News release

Kyowa Kirin Receives European Commission Approval for Use of CRYSVITA®▼ (burosumab) for the Treatment of Tumour-Induced Osteomalacia (TIO)

CRYSVITA is the first approved biologic treatment in the EU for patients with TIO who cannot undergo surgical removal of tumours

Tokyo, Japan, 19 August 2022 – Kyowa Kirin Co., Ltd. (TSE: 4151, Kyowa Kirin) today announced that the European Commission (EC) approved CRYSVITA® (burosumab) for the treatment of FGF23-related hypophosphataemia in Tumour-Induced Osteomalacia (TIO) associated with phosphaturic mesenchymal tumours (PMTs) that cannot be curatively resected or localised in children and adolescents aged 1 to 17 years and in adults.[1] CRYSVITA is also already licensed in the EU for use in the rare disease X-Linked Hypophosphataemia (XLH), for children and adolescents between 1 and 17 years of age with radiographic evidence of bone disease, and in adults.[2]

Also known as oncogenic osteomalacia, TIO is an acquired disorder caused by typically small, slow-growing, benign PMTs.[3,4] It is a rare condition with fewer than 1000 cases reported in the medical literature,[4] which mainly affects adults and with a mean onset age of 40 – 45 years.[3,5] TIO is associated with progressive and debilitating musculoskeletal deficits,[6,7] ultimately having a detrimental impact on ability to perform daily activities, as well as on physical and social wellbeing.[8]

A cure for TIO can be achieved with complete surgical resection of the causative tumour(s), however, surgical resection is not always possible due to the anatomical location and difficulty in detecting tumours.[3,5] TIO may recur and persist following incomplete or unsuccessful surgical resection.[9]

With this approval by the European Commission, CRYSVITA is the first biologic treatment available to EU patients within its licensed indication for TIO. CRYSVITA blocks the action of fibroblast growth factor-23 (FGF23), which is produced in excess in TIO, restoring phosphate homeostasis.[2,10]

“The approval by the European Commission is a very welcome milestone for those living with TIO that cannot be cured by complete surgical resection,” said Professor Ralf Oheim, Department of Osteology and Biomechanics, University Medical Center Hamburg. “With the challenges faced by those living with TIO and those treating it, the unmet need in TIO has been clear for a long time and today’s decision will help support those living with TIO and those healthcare professionals supporting them address such unmet need.”

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"This is a momentous day for the TIO community in Europe and I'm proud that Kyowa Kirin can be a part of meeting the needs of people who have such a high unmet need", said Abdul Mullick, President of Kyowa Kirin International. "Our purpose is to make people smile, and with this new indication for a rare disease with limited available treatment options, we can truly say that together with the TIO community, we are living our purpose."

With this EC approval, Kyowa Kirin International will work with local health authorities in each country under the purview of the EC to ensure that those living with TIO are able to gain access to CRYSVITA as soon as possible.

▼This medicinal product is subject to additional monitoring.

About Tumour-Induced Osteomalacia (TIO)

TIO is characterised by chronic hypophosphataemia caused by tumour(s) secreting excess fibroblast growth factor 23 (FGF23),[3] which can lead to issues such as decreased intestinal absorption of phosphate and compromised vitamin D activation.[3,4]

The most common signs and symptoms include bone pain, difficulty walking, pathological fractures, height loss and muscle weakness.[6] In TIO, muscle weakness and pain severely interfere with physical functioning, including standing up without assistance, walking and ability to work.[8] The pain in TIO also severely interferes with mood and moderately interferes with enjoyment of life for those living with it.[8]

TIO diagnosis is often missed and/or delayed and testing serum phosphate levels is important for diagnosis.[3] The only cure in TIO is complete removal of the causative tumour(s).[3] Pharmacological treatment should be considered in TIO cases where tumour(s) cannot be curatively resected or localised.[3] Restoring phosphate homeostasis is essential to improve the health of people living with TIO.[3]

About CRYSVITA® (burosumab) in TIO

CRYSVITA (burosumab) was created and developed by Kyowa Kirin and is a recombinant fully human monoclonal antibody that binds to and inhibits the activity of FGF23.[2] CRYSVITA blocks the action of FGF23, which is produced in excess in TIO, restoring phosphate homeostasis.[2]

The efficacy and safety of CRYSVITA have been demonstrated in two Phase 2 clinical trials published in the disease area of TIO.[11,12] CRYSVITA was well-tolerated and demonstrated an acceptable safety profile.[11,12]

Following this new EC approval, CRYSVITA is now indicated in the EU for the treatment of FGF23-related hypophosphataemia in TIO associated with PMTs that cannot be curatively resected or localised in children and adolescents aged 1 to 17 years and in adults[1], as well as for XLH in children and adolescents aged 1 to

17 years with radiographic evidence of bone disease, and in adults.[2] CRYSVITA is given as a subcutaneous injection, every 4 weeks in adults and every 2 weeks in children and adolescents aged 1 to 17 years.[2]

CRYSVITA is currently approved for use in the treatment of TIO in a number of countries, including the United States[13] and Japan.[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 heritage of more than 70 years, the company applies cutting-edge science, including expertise in antibody research and engineering, to address the needs of patients across multiple therapeutic areas such as nephrology, oncology, immunology/allergy and neurology. Across its four regions – Japan, Asia Pacific, North America and EMEA/International – Kyowa Kirin focuses on its purpose, to make people smile, and is united by its shared values of commitment to life, teamwork, innovation and integrity.

You can learn more about the business of Kyowa Kirin at: https://www.kyowakirin.com/

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