BioCryst Presents New Data Demonstrating Sustained Reductions in Attack Rates and Improvement in Quality of Life Among HAE Patients Following Long-Term Treatment with ORLADEYO® (berotralstat)

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— Analysis from APeX-2 showed 94 percent attack-free days across all patients who completed 96 weeks of treatment —

RESEARCH TRIANGLE PARK, N.C., Feb. 24, 2022 (GLOBE NEWSWIRE) -- BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today announced new long-term efficacy and safety data from the APeX-2 clinical trial evaluating oral, once-daily ORLADEYO® (berotralstat) for the prophylactic treatment of hereditary angioedema (HAE) showing sustained reductions in attack rates and improvement in quality of life (QoL) among patients living with HAE, regardless of their baseline attack rates and initial responses to ORLADEYO.

The data are being presented at the 2022 American Academy of Allergy, Asthma & Immunology (AAAAI) annual meeting, which is being held live in Phoenix, Arizona, and virtually, from February 25-28, 2022.

“The long-term data from APeX-2 show that HAE patients in our clinical program had an experience consistent with what we are seeing commercially in the real world; that ORLADEYO provides noteworthy, sustained, consistent reductions in HAE attack rates that persist and maintain over time, resulting in meaningful quality of life improvements,” said Dr. William Sheridan, chief medical officer of BioCryst.

“The 96-week data from APeX-2 showcase the durable, long-term efficacy of ORLADEYO and build on the strong reductions in attack rates that have previously been reported, with all patients experiencing an average of 94 percent attack-free days at Week 96. ORLADEYO can be an effective prophylactic therapy for HAE patients regardless of their baseline attack rate,” said Dr. Emel Aygören-Pürsün, specialist in internal medicine at the division of oncology, hematology and hemostaseology at the department for children and adolescents of the University Hospital Frankfurt.

BioCryst AAAAI 2022 Presentation Highlights

APeX-2 included 121 HAE patients who were randomized 1:1:1 to ORLADEYO 110 mg or 150 mg, or placebo, once daily for 24 weeks (part 1 of the study). At Week 24, patients on ORLADEYO continued on the same dose and placebo patients were re-randomized to ORLADEYO 110 mg or 150 mg for another 24 weeks (part 2 of the study). At Week 48 and thereafter, all patients continued on ORLADEYO 150 mg (open-label phase).

The 96-week safety and efficacy data were previously reported in July 2021. These additional analyses from APeX-2, as reported in the posters at AAAAI, evaluated the long-term efficacy of ORLADEYO 150 mg in patients who completed 96 weeks of treatment (n=21). In APeX-2, ORLADEYO was safe and generally well tolerated, with no drug-related serious adverse events reported.

- ***Sustained Reductions in Hereditary Angioedema (HAE) Attack Rates Observed over 96 Weeks of Oral Berotralstat Treatment Regardless of Initial Response*** (Poster #490)
    - This analysis stratified all 21 patients by their initial reduction in HAE attack rate from baseline to Week 24 in three groups: Group A (<50 percent attack rate reduction; n=4), Group B (≥50 percent attack rate reduction; n=17) and Group C (≥70 percent attack rate reduction; n=14). To note, Group C was a subset of Group B.
    - A sustained reduction in HAE attack rates was observed from baseline to Week 96 across all three groups of patients. Group A had a mean decrease of 2.3 attacks/month, Group B had a mean decrease of 2.5 attacks/month and Group C had a mean decrease of 2.6 attacks/month.
    - The percentage of attack-free days across all patients for the entire study duration (96 weeks) was 94 percent (88 percent, 96 percent and 96 percent in Groups A, B and C, respectively), demonstrating ORLADEYO is an effective oral HAE prophylactic treatment even in patients who may have a lower initial response.
- ***Oral Berotralstat Treatment for 96 Weeks Consistently Reduces Hereditary Angioedema (HAE) Attack Rates Regardless of Baseline Attack Rate*** (Poster #491)
    - This analysis stratified all 21 patients based on baseline attack rate: Group 1 (<2 attacks/month; n=7), Group 2 (≥2 to <3 attacks/month; n=7) and Group 3 (≥3 attacks/month; n=7).
    - A >80 percent reduction in mean attack rates was observed at Week 96 of treatment regardless of the patients’ baseline attack rates (100 percent for Group 1, 90 percent for Group 2 and 82 percent for Group 3).

- At Week 96, median attack rates were 0.0 regardless of baseline attack rate.

- These data demonstrate ORLADEYO is an effective prophylactic therapy for patients with HAE regardless of baseline attack rate.

- ***Sustained Improvement Observed in Patient-Reported Quality of Life (QoL) with 96 Weeks of Oral Berotralstat Treatment*** (Poster #492)

  - This analysis assessed the QoL of all 21 patients using the Angioedema Quality of Life Questionnaire (AE-QoL), a validated tool to measure QoL impairment in patients with recurrent angioedema. The minimal clinically important difference (MCID) was defined as a change of six points in total score.

  - A mean of 77 percent of patients reported clinically meaningful improvements using the AE-QoL total scores (ranging from a high of 91 percent to a low of 62 percent over time), including improvements observed as early as Week 4, and at each time point through 96 weeks of treatment (improvement of 19.8, 18.3 and 23.0 points at Weeks 24, 48 and 96, respectively).

  - The largest improvement was observed in the functioning domain with a mean improvement (SEM) of 33.4 (6.08) points at Week 96, suggesting patients reported less impairment in their day-to-day activities while on ORLADEYO 150 mg.

  - The improvement in total AE-QoL scores and the percentage with an MCID in these long-term results show that patients continue to experience QoL improvements compared to baseline over time with ORLADEYO.

All posters are available to meeting registrants and will be on display in the poster hall in the Phoenix Convention Center during the meeting.

About ORLADEYO® (berotralstat)

ORLADEYO® (berotralstat) is the first and only oral therapy designed specifically to prevent attacks of hereditary angioedema (HAE) in adult and pediatric patients 12 years and older. One capsule of ORLADEYO per day works to prevent HAE attacks by decreasing the activity of plasma kallikrein.

U.S. Indication and Important Safety Information

INDICATION

ORLADEYO® (berotralstat) is a plasma kallikrein inhibitor indicated for prophylaxis to prevent attacks of hereditary angioedema (HAE) in adults and pediatric patients 12 years and older.

Limitations of use

The safety and effectiveness of ORLADEYO for the treatment of acute HAE attacks have not been established. ORLADEYO should not be used for the treatment of acute HAE attacks. Additional doses or dosages of ORLADEYO higher than 150 mg once daily are not recommended due to the potential for QT prolongation.

IMPORTANT SAFETY INFORMATION

An increase in QT prolongation was observed at dosages higher than the recommended 150 mg once-daily dosage and was concentration dependent.

The most common adverse reactions (≥10% and higher than placebo) in patients receiving ORLADEYO were abdominal pain, vomiting, diarrhea, back pain, and gastroesophageal reflux disease.

A reduced dosage of 110 mg taken orally once daily with food is recommended in patients with moderate or severe hepatic impairment (Child-Pugh B or C) and in patients taking chronically administered P-glycoprotein (P-gp) or breast cancer resistance protein (BCRP) inhibitors (eg, cyclosporine).

Berotralstat is a substrate of P-gp and BCRP. P-gp inducers (eg, rifampin, St. John's wort) may decrease berotralstat plasma concentration, leading to reduced efficacy of ORLADEYO. The use of P-gp inducers is not recommended with ORLADEYO.

ORLADEYO at a dose of 150 mg is a moderate inhibitor of CYP2D6 and CYP3A4. For concomitant medications with a narrow therapeutic index that are predominantly metabolized by CYP2D6 or CYP3A4, appropriate monitoring and dose titration is recommended. ORLADEYO at a dose of 300 mg is a P-gp inhibitor. Appropriate monitoring and dose titration is recommended for P-gp substrates (eg, digoxin) when coadministering with ORLADEYO.

The safety and effectiveness of ORLADEYO in pediatric patients <12 years of age have not been established.

There are insufficient data available to inform drug-related risks with ORLADEYO use in pregnancy. There are no data on the presence of berotralstat in human milk, its effects on the breastfed infant, or its effects on milk production.

To report SUSPECTED ADVERSE REACTIONS, contact BioCryst Pharmaceuticals, Inc. at 1-833-633-2279 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please see full Prescribing Information.

About BioCryst Pharmaceuticals

BioCryst Pharmaceuticals discovers novel, oral, small-molecule medicines that treat rare diseases in which significant unmet medical needs exist and an enzyme plays a key role in the biological pathway of the disease. Oral, once-daily ORLADEYO® (berotralstat) is approved in the United States, the European Union, Japan, the United Arab Emirates and the United Kingdom. BioCryst has several ongoing development programs including BCX9930, an oral Factor D inhibitor for the treatment of complement-mediated diseases, BCX9250, an ALK-2 inhibitor for the treatment of fibrodysplasia ossificans progressiva, and galidesivir, a potential treatment for Marburg virus disease and Yellow Fever. RAPIVAB® (peramivir injection) has received regulatory approval in the U.S., Canada, Australia, Japan, Taiwan and Korea. Post-marketing commitments for RAPIVAB are ongoing. For more information, please visit the company's website at www.biocryst.com.

Forward-Looking Statements

This press release contains forward-looking statements, including statements regarding future results, performance or achievements. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Some of the factors that could affect the forward-looking statements contained herein include: the ongoing COVID-19 pandemic, which could create challenges in all aspects of BioCryst's business, including without limitation delays, stoppages, difficulties and increased expenses with respect to BioCryst's and its partners' development, regulatory processes and supply chains, negatively impact BioCryst's ability to access the capital or credit markets to finance its operations, or have the effect of heightening many of the risks described below or in the documents BioCryst periodically files with the Securities and Exchange Commission; BioCryst's ability to successfully implement its commercialization plans for, and to commercialize, ORLADEYO, which could take longer or be more expensive than planned; the commercial viability of ORLADEYO, including its ability to achieve market acceptance; the FDA or other applicable regulatory agency may require additional studies beyond the studies planned for products and product candidates, may not provide regulatory clearances which may result in delay of planned clinical trials, may impose certain restrictions, warnings, or other requirements on products and product candidates, may impose a clinical hold with respect to product candidates, or may withhold, delay, or withdraw market approval for products and product candidates; BioCryst's ability to successfully manage its growth and compete effectively; risks related to the international expansion of BioCryst's business; and actual financial results may not be consistent with expectations, including that revenue, operating expenses and cash usage may not be within management's expected ranges. Please refer to the documents BioCryst files periodically with the Securities and Exchange Commission, specifically BioCryst's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, which identify important factors that could cause the actual results to differ materially from those contained in BioCryst's forward-looking statements.

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