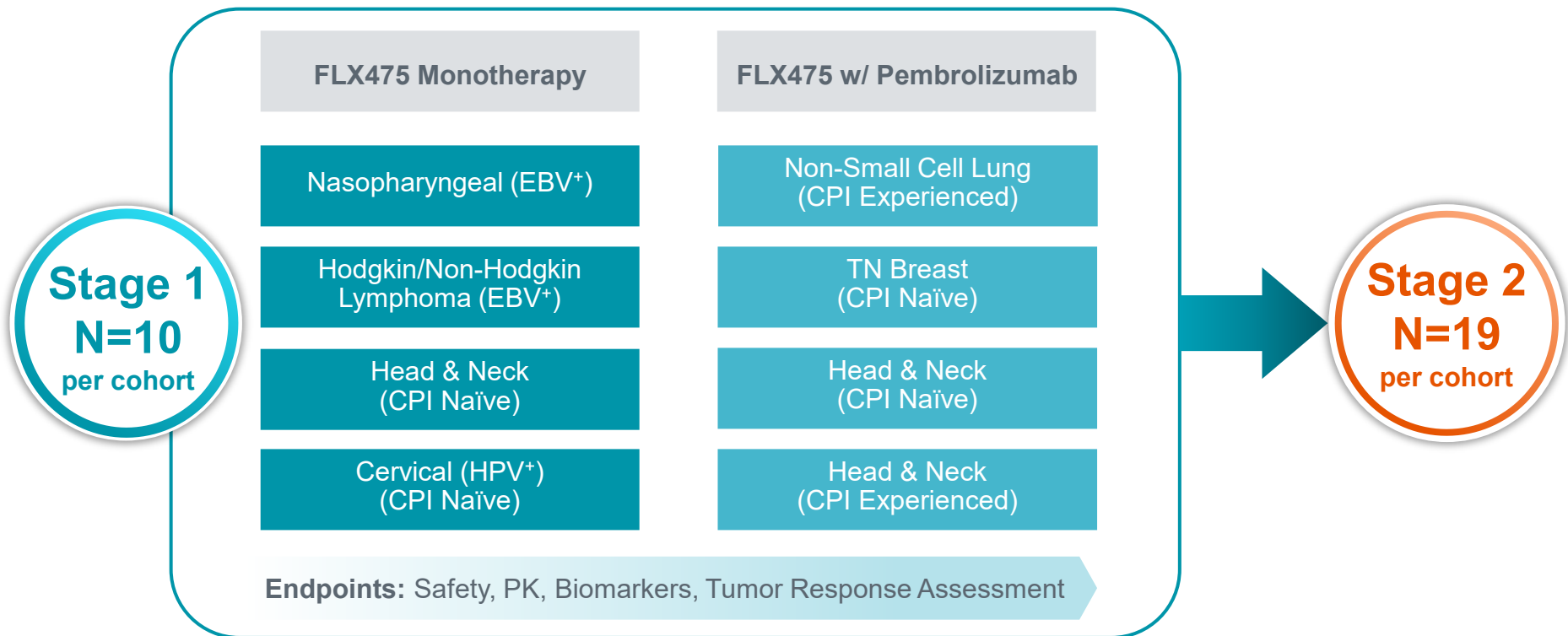
NPC Nasopharyngeal; HNSCC Head & Neck Squamous Cell Carcinoma; NHL Non-Hodgkin

Lymphoma; NSCLC Non-Small Cell Lung Cancer; TNBC Triple Negative Breast Cancer

- “Charged” tumors: high levels of CCR4 ligands, T_{reg} and CD8 T cells
- Potential for both monotherapy and combination activity
- Represent cancers with high unmet need and large markets
- Potential for tissue-agnostic accelerated approval in virally-associated tumors

Phase 2: Gated Simon 2-Stage Design

- To evaluate the antitumor activity of FLX475 as monotherapy and in combination with pembrolizumab in charged cancers that progressed after ≥ 1 line of therapy



CPI = Checkpoint Inhibitor

Phase 2: Status and Stage 2 Decisions

Stage 1
N=10
per cohort

Stage 1 Pending

Cervical (CPI Naïve)
Monotherapy

Stage 2
N=19
per cohort

Stage 2 Initiated

EBV⁺ Lymphoma
Mono and Combo

Nasopharyngeal (EBV+)
Combination

Head & Neck (CPI Naïve)
Combination

Head & Neck (CPI Exp.)
Combination

FLX475 Phase 2 Program Summary

- FLX475, a highly selective tumor T_{reg} inhibitor, appears to be an active agent in charged cancers
 - Demonstrated clinical activity as monotherapy
 - Demonstrated clinical activity in combination with pembrolizumab in checkpoint-naïve cancers beyond expected from checkpoint alone
- Ungated Stage 2 expansions in 4 indications
 - EBV+ lymphoma, nasopharyngeal and head and neck cancers (CPI naïve and CPI refractory)
- Favorable safety supportive of broad combinability
- Targeting a medical conference in 2022 for data presentation

Key Takeaways and Upcoming Milestones

- **RPT193**: safe oral agent designed for an array of inflammatory diseases – positive Phase 1b data in AD
- **FLX475**: a highly selective tumor T_{reg} inhibitor in multiple Phase 2 expansions as monotherapy and in combination with pembrolizumab
- **Planned Key Milestones**
 - **1H 2022**: RPT193 Phase 1b AD biomarker data
 - **1H 2022**: RPT193 Phase 2b AD trial initiation
 - **2H 2022**: RPT193 Phase 2a asthma trial initiation
 - **2022**: FLX475 Phase 2 data update



Thank You

