

Interim data from phase III HAVEN 6 study demonstrate favourable safety and efficacy profile of Roche's Hemlibra in people with moderate or mild haemophilia A

- **People with moderate or mild haemophilia A have significant unmet clinical needs, as this population may not use preventative treatments due to missed or delayed diagnoses of bleeding episodes and a lack of treatment guidelines^{1,2}**
- **New data indicate that Hemlibra has a favourable safety profile in people with moderate or mild haemophilia A without factor VIII inhibitors, with no new safety signals identified³**
- **Hemlibra also achieved clinically meaningful bleed control, with 80.3% of participants experiencing no bleeding episodes that required treatment and 90.1% experiencing no joint bleeds that required treatment³**
- **A separate analysis of thrombosis-related events in people taking Hemlibra, including real-world data, further confirmed the safety profile of Hemlibra⁴**

Basel, 13 December 2021 - Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced results from an interim analysis of the phase III HAVEN 6 study, which show Hemlibra® (emicizumab) demonstrated a favourable safety profile and effective bleed control in people with moderate or mild haemophilia A without factor VIII inhibitors.³ The data were presented at the 63rd American Society of Hematology (ASH) Annual Meeting and Exposition as an oral presentation on 12 December 2021.

While the treatment and management of severe haemophilia A are well-established, there is less information and treatment guidance on moderate and mild haemophilia A, which can lead to delayed or missed diagnosis of bleeding episodes.¹ Considering this population may not use preventative treatments, they may experience worsened clinical burden, with less than 30% of people with moderate or mild haemophilia A living a bleed-free life.^{1,2}

“We are pleased to see that Hemlibra continues to show benefit in additional haemophilia A populations, regardless of severity,” said Levi Garraway, M.D., Ph.D., Roche’s Chief Medical Officer and Head of Global Product Development. “The clinical evidence for Hemlibra derives from one of the largest pivotal clinical trial programmes in haemophilia A, with and without factor VIII inhibitors. We remain committed to working together with the haemophilia community as we further explore the efficacy and safety of Hemlibra in broader populations.”

HAVEN 6 is a phase III study evaluating the safety, efficacy, pharmacokinetics and pharmacodynamics of Hemlibra in people with moderate or mild haemophilia A without factor VIII inhibitors. This interim analysis included data from 71 participants (69 men and two women); 20 of whom had mild haemophilia A without factor VIII inhibitors and 51 had moderate haemophilia A without inhibitors. Thirty-seven participants were on factor VIII prophylaxis at baseline.³

This interim analysis was conducted after 50 participants with moderate haemophilia A completed at least 24 weeks in the study or withdrew. Data cut-off was on 16 April 2021. These data show Hemlibra demonstrated a favourable safety profile and effective bleed control in the HAVEN 6 study, with 80.3% of participants experiencing no bleeding episodes that required treatment and 90.1% experiencing no joint bleeds that required treatment.³ Annualised bleeding rates (ABR) remained low, consistent with previously reported observations from the HAVEN 1-4 studies.^{3,5,6,7,8} In addition, of the 50 participants aged 12 years or more who responded to the EmiPref questionnaire, 48 (96.0%) preferred Hemlibra to their previous treatment, one preferred their old treatment, and one expressed no preference.^{3,9}

The most common adverse events (AEs) occurring in 10% or more people in the HAVEN 6 study were headache (14.1%) and local injection site reactions (ISRs) (12.7%). Eleven people (15.5%) reported a Hemlibra-related AE, with ISRs being the most common (12.7%). There were no deaths, or cases of thrombotic microangiopathy (TMA) or serious thrombotic events (TEs) in the study as of the data cut-off, reinforcing Hemlibra's favourable safety profile.³

A separate analysis of TE and TMA events in people taking Hemlibra, including real-world data, will also be presented as a poster at ASH.⁴ These results showed that the evaluation of reported events without concomitant activated prothrombin complex concentrate (aPCC) remains similar to previous analyses as exposure increases, and the benefit/risk profile of Hemlibra remains unchanged. These data further confirm the favourable safety profile of Hemlibra, consistent with results from previous HAVEN and STASEY studies.^{4,10}

Hemlibra is approved to treat people with haemophilia A with factor VIII inhibitors in more than 100 countries worldwide and for people without factor VIII inhibitors in more than 90 countries worldwide, including the US, EU and Japan. Hemlibra has been studied in one of the largest clinical trial programmes in people with haemophilia A with and without factor VIII inhibitors, including eight phase III studies.

About Hemlibra® (emicizumab)

Hemlibra is a bispecific factor IXa- and factor X-directed antibody. It is designed to bring together factor IXa and factor X, proteins involved in the natural coagulation cascade, and restore the blood clotting process for people with haemophilia A. Hemlibra is a prophylactic

(preventative) treatment that can be administered by an injection of a ready-to-use solution under the skin (subcutaneously) once-weekly, every two weeks, or every four weeks (after an initial once-weekly dose for the first four weeks). Hemlibra was created by Chugai Pharmaceutical Co., Ltd. and is being co-developed globally by Chugai, Roche and Genentech. It is marketed in the United States by Genentech as Hemlibra (emicizumab-kxwh), with kxwh as the suffix designated in accordance with Nonproprietary Naming of Biological Products Guidance for Industry issued by the U.S. Food and Drug Administration.

About haemophilia A

Haemophilia A is an inherited, serious disorder in which a person's blood does not clot properly, leading to uncontrolled and often spontaneous bleeding. Haemophilia A affects around 900,000 people worldwide, approximately 35-39% of whom have a severe form of the disorder. People with haemophilia A either lack or do not have enough of a clotting protein called factor VIII. In a healthy person, when a bleed occurs, factor VIII brings together the clotting factors IXa and X, which is a critical step in the formation of a blood clot to help stop bleeding. Depending on the severity of their disorder, people with haemophilia A can bleed frequently, especially into their joints or muscles. These bleeds can present a significant health concern as they often cause pain and can lead to chronic swelling, deformity, reduced mobility and long-term joint damage. A serious complication of treatment is the development of inhibitors to factor VIII replacement therapies. Inhibitors are antibodies developed by the body's immune system that bind to and block the efficacy of replacement factor VIII, making it difficult, if not impossible, to obtain a level of factor VIII sufficient to control bleeding.

About Roche in haematology

Roche has been developing medicines for people with malignant and non-malignant blood diseases for over 20 years; our experience and knowledge in this therapeutic area runs deep. Today, we are investing more than ever in our effort to bring innovative treatment options to patients across a wide range of haematological diseases. Our approved medicines include MabThera®/Rituxan® (rituximab), Gazyva®/Gazyvaro® (obinutuzumab), Polivy® (polatuzumab vedotin), Venclexta®/Venclyxto® (venetoclax) in collaboration with AbbVie, and Hemlibra® (emicizumab). Our pipeline of investigational haematology medicines includes T-cell engaging bispecific antibodies, glofitamab and mosunetuzumab, targeting both CD20 and CD3, and cevostamab, targeting both FcRH5 and CD3; Tecentriq® (atezolizumab), a monoclonal antibody designed to bind with PD-L1; and crovalimab, an anti-C5 antibody engineered to optimise complement inhibition. Our scientific expertise, combined with the breadth of our portfolio and pipeline, also provides a unique opportunity to develop combination regimens that aim to improve the lives of patients even further.

About Roche

Roche is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives. The combined strengths of pharmaceuticals and diagnostics, as well as growing capabilities in the area of data-driven medical insights help Roche deliver truly personalised healthcare. Roche is working with partners across the healthcare sector to provide the best care for each person.

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases, ophthalmology and diseases of the central nervous system. Roche is also the world leader in in vitro diagnostics and tissue-based cancer diagnostics, and a frontrunner in diabetes management. In recent years, the company has invested in genomic profiling and real-world data partnerships and has become an industry-leading partner for medical insights.

Founded in 1896, Roche continues to search for better ways to prevent, diagnose and treat diseases and make a sustainable contribution to society. The company also aims to improve patient access to medical innovations by working with all relevant stakeholders. More than thirty medicines developed by Roche are included in the World Health Organization Model Lists of Essential Medicines, among them life-saving antibiotics, antimalarials and cancer medicines. Moreover, for the thirteenth consecutive year, Roche has been recognised as one of the most sustainable companies in the pharmaceutical industry by the Dow Jones Sustainability Indices (DJSI).

The Roche Group, headquartered in Basel, Switzerland, is active in over 100 countries and in 2020 employed more than 100,000 people worldwide. In 2020, Roche invested CHF 12.2 billion in R&D and posted sales of CHF 58.3 billion. Genentech, in the United States, is a wholly owned member of the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, Japan. For more information, please visit www.roche.com.

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References

- [1] Walsh C, et al. Identified unmet needs and proposed solutions in mild-to-moderate haemophilia: A summary of opinions from a roundtable of haemophilia experts. *Haemophilia*. 2021;27(S1):25-32.
- [2] Nissen F, et al. An Insight into clinical outcomes in mild, moderate, and severe hemophilia A (HA): A preliminary analysis of the CHES II study. Presented at: International Society on Thrombosis and Haemostasis (ISTH) Virtual Congress; 2020 July 12-14. Abstract OC 09.3.
- [3] Negrier C, et al. Emicizumab Prophylaxis in Persons with Mild or Moderate Hemophilia A: Results from the Interim Analysis of the HAVEN 6 Study. Presented at: American Society of Hematology (ASH) Annual Meeting and Exposition; 2021 December 11-14; Atlanta, GA, USA. Abstract #343 oral presentation.
- [4] Howard M, et al. Evaluation of the Safety of Emicizumab Prophylaxis in Persons with Hemophilia A: An Updated Summary of Thrombotic Events and Thrombotic Microangiopathies. Presented at: American Society of Hematology (ASH) Annual Meeting and Exposition; 2021 December 11-14; Atlanta, GA, USA. Abstract #3186 poster presentation.
- [5] Mancuso ME, et al. Emicizumab Prophylaxis in Adolescent/Adult Patients with Hemophilia A Previously Receiving Episodic or Prophylactic Bypassing Agent Treatment: Updated Analyses from the HAVEN 1 Study. *Blood*. 2017;130 (Supplement 1):1071.
- [6] Young G, et al. Emicizumab prophylaxis provides flexible and effective bleed control in children with hemophilia A with inhibitors: results from the HAVEN 2 study. *Blood*. 2018;132 (Supplement 1):632.
- [7] Mahlangu J, et al. Emicizumab Prophylaxis in Patients Who Have Hemophilia A without Inhibitors. *N Engl J Med*. 2018;379:811-822.
- [8] Pipe S, et al. Emicizumab subcutaneous dosing every 4 weeks is safe and efficacious in the control of bleeding in persons with hemophilia A (PwHA) with and without inhibitors: Results from the Phase 3 HAVEN 4 study [abstract no. M-LBMED01-005 (854)]. *Haemophilia*. 2018;24:209-218.

[9] Parnes A, et al. Patient preference for emicizumab versus prior factor therapy in people with haemophilia A: Results from the HAVEN 3 and HAVEN 4 studies. Haemophilia. 2021;27:e772-e775.

[10] Lee L, et al. Summary of thrombotic or thrombotic microangiopathy events in persons with hemophilia A taking Emicizumab. Presented at: National Hemophilia Foundation (NHF) Bleeding Disorders 2020 Virtual Conference; 2020 August 1-8. Abstract #35 poster.

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