Allena Pharmaceuticals Provides Update on Clinical Development Programs

July 12, 2021

-ALLN-346 successfully completes Phase 1b safety study; on track to start two Phase 2a studies in Q3 2021 with initial data expected in Q4 2021-

-Reloxaliase advancing in URIROX-2 Pivotal Phase 3 study; revised interim analysis now targeted for Q1 2022-

NEWTON, Mass., July 12, 2021 (GLOBE NEWSWIRE) -- Allena Pharmaceuticals, Inc. (NASDAQ: ALNA), a late-stage biopharmaceutical company dedicated to discovering, developing and commercializing first-in-class, oral enzyme therapeutics to treat patients with rare and severe metabolic and kidney disorders, today provided progress updates on its clinical programs: ALLN-346, a first-in-class, oral urate degrading enzyme in development for the treatment of patients with hyperuricemia and gout in the setting of chronic kidney disease (CKD) and reloxaliase (ALLN-177), a first-in-class, oral oxalate degrading enzyme in development for the treatment of patients with enteric hyperoxaluria.

ALLN-346: Phase 1b Study Results and Planned Phase 2A Program

ALLN-346 is an investigational first-in-class, non-absorbed, orally administered enzyme for the treatment of hyperuricemia and gout, a metabolic disorder characterized by high systemic levels of uric acid that can lead to several complications, including arthritis, kidney stones, and chronic kidney disease.

The Company recently completed a Phase 1b multiple ascending dose study of ALLN-346. The study included 18 healthy volunteers, who received either ALLN-346 or placebo (2:1 randomization) for seven days. There were two cohorts consisting of nine subjects each, with the first receiving three capsules of ALLN-346 three times daily, and the second receiving five capsules of ALLN-346 three times daily. ALLN-346 was well tolerated with no evidence of systemic absorption, as confirmed by an enzyme-linked immunosorbent assay (ELISA). Evaluation of clinical and laboratory parameters revealed no significant safety signals and no serious adverse events were reported.

As previously reported, the Company is preparing to initiate two randomized, double-blind, placebo-controlled Phase 2a studies to obtain initial bioactivity data and additional safety data for ALLN-346 in patients with hyperuricemia and gout during the third quarter of 2021. Initial results from the Phase 2a program are expected during the fourth quarter of 2021.

An inpatient study (Study 201) is planned to initially enroll 12 patients with hyperuricemia randomized (2:1) to receive either five capsules of ALLN-346 or matching placebo three times daily during a one-week treatment period. Key bioactivity endpoints will include serum uric acid level, 24-hour urine uric acid level, and renal clearance of uric acid. Following evaluation of the data from the initial 12 patients, the Company will make a determination regarding potentially extending the study to include up to an additional 12 patients, either to obtain additional data at the five-capsule, three-times-daily dose, or to evaluate a different dose.

An outpatient study (Study 202) is planned to enroll 24 hyperuricemic patients with gout and mild-to-moderate chronic kidney disease randomized (2:1) to receive either five capsules of ALLN-346 or matching placebo, three times daily, during a two-week treatment period. Two cohorts of 12 patients each are planned, with the first cohort consisting of patients with an eGFR (estimated glomerular filtration rate, a measure of renal function) of 60-89 mls/minute, and the second consisting of patients with an eGFR of 30-59 mls/minute. Key bioactivity endpoints will include serum uric acid level, 24-hour urine uric acid level, and renal clearance of uric acid.

The limitations of existing gout treatments were highlighted in the Company's recent KOL Webinar. Specifically, managing gout in the setting of advanced chronic kidney disease remains a significant challenge for clinicians because currently available agents are either dose-limited or contraindicated in these patients. There are approximately 500,000 patients with gout and advanced chronic kidney disease in the United States.

Reloxaliase: Revised Plan for First Interim Analysis

Reloxaliase is an investigational, first-in-class, non-absorbed, orally administered enzyme for the treatment of enteric hyperoxaluria, a metabolic disorder characterized by high levels of urinary oxalate (UOx), which can lead to kidney stone disease and chronic kidney disease. There are currently no approved therapies for this disorder, which affects approximately 250,000 patients in the United States. Reloxaliase exerts its effect by breaking down oxalate in the gastrointestinal (GI) tract, reducing the absorption of dietary oxalate. The Company previously completed the URIROX-1 trial, the first of two pivotal Phase 3 clinical trials of reloxaliase, which demonstrated a statistically significant reduction in UOx levels during weeks 1-4, the primary endpoint of the study. The Company is currently studying reloxaliase in the adaptive-design URIROX-2 trial, the second of two pivotal Phase 3 clinical trials in its URIROX program.

URIROX-2 is a multicenter, global, randomized, double-blind, placebo-controlled study designed to evaluate the safety and efficacy of reloxaliase in patients with enteric hyperoxaluria over a minimum treatment period of two years. The trial is designed to enroll 200 patients with 24-hour UOx excretion greater than or equal to 50 mg/day and a history of kidney stones, and includes patients with both normal kidney function and reduced kidney function up to Stage 3 chronic kidney disease (eGFR > 30 mL/min). The primary efficacy endpoint of URIROX-2 is the percent change from baseline in 24-hour UOx excretion during weeks 1-4, the same primary endpoint as URIROX-1. Secondary endpoints in URIROX-2 include the percent change from baseline in 24-hour UOx excretion during weeks 16-24 and the proportion of subjects with a ≥ 20% reduction from baseline in 24-hour UOx excretion during Weeks 1-4. The primary long-term efficacy endpoint to confirm clinical benefit is kidney stone disease progression, defined as a composite of either symptomatic kidney stones or finding of new or enlarged kidney stones using imaging, over a minimum treatment period of two years. Secondary long-term efficacy endpoints to confirm clinical benefit include change in eGFR from baseline and resource utilization

for the management of kidney stones. URIROX-2 incorporates adaptive design elements that could, if necessary, allow for increasing the sample size and/or duration of treatment based upon the results of two interim analyses.

As part of the URIROX-2 adaptive design, the Company had previously planned to conduct the first interim analysis after 130 subjects had been treated for at least six months and had estimated the timing of this analysis to be in the second or third quarter of 2022. Given the adverse impact of the COVID-19 global pandemic on the rate of patient enrollment in this global study, and considering as well that enrollment in the study began in early 2019, the Company has modified its plans and now expects to conduct the first interim analysis, which will include all subjects who were enrolled in the trial as of the end of November 2021, during the first quarter of 2022. Based upon the number of subjects enrolled to date, the number of subjects currently in screening, and management's estimate of expected enrollment over the next several months through November, the Company estimates that this revised interim analysis would include UOx data during weeks 1-4 for approximately 80 patients but would not include sufficient data to evaluate UOx levels during weeks 16-24 or the blinded rate of kidney stone events, as previously planned. The Company will submit its revised plan for the first interim analysis to the Food and Drug Administration (FDA) as part of its planned update to the URIROX-2 statistical analysis plan and adaptive design charter.

The revised interim analysis, which will be conducted by an independent data monitoring committee, will assess whether the study continues to be adequately powered to evaluate efficacy against the primary endpoint, the change in UOx levels during weeks 1-4 versus baseline, with the planned enrollment of 200 subjects, or whether the study size should be increased. As a result of conducting an earlier interim analysis with a smaller sample size than previously planned, the Company anticipates that the ultimate size of the study may be larger than would have otherwise been required, but that if this occurs, any such increase would be modest relative to an increase, if any, that would have been necessary had the first interim analysis been conducted with six-month data on 130 patients, as previously planned. Any adjustment in study size would be designed to ensure that the statistical power of the study remains sufficiently robust. As previously planned, the interim analysis will also include an assessment of futility with respect to the primary endpoint.

The Company does not anticipate any changes to the planned second interim analysis, which will also include an assessment of the secondary endpoint of change in UOx levels during weeks 16-24 and of unblinded kidney stone events. The second interim analysis is expected to be conducted once 200 subjects have reached six months of treatment and is designed to enable a potential filing for accelerated approval for reloxaliase on the basis of UOx levels. The Company expects to provide revised guidance on its expectations for the timing of the second interim analysis and topline data from the URIROX-2 study following completion of the initial interim analysis in the first quarter of 2022.

“We are encouraged by the progress of our two clinical programs, which we have sustained despite the challenges presented by the Covid-19 pandemic,” stated Louis Brenner, M.D., President and Chief Executive Officer of Allena Pharmaceuticals, Inc. “We are focused on continuing to advance our bacterial-derived oral enzyme product candidates through clinical development for patients with significant unmet needs in enteric hyperoxaluria and gout with CKD. We believe that the recent attention to the potential of synthetic biology and microbiome-derived therapeutics highlights the potential broad applicability of our technology.”

“In our ongoing URIROX-2 study in enteric hyperoxaluria, our trial simulation analyses give us confidence that an earlier URIROX-2 interim analysis will not result in a material impact on the size of the trial relative to any increase in size that might have been necessary had the first interim analysis been conducted with a larger data set as previously planned, and we believe it will provide meaningful and timely feedback for the conduct and ultimate completion of the adaptive design trial,” added Dr. Brenner. “In addition, we look forward to seeing the first data from hyperuricemic subjects treated with ALLN-346 late this year.”

About Allena Pharmaceuticals

Allena Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to discovering, developing and commercializing first-in-class, oral biologic therapeutics to treat patients with rare and severe metabolic and kidney disorders. Allena's lead product candidate, reloxaliase, is currently being evaluated in a pivotal Phase 3 clinical program for the treatment of enteric hyperoxaluria, a metabolic disorder characterized by markedly elevated urinary oxalate levels and commonly associated with kidney stones, chronic kidney disease and other serious kidney disorders. Allena is also developing ALLN-346 for the treatment of hyperuricemia in the setting of gout and advanced chronic kidney disease, with a Phase 1 multiple-ascending dose study recently completed and a Phase 2a program planned for the second half of 2021.

Forward-Looking Statements

This release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including, without limitation, statements concerning the future clinical, regulatory and commercial potential of reloxaliase, statements regarding enrollment and the timing of the planned interim analysis in the URIROX-2 trial, the impact of an earlier initial interim analysis on the size and duration of the URIROX-2 trial, statements regarding Allena’s strategy of pursuing a BLA submission for reloxaliase based upon data from its URIROX program using the accelerated approval regulatory pathway, which strategy is predicated on the FDA’s agreement with our predictive model supporting a relationship between UOx levels and stone formation rates, statements regarding Allena’s development of ALLN-346 including the timing of planned clinical trials and the announcement of topline date for these trials, and statements regarding Allena’s financial position and need for capital. Any forward-looking statements in this press release are based on management’s current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: market and other conditions, the timing for completion of Allena’s clinical trials of its product candidates, risks associated with obtaining, maintaining and protecting intellectual property; risks associated with Allena’s ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties; the risk of competition from other companies developing products for similar uses; risks associated with Allena’s financial condition and its need to obtain additional funding to support its business activities, including the future clinical development of reloxaliase and its ability to continue as a going concern; risks associated with Allena’s dependence on third parties; and risks related to the COVID-19 coronavirus. For a discussion of other risks and uncertainties, and other important factors, any of which could cause Allena’s actual results to differ from those contained in the forward-looking statements, see the section entitled “Risk Factors” in Allena’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, as well as discussions of potential risks, uncertainties and other important factors in Allena’s subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and Allena undertakes no duty to update this information unless required by law.

Investor Relations Contact:
Ashley R. Robinson

LifeSci Advisors, LLC
Tel: 617-430-7577
arr@lifesciadvisors.com

Media Contact
Adam Daley
Berry & Company Public Relations
212-253-8881
adaley@berrypr.com

Source: Allena Pharmaceuticals, Inc.