BioCryst Presents New Data Showing Sustained Reduction of HAE Attack Rates and Improved Patient Satisfaction After Patients Switch to ORLADEYO® (berotralstat)

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Data from APeX-S showed patients had more than 80 percent attack free months after switching to ORLADEYO from injectable prophylactic therapies

RESEARCH TRIANGLE PARK, N.C., Nov. 05, 2021 (GLOBE NEWSWIRE) -- BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today announced new long-term efficacy and safety data from studies evaluating oral, once-daily ORLADEYO® (berotralstat) for the prophylactic treatment of hereditary angioedema (HAE), including results showing sustained reduction of HAE attack rates and improved patient satisfaction after patients switched to ORLADEYO monotherapy from injectable prophylactic therapies (lanadelumab and C1 inhibitors).

The data are being presented at the 2021 Annual Scientific Meeting of the American College of Allergy, Asthma & Immunology (ACAAI), which is being conducted in New Orleans, Louisiana, and online, from November 4-8, 2021.

“We continue to see improvement in key indicators that demonstrate the value of oral, once-daily ORLADEYO as an excellent option for patients who want alternatives to injectable prophylactic therapies, which carry a high treatment burden,” said Dr. William Sheridan, chief medical officer of BioCryst. “The data we are presenting at ACAAI further support ORLADEYO as a transformative therapy for HAE patients, including those who are already well-controlled on other therapies.”

“The data from APeX-S showed that HAE patients who switched to ORLADEYO from an injectable prophylactic therapy had more than 80 percent attack free months,” said Marc Riedl, M.D., clinical director of the US HAEA Angioedema Center at the University of California San Diego. “These data show that, regardless of which therapy patients switched from, or when they switched, ORLADEYO provided consistently low attack rates when used as a monotherapy. These important findings add to real-world evidence that this oral, once-daily therapy is a beneficial treatment option for many HAE patients.”

“Increased satisfaction and improvement in quality of life continue to be major driving factors for patients who decide to switch to an oral prophylactic option, as shown in our analysis of patients who switched from injectable prophylaxis to ORLADEYO in APeX-2,” said Jonathan Bernstein, M.D., professor of medicine, department of internal medicine, division of allergy & immunology at the University of Cincinnati and partner of the Bernstein Allergy Group and Bernstein Clinical Research Center. “These results underscore what I see every day in clinical practice, that HAE patients want a more convenient treatment option to control their HAE attacks and reduce their overall burden of therapy.”

BioCryst ACAAI 2021 Presentation Highlights

- ***Consistently Low Hereditary Angioedema (HAE) Attack Rates Observed in US Patients Treated with Berotralstat*** (Distinguished Industry Oral Presentation)
    - Highlights safety, effectiveness and patient-reported outcomes of ORLADEYO 150 mg in U.S. patients from APeX-S who completed 12 months of treatment (n=71).
    - Following initiation of ORLADEYO, patients experienced low HAE attack rates that were sustained throughout the treatment period (median attack rate of 0.0 attacks per month through month 12), consistent with previously reported data.
    - ORLADEYO was associated with prompt, sustained, statistically significant and clinically meaningful improvements in quality of life (-10.8 change from baseline at month 1 and -13.6 change from baseline at months 6 and 12; $p<0.001$) as measured by the AE-QoL (angioedema quality of life questionnaire) total score. These improvements exceeded the minimal clinically important difference (-6 change).
    - ORLADEYO was generally well tolerated, with no drug-related serious adverse events reported.
- ***Berotralstat Demonstrates Low Hereditary Angioedema (HAE) Attack Rates in Patients Switching from Injectable Prophylaxis*** (poster #P045)
    - Patients at U.S. sites in APeX-S who switched to ORLADEYO (n=34) had more than 80 percent attack free months for up to 12 months after switching from long-term prophylactic treatment (LTP) (lanadelumab and C1 inhibitors).
    - After switching from prior injectable prophylaxis, mean monthly attack rates were consistently low ($\leq$ 0.5 attacks per month) and median attack rates remained at 0.0 attacks per month throughout 12 months of treatment with

ORLADEYO monotherapy.

- The transition from injectable LTP to ORLADEYO was generally well tolerated with no additional safety signals.

- ***Improved Patient Satisfaction with Berotralstat in Patients Switching from Injectable Hereditary Angioedema (HAE) Prophylactic Treatments*** (poster #P048)

  - Treatment satisfaction in patients who switched to ORLADEYO monotherapy from prior injectable LTP at U.S. sites in APeX-S was reported as assessed by the Treatment Satisfaction Questionnaire for Medication (TSQM).

  - Statistically significant improvements were observed in convenience and global satisfaction scores in patients who switched from lanadelumab or a subcutaneous C1 inhibitor to ORLADEYO (n=34), consistent with a positive experience using an oral HAE prophylactic therapy.

  - For all patients who switched to ORLADEYO, the most significant improvement was observed in convenience, with scores of more than 90 points at month 12 (33.4 point improvement; $p<0.001$).

  - From baseline to month 12, effectiveness scores remained consistently high, supporting patients' perception that ORLADEYO is as effective as their prior prophylactic therapy.

- ***Sustained Reduction in Hereditary Angioedema (HAE) Attack Rates Following Switch to Berotralstat: Subgroup Analysis from APeX-2*** (poster #P053)

  - Long-term efficacy and safety data were analyzed in patients who switched to ORLADEYO 150 mg for parts 2 and 3 of the APeX-2 pivotal clinical trial after receiving placebo in part 1 of the trial (n=17).

  - A rapid reduction in attack rates was observed following the switch to ORLADEYO, with median attack rates of 0.0 attacks per month at more than 75 percent of all timepoints.

  - Sustained reductions in mean and median HAE attack rates were observed after patients switched to ORLADEYO.

  - ORLADEYO was generally well tolerated in patients who switched from placebo; safety data in this switch subset were consistent with those previously reported for the overall study patient population.

All e-posters are available online at epostersonline.com/acaai2021 and will be on display in the exhibit hall 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 percent 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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