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News release

Kyowa Kirin Announces EU Approval for the Self-administration of CRYSVITA® ▼ (burosumab) to Treat X-Linked Hypophosphataemia (XLH)

An additional option is now available to healthcare professionals to meet the needs of XLH patients and their carers

TOKYO, Japan, 19 July 2021 – Kyowa Kirin Co., Ltd. (TSE:4151, Kyowa Kirin) today announced that CRYSVITA® (burosumab) has been approved for the option of self-administration in the European Union (EU) for the treatment of X-linked hypophosphataemia (XLH), a rare metabolic bone disease that impacts children and adults. The approval means that some patients or carers may be suitable to administer CRYSVITA themselves, at the recommendation of the treating physician, in its licensed indication for the treatment of XLH in children and adolescents aged 1 to 17 years with radiographic evidence of bone disease, and in adults.[1]

Dr Raja Padidela, Consultant Paediatric Endocrinologist at Royal Manchester Children's Hospital, UK said: "XLH is a progressive, disabling condition, causing rickets, lower limb deformities, stunted growth, bone and joint pain. Now CRYSVITA is approved in Europe for self-administration, healthcare professionals will have the option to help XLH patients and their carers gain more independence. Adults with XLH and their carers, or the parents or guardians of young children or adolescents with XLH, may benefit from CRYSVITA's self-administration option. The self-administration of CRYSVITA is at the discretion of a treating physician, providing those self-administering are competent and comfortable doing so."

Abdul Mullick, President of Kyowa Kirin International, said: "This approval is another significant milestone for the treatment of people living with XLH. Kyowa Kirin is committed to improving the lives of patients and their families by giving healthcare professionals better ways to care for them. By gaining EU approval for the self-administration of CRYSVITA, we have created another valuable option in the care of children, adolescents and adults with XLH. The self-administration of CRYSVITA is a great example of how Kyowa Kirin is meeting physician and patient needs and delivering on our purpose, to make people smile."

CRYSVITA is administered by subcutaneous injection.[1] CRYSVITA treatment will still need to be initiated by a physician experienced in the management of patients with metabolic bone diseases. Subsequently, if the patient is receiving a stable dose, the physician may recommend that administration can be performed by the patient or carer following appropriate training. The first self-administered dose after drug initiation or dose change will need to be conducted under the supervision of a healthcare professional.

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▼This medicinal product is subject to additional monitoring.

About X-linked hypophosphataemia

X-linked hypophosphataemia (XLH) is a rare, genetic disease that causes abnormalities in the bones, muscles, and joints.[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.[4]

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.[4,5] Phosphate is a key mineral needed for maintaining the body's energy levels, muscle function, and the formation of healthy bones and teeth.[6,7] 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.[8]

XLH is the most common form of hereditary rickets.[9] 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.[10]

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). FGF23 is a hormone that reduces serum levels of phosphate by regulating phosphate excretion and active vitamin D production by the kidney. Phosphate wasting and resulting hypophosphataemia in X-linked hypophosphataemia (XLH) is caused by excess FGF23. CRYSVITA is designed to bind to, and thereby inhibit, the biological activity of FGF23. By blocking excess FGF23 in patients, CRYSVITA is intended to increase phosphate reabsorption from the kidney and increase the production of active vitamin D, which enhances intestinal absorption of phosphate and calcium.

CRYSVITA has been available for clinical use since 2018. The first approval came from the European Commission, that 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. In 2020, this authorisation was subsequently expanded to include older adolescents and adults.[1]

CRYSVITA is approved by the US Food and Drug Administration (FDA) for patients with XLH aged 6 months and older and by Health Canada for patients with XLH aged one year and older.[11,12]

In 2019, CRYSVITA received approval from Japan's Ministry of Health, Labour and Welfare for the treatment of FGF23-related hypophosphataemic rickets and osteomalacia. In 2020, CRYSVITA was reimbursed by National Health Insurance (NHI) in Japan as a self-injection presentation for the treatment of FGF23-related

hypophosphataemic rickets and osteomalacia.

In January 2020, Swissmedic approved CRYSVITA for the treatment of adults, adolescents and children (one year of age and older) with XLH.[13]

In June 2020, the U.S. Food and Drug Administration (FDA) approved CRYSVITA for patients aged two and older with tumour-induced osteomalacia (TIO), a rare disease that is characterised by the development of tumours that cause weakened and softened bones.[14]

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, the company applies 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/Wa, innovation, and integrity. You can learn more about the business of Kyowa Kirin at: https://www.kyowakirin.com/

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