

NICE BACKS CRYSVITA® (BUROSUMAB) FOR RARE METABOLIC BONE DISORDER, X-LINKED HYPOPHOSPHATAEMIA (XLH)

The positive recommendation marks a step change in the management of XLH for children and young people, and the first significant clinical advancement for the condition in the last 35 years.

LONDON, UNITED KINGDOM, 5th September 2018: The National Institute for Health and Care Excellence (NICE) has issued a positive recommendation for Kyowa Kirin International's Crysvita (burosumab) within its marketing authorisation, for treating X-linked hypophosphataemia (XLH) in children and young people with growing bones in England and Wales.¹ The final guidance is expected to be published on 24th October 2018.

XLH is an inherited genetic disorder that causes low levels of phosphate in the blood. This leads to soft, weak bones, which can result in life-long physical disabilities and pain. Children with the condition usually have bowed or bent legs, short stature, bone pain and delayed walking, and may also have dental problems and hearing loss.

Crysvita is an anti-FGF23 fully human monoclonal antibody, and the first treatment to target the underlying pathophysiology of XLH. It received a conditional marketing authorisation from the European Medicines Agency in February 2018.²

Commenting on NICE's decision, Oliver Gardiner, Board Member at XLH UK, said: "This is important news for children and young adults with XLH who will now be able to benefit from Crysvita routinely on the NHS. Access to a treatment that tackles the underlying mechanism and has the potential to avoid or mitigate substantial physical and emotional challenges, will truly make a difference to the lives of patients and their families."

Dr Poonam Dharmaraj, Chairperson of the British Paediatric and Adolescent Bone Group said on behalf of the group: "This treatment represents a significant improvement for a condition in which there have been no advances in management for 35 years and will be much easier to adhere to compared to current therapy options. It will result in better healing of rickets, linear growth and muscle function among affected individuals."

Tom Stratford, CEO, Kyowa Kirin International said: "Kyowa Kirin International is committed to improving the lives of the many children across Europe who are living with XLH. It is a major development that NICE has recommended Crysvita for routine use among children and young people with XLH in England and Wales. This marks a step change in treatment for XLH, emphasised through the emotional testimonies provided by patient groups and clinicians following the first evaluation consultation."

Kyowa Kirin International has been providing access to Crysvita for eligible patients at no cost, via an Early Access Programme in the UK. This programme will be extended, to allow time for NHS England to implement the NICE final guidance, enabling a smooth transition to NHS supply in England and Wales.

PRESS RELEASE

Notes to editors

NICE Final Evaluation Document (FED)

The Final Evaluation Document (FED) is available on the NICE website here:

<https://www.nice.org.uk/guidance/indevelopment/gid-hst10016/documents>

Final publication is expected on 24th October 2018.

All committee papers including testimony from stakeholders in response to the Evaluation Consultation Document (ECD) are available here:

<https://www.nice.org.uk/guidance/indevelopment/gid-hst10016/documents>

About XLH

XLH is a rare, chronic progressive musculoskeletal disorder characterised by renal phosphate wasting caused by excess FGF23 production. XLH is first seen in infants and also affects adults. In children, XLH causes skeletal disease, leading to lower-extremity deformity and diminished height.

Until now, the treatment of XLH has consisted of multiple daily doses of phosphate and active vitamin D to counteract the excess effects of FGF23 but this does not correct the underlying disease.

About Crysvisa®

Crysvisa is a first-in-class recombinant, fully human monoclonal antibody to FGF23. Crysvisa was developed following the discovery by Kyowa Kirin scientists of the role of FGF23 in XLH.

Crysvisa works by blocking the activity of FGF23 and thereby restores phosphate blood levels by reducing phosphate loss via the kidneys and increasing the production of vitamin D, which enhances intestinal absorption of phosphate and calcium.

In the EU Crysvisa is indicated for the treatment of X-linked hypophosphataemia with radiographic evidence of bone disease in children 1 year of age and older and adolescents with growing skeletons.²

In Clinical Study UX023-CL201³

- Crysvisa significantly decreased the mean Rickets Severity Score (RSS) versus baseline in the overall study population by -50% at week 40 ($p < 0.0001$) that was maintained at week 64, indicating an improvement in rickets
- A significant improvement in rickets healing was also shown versus baseline at week 40 ($p < 0.0001$) that was maintained at week 64 measured using a Radiographic Global Impression of Change score (RGI-C)
- Improvements were also observed in renal tubular phosphate reabsorption, serum phosphorus levels, linear growth, physical function and pain

Adverse reactions listed as very common (occurring in 1 in 10 people or more) in the summary of product characteristics include: injection site reactions, headache, pain in the extremities, decreased vitamin D, rash, toothache, tooth abscesses, myalgia and dizziness.²

KYOWA KIRIN

PRESS RELEASE

Kyowa Kirin International, a wholly owned subsidiary of Kyowa Hakko Kirin, and Ultragenyx Pharmaceutical Inc. (NASDAQ: RARE) have been collaborating in the development and commercialization of Crysvida globally, based on the collaboration and license agreement between Kyowa Hakko Kirin and Ultragenyx.

About Kyowa Kirin

Kyowa Hakko Kirin Co., Ltd. is a research-based life sciences company, with special strengths in biotechnologies. In the core therapeutic areas of oncology, nephrology and immunology/allergy, Kyowa Hakko Kirin leverages leading-edge biotechnologies centred on antibody technologies, to continually discover innovative new drugs and to develop and market those drugs worldwide. In this way, the company is working to realise its vision of becoming a Japan-based global specialty pharmaceutical company that contributes to the health and wellbeing of people around the world.

Kyowa Kirin International PLC is a wholly owned subsidiary of Kyowa Hakko Kirin and is a rapidly growing specialty pharmaceutical company engaged in the development and commercialization of prescription medicines for the treatment of unmet therapeutic needs in Europe and the United States. Kyowa Kirin International is headquartered in Scotland.

You can learn more about the business at: www.kyowa-kirin.com.

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