RAPT Therapeutics Announces Biomarker Data from Phase 1b Trial of RPT193 Consistent with Disease Modification in Atopic Dermatitis

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Significant improvement in atopic dermatitis gene signatures in patients treated with RPT193 reported in late-breaking presentation at the American Academy of Dermatology Annual Meeting

SOUTH SAN FRANCISCO, Calif., March 28, 2022 (GLOBE NEWSWIRE) -- RAPT Therapeutics, Inc. (Nasdaq: RAPT), a clinical-stage, immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in inflammatory diseases and oncology, today announced biomarker data from the company's randomized placebo-controlled Phase 1b clinical trial of RPT193 in patients with moderate-to-severe atopic dermatitis (AD) were consistent with previously reported top-line data which showed clear improvement in key exploratory efficacy measures. The biomarker data, which were presented in a late-breaking oral session at the American Academy of Dermatology Annual Meeting by Emma Guttman-Yassky, M.D., Ph.D., the Waldman Professor and System Chair of Dermatology and Immunology at the Icahn School of Medicine at Mount Sinai, showed patients treated with RPT193 experienced a statistically significant improvement ($p<0.001$) in the meta-analysis derived atopic dermatitis (MADAD) score, a well-established gene signature that tracks with disease severity. Additionally, administration of RPT193 resulted in improvements in immune pathways known to be dysregulated in AD, such as Th2, Th22 and Th1. These biomarker data were derived from biopsies taken from the lesional and non-lesional skin of patients enrolled in the Phase 1b trial.

"These biomarker results support the potential of RPT193 as a once-daily, oral treatment that actually may be altering the course of atopic dermatitis versus just treating symptoms of the disease," said Dr. Guttman. "Specifically, changes in atopic dermatitis-related biomarkers showed significant correlations with clinical efficacy and disease improvement. Furthermore, the demonstration of changes in gene signatures likely explain the added benefit patients experienced up to two weeks after RPT193 treatment had ended. I'm excited to continue further biomarker analyses from this trial and to see RPT193 clinical development advance and expand into other inflammatory conditions."

Brian Wong, M.D., Ph.D., President and CEO of RAPT, added, "We thank Dr. Guttman and her lab for the rigorous evaluation of patient samples from our Phase 1b trial of RPT193 in atopic dermatitis. These data are supportive of the unique mechanism of RPT193 that resulted in impressive reductions in disease severity, both during treatment and after dosing cessation in the trial. We look forward to initiating our Phase 2b clinical trial in atopic dermatitis and to expanding our exploration of RPT193 in a Phase 2a trial in asthma."

About the Phase 1a/1b Study of RPT193
The Phase 1b trial was part of a combined Phase 1a/1b clinical study of RPT193. The Phase 1a portion of the Phase 1a/1b trial was a standard single and multiple dose-escalation study in healthy volunteers. The data from the Phase 1a study demonstrated pharmacokinetics and pharmacodynamics that support once-daily oral dosing with RPT193, and blinded safety data supported initiation of the Phase 1b portion of the trial.

The Phase 1b portion of the trial was a randomized, double-blind, placebo-controlled study examining RPT193 as monotherapy in 31 patients with moderate-to-severe AD who had an inadequate response to, or were intolerant of, topical corticosteroids. The primary endpoint of the Phase 1b study was safety. Secondary and exploratory endpoints included pharmacokinetics, biomarkers and clinical efficacy as evaluated by multiple measurements, including percent change in the Eczema Area and Severity Index (EASI) score, change in body surface area (BSA) affected by AD, the validated Investigator Global Assessment (vIGA) and pruritus Numerical Rating Scale (NRS). The Phase 1b trial was not powered to achieve statistical significance for any particular endpoint.

Last year, RAPT reported results from the Phase 1b trial, which demonstrated that at Day 29, i.e., after the four-week treatment period, clear benefit over placebo was observed on EASI score, EASI-50, vIGA 0/1 (clear or almost clear skin), BSA and pruritus NRS-3 and 4 (3- or 4-point reduction on the numerical rating scale for itch). By the end of study, including the 2-week follow-up period (Day 43), RPT193 demonstrated improvement in EASI, EASI-50, EASI-75, EASI-90, vIGA 0/1 and BSA. In a post-hoc statistical analysis comparing RPT193-treated patients to placebo-treated patients, statistically significant improvements in EASI, EASI-50 and BSA were observed at Day 43. RPT193 was well tolerated in the Phase 1b study. No serious adverse events were reported, and all adverse events reported were mild or moderate in intensity.

About RPT193
RPT193 is a small molecule oral therapy in development for the treatment of atopic dermatitis and other inflammatory diseases. RPT193 is designed to selectively inhibit the migration of Th2 cells into inflamed tissues by blocking CCR4, a receptor highly expressed on Th2 cells. Preclinical data suggest that RPT193 also has the potential to modulate Th2 cell function by lowering the secretion of Th2 cytokines upon stimulation. In allergic inflammatory diseases such as AD, chemokines recruit Th2 cells via CCR4 into inflamed tissues, where the Th2 cells secrete proteins known to drive the inflammatory response. The role of Th2 cells has been clinically validated by injectable biologics targeting this pathway. Patients with atopic dermatitis express higher levels of CCR4 ligands compared with healthy humans; these ligands also correlate with the severity of disease. RAPT believes that by inhibiting CCR4, RPT193 has the potential to bring therapeutic benefit to patients across a broad spectrum of inflammatory diseases, including atopic dermatitis, asthma, chronic spontaneous urticaria, allergic rhinitis with nasal polyps, chronic rhinosinusitis and eosinophilic esophagitis.

About Atopic Dermatitis
Atopic dermatitis is a highly prevalent chronic, inflammatory skin disease characterized by skin barrier disruption and immune dysregulation. Patients with AD have chronically inflamed skin lesions that can cause debilitating pruritus (itch), which can severely impair quality of life. While there is a marketed injectable product for the treatment of AD, RAPT believes RPT193, if approved, could fill an unmet medical need for the treatment of inflammatory disorders with the convenience of once-daily oral dosing. There are ~19M adults and ~10M children affected by AD in the US.

About RAPT Therapeutics, Inc.
RAPT Therapeutics is a clinical stage immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in inflammatory diseases and oncology. Utilizing its proprietary discovery and development engine, the company is developing highly selective small molecules designed to modulate the critical immune drivers underlying these diseases. RAPT has discovered and advanced two unique drug candidates, RPT193 and FLX475, each targeting C-C motif chemokine receptor 4 (CCR4), for the treatment of inflammation and cancer, respectively. The company is also pursuing a range of targets that are in the discovery stage of development.

Forward-Looking Statements
This press release contains forward-looking statements. These statements relate to future events and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future performances or achievements expressed or implied by the forward-looking statements. Each of these statements is based only on current information, assumptions and expectations that are inherently subject to change and involve a number of risks and uncertainties. Forward-looking statements include, but are not limited to, statements about interpretations of the biomarker data from the Phase 1b clinical trial of RPT193, clinical development progress including the anticipated advancement of RPT193 to a Phase 2b trial in AD as well as a Phase 2a trial in asthma or other indications and the potential of RPT193 to treat AD or other inflammatory diseases. Detailed information regarding risk factors that may cause actual results to differ materially from the results expressed or implied by statements in this press release may be found in RAPT's Form 10-K filed with the Securities and Exchange Commission on March 10, 2022 and subsequent filings made by RAPT with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. RAPT disclaims any obligation to update these forward-looking statements.

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