### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

#### FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13A-16 OR 15D-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of January 2023

Commission File Number: 001-40010

### Pharvaris N.V.

(Translation of registrant's name into English)

J.H. Oortweg 21 2333 CH Leiden The Netherlands

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):  $\Box$ 

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

#### PHARVARIS N.V.

On January 9, 2023 Pharvaris N.V. issued a press release and made available an investor presentation on its website. The press release is attached as Exhibit 99.1 hereto and is incorporated by reference herein. A copy of the investor presentation is attached hereto as Exhibit 99.2.

Exhibit 99.1 to this Report on Form 6-K shall be deemed to be incorporated by reference into the registration statements on Form F-3 (Registration Number 333-263198) and Form S-8 (Registration Number 333-252897). Exhibit 99.2 to this Report on Form 6-K shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended or the Exchange Act.

#### **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

#### PHARVARIS N.V.

Date: January 9, 2023 /s/ Berndt Modig Berndt Modig By:

Name:

Title: Chief Executive Officer

#### EXHIBIT INDEX

#### Exhibit

Description

**No.** 99.1 99.2 Press release, dated January 9, 2023 Investor Presentation, dated January 9, 2023

#### Pharvaris Provides Regulatory, Clinical, and Corporate Updates

**ZUG, Switzerland, January 9, 2023** – <u>Pharvaris</u> (Nasdaq: PHVS), a clinical-stage company developing novel, oral bradykinin-B2-receptor antagonists to treat and prevent hereditary angioedema (HAE) attacks, today provided business updates and company highlights.

#### **Business Updates and Company Highlights**

- Meeting minutes from Type A meeting with U.S. Food and Drug Administration (FDA) received. Pharvaris will conduct a 26-week rodent toxicology study to resolve the clinical holds in the U.S. The protocol for this nonclinical study has been submitted to the FDA for review.
- FDA approval of dosing of final U.S. participants in RAPIDe-1 received. The FDA has agreed to partially lift the hold on on-demand to allow the two remaining U.S. participants in RAPIDe-1 to complete treatment of the last attack per the protocol. Positive top-line data from RAPIDe-1 was announced in December 2022. RAPIDe-2, a long-term extension study of PHVS416 for the on-demand treatment of HAE, is currently on hold in the U.S. and is underway outside the U.S.
- Top-line data from CHAPTER-1, a global Phase 2 study of PHVS416 for the prophylactic treatment of HAE attacks, anticipated 2H2023. CHAPTER-1 is currently on hold in the U.S. All active sites outside of the U.S. continue to recruit participants in the CHAPTER-1 clinical study. After being notified of the clinical holds in the U.S. by the FDA, Pharvaris informed country-specific regulatory authorities in Canada, Europe, Israel, and the UK regarding the clinical holds in the U.S. To date, the regulatory status of the CHAPTER-1 study outside the U.S. remains unchanged. Based on the Company's current assumptions regarding ex-U.S. regulatory status and enrollment, Pharvaris anticipates announcing top-line data from the CHAPTER-1 trial in 2H2023.
- Cash runway into 4Q2024. Pharvaris remains diligent in its operational management and is focusing on its existing clinical HAE pipeline to extend runway into 4Q2024.

#### **Upcoming Data Presentation**

- American Academy of Allergy, Asthma & Immunology (AAAAI) Annual Meeting. San Antonio, TX, February 24-27, 2023. Details for the
  accepted poster presentation at AAAAI are as follows:
  - Title: Efficacy And Safety Of Bradykinin B2 Receptor Inhibition With Oral PHVS416 In Treating Hereditary Angioedema Attacks: Results Of RAPIDe-1 Phase 2 Trial
  - o **Presenter:** Prof. Marcus Maurer
  - o **Date, Time:** Sunday, February 26, 2023, 9:45-10:45 a.m. CST

#### **About Pharvaris**

Pharvaris is a clinical-stage company developing novel, oral bradykinin-B2-receptor antagonists to treat and prevent HAE attacks, building on its deep-seated roots in HAE. By directly targeting this clinically proven therapeutic target with novel small molecules, the Pharvaris team aspires to offer people with all subtypes of HAE safe, effective and convenient alternatives to treat attacks, for both on-demand and prophylactically. The company brings together the best talent in the industry with deep expertise in rare diseases and HAE. For more information, visit <a href="https://pharvaris.com/">https://pharvaris.com/</a>.

#### 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 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 with respect to the clinical holds on PHA121 clinical trials in the U.S.; the expected timing, progress, or success of our clinical development programs, especially for PHVS416 and PHVS719, which are in mid-stage global clinical trials and are currently on hold in the U.S. as a result of the clinical holds; risks associated with the COVID-19 pandemic, which may adversely impact our business, nonclinical studies, and clinical trials; the 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 PHVS416 and PHVS719, 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 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 weakness in our internal control over financial reporting and to maintain an effective system of internal control over financial reporting; changes in general market, political and economic conditions, including as a result of the current conflict between Russia and Ukraine; and the other

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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 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.

#### Contact

Maryann Cimino Director of Corporate Relations <u>maryann.cimino@pharvaris.com</u> +1-617-710-7305

**PHARVARIS** 

# **PHARVARIS**

### Pioneering science for patient choice

January 2023

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### Disclaimer

This Presentation may contain certain "forward-looking statements" within the meaning of the federal securities laws that involve substantial risks and uncertainties. All statements contained in this Presentation that do not relate to matters of historical fact should be considered forward-looking, without limitation, statements containing the words "believe," "anticipate," "expect," "expect," "expect," "expect," "expect," "expect," "expect," "expect," "expect," "would," "would," "will," "intend" and similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Such forward-looking statements involve unknown risks, uncertainties and other factors which may cause our actual results, financial condition, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that might cause such a difference include, but are not limited to, uncertainty in the outcome of our interactions with regulatory authorities, including the FDA with respect to the clinical hold on PHA121 clinical trials in the U.S., the expected timing, progress, or success of our clinical development programs especially for PHV\$416 and PHV\$719 which are in mid-stage clinical trials and are currently on hold in the U.S. as a result of the FDA clinical hold, risks associated with the COVID-19 pandemic which may adversely impact our business, nonclinical studies, and clinical trials, the 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 PHV\$416 and PHV\$719, or any other product candidates, our ability to compete in the pharmaceutical industry and with competitive generic products, our ability to mark

Certain information contained in this Presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this Presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

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### Pharvaris: Focused on unmet need in the treatment of hereditary angioedema (HAE) and other bradykinin-mediated diseases



#### Competitive product profile

Convenient, orally available, small molecule targeting the **validated bradykinin B2 receptor pathway** 

Clinical proof-of-mechanism using surrogate endpoint with higher potency and duration than previously observed for icatibant

**Positive top-line Phase 2 data** from RAPIDe-1 study of PHVS416 for the ondemand treatment of HAE attacks

PK/PD profile supports use in both on-

demand and prophylactic settings; Phase 2 studies underway\*



### Large market opportunity

#### Large global HAE market:

>\$2 billion with predicted 9% CAGR over 5 years

Potential portfolio expansion into other BK-mediated angioedema and diseases through **B2-receptor** pathway expertise



#### Strong fundamentals

**Novel lead series with strong IP** (primary CoM granted in multiple territories; initial term to 2038); FDA **orphan drug designation** 

**World-wide operations**: the Netherlands, USA, and Switzerland (headquarters)

Strong financial position; cash runway into 4Q24

Experienced management **team with successful track record** in HAE drug design and development

\*The FDA has placed a hold on the clinical trials of PHA121 in the U.S.; see slide 16 for an update on our clinical program

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### **Experienced management with deep expertise in development and rare diseases**













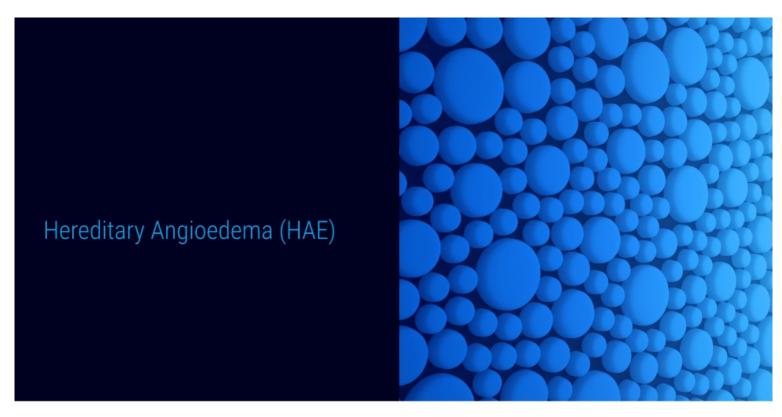




Includes the leaders behind the discovery, development, and approval of Firazyr® (icatibant), and a key member of the Takhzyro® (lanadelumab) development team



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### HAE is a rare, life-long condition characterized by attacks of swelling

- Rare and potentially life-threatening genetic condition
- 1:10,000 to 1:50,000 Individuals affected by HAE globally
  - At least 6,600 people living with HAE in the U.S.
  - At least 8,900 people living with HAE in Europe
  - Globally, under-diagnosed/treated







Nordenfelt et al, Acta Derm. Venereol 2016: 96: 540-545

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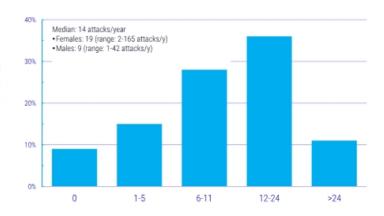
### HAE attacks are unpredictable, debilitating and potentially lethal

Patients reporting

Attacks are unpredictable in frequency, location, timing, and severity

- Multiple types of triggers
- If untreated, attacks last multiple days
- Attacks are commonly painful, leading to hospitalization or multiple sick days
- Half of people living with HAE experience a potentially life-threatening laryngeal attack at least once in their lifetime

### Annual attacks (overall)



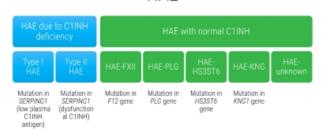
Nordenfelt et al, Acta Derm. Venereol 2016: 96: 540-545

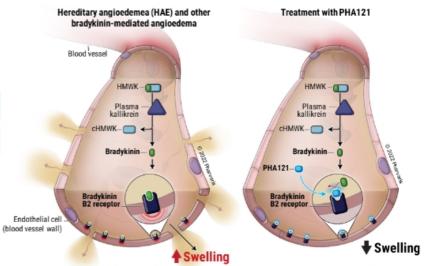
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## The swelling of an HAE attack is caused by excess levels of bradykinin: PHA121 is designed to block signaling by bradykinin

Genetic causes lead to elevated levels of bradykinin

HAE



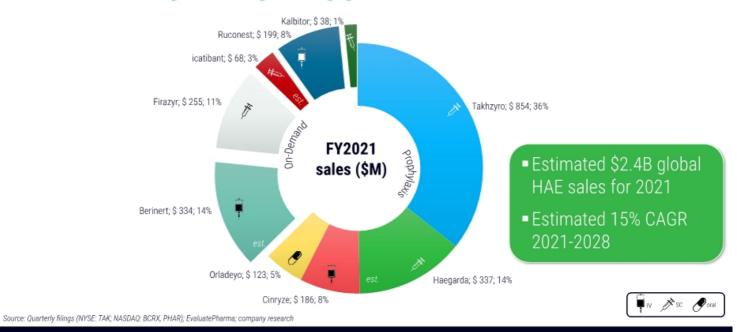


Busse 2020 J Allergy Clin Immunol Pract; Bork et al 2021 J Allergy Clin Immunol

HMWK: high-molecular-weight kininogen; cHMWK: cleaved high-molecular-weight kininogen

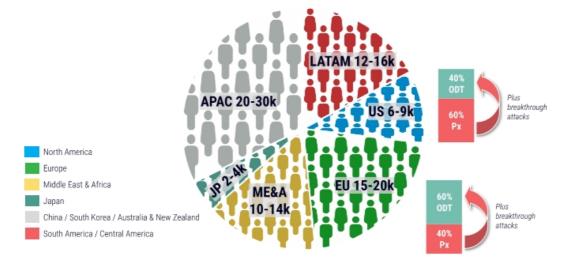
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### HAE is a meaningful and growing global market



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## Significant global unmet need: Potentially up to 100,000 people living with HAE



Proprietary company research 2022; Maurer et al. Consensus on diagnosis and management of Hereditary Angioedema in the Middle East: A Delphi initiative. World Allergy Organization Journal (2023);16:1-2; Zuraw et al. NEJM 2008;359:1027-1036; HAEI (hael.org), The State of Management of HAE in Latin America (2015); <a href="https://haei.org/potentially-28000-hae-patients-in-china/di;">https://haei.org/potentially-28000-hae-patients-in-china/di;</a> Ann Allergy Asthma Immunol 2015:114(6), 492-498; Allergol Int. (2020) Nov 6:51323-8930/2030135-0

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## People living with HAE actively switch products, seeking improvement in efficacy, safety/tolerability, and convenience



**Efficacy** is patients' prime concern ...



... but **safety & tolerability** are pushing patients to explore alternatives ...



... while **convenience** has become a key driver for patient preference

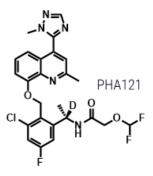
People living with HAE desire HAE therapy that can deliver on ALL fronts

Proprietary company research 2022

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## Pharvaris has discovered the first orally bioavailable bradykinin B2 receptor antagonist

- New molecular entity, orally administered
- Potent inhibition of the bradykinin B2 receptor to compete with bradykinin, the ultimate driver of swelling attacks
- Results from Phase 1 healthy volunteer studies demonstrate rapid absorption, exposure, and tolerability
- Dose and exposure threshold predicted from human surrogate endpoint for both on-demand and prophylaxis
  - · Bradykinin challenge in healthy volunteers



Pharvaris' aspiration is to develop **novel**, **oral alternatives** that **improve** the **standard of care** for people living with HAE

Lesage et al, Frontiers in Pharmacology 2020, doi: 10.3389/fphar.2020.00916; ; Lesage et al, Int. Immunopharmacology 2022, doi.org/10.1016/j.intimp.2022.108523; <a href="https://ir.pharvaris.com/static-files/0361cd85-6000-490b-932b-d305e1f3ca1b:">https://ir.pharvaris.com/static-files/03817745-6893-4f49-893-80ea6fb2a31; <a href="https://ir.pharvaris.com/static-files/0361cd85-6000-490b-932b-d305e1f3ca1b:">https://ir.pharvaris.com/static-files/0361cd85-6000-490b-932b-d305e1f3ca1b:</a><a href="https://ir.pharvaris.com/static-files/0361cd85-6000-490b-932b-d305

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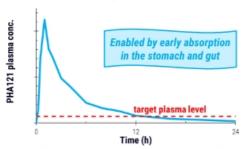
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On-demand and prophylaxis: Developing two oral products utilizing the same active ingredient



**PHVS416** 

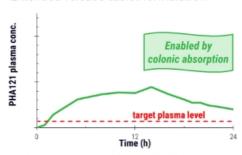
Softgel capsule formulation



Potential to provide rapid, easy, and reliable symptom relief for all attacks\*

### **PHVS719**

Extended-release tablet formulation



Aim to maintain compound exposure to prevent attacks, for convenient and effective control\*

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<sup>\*</sup>Aspirational; to be confirmed with clinical data

## Wholly-owned pipeline focused on bradykinin B2 receptor mechanism



<sup>\*</sup>The FDA has placed a clinical hold on the clinical trials of PHA121 in the U.S.; timeline based on studies ongoing outside the U.S.; see slide 16 for an update on our clinical program

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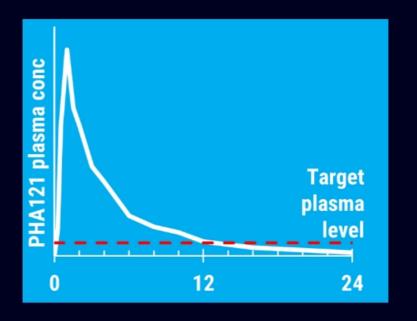
### **Regulatory update**

- In August 2022, the U.S. Food & Drug Administration (FDA) placed a hold on the clinical trials of PHA121 in the U.S. based on its review of nonclinical data
  - The agency requested that Pharvaris conduct an additional long-term rodent toxicology study and update the Investigator's Brochure
- Pharvaris participated in a Type A meeting with the FDA to discuss paths to address the on-demand and prophylactic holds
  - . A protocol for a 26-week rodent toxicology study has been submitted to the FDA for review
- FDA has agreed to partially lift the clinical hold on on-demand
  - Two remaining U.S. participants in RAPIDe-1 allowed to complete treatment of a final HAE attack per protocol
  - · All other clinical studies of PHA121 are currently on hold in the U.S.
- Outside the U.S., the regulatory status remains unchanged for the CHAPTER-1 study and other studies, including long-term extension RAPIDe-2 study
  - Pharvaris notified country-specific regulatory authorities in Canada, Europe, Israel, and the UK of the U.S. clinical holds
  - · All active sites outside of the U.S. continue to recruit participants in the CHAPTER-1 clinical study

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### PHVS416/On-Demand

Softgel capsule formulation of PHA121



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## On-demand treatment of HAE attacks: No new approvals beyond injectable options have left a significant unmet need



Treatment today means **painful** injections ...



... and often one dose does not suffice ...



... while finding a place to administer the drug causes an **extra burden** 

As a result, people living with HAE often delay or even avoid therapy against clinical guideline recommendations

Proprietary Pharvaris research, 2022 (representative sample of patients, n = 103, and doctors, n = 100)

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## People living with HAE are hoping for better on-demand therapies that offer rapid symptom relief with one single, oral dose







Patients want rapid onset of symptom relief ...

... with single dose durability ...

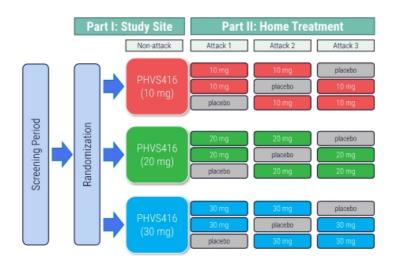
... in an oral pill

Effectively targeting the **bradykinin receptor** with a **small molecule** has the potential to deliver on their hopes

Proprietary Pharvaris research, 2022 (representative sample of patients, n = 103, and doctors, n = 100)

PHARVARIS © 2023

### HAE RAPIDe-1 study: Phase 2 study of on-demand treatment of angioedema attacks in patients with Type I or II HAE



- <u>Primary objective:</u> to evaluate angioedema symptom relief within four hours in acute attacks of patients with HAE type 1 or 2
- Study design: Placebo-controlled, three dose levels
  - Part I: patients randomized and received a single dose of PHA121 in clinic for PK and safety assessment
  - Part II: patients treated three attacks with two PHA121 vs. one placebo
  - Before an attack was treated, one of the VAS-3 elements had to be at least hit a score of 30 and it had to be qualified by the clinician
- 74 HAE patients enrolled from ~30 sites in US, Canada, Europe, Israel, and UK

www.hae-rapide.com; https://clinicaltrials.gov/cr2/show/ NCT04618211; https://hae-rapide.us/: https://www.clinicaltrialsregister.eu/ctr-search/search/query=2020-003445-11

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### Positive top-line Phase 2 data from RAPIDe-1 study of PHVS416 for the on-demand treatment of HAE attacks

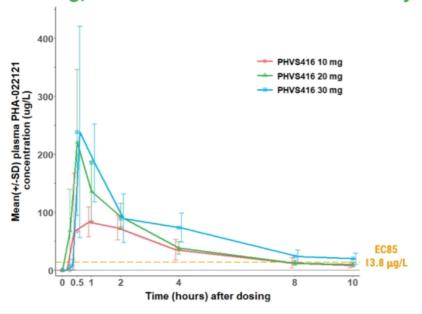
- A total of 74 patients from 13 countries were enrolled to the study, 62 of them had 147 attacks that were treated with blinded study drug and included in efficacy evaluation
- The primary endpoint and all key secondary endpoints were met
- PHVS416 demonstrated rapid onset of action, symptom relief, and resolution of HAE attacks
- PHVS416 substantially reduced the use of rescue medications
- PHVS416 was well tolerated at all dose levels
  - There were no treatment-related SAEs, no treatment-related AEs of severe severity, and no AEs leading to treatment discontinuation

**Consistent outcomes** observed across all endpoints and types of measurements

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This presentation includes data for an investigational product not yet approved by regulatory authorities

### PK profile in HAE patients: Rapid absorption confirmed on oral dosing, consistent with Phase 1 healthy volunteer studies

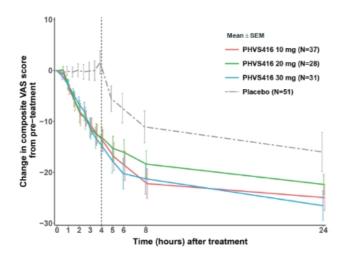


- Rapid absorption with mean plasma levels exceeding EC<sub>85</sub> (13.8 ng/mL) within 30 min
- Mean plasma levels maintained >EC<sub>85</sub> for approximately
  - 8 h at 10 mg or 20 mg
  - >10 h at 30 mg dose
- EC<sub>85</sub> levels established using bradykinin challenge, a human surrogate endpoint study in healthy volunteers

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This presentation includes data for an investigational product not yet approved by regulatory authorities

## Primary endpoint: PHVS416 significantly reduces attack symptoms by VAS-3 at 4h



### Difference from placebo in change from pre-treatment to 4 h post-treatment, least-squares mean (95% CI)

PHVS416 10 mg	-16.75 (-21.52, -11.97)	p < 0.0001 <sup>†</sup>
PHVS416 20 mg	-15.02 (-20.22, -9.81)	p < 0.0001
PHVS416 30 mg	-16.28 (-21.27, -11.29)	p < 0.0001
Combined PHVS416	-16.08 (-19.87, -12.29)	

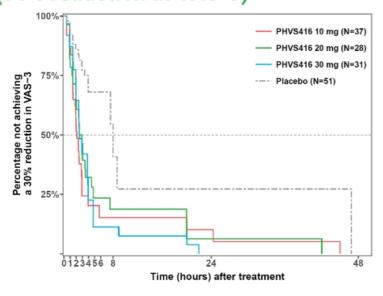
Median VAS-3 at pre-treatment ranges from 24.33-27.00

†Nominal p-value; VAS assessed every 30 minutes up to 4 hours post-treatment, then at 5, 6, 8, 24, 48 hours; N = The number of attacks in the mITT Analysis Set. Attacks in mITT Analysis Set refer to attacks treated with blinded study drug that had non-missing VAS result at pre-treatment and at least one non-missing VAS result at pre-treatment and at least one non-missing VAS result at pre-treatment and at least one non-missing VAS result at pre-treatment and pre-treatment and pre-treatment values come from a mixed-effects model with repeated measures (MMRM). Data after rescue medication use is not included. The combined PHVS416 result is based on post-hoc analysis using a similar MMRM with all three active doses combined vs placebo



This presentation includes data for an investigational product not yet approved by regulatory authorities

## PHVS416 significantly shortened time to onset of symptom relief (30% reduction in VAS-3)



Median time in hours (95% CI)					
Placebo	8.0 (7.6, 46.9)				
PHVS416 10 mg	2.1 (1.5, 2.9)	p < 0.0001 <sup>†</sup>			
PHVS416 20 mg	2.7 (1.9, 3.5)	p = 0.0021			
PHVS416 30 mg	2.5 (1.9, 3.8)	p < 0.0001			
Combined PHVS416	2.4 (2.0, 2.9)				

VAS assessed every 30 minutes up to 4 hours post-treatment, then at 5, 6, 8, 24, 48 hours

\*\*tNominal p-value; N = The number of attacks in the mITT Analysis Set. Median time based on Kaplan-Meier estimates. p-values based on a marginal Cox proportional hazards model. The combined PHVS416 results are based on post-hoc analyses to provide a reference of the result by pooling all three active doses.

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This presentation includes data for an investigational product not yet approved by regulatory authorities

### **TOS Patient Reported Outcome (PRO)**

■ TOS PRO captures change in five symptom complexes of HAE attacks

Internal he	d/neck Stomach/GI	Genital/buttocks	External head/neck	Cutaneous	]
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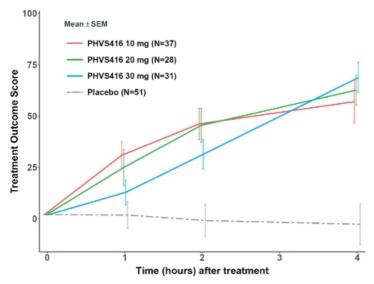
• At each timepoint, the change in attack symptom from pre-treatment is reported by patient

**PRO** – how do you feel now compared to before receiving study drug?

A lot better or resolved	A little better	Same	A little worse	A lot worse
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### TOS endpoint shows early response to treatment: Significant at 4h



### Difference from placebo in 4 h post-treatment leastsquares mean (95% CI)

PHVS416 10 mg	64.13 (40.35, 87.91)	p < 0.0001 <sup>†</sup>
PHVS416 20 mg	62.69 (36.71, 88.67)	p < 0.0001
PHVS416 30 mg	71.06 (46.09, 96.03)	p < 0.0001
Combined PHVS416	66.05 (47.42, 84.69)	

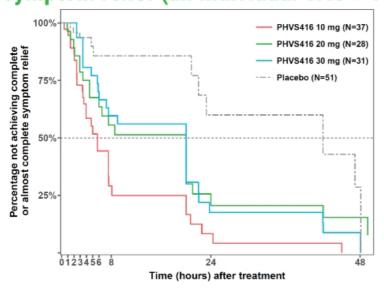
Minimally Important Difference (MID) for TOS is **30** 

Source: Vernon M, Rentz AM, Wyrwich KW, et al. Qual Life Res. 2009; †Nominal p-value; N = The number of attacks in the mITT Analysis Set. TOS = Treatment Outcome Score. Figure is based on descriptive summary of mean and SEM. The least-squares mean differences, CIs, and p-values come from an MMRM. Data after rescue medication use is not included. The combined PHVS416 result is based on post-hoc analysis using a similar MMRM with all three active doses combined vs placebo

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## PHVS416 significantly reduces time to almost complete or complete symptom relief (all individual VAS ≤ 10)



Median time in hours (95% CI)					
Placebo	42.0 (22.0, 48.1)				
PHVS416 10 mg	5.8 (3.6, 7.5)	p < 0.0001 <sup>†</sup>			
PHVS416 20 mg	20.0 (4.5, 20.0)	p = 0.0127			
PHVS416 30 mg	20.0 (6.0, 20.1)	p = 0.0001			
Combined PHVS416	7.5 (5.9, 20.0)				

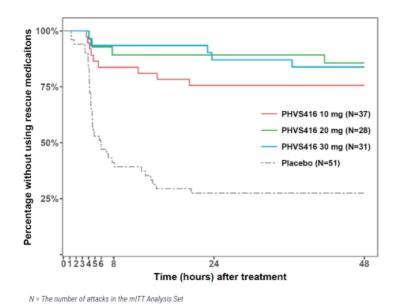
VAS assessed every 30 minutes up to 4 hours post-treatment, then at 5, 6, 8, 24, 48 hours

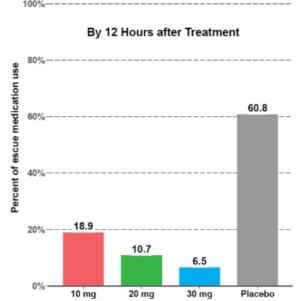
tNominal p-value; N = The number of attacks in the mITT Analysis Set. Median time based on Kaplan-Meier estimates, p-values based on a marginal Cox proportional hazards model. The combined PHVS416 results are based on post-hoc analyses to provide a reference of the result by pooling all three active doses.

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## Patients treating with PHVS416 used substantially less rescue medication





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### PHVS416 was well tolerated at all doses

- No treatment-related SAEs or AEs of severe severity
- No AEs leading to treatment discontinuation
- No treatment-related AEs of laboratory parameters, vital signs, or ECG parameters
- Few treatment-related AEs reported within 48 h after administration of study drug

	Part I (Non-Attack)			Part II (Attack 1,2,3)			
	10 mg N=23	20 mg N=24	30 mg N=25	Placebo N=53	10 mg N=38	20 mg N=29	30 mg N=36
Subjects (Part I) or Attacks (Part II) with any treatment related AEs	1 (4.3%)	1 (4.2%)		1 (1.9%)			1 (2.8%)
Headache		1 (4.2%)	-	-			-
Nausea	1 (4.3%)	-	-	-	-	-	1 (2.8%)
Vomiting	-	-		-			1 (2.8%)
Fatigue	-	-	-	-	-	-	1 (2.8%)
Blister	-	-	-	1 (1.9%)	-	-	-

N= The number of subjects (Part I) and number of attacks (Part II) in the Safety Analysis Set. The Safety Analysis Set includes all randomized patients who received any dose of study drug. T reatment-related AEs within 48 h post-treatment are included



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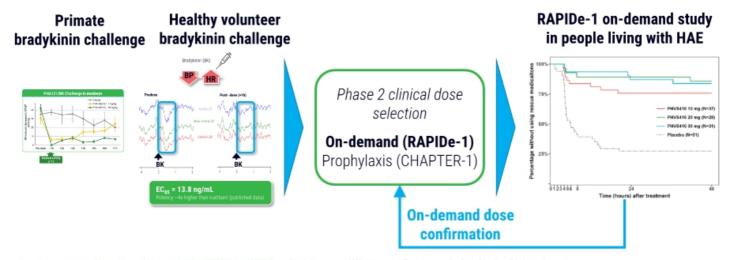
# Both doctors and patients consider an oral acute therapy would increase likelihood that patients would treat more attacks, earlier

	🔒 Doctor	S (n=100)	Patients (n=103)		
Anticipated impact of ORAL acute therapy on attacks treated	Would treat MORE attacks	Would treat attacks EARLIER	Would treat MORE attacks	Would treat attacks EARLIER	
Mean /10	7.9	8.1	7.6	7.7	
Ratings 8-10 (10=extremely likely) Ratings 6-7	70%	73%	60%	67%	
Ratings 1-3 (1=not at all likely)	23%	23%	17% 12%	11% 10% 13%	

Proprietary Pharvaris research, 2022 (representative sample of patients, n = 103, and doctors, n = 100)

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# Predictive value of our unique in vivo surrogate-marker model, the BK challenge, allows for derisking of our clinical studies

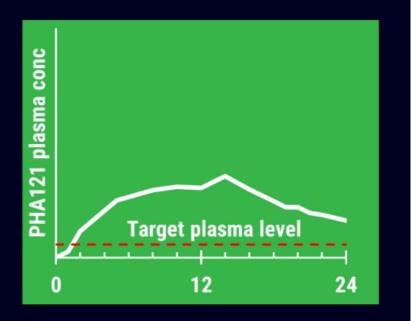


https://www.accessdata.fda.gov/drugsatfda.docs/nda/2011/0221500rig1s000ClinPharmR.pdf; Maurer et al 2020: Long-term effectiveness and safety of icatibant for the on-demand treatment of hereditary angioedema attacks: 10 years of the icatibant outcome survey (EAACI Poster #1118, June 6-8, 2020): https://clinicaltrials.gov/ct2/show/NCT01034969; https://cipharvaris.com/static-files/33217945-6893-4f49-8a93-c80ea6fb2a31; https://doi.org/10.1016/j.jaci.2019.12.094

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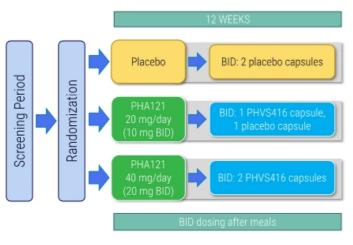
## PHVS719/Prophylaxis

Extended-release tablet formulation of PHA121



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# HAE CHAPTER-1 study ongoing outside U.S.: Prevention of attacks in HAE (proof of concept with PHVS416 softgel capsule)

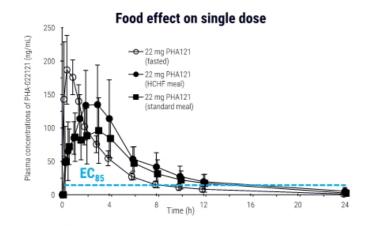


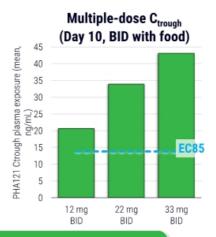
- Primary objective: assessing safety and efficacy of PHA121 in preventing HAE attacks in patients with HAE type 1 or type 2
  - · Placebo-controlled, 3 parallel arms, two doses
  - · Includes open-label extension
- Primary endpoint: Number of investigator-confirmed HAE attacks
  - Secondary endpoints include moderate or severe HAE attacks, HAE attacks requiring acute treatment
- Target enrolment of 30 HAE patients globally
- Regulators in Canada, Europe, Israel, and the UK have been notified of U.S. clinical hold; the regulatory status of the CHAPTER-1 study outside the U.S. remains unchanged

https://clinicaltrials.gov/ct2/show/NCT05047185, https://haechapter-1.com/

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# Phase 1 pharmacokinetics offer options to use softgel capsule as proof-of-concept in prophylactic development



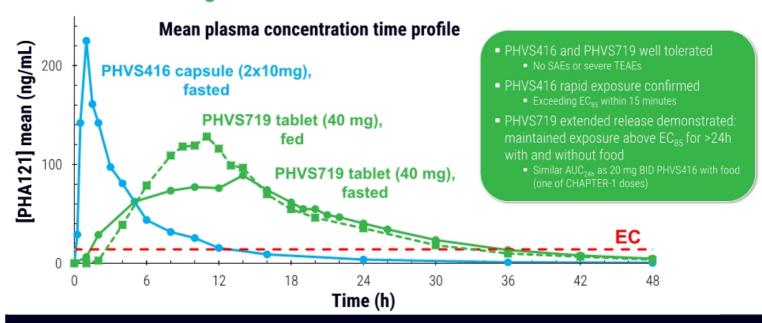


When dosed BID with food, exposure maintained above target levels, steady state reached within 72 hours

https://ir.pharvaris.com/static-files/0361cd85-6000-490b-932b-d305e1f3ca1b: https://ir.pharvaris.com/static-files/81a9499d-0769-4b89-8ecd-8ace5ca521d3

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# PHVS719 single-dose PK study demonstrates QD potential; target for Phase 3 dosage form



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## **Corporate summary and milestones**

	HAE On-Demand (type 1 and type 2)	HAE Prophylaxis (type 1 and type 2)
PHVS416 softgel capsule	✓ RAPIDe-1 Ph2 top-line data meets all primary and key secondary endpoints	CHAPTER-1 Ph2 top-line data (expected 2H23)
PHVS719 XR tablet		✓ Ph1 SD PK demonstrates once-daily potential

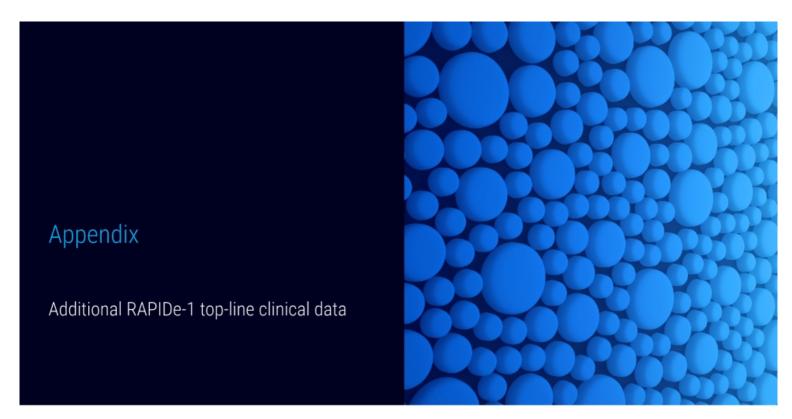
Financially strong: Cash runway into 4Q24

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# **PHARVARIS**

Nasdaq: PHVS

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### RAPIDe-1: Primary, key secondary and other endpoints

#### **Primary Endpoint**

• Change in VAS-3 score from pre-treatment to 4h post-treatment

#### **Key Secondary Endpoints**

- Time to onset of symptom relief (VAS-3; ≥30% reduction from the pre-treatment score)
- Time to a ≥50% reduction in VAS-3 score from the pre-treatment score
- Time to almost complete and complete symptom relief (VAS; all 3 items ≤10)
- Change of MSCS (mean symptom complex severity) score from pre-treatment to 4h post-treatment
- TOS (treatment outcome score) at 4h post-treatment

#### Other Endpoints Included in the top-line Outputs

- Proportion of study-drug-treated attacks requiring the use of HAE rescue medication
- Time to the first use of HAE rescue medication
- Safety and PK assessments

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## **Results summary of primary efficacy endpoint**

	Placebo N=51	PHVS416 10 mg N=37	PHVS416 20 mg N=28	PHVS416 30 mg N=31	Combined PHVS416* N=96
Mean VAS-3 at pre-treatment Change in VAS-3 at 4 hours	27.76	26.16	25.46	29.73	27.11
least-squares mean difference: PHVS416 - Placebo		-16.75	-15.02	-16.28	-16.08
p-value		<0.0001 <sup>†</sup>	<0.0001	< 0.0001	

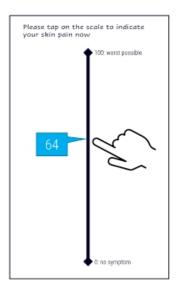
<sup>&#</sup>x27;nominal p-value; N = The number of attacks included in the mITT Analysis Set p-values for PHVS416 20mg and PHVS416 30mg are based on statistical tests in the pre-specified multiple comparison procedure, other p-values are nominal least-squares = Least squares. The least-squares mean differences and p-values are based on mixed-effects model for repeated measures \*The combined PHVS416 results are based on post-hoc analyses to provide a reference of the result by pooling all three active doses

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## VAS-3 is a measure of HAE attack severity, based electronically captured numerically assisted visual scale

- Electronically captured patient-reported assessment of three symptoms
  - · Skin pain, skin swelling, abdominal pain
- Patient indicates the severity of symptom on a sliding scale, from 0-100
- Once an attack qualifies and is treated, VAS-3 assessed every ~30 min until 4 hours post-treatment and then at 5, 6, 8, 24, 48 hours post-treatment
- Used in approval of two most recently approved on-demand therapies
  - FIRAZYR® icatibant and RUCONEST® C1 esterase inhibitor [recombinant]
- VAS, MSCS, TOS are only endpoints listed for attacks in FDA compendium of clinical outcome assessments (2021) as listed by Division of Pulmonology, Allergy and Critical Care



Firazyr is a registered trademark of Shire, and marketed by Takeda; Ruconest is a registered trademark of and marketed by Pharming; FDA 2021 COA compendium. https://www.fda.gov/drups/development-resources/clinical-outcome-assessment-compendium.

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## Results summary of key secondary efficacy endpoints

	Placebo N=51	PHVS416 10 mg N=37	PHVS416 20 mg N=28	PHVS416 30 mg N=31	Combined PHVS416* N=96
Time to onset of symptom relief by VAS-3 30% reduction					
Median time in hours (95% CI)	8.0 (7.6, 46.9)	2.1 (1.5, 2.9)	2.7 (1.9, 3.5)	2.5 (1.9, 3.8)	2.4 (2.0, 2.9)
Hazard ratio	,	3.81	3.08	3.61	,
p-value		<0.0001	0.0021	< 0.0001	
Time to VAS-3 50% reduction <sup>a</sup>					
Median time in hours (95% CI)	22.8 (20.0, 24.1)	3.3 (2.4, 3.9)	4.0 (2.9, 6.0)	4.0 (3.3, 5.8)	3.9 (3.0, 4.8)
Hazard ratio		4.55	3.65	3.87	
p-value		<0.0001 <sup>†</sup>	0.0003	< 0.0001	
Time to almost complete or complete symptom relief by VA	S <sup>a</sup>				
Median time in hours (95% CI)	42 (22.0, 48.1)	5.8 (3.6, 7.5)	20 (4.5, 20.0)	20 (6.0, 20.1)	7.5 (5.9, 20.0)
Hazard ratio		5.09	2.25	2.65	
p-value		<0.0001 <sup>+</sup>	0.0127	0.0001	
Change in MSCS score at 4 hours <sup>b</sup>					
least-squares mean difference: PHVS416 - Placebo		-0.79	-0.61	-0.39	-0.61
p-value		<0.0001	0.0008	0.0291	
TOS at 4 hours <sup>b</sup>					
least-squares mean difference: PHVS416 - Placebo		64.13	62.69	71.06	66.05
p-value		<0.0001 <sup>†</sup>	< 0.0001	< 0.0001	
p-value		<0.00011	<0.0001	<0.0001	

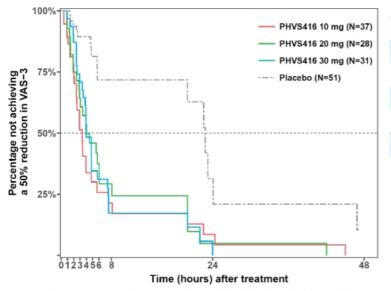
<sup>†</sup>nominal p-value; N = The number of attacks included in the mITT Analysis Set

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Province for PHVS416 20mg and PHVS416 30mg are based on statistical tests in the pre-specified multiple comparison procedure, other p-values are nominal "Hazard ratios and p-values are based on marginal Cox proportional hazards models "p-values are based on mixed-effects models for repeated measures "The combined PHVS416 results are based on post-hoc analyses to provide a reference of the result by pooling all three active doses

## PHVS416 significantly reduces time to 50% reduction in VAS-3



Median time in hours (95% CI)						
Placebo	22.8 (20.0, 24.1)					
PHVS416 10 mg	3.3 (2.4, 3.9)	$p < 0.0001^{\dagger}$				
PHVS416 20 mg	4.0 (2.9, 6.0)	p = 0.0003				
PHVS416 30 mg	4.0 (3.3, 5.8)	p < 0.0001				
Combined PHVS416	3.9 (3.0, 4.8)					

†Nominal p-value; VAS assessed every 30 minutes up to 4 hours post-treatment, then at 5, 6, 8, 24, 48 hours; N = The number of attacks in the mITT Analysis Set. Median time based onKaplan-Meier estimates. p-values based on a marginal Cox proportional hazards model. The combined PHVS416 results are based on post-hoc analyses to provide a reference of the result by pooling all three active doses.

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#### MSCS and TOS: definitions

- Validated patient-reported outcome measures to comprehensively capture symptom severity and change of HAE attacks
- MSCS (Mean Symptom Complex Severity) score is a point-in-time measure of symptom severity:
  - Patients rated the severity of each affected symptom on a categorical scale (0 = normal, 1 = mild, 2 = moderate, 3 = severe)
  - Calculated as average score from all affected anatomic sites of attack (symptom complexes or SC) pretreatment
  - Decrease in MSCS score reflects improvement in symptom severity
- TOS (Treatment Outcome Score) is a measure of symptom response to treatment:
  - Patient assessment of response for each affected SC recorded on categorical scale (significant improvement [100], improvement [50], same [0], worsening [-50], significant worsening [-100])
  - Calculated as weighted average of the response at all SC using pre-treatment severity as the weight
  - TOS value >0 reflects improvement in symptoms from pre-treatment

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## Greater improvement in MSCS and TOS with PHVS416 than placebo

-					
	Placebo	PHVS416 10 mg	PHVS416 20 mg	PHVS416 30 mg	Combined PHVS416
Change in MSCS score at 4 hours					
n	40	32	26	27	85
least-squares mean (95% CI)	-0.29 (-0.51, -0.08)	-1.08 (-1.33, -0.83)	-0.91 (-1.19, -0.62)	-0.68 (-0.95, -0.40)	-0.90 (-1.06, -0.75)
Difference (PHVS416 – Placebo, LSMD) p-value		-0.79 <0.0001 <sup>†</sup>	-0.61 0.0008	-0.39 0.0291	-0.61
TOS at 4 hours					
n	40	32	25	28	85
least-squares mean (95% CI)	-3.62 (-19.68, 12.45)	60.52 (41.74, 79.29)	59.08 (37.58, 80.57)	67.44 (47.15, 87.74)	62.57 (50.95, 74.19)
Difference (PHVS416 – Placebo, LSMD) p-value		64.13 <0.0001 <sup>†</sup>	62.69 <0.0001	71.06 <0.0001	66.05

†Nominal p-value; MSCS = Mean Symptom Complex Severity, TOS = Treatment Outcome Score, CI = confidence interval, LSMD = least-squares mean difference; least-squares mean, LSMD, CIs, and p-values for MSCS change from pre-treatment/TOS come from mixed-effect models with repeated measures (MMRM). Data after rescue medication use is not included. The combined PHVS416 result is based on post-hoc analysis using similar MMRM with all three active doses combined vs placebo

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# Time to symptom relief by TOS PRO demonstrated consistent efficacy at all doses

	Placebo	PHVS416 10 mg	PHVS416 20 mg	PHVS416 30 mg	Combined PHVS416
Number of attacks	49	36	28	29	93
Attacks achieving <u>"a little better"</u> for all SCs at two consecutive time points - n (%)*	18 <b>(36.7%</b> )	32 (88.9%)	25 (89.3%)	27 (93.1%)	84 ( <b>90.3%</b> )
Median (95% CI) time by KM estimate (hours)	<b>7.62</b> (3.95, NE)	1.89 (0.97, 3.97)	2.15 (1.75, 4.00)	1.98 (1.80, 3.87)	<b>1.98</b> (1.88, 3.87)
Attacks achieving <u>"a lot better or resolved"</u> for all SCs at any time point – n (%)*	13 ( <b>26.5%</b> )	30 (83.3%)	23 (82.1%)	25 (86.2%)	78 <b>(83.9%</b> )
Median (95% CI) time by KM estimate (hours)	<b>23.28</b> (5.78, 47.17)	4.02 (3.93, 5.77)	5.93 (3.90, 8.58)	4.12 (3.92, 7.22)	<b>5.23</b> (3.98, 5.78)

<sup>\*</sup> Within 48 hours assessments

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TOS = Treatment Outcome Score. PRO = Patient Reported Outcome. SC = Symptom Complex. KM = Kaplan-Meier. NE = Not Estimable