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News release

SCOTTISH MEDICINES CONSORTIUM (SMC) ENABLES ACCESS TO FIRST TREATMENT TACKLING THE UNDERLYING CAUSE OF X-LINKED HYPOPHOSPHATAEMIA (XLH) IN ADULTS

Crysvita®▼ the only therapy targeting the underlying pathophysiology of XLH, a rare, life-long genetic disease that causes abnormalities in the bones, muscles and joints,[1,2,3] will be made available in Scotland via the ultra-orphan pathway.[4]

GALASHIELS, UNITED KINGDOM (13th February 2023):) The Scottish Medicines Consortium (SMC) has completed the initial assessment of Crysvita® (burosumab) and published the ultra-orphan medicine assessment report for use in adults with a confirmed diagnosis of XLH, who have evidence of persistent, chronic, symptoms.[4] Crysvita is the first available treatment to tackle the underlying cause of XLH in adults.[5]

Prior to this decision, access to Crysvita was provided in 2020, also via the ultra-orphan pathway, for children with radiographic evidence of bone disease, one year of age and older and adolescents with growing skeletons.[6] The introduction of the ultra-orphan pathway has been praised in the Scottish Government's Rare Disease Action Plan for ensuring faster access to medicines.[7]

The ultra-orphan pathway, created to assess medicines for very rare diseases,[8] allows eligible adults to access Crysvita whilst Kyowa Kirin collects additional data to strengthen the evidence base for this treatment. The SMC will review this further evidence after three years and then make a final decision on its routine use in NHS Scotland.[9]

Scotland is the first of the four UK nations to enable access to Crysvita for adults with XLH, who are symptomatic. Kyowa Kirin continue to engage with the health technology authorities across the country to ensure equity of access across the UK. Meanwhile, Crysvita is available for eligible children in all four UK nations.[10,11,12]

XLH is a life-long and progressive disease that typically presents in early childhood, causing bowed legs, stunted growth, and bone and joint pain.[13] It is a whole life, whole body, whole family disease, according to people living with the condition as several family members are often impacted due to the inherited nature.[14] Adults with XLH continue to experience a wide range of progressively debilitating bone, joint and muscle symptoms affecting most areas of the body, resulting in pain, stiffness and fatigue that severely limit physical function and mobility.[15] XLH also has an adverse impact on emotional wellbeing primarily due to pain, uncertainty about the future and financial challenges that may also be associated with XLH.[15] XLH does not

just affect the individuals with the disease themselves, but also their family and friends, who are often involved in their support and care.[15]

Crysvita is an anti-FGF23 fully human monoclonal antibody, and the first treatment to tackle the underlying cause of XLH in adults. It received marketing authorisation for adults via the European Commission in September 2020.[5]

Oliver Gardiner, Founder and Trustee of XLH UK, said: “I am delighted that adults with symptomatic XLH now have access to Crysvita in Scotland. Access to a treatment that can reduce some of the most burdensome symptoms of XLH, which is easily administered, will not only provide a vital step change in the management of this disease for adults, but also support greater independence.”

Professor Stuart Ralston, Professor of Rheumatology at the University of Edinburgh, said: “Until now, treatment options for adults living with symptomatic XLH have been limited. This is why it is excellent news that these patients will now be able to access a treatment that not only tackles the symptoms of XLH, but also targets the underlying cause of this rare, debilitating disease. I am excited to see the impact Crysvita has on eligible adults in Scotland.”

Jeremy Morgan, President, Kyowa Kirin International, said: “Kyowa Kirin International is committed to improving the lives of children and adults across Europe with XLH. Extending access to Crysvita for adults, following its use for children, will provide a paradigm shift in the management of people living in Scotland with XLH. We are committed to working with the community to collect more data on the efficacy and tolerability of the treatment over the next few years.”

The SMC’s initial assessment is based on data including the pivotal Phase 3 international randomized, double-blind, placebo controlled study of burosumab (1 mg/kg every 4 weeks) in adults with XLH. In this study, significantly more subjects in the burosumab group than in the placebo group achieved mean serum phosphate concentrations above the lower limit of normal (LLN) over 24-week treatment (the primary endpoint). Patients also reported improvements in musculoskeletal symptoms of XLH, assessed by various patient reported outcome (PRO) measurements. Following the initial 24-week double-blind period, all subjects continued into a 24-week open-label treatment period, followed by a further 48-week open-label extension to week 96 where further improvements versus baseline were observed.[4]

 # ENDS #

About X-linked hypophosphataemia

X-linked hypophosphataemia (XLH) is a rare, genetic disease that causes abnormalities in the bones, muscles, and joints.[1,2,3] XLH is not life-threatening, but its burden is life-long and progressive, and it may reduce a person's quality of life.[13]

People with XLH have a genetic defect on the X-chromosome, which causes an excessive loss of phosphate through the urine and poor absorption from the gut, resulting in chronically low levels of phosphate in the blood.[13,16] Phosphate is a key mineral needed for maintaining the body's energy levels, muscle function, and the formation of healthy bones and teeth.[17,18] While there is no cure for XLH, therapies aimed at helping to restore phosphate to normal levels within the body may help to improve the symptoms of the disease.[19]

XLH is the most common form of hereditary rickets.[20] It can sometimes appear in individuals with no family history of the disease but is usually passed down from a parent who carries the defective gene.[21]

About CRYSVITA® (burosumab)

CRYSVITA (burosumab) was created and developed by Kyowa Kirin and is a recombinant fully human monoclonal IgG1 antibody against the phosphaturic hormone fibroblast growth factor 23 (FGF23).[22] FGF23 lowers the amount of phosphate in the blood, which may lead to bones that may not harden properly and, in children and adolescents, cannot grow properly, and result in pain and stiffness in bones and joints.[22] CRYSVITA attaches to FGF23 in the blood which stops FGF23 from working and increases the phosphate levels in the blood so that normal levels of phosphate can be achieved.[22]

In 2018, the European Commission granted a conditional marketing authorisation for CRYSVITA for the treatment of XLH with radiographic evidence of bone disease in children one year of age and older and adolescents with growing skeletons.[22] In 2020, the European Commission approved an amendment to the marketing authorisation, extending the indication to include older adolescents, regardless of growth status, and adults with XLH, meaning that children and adolescents aged 1 to 17 years with radiographic evidence of bone disease and adults with XLH could be treated with CRYSVITA.[4] In 2021, CRYSVITA received further approval from the European Commission for the option of self-administration for the treatment of XLH by some patients or carers, subject to the recommendation of a treating physician.[23] The conditional marketing authorisation was converted to a standard marketing authorisation in October 2022.[5]

In 2018, CRYSVITA also received approval from the US Food and Drug Administration (FDA) and Health Canada for paediatric and adult use.[24,25]

In 2019, Kyowa Kirin announced that CRYSVITA had received approval from Japan's Ministry of Health, Labour and Welfare for the treatment of FGF23-related hypophosphataemic rickets and osteomalacia.[26]

In 2020, Swissmedic approved CRYSVITA for the treatment of adults, adolescents and children (one year of age and older) with XLH.[27]

Kyowa Kirin and Ultragenyx Pharmaceutical Inc. (NASDAQ: RARE: Ultragenyx) have been collaborating in the development and commercialisation of CRYSVITA globally, based on the collaboration and licence agreement between Kyowa Kirin and Ultragenyx.

About Kyowa Kirin

Kyowa Kirin strives to create and deliver novel medicines with life-changing value. As a Japan-based global specialty pharmaceutical company with a more than 70-year heritage, we apply cutting-edge science, including an expertise in antibody research and engineering, to address the needs of patients and society across multiple therapeutic areas including Nephrology, Oncology, Immunology/Allergy and Neurology. Across our four regions – Japan, Asia Pacific, North America and EMEA/International – we focus on our purpose, to make people smile, and are united by our shared values of commitment to life, teamwork, innovation, and integrity. You can learn more about Kyowa Kirin International at: https://international.kyowa-kirin.com/uk/

Contact for Kyowa Kirin Co., Ltd.:

Media

Victoria Hayes

Director Public Affairs, Northern Cluster (UK, Ireland, Nordics & Baltics)

+44 (0)7771107406

Email: victoria.hayes@kyowakirin.com

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