RPT193, an oral CCR4 inhibitor: Efficacy results from a randomized, placebo-controlled Phase 1b monotherapy trial in patients with moderate-to-severe atopic dermatitis

Robert Bissonnette[1], Joshua Rulloda[2], Nadine Lee[2], Paul Kassner[2], Jasmina Jankicevic[2], William Ho[2], Laurence Cheng[2], Emma Guttman-Yassky[3]

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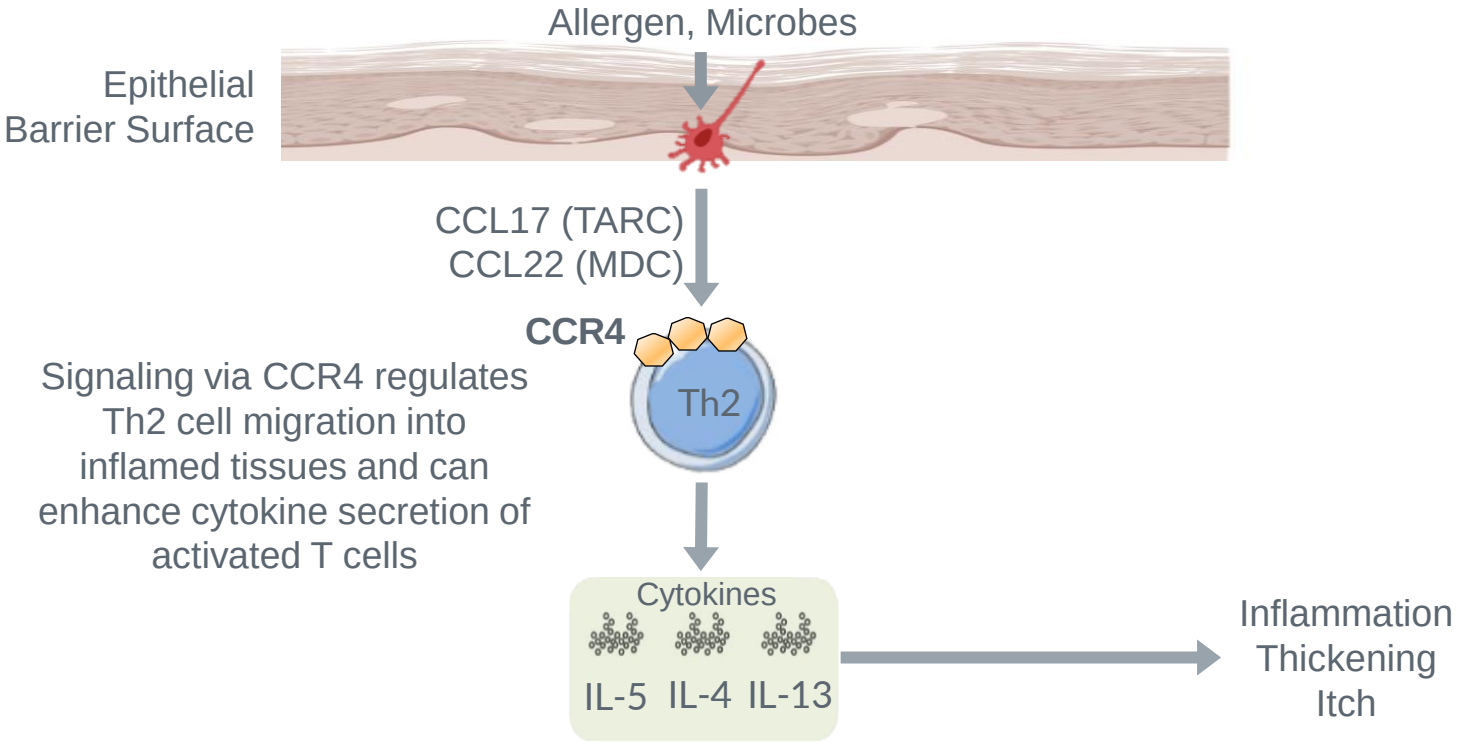
[1]Innovaderm Research Inc., Montreal, Quebec, Canada, [2]RAPT Therapeutics, Inc., South San Francisco, CA, USA, [3]Icahn School of Medicine at Mount Sinai, New York, NY, USA

Disclosures

- R Bissonnette is an Advisory Board Member, Consultant, Speaker and/or Investigator for and receives honoraria and/or grant from AbbVie, Arcutis, Arena Pharma, Aristea, Asana BioSciences, Bellus Health, Bluefin Biomedicine, Boehringer-Ingelheim, CARA, Dermavant, Eli Lilly, EMD Serono, Evidera, Galderma, GSK, Inmagene Bio, Incyte, Kiniksa, Kyowa Kirin, LEO Pharma, Novan, Pfizer, Ralexar, RAPT, Regeneron, Respivant, Sanofi-Genzyme, Sienna and Target RWE. R Bissonnette is also an employee and shareholder of Innovaderm Research.

RPT193 Targets Th2 Activity Responsible for Allergic Inflammation in Atopic Dermatitis, Asthma, and Other Diseases



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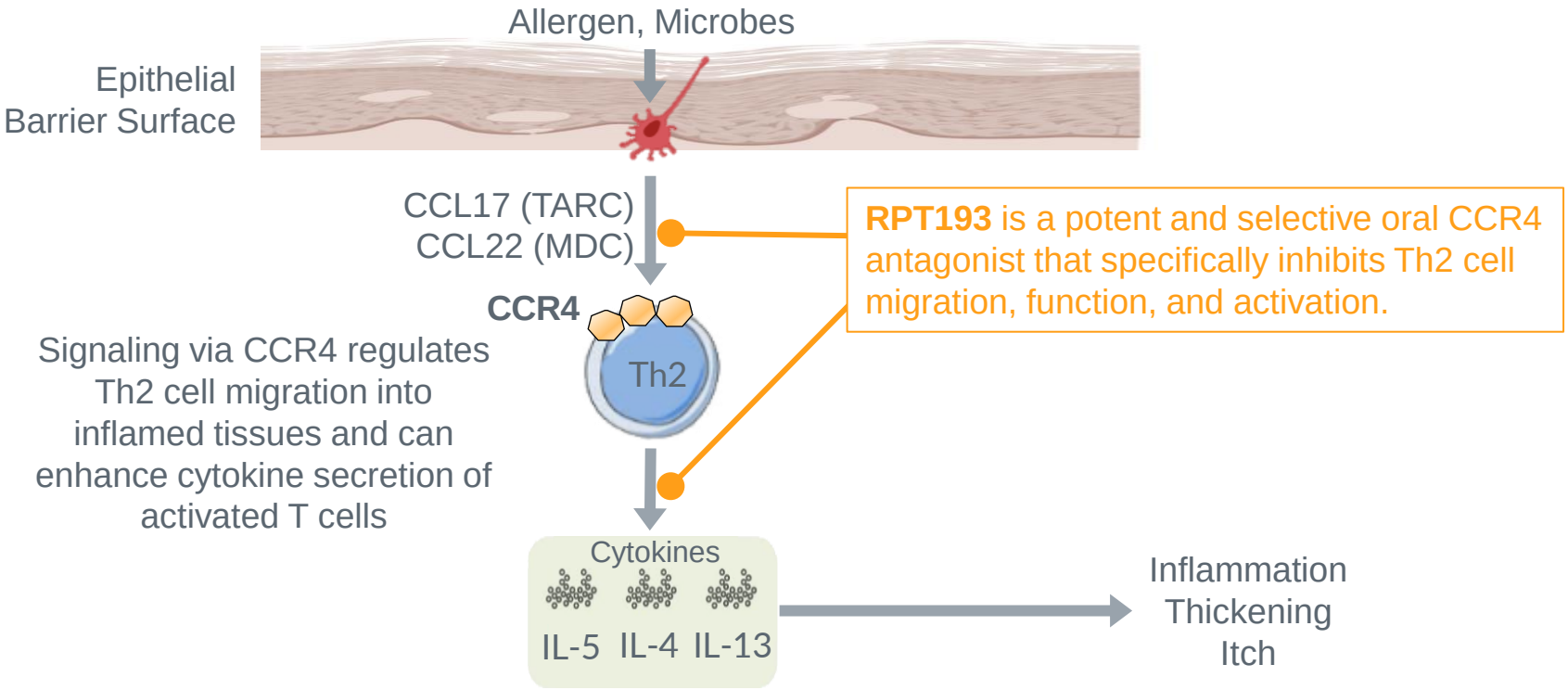
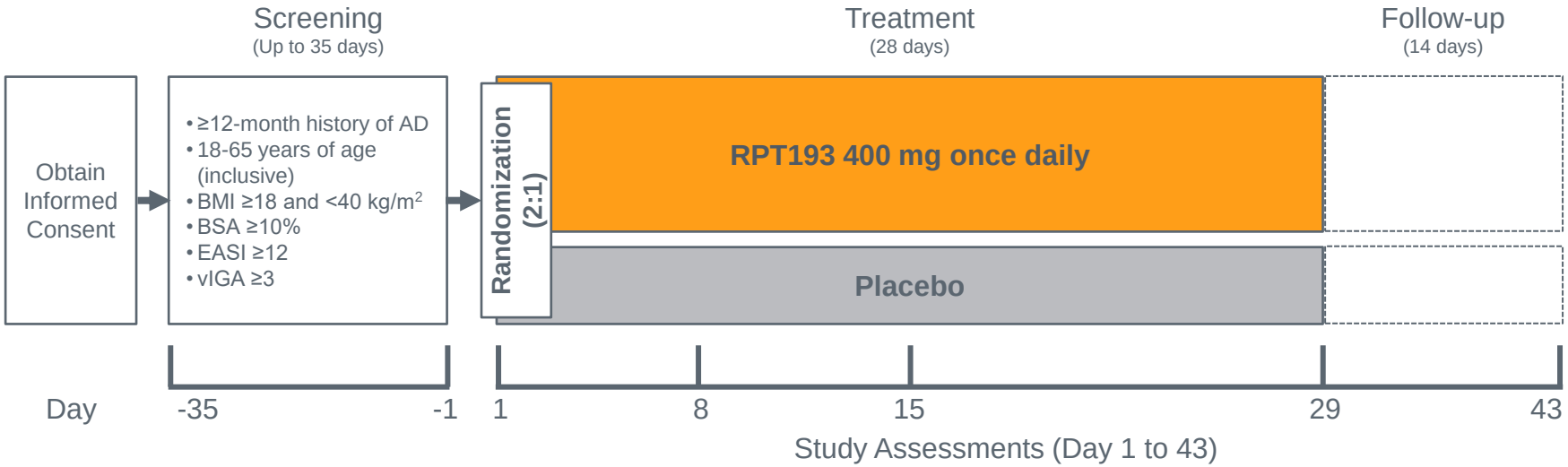


Phase 1b Trial Explored RPT193 Activity in Patients with Moderate-to-Severe Atopic Dermatitis



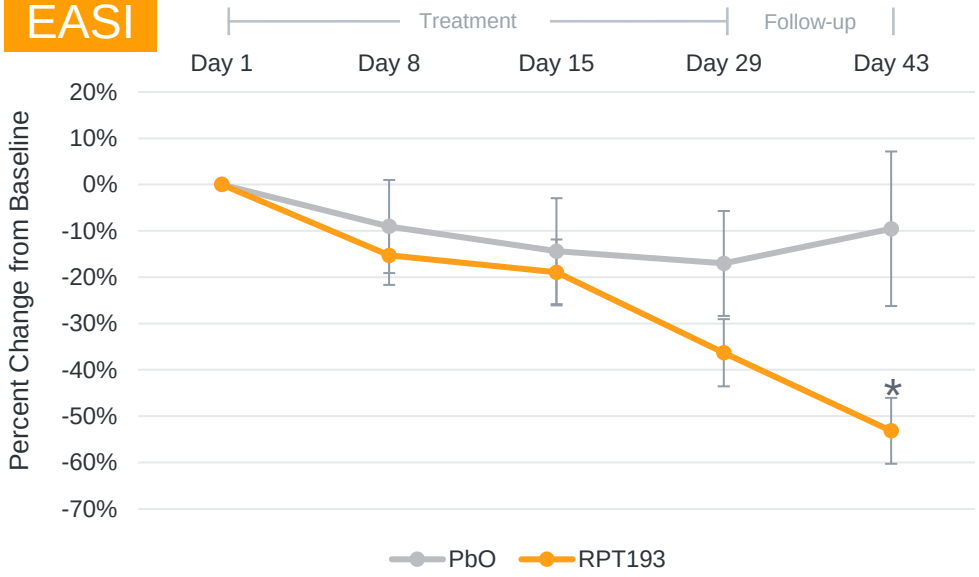
- Phase 1b trial part of a broader study conducted in healthy volunteers (HV) to investigate single and multiple doses of RPT193
- 400 mg dose selected based on safety, tolerability, PK and PD data from HV
- Double-blind, randomized, monotherapy study
- Primary and secondary endpoints were safety and PK, respectively
  - Trial was not powered for any specific endpoint
- Modified Intent to Treat (mITT) dataset with arithmetic means and standard error for continuous endpoints presented

Phase 1b Patient Demographics and Baseline AD Characteristics

	Placebo	RPT193
N	10	21
Age, Mean (Range)	35.8 (22-64)	41.1 (19-63)
Female, n (%)	4 (40.0%)	12 (57.1%)
Hispanic or Latino Ethnicity, n (%)	3 (30.0%)	3 (14.3%)
Race		
White, n (%)	5 (50.0%)	12 (57.1%)
Asian, n (%)	0 (0%)	2 (9.5%)
Black or African American, n (%)	5 (50.0%)	7 (33.3%)
Baseline AD Characteristics		
Total SCORAD (Range)	56.62 (41.0-81.4)	56.98 (36.6-82.4)
SCORAD Subj (Range)	10.77 (2.0-16.3)	11.99 (5.0-18.0)
EASI, Mean (Range)	21.07 (13.6-45.5)	18.49 (12-30)
BSA, Mean (Range)	24.50 (10-61)	23.29 (11-55)
vIGA 3, n (%)	8 (80.0%)	18 (85.7%)

RPT193: Previously Reported Phase 1b Data

EASI



Clinical Safety	Placebo	RPT193
Number of subjects with treatment emergent AE (TEAE), n (%)	2 (20.0%)	9 (42.9%)
Number of SAEs reported, n (%)	0 (0.0%)	0 (0.0%)
TEAEs observed in 2 or more subjects		
Nausea, n (%)	0 (0.0%)**	3 (14.3%)

Improvement compared to Placebo in EASI and vIGA at Day 29 with further deepening of the response at Day 43

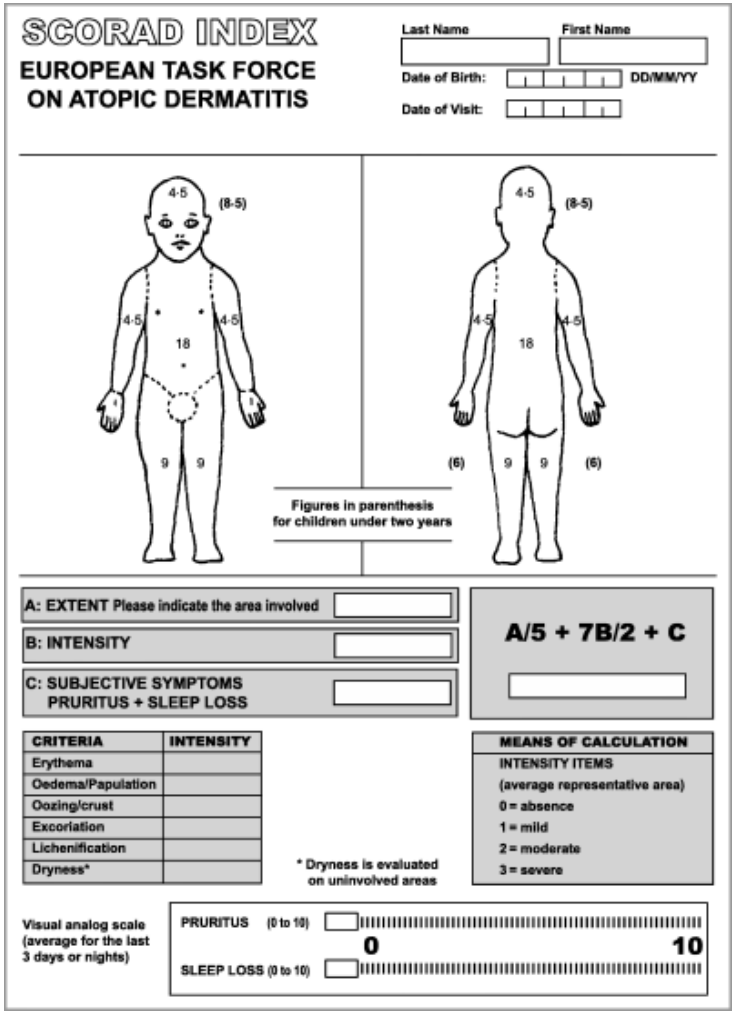
Once-daily, oral RPT193 was generally well tolerated after 28 days of dosing

*p<0.05; post-hoc analysis

**Nausea also observed in 12.5% of HV in the placebo arm of the MAD portion of the Phase 1

SCORAD Background

- Developed in 1993
- Score range from 0-103 with objective, investigator-assessed and subjective, patient-reported elements
- Objective
  - Six criteria signs are used to assess Intensity or lesion severity
  - Extent of BSA affected by AD
- Subjective
  - Sleep loss and pruritus assessed individually
  - Patients rate average for each over the past 3 days using a visual analog scale

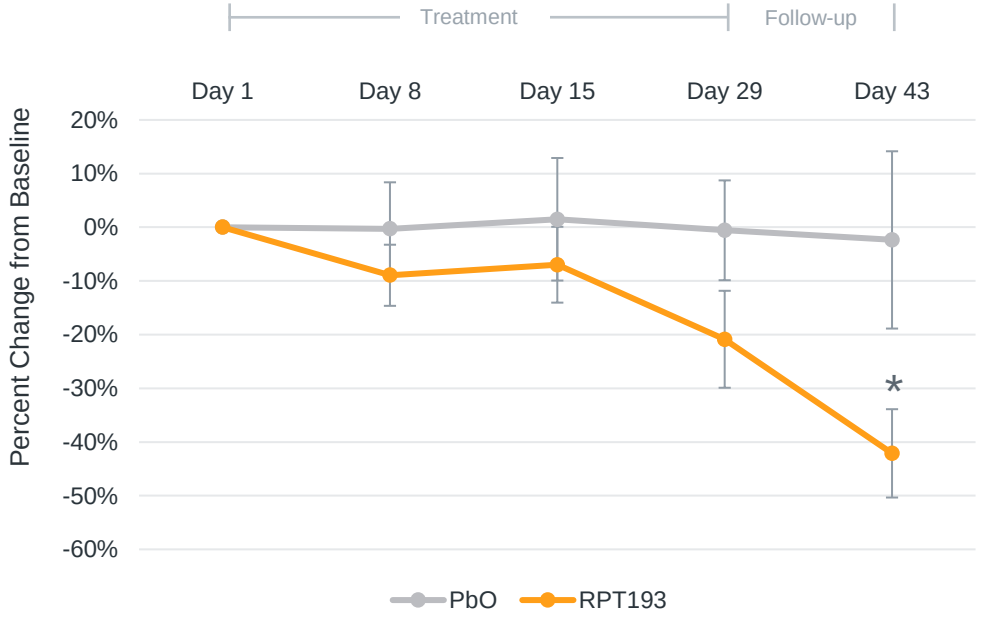


ETFAD, *Dermatology* 1993

RPT193: Percent Change in Total SCORAD

*p<0.05 (post-hoc analysis)

RPT193: Percent Change in SCORAD Extent Area Involved



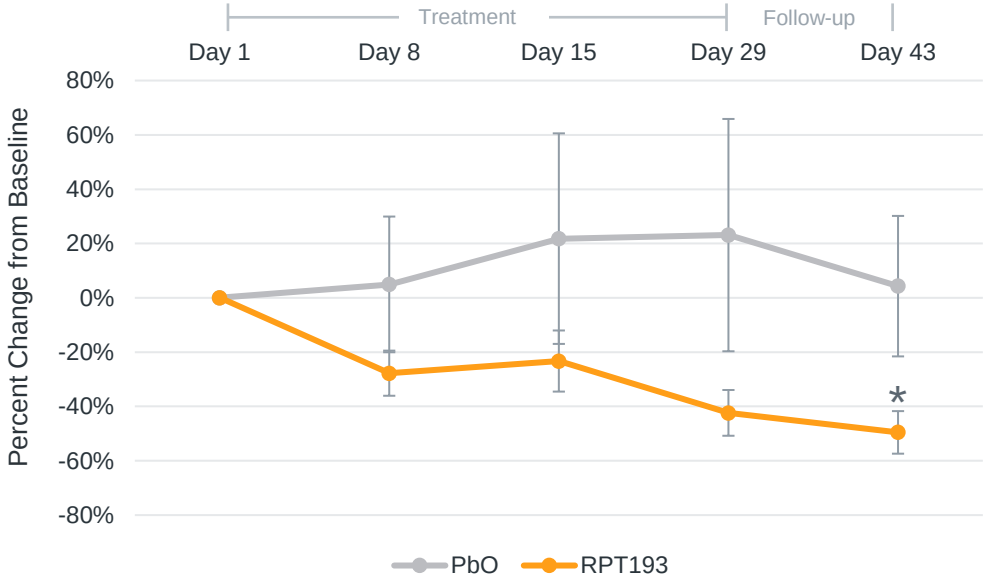
*p<0.05 (post-hoc analysis)

RPT193: Percent Change in SCORAD Intensity (Lesion Severity)

*p<0.05 (post-hoc analysis)

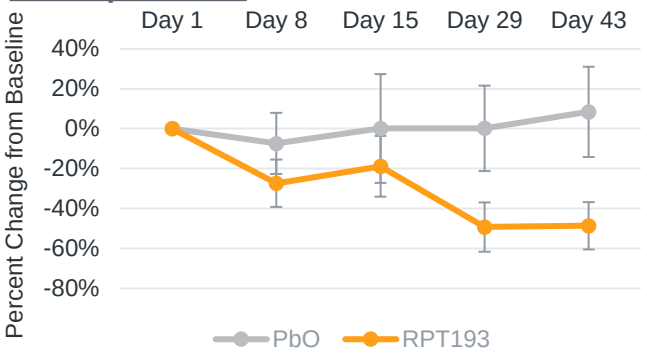
RPT193: Percent Change in Subjective SCORAD

Sleep Loss + Pruritus

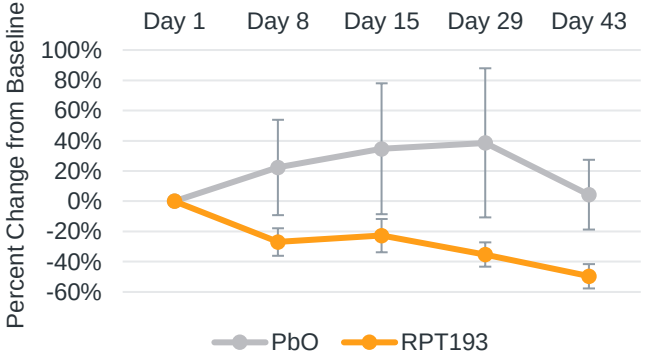


*p<0.05 (post-hoc analysis)

Sleep Loss



Pruritus



Conclusions

- This is the first reported study of a CCR4 antagonist that showed a positive efficacy signal on both the signs and symptoms of AD
- Once-daily, oral RPT193 was generally well tolerated after 28 days of dosing
- At the End of Treatment (Day 29) and compared to Placebo, RPT193 showed greater decrease in total SCORAD and all sub-domains
- At the End of Study (Day 43), RPT193 showed further decreases in total SCORAD and sub-domains, including pruritus and sleep loss, compared to Day 29
  - Change in total SCORAD and all sub-domains at Day 43 demonstrated statistical significance in a post-hoc analysis
- Further improvement after cessation of dosing could be consistent with unique kinetics associated with targeting Th2 cell migration and activation through CCR4 inhibition
- A dose-ranging Phase 2b trial is planned to further investigate RPT193's efficacy and safety in patients with AD

For additional details, please refer to the Poster for Abstract 88

Acknowledgments

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