

Pharvaris Presents Data at the Bradykinin Symposium 2024

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ZUG, Switzerland, Sept. 05, 2024 (GLOBE NEWSWIRE) -- [Pharvaris](#) (Nasdaq: PHVS), a late-stage biopharmaceutical company developing novel, oral bradykinin B2 receptor antagonists to prevent and treat hereditary angioedema (HAE) attacks, today announced a summary of data being presented at the ongoing 7th Bradykinin Symposium. Details of the presentations are outlined below:

[Long-Term Safety and Efficacy of Oral Deucricitabant for HAE Prophylaxis](#), a poster presentation by Marc A. Riedl, M.D., M.S. In the current analysis of the ongoing open-label extension of the CHAPTER-1 Phase 2 study, deucricitabant 40 mg/day was well-tolerated, with no new safety signals observed. The results presented provide evidence of the long-term safety and efficacy of deucricitabant for the prevention of HAE attacks and support further development of deucricitabant as a potential prophylactic therapy for HAE. Results of this analysis provide support that:

- Continuing deucricitabant treatment sustained the early-onset attack reduction seen in the randomized, placebo-controlled portion of the trial, with a median attack rate of zero for every month for over a year in the open-label part of the study
- On average, less than one attack per year per participant was treated with on-demand medication

[Treatment of HAE Attacks with Oral Deucricitabant: RAPiDe-2 Extension Results](#), a poster presentation by Emel Aygören-Pürsün, M.D. In the current analysis of the ongoing RAPiDe-2 Phase 2/3 extension study, deucricitabant immediate release capsule was well-tolerated for all studied doses with no new safety signals observed. Results from the ongoing RAPiDe-2 extension are consistent with the randomized, placebo-controlled RAPiDe-1 Phase 2 study and provide evidence regarding the long-term safety and efficacy of deucricitabant IR capsule for repeat treatment of HAE attacks. Outcome analyses showed:

- Median time to onset of symptom relief as measured by the Patient Global Impression of Change (PGI-C) was 1.1 hours, with 98.5% of attacks achieving onset of symptom relief by 12 hours
- Median time to reduction in attack severity as measured by the Patient Global Impression of Severity (PGI-S) was 2.6 hours, with 97.7% of attacks achieving reduction in attack severity by 12 hours
- Median time to complete attack resolution as measured by PGI-S was 11.5 hours, with 85.8% of attacks achieving complete attack resolution within 24 hours
- Overall, 86.0% of attacks were treated with a single dose of deucricitabant immediate-release capsule

[Prophylactic Treatment with Deucricitabant Improves HAE Disease Control and HRQoL](#), an oral presentation by Markus Magerl, M.D. In the randomized, placebo-controlled part of CHAPTER-1, a Phase 2 clinical study of deucricitabant for the prophylactic treatment of HAE attacks, health-related quality of life was evaluated using several measures. In the study, it was demonstrated that deucricitabant treatment led to improvements in disease control versus placebo, with 90% of participants in the deucricitabant-groups demonstrating well-controlled HAE at week 12. Presentation details included:

- Deucricitabant improved Angioedema Quality of Life Questionnaire (AE-QoL) scores, particularly in “functioning” and “fear/shame” domains compared to placebo
- Deucricitabant-treated participants reported greater satisfaction than those treated with placebo with regards to effectiveness and the domain of global satisfaction, and a comparable satisfaction for side effects, as measured by Treatment Satisfaction Questionnaire for Medication (TSQM)

[Deucricitabant vs. Standard of Care in HAE: Propensity Score-Matched Analysis](#), a poster presentation by Marc A. Riedl, M.D., M.S. A propensity score-matched comparison of clinical outcomes between a subgroup of attacks (N=73) from the RAPiDe-2 study and a subgroup of attacks (N=73) from an observational real-world study treated with standard of care, the outcomes were more favorable for the attacks treated with deucricitabant on PGI-C- and PGI-S-based assessments. Deucricitabant had a shorter (1.07 hours) median time to onset of symptom relief as measured by PGI-C “a little better” compared to standard of care (2.38 hours).

[Cardiovascular safety of repeated oral administration of the B2-receptor antagonist deucricitabant](#), a poster presentation by Nieves Crespo, Ph.D. In chronic nonclinical safety studies of deucricitabant in non-human primates, no evident effects on cardiac electrophysiology, morphology and hemodynamic parameters were observed. Deucricitabant has showed no evident effects on cardiac electrophysiology and hemodynamic parameters in clinical studies in humans to date, following prophylactic treatment up to 12 weeks of administration in the randomized, placebo-controlled part of the Phase 2 CHAPTER-1 clinical study and up to one year of mean duration of treatment in the ongoing open-label extension (OLE) part.

[Prophylaxis of Hereditary Angioedema Attacks with Oral Deucricitabant: CHAPTER-1 Results](#), a poster presentation by Emel Aygören-Pürsün, M.D. The CHAPTER-1 study demonstrated that deucricitabant may significantly reduce the occurrence of HAE attacks, and clinically meaningful reduction in occurrence of moderate and severe HAE attacks, as well as HAE attacks treated with on-demand medication, was observed. CHAPTER-1 results provide evidence of the efficacy and safety of deucricitabant for the prevention of HAE attacks and support its further development as a potential prophylactic therapy for HAE.

[Clinical Trials Conformity with AURORA COS: a systematic literature review](#), a poster presentation by Remy S. Petersen, M.D., Conforming to a core outcome set (COS) across various study designs, such as the COS recommended for HAE clinical studies by the Panel of Experts participating in the AURORA Project, may homogenize the use of specific outcomes for clinical studies and support future indirect comparisons among interventions. The design of the RAPiDe-3 Phase 3 study of deucricitabant immediate-release capsule for the on-demand treatment of HAE attacks fully conforms with the AURORA COS based on its prespecified endpoints.

[Bradykinin Challenge Model in Humanized Bradykinin B2 receptor Transgenic Rat](#), an oral presentation by Jolanta Skarbaliene, Ph.D. The bradykinin (BK) challenge model is a tool to assess pharmacokinetic and pharmacodynamic activity of bradykinin B2 receptor antagonists. A BK challenge model was successfully developed in humanized bradykinin B2 receptor transgenic rats that are pharmacologically responsive to bradykinin B2 receptor antagonists. The BK challenge model in humanized bradykinin B2 receptor transgenic rats can offer a valuable, easy to manage, and cost-effective tool for efficacy studies compared to those involving non-human primates.

[Deucricitbant inhibits carrageenan-induced edema in bradykinin B2 receptor transgenic rat](#), a poster presentation by Anne Lesage, Ph.D. A humanized bradykinin B2 receptor transgenic rat model was used to address the challenge of deucricitbant species selectivity in experimental models. Oral deucricitbant inhibited carrageenan-induced paw edema in humanized bradykinin B2 receptor transgenic rats.

[The bradykinin challenge model translates across rat, monkey and human](#), a poster presentation by Juan Bravo, Ph.D. The pharmacokinetics (PK) and pharmacodynamics (PD) of icatibant were analyzed from BK challenge studies in humanized bradykinin B2 receptor transgenic rats, non-human primates, and healthy volunteers. Analyses across species showed similar responses, demonstrating that the BK challenge model in transgenic rats and non-human primates may be predictive of PK/PD outcomes in humans.

[A novel kinin biomarker assay for characterization of bradykinin-mediated disorders](#), a poster presentation by Evangelia Pardali, Ph.D. BK is involved in various physiological and pathological processes, including angioedema (AE). Differentiating BK-mediated from histamine-mediated AE and assessing the role of BK in the pathogenesis of other conditions by measuring kinin peptides remains a challenge due to their proteolytic instability and limitations of current analytical assays. A kinin biomarker assay was established and qualified, which could become a key tool for identifying, studying, and managing BK-mediated diseases.

[A HMWK capillary immunoblotting assay to characterize bradykinin-mediated disorders](#), a poster presentation by Evangelia Pardali, Ph.D. Activation of the plasma kallikrein-kinin system (KKS) can result in cleavage of high molecular weight kininogen (HMWK) and production of vasodilatory kinins, such as BK. A HMWK immunoblotting assay was established and qualified to reliably measure KKS biomarkers in human plasma and could become a key tool for identifying, studying, and managing BK-mediated diseases.

The presentation slides and posters are available on the Investors section of the Pharvaris website at: <https://ir.pharvaris.com/news-events/events-presentations>.

About Deucricitbant

Deucricitbant is a novel, potent, oral small-molecule bradykinin B2 receptor antagonist. By inhibiting bradykinin signaling through the bradykinin B2 receptor, deucricitbant has the potential to prevent the occurrence of HAE attacks and to treat the manifestations of attacks if they occur. Based on its chemical properties, Pharvaris is developing two formulations of deucricitbant for oral administration: an extended-release tablet to enable sustained absorption and efficacy for prophylactic treatment, and an immediate-release capsule to enable rapid onset of activity for on-demand treatment.

About Pharvaris

Pharvaris is a late-stage biopharmaceutical company developing novel, oral bradykinin B2 receptor antagonists to prevent and treat HAE attacks. By directly pursuing this clinically proven therapeutic target with novel small molecules, the Pharvaris team aspires to offer people with all types of bradykinin-mediated angioedema effective, well-tolerated, and easy-to-administer alternatives to treat attacks, both prophylactically and on-demand. With positive data in both Phase 2 prophylaxis and on-demand studies in HAE, Pharvaris is encouraged to further develop deucricitbant. Pharvaris is currently enrolling a pivotal Phase 3 study for the on-demand treatment of HAE attacks and plans to initiate a pivotal Phase 3 study of deucricitbant for the prevention of HAE attacks in the coming months. For more information, visit <https://pharvaris.com/>.

Forward-Looking Statements

This press release contains certain forward-looking statements that involve substantial risks and uncertainties. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including, without limitation, statements relating to our future plans, studies and trials, and any statements containing the words “believe,” “anticipate,” “expect,” “estimate,” “may,” “could,” “should,” “would,” “will,” “intend” and similar expressions. These forward-looking statements are based on management’s current expectations, are neither promises nor guarantees, and involve known and unknown risks, uncertainties and other important factors that may cause Pharvaris’ actual results, performance or achievements to be materially different from its expectations expressed or implied by the forward-looking statements. Such risks include but are not limited to the following: uncertainty in the outcome of our interactions with regulatory authorities, including the FDA; the expected timing, progress, or success of our clinical development programs, especially for deucricitbant immediate-release capsules and deucricitbant extended-release tablets, which are in late-stage global clinical trials; our ability to replicate the efficacy and safety demonstrated in the RAPIDe-1, RAPIDe-2, and CHAPTER-1 Phase 2 studies in ongoing and future nonclinical studies and clinical trials; risks arising from epidemic diseases, such as the COVID-19 pandemic, which may adversely impact our business, nonclinical studies, and clinical trials; the outcome and timing of regulatory approvals; the value of our ordinary shares; the timing, costs and other limitations involved in obtaining regulatory approval for our product candidates, or any other product candidate that we may develop in the future; our ability to establish commercial capabilities or enter into agreements with third parties to market, sell, and distribute our product candidates; our ability to compete in the pharmaceutical industry, including with respect to existing therapies, emerging potentially competitive therapies and with competitive generic products; our ability to market, commercialize and achieve market acceptance for our product candidates; our ability to raise capital when needed and on acceptable terms; regulatory developments in the United States, the European Union and other jurisdictions; our ability to protect our intellectual property and know-how and operate our business without infringing the intellectual property rights or regulatory exclusivity of others; our ability to manage negative consequences from changes in applicable laws and regulations, including tax laws, our ability to successfully remediate the material weaknesses in our internal control over financial reporting and to maintain an effective system of internal control over financial reporting; changes and uncertainty in general market, political and economic conditions, including as a result of inflation and the current conflict between Russia and Ukraine and the Hamas attack against Israel and the ensuing war; and the other factors described under the headings “Cautionary Statement Regarding Forward-Looking Statements” and “Item 3. Key Information—D. Risk Factors” in our Annual Report on Form 20-F and other periodic filings with the U.S. Securities and Exchange Commission. These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management’s estimates as of the date of this press release. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. While Pharvaris may elect to update such forward-looking statements at some point in the future, Pharvaris disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing Pharvaris’ views as of any date subsequent to the date of this press release.

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