



## BioCryst Presents New Real-world Evidence Showing Significant and Sustained Reductions in HAE Attack Rates in Adolescents and People with Severe HAE Following Initiation of ORLADEYO® (berotralstat)

May 16, 2025

RESEARCH TRIANGLE PARK, N.C., May 16, 2025 (GLOBE NEWSWIRE) -- [BioCryst Pharmaceuticals, Inc.](#) (Nasdaq: BCRX) today announced new real-world evidence on the use of oral, once-daily ORLADEYO® (berotralstat) in adolescents and people with severe HAE showing significant and sustained reductions in HAE attack rates through 18 months of follow-up after beginning treatment with ORLADEYO in both patient populations.

The real-world evidence was presented in two posters at the 2025 International Society for Pharmacoeconomics and Outcomes Research conference (ISPOR), which is being held in Montreal from May 13-16, 2025.

"The outcomes detailed in these posters show how ORLADEYO is making a difference for people living with HAE, in particular those with very severe disease and those who are adolescents. These two groups experienced far fewer attacks per month compared to baseline after starting ORLADEYO. These kinds of real-world results should give physicians as well as their HAE patients the additional confidence to improve control of their attacks," said Dr. Raffi Tachdjian, associate clinical professor of medicine & pediatrics, division of allergy & clinical immunology, David Geffen School of Medicine, University of California Los Angeles.

### Significant and sustained reductions in attack rates after ORLADEYO initiation

The results presented in two posters at ISPOR 2025 were from a retrospective pre-post study using outcomes collected from BioCryst's sole-source pharmacy from December 15, 2020, to January 8, 2024.

The poster "Real-World Hereditary Angioedema Attack Rates Before and After Berotralstat Initiation Among Patients with C1 Inhibitor Deficiency (Type I/II) and  $\geq 8$  Attacks/month" (#PCR182) detailed findings from 56 U.S. patients with HAE with C1-inhibitor deficiency (HAE-C1-INH) who received ORLADEYO.

- Patients experienced significantly lower HAE attack rates while on ORLADEYO in each 90-day follow-up period (1.24-1.90 attacks/month) compared to baseline (7.78-8.23 attacks/month).
- Patients experienced significantly fewer HAE attacks per month following ORLADEYO initiation during every 90-day follow-up period relative to baseline, including:
  - 6.25 fewer attacks/month (95 percent confidence period (CI): [5.63, 6.87];  $p < 0.001$ ) at 12 months (days 271-360)
  - 6.43 fewer attacks/month (95 percent CI: [5.78, 7.09];  $p < 0.001$ ) at 18 months (days 451-540)

The poster "Real-World Hereditary Angioedema Attack Rates Before and After Berotralstat Initiation Among Adolescents" (#PCR132) highlighted outcomes reported from 99 U.S. patients with HAE aged 12-17 years who received ORLADEYO.

- Patients had significantly lower HAE attack rates while on ORLADEYO during each 90-day follow-up period (0.36-0.76 attacks/month) compared to the mean baseline rate (2.07-2.30 attacks/month).
- Compared to baseline, adolescents experienced statistically significant and sustained reductions in HAE attack rates after ORLADEYO initiation during each 90-day follow-up period, including:
  - 1.56 fewer attacks/month (95 percent CI: [0.89, 2.23];  $p < 0.001$ ) at 12 months (days 271-360)
  - 1.85 fewer attacks/month (95 percent CI: [1.12, 2.58];  $p < 0.001$ ) at 18 months (days 451-540)

"We continue to generate evidence from real-world use of our oral, once-daily prophylactic therapy for HAE that supports its effectiveness in a wide range of people with HAE. Here, we show that ORLADEYO is having a positive impact on attack reduction for younger people and those with severe disease. These additional findings further underscore that ORLADEYO works well for many patients with HAE, regardless of their attack severity, age or other aspects," said Dr. Donald S. Fong, chief medical officer of BioCryst.

### **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 ( $\geq 10\%$  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).

Berotrastat is a substrate of P-glycoprotein (P-gp) and breast cancer resistance protein. P-gp inducers (eg, rifampin, St. John's wort) may decrease berotrastat 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 berotrastat 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](http://www.fda.gov/medwatch).**

**Please see full [Prescribing Information](#).**

#### **About BioCryst Pharmaceuticals**

BioCryst Pharmaceuticals is a global biotechnology company with a deep commitment to improving the lives of people living with hereditary angioedema and other rare diseases. BioCryst leverages its expertise in structure-guided drug design to develop first-in-class or best-in-class small-molecule and protein therapeutics to target difficult-to-treat diseases. BioCryst has commercialized ORLADEYO<sup>®</sup> (berotrastat), the first oral, once-daily plasma kallikrein inhibitor, and is advancing a pipeline of small-molecule and protein therapies. For more information, please visit [www.biocryst.com](http://www.biocryst.com) or follow us on [LinkedIn](#).

#### **Forward-Looking Statements**

This press release contains forward-looking statements, including statements regarding future results, performance or achievements and statements relating to ORLADEYO performance and effectiveness. 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: BioCryst's ability to successfully implement or maintain its commercialization plans for ORLADEYO; the commercial viability of ORLADEYO, including its ability to achieve sustained 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; and BioCryst's ability to successfully manage its growth and compete effectively. 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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