PRESS RELEASE

Stockholm, Sweden, 9 July 2019

Switching to extended half-life prophylaxis impacted clinical outcomes and improved quality of life for people with haemophilia A or B

Clinical study data on switching haemophilia A and B patients from on-demand treatment to extended half-life (EHL) prophylaxis showed a positive impact on clinical outcomes, with improvements in quality of life (QoL) and reduced annual bleeding rates (ABR). The results of these joint studies by Sobi™ and Sanofi were presented at ISTH 2019, the 27th Congress of the International Society on Thrombosis and Haemostasis, in Melbourne, Australia, on 7, 8 and 9 July 2019.

"This data supports the observation that the introduction of EHLs has allowed for people with haemophilia to live a life beyond haemophilia, with increased quality of life and a greater ability to engage in sports and activities," says Armin Reininger, Head of Medical and Scientific Affairs at Sobi. "Improved opportunities to personalise treatment are valuable in this respect, and personalisation is only possible using replacement factor."

The introduction of EHL factor replacement products has led to patients switching from standard half-life products to EHLs as well as from on-demand treatment to EHL prophylaxis. Clinical studies and surveys with treating physicians presented at ISTH show that the outcome of this switch has largely been beneficial. For people with haemophilia who switched from on-demand to prophylactic rFVIIIFc (Elocta®) or rFIXFc (Alprolix®) treatment, the clinical studies showed benefits including reduced ABRs which were maintained long-term, with improved joint health and quality of life, at stable factor usage levels. The most pronounced differences in quality of life were related to sports, leisure and physical health.

In a survey among physicians who had switched patients from standard half-life products to EHLs, a majority reported improved quality of life, treatment adherence and disease control, and reduced treatment burden, after a switch to rFVIIIFc or rFIXFc. Most physicians surveyed believed EHLs allow treatment personalisation and can lead to a more active life without worry about bleeds.

Results from the studies

Within the A-LONG and ASPIRE (Elocta), and B-LONG and B-YOND (Alprolix) studies, analyses of the long-term outcomes of patients with severe haemophilia A and B who had been switched to prophylaxis with Elocta or Alprolix from on-demand treatment were presented.

Of 70 subjects with severe haemophilia A switching from on-demand to prophylaxis in A-LONG/ASPIRE, 67 (96 per cent) continued prophylaxis for ≥6 months with a median duration of prophylactic treatment with rFVIIIFc of 4.8 years. The median weekly dose was stable and median intervals increased from 3.5 to 5.0 days at start

vs. end of follow-up. Median overall ABR was 30.0 with on-demand vs. 1.5 on prophylaxis, and stable over time. Joints with pain decreased in 29 per cent of subjects and joint health measured using modified Haemophilia Joint Health Score (mHJHS) was improved, as was quality of life in relation to areas such as sports, leisure and physical health.

Similarly, of 52 subjects with severe haemophilia B switching from on-demand to prophylaxis in B-LONG/B-YOND, 50 (96 per cent) continued prophylaxis for ≥6 months with a median duration of prophylactic treatment with rFIXFc of 3.6 years. The median weekly dose and dosing interval were stable from start of prophylaxis to the end of follow-up. Median overall ABR was 24.2 with on-demand vs. 2.0 on prophylaxis, and stable over time. Quality of life improved, in relation to areas such as sports, leisure and physical health. This data demonstrates the positive impact on clinical outcomes of switching from on-demand to rFIXFc prophylaxis.

Furthermore, Sobi conducted a survey in five European countries of physicians' treatment-switching practice in prophylaxis for people with haemophilia A and B. An online questionnaire was given to physicians in Germany, France, the UK, Italy and Spain regarding treatment practices, factor prescription and switches to EHL products in their centres: 37 physicians took part, providing information on 113 patients switched from FVIII prophylaxis to Elocta (EHL rFVIIIFc) and on 36 patients switched from FIX prophylaxis to Alprolix (EHL rFIXFc). Bleed rates, pharmacokinetics, joint health and adherence were considered most important outcomes to assess in routine care and when switching to an EHL. Physicians reported decreased weekly dose, injection frequency and estimated ABR after a switch to rFVIIIFc or rFIXFc. In haemophilia A, most physicians believed that EHLs allow treatment personalisation and a more active life without worry about bleeds, and a majority reported improved QoL, adherence, disease control and reduced treatment burden after a switch to rFVIIIFc. In haemophilia B, most physicians perceived a reduced treatment and disease burden, less pain, and improved QoL and adherence in patients.

Abstracts:

- A Survey of Physicians' Treatment Switching Practice in Long-term Prophylaxis for People with Haemophilia B in Five European Countries: Sunday 7 July, Poster # PB0208
- A Survey of Physicians' Treatment Switching Practice in Long-term Prophylaxis for People with Haemophilia A in Five European Countries: Monday 8 July, Poster # PB0692
- Long-term Outcomes after Switch from On-demand Treatment to Prophylaxis with rFIXFc: Longitudinal Subgroup Analysis of the B-LONG and B-YOND Study Population: Monday 8 July, Poster # PB0693. In collaboration with Sanofi

- Long-term Outcomes after Switch from On-demand Treatment to Prophylaxis with rFVIIIFc: Longitudinal Subgroup Analysis of the A-LONG and ASPIRE Study Population: Tuesday 9 July, Poster # PB1410. In collaboration with Sanofi

All abstracts can be accessed via the official ISTH website.

About Elocta®
Elocta® (efmoroctocog alfa) is a recombinant clotting factor therapy developed for haemophilia A using Fc fusion technology to prolong circulation in the body. It is engineered by fusing factor VIII to the Fc portion of immunoglobulin G subclass 1, or IgG1 (a protein commonly found in the body), enabling Elocta to use a naturally occurring pathway to extend the time the therapy remains in the body (half-life). Elocta is manufactured using a human cell line in an environment free of animal and human additives.

Elocta is approved and marketed by Sobi for the treatment of haemophilia A in the EU, Iceland, Kuwait, Liechtenstein, Norway, Saudi Arabia and Switzerland. It is approved and marketed as ELOCTATE® [Antihemophilic Factor (Recombinant), Fc Fusion Protein] by Sanofi in the United States, Japan and Canada. It is also approved in Australia, New Zealand, Brazil and other countries, where Sanofi has the marketing rights.

As with any factor replacement therapy, allergic-type hypersensitivity reactions and development of inhibitors may occur in the treatment of haemophilia A. Inhibitor development has been observed with Elocta, including in previously untreated patients. For more information, please see the full US prescribing information for ELOCTATE. Note that the indication for previously untreated patients and ITI treatment is not included in the EU Product Information for Elocta.

About Alprolix®
Alprolix® (eftrenonacog alfa), is a recombinant clotting factor therapy developed for haemophilia B using Fc fusion technology to prolong circulation in the body. It is engineered by fusing factor IX to the Fc portion of immunoglobulin G subclass 1, or IgG1 (a protein commonly found in the body), enabling Alprolix to use a naturally occurring pathway to extend the time the therapy remains in the body (half-life). Alprolix is manufactured using a human cell line in an environment free of animal and human additives.

Alprolix is approved and marketed by Sobi for the treatment of haemophilia B in the EU, Iceland, Kuwait, Liechtenstein, Norway, Saudi Arabia and Switzerland. It is also approved in the United States, Canada, Japan, Australia, New Zealand, Brazil and other countries where Sanofi has the marketing rights.

Allergic-type hypersensitivity reactions and development of inhibitors have been observed with Alprolix in the treatment of haemophilia B, including in previously-untreated patients. For more information, please see the full US prescribing information for Alprolix. Note that the indication for previously-untreated patients is not included in the EU Product Information.

About haemophilia A and B
Haemophilia is a rare, genetic disorder in which the ability of a person's blood to clot is impaired. Haemophilia A occurs in about one in 5,000 male births annually, and more rarely in females. Haemophilia B occurs in about one in 25,000 male births annually, and more rarely in females. The World Federation of Haemophilia estimates that approximately 196,700 people are currently diagnosed with haemophilia A and B worldwide.[i]

People with haemophilia A or B experience significant bleeding episodes some of which can be life-threatening. Prophylactic infusions of factor VIII or IX can temporarily replace the clotting factors that are needed to control bleeding and prevent new bleeding

episodes.[ii] The World Federation of Hemophilia recommends prophylactic factor replacement therapy for patients with haemophila to help prevent bleeding.[iii]

About ASPIRE
ASPIRE is an open-label, non-randomised, multi-year extension study for people who completed the pivotal, phase 3 A-LONG or Kids A-LONG studies. The study enrolled 211 males, including 150 (98 per cent) of those who completed A-LONG and 61 (91 per cent) of those who completed Kids A-LONG. The primary endpoint is the development of inhibitors. Secondary endpoints include the annualised number of bleeding episodes per subject, Elocta exposure days and a participant's assessment of response to treatment of a bleeding episode.

About A-LONG
The Phase 3 A-LONG clinical study was an open-label, multi-centre study that evaluated the efficacy, safety and pharmacokinetics of Elocta in 165 previously treated males with ≥150 exposure days 12 years of age and older with severe haemophilia A (endogenous factor VIII level of <1 IU/dL). It examined Elocta in individualised and weekly prophylaxis to reduce or prevent bleeding episodes, and on-demand dosing to treat bleeding episodes. In the individualized arm, each study participant started on a twice-weekly dosing regimen. Participants' pharmacokinetic parameters were used to guide adjustments to dosing interval (every three to five days), and dose (25 to 65 IU/kg) to target a minimum factor VIII level of 1 to 3 IU/dL or higher as needed to maintain good control of breakthrough bleeding.

About Kids A-LONG
The Kids A-LONG study was the first clinical study to evaluate an investigational haemophilia therapy with a prolonged half-life Elocta in children younger than 12 years of age. The study was a global, open-label, multi-centre Phase 3 study involving 71 boys with severe haemophilia A (endogenous factor VIII level of <1 IU/dL) with at least 50 prior exposure days to factor VIII therapies. The study evaluated safety, efficacy and pharmacokinetics (PK) in twice-weekly prophylaxis regimen. Dose and interval were adjusted based on PK data and clinical assessment to ≤ 80 IU/kg and ≥ 2 days respectively.

About B-YOND
B-YOND is an open-label, non-randomised, multi-year extension study for people who completed the pivotal, phase 3 B-LONG or Kids B-LONG studies. B-YOND enrolled 116 previously-treated males, including 93 participants (81%) who completed B-LONG, and 27 (100%) of those who completed Kids B-LONG. The primary outcome measure is development of inhibitors. Secondary endpoints include the annualised number of bleeding episodes per subject (including spontaneous joint bleeding rates), Alprolix exposure days per participant, Alprolix consumption (total IU/kg per subject per year), and the participant's assessment of response to treatment of a bleeding episode.

About B-LONG
B-LONG was a global, open-label, multi-centre phase 3 study that evaluated the efficacy, safety and pharmacokinetics of Alprolix in 123 males aged 12 years and older with severe haemophilia B (endogenous factor IX level of ≤2 IU/dL) and a history of at least 100 exposure days on any currently available factor IX therapy. The study involved 50 haemophilia treatment centres in 17 countries on six continents. It examined Alprolix in prophylaxis, treatment of bleeding, and perioperative haemostasis. Starting prophylaxis regimens were either 50 IU/kg once weekly or 100 IU/kg every 10 days. The dose or interval could be adjusted as clinically indicated.

About Kids B-LONG
Kids B-LONG was a global, open-label, multi-centre phase 3 study involving 30 boys under age 12 with severe haemophilia B (endogenous factor IX level of ≤2 IU/dL) and at least 50 prior exposure days to factor IX therapies. All patients were initially given Alprolix prophylaxis (50–60 IU/kg) once per week with adjustments to dose (≤100 IU/kg per infusion) or dosing frequency (up to two times per week) as needed.

About the Sobi and Sanofi collaboration
Sobi and Sanofi collaborate on the development and commercialisation of Alprolix and Elocta/ELOCTATE®. Sobi has final development and commercialisation rights in the Sobi territory (essentially Europe, North Africa, Russia and most Middle Eastern markets). Sanofi has final development and commercialisation rights in North America and all other regions in the world excluding the Sobi territory

and has manufacturing responsibility for Elocta/ELOCTATE and Alprolix. While Fc fusion technology has been used for more than 15 years, Sobi and Sanofi have optimised the technology and are the first companies to utilise it in the treatment of haemophilia. In 2014, Sobi added the rFVIIIFc-XTEN-vWF fusion molecule for potential treatment of haemophilia A, to the collaboration agreement.

About Sobi™
At Sobi, we are transforming the lives of people affected by rare diseases. As a specialised international biopharmaceutical company, we provide sustainable access to innovative therapies in the areas of haematology, immunology and specialty care. We bring something rare to rare diseases – a belief in the strength of focus, the power of agility and the potential of the people we are dedicated to serving. The hard work and dedication of our approximately 1050 employees around the globe have been instrumental in our success across Europe, North America, the Middle East, Russia and North Africa, leading to total revenues of SEK 9.1 billion in 2018. Sobi's share (STO:SOBI) is listed on Nasdaq Stockholm. You can find more information about Sobi at www.sobi.com.

For more information please contact
Paula Treutiger, Head of Communication & Investor Relations
+46 733 666 599
paula.treutiger@sobi.com

Linda Holmström, Corporate Communication & Investor Relations
+46 708 734 095
linda.holmstrom@sobi.com

[i] The WFH Annual Global Survey 2017 https://www.wfh.org/en/data-collection
[ii] World Federation of Hemophilia. About Bleeding Disorders – Frequently Asked Questions. Available at: http://www.wfh.org/en/page.aspx?pid=637. Accessed on 4 July 2019.
[iii] World Federation of Hemophilia. Guideline for the management of hemophilia, 2nd edition. Available at: http://www1.wfh.org/publication/files/pdf-1472.pdf. Accessed on 4 July 2019.