



Press Release

Astellas Receives European Commission Approval for First-in-Class EVRENZO™ (roxadustat) for Adult Patients with Symptomatic Anemia of Chronic Kidney Disease

Roxadustat is the first orally administered hypoxia-inducible factor (HIF) prolyl hydroxylase (PH) inhibitor available for adult patients with anemia associated with chronic kidney disease in Europe

TOKYO, August 20, 2021 – Astellas Pharma Inc. (TSE: 4503, President and CEO: Kenji Yasukawa, Ph.D., "Astellas") and FibroGen, Inc. (Nasdaq: FGEN, CEO: Enrique Conterno, "FibroGen") today announced that the European Commission (EC) has approved EVRENZO™ (roxadustat) for the treatment of adult patients with symptomatic anemia associated with chronic kidney disease (CKD).

"We are very pleased EVRENZO has been approved as the first oral HIF-PH inhibitor to treat adult patients with symptomatic anemia associated with CKD in the European Union," said Steven Benner, M.D., M.H.S., President of Development, Astellas. "Today's approval provides patients, regardless of dialysis status, with a first-in-class treatment option to address the multifaceted nature of this condition. We look forward to making roxadustat available to adult patients with anemia of CKD in countries across the European Union."

CKD impacts one in 10 people globally, of whom one in five are affected by anemia.^{1, 2} Anemia of CKD is often untreated or not treated to target, and is associated with reduced quality of life and progression to adverse cardiovascular (CV) and renal outcomes.³⁻⁵

"Anemia is a significant and early complication of CKD that occurs with greater frequency and impact as CKD worsens, affecting patients' day-to-day living, self-care and mobility," said Jonathan Barratt, Ph.D., FRCP, Consultant Nephrologist and the Mayer Professor of Renal Medicine at the University of Leicester, United Kingdom. "This approval represents a step forward in providing patients with an efficient and simple option to manage anemia symptoms and maintain target hemoglobin levels to minimize the impact on their quality of life."

Roxadustat is the first orally administered HIF-PH inhibitor available in the European Union. Roxadustat increases hemoglobin (Hb) levels through a different mechanism of action compared to injectable erythropoiesis-stimulating agents (ESAs) which are typically co-administered with intravenous iron. As a HIF-PH inhibitor, roxadustat activates the body's natural response to reduced oxygen levels in the blood. This response involves the regulation of multiple, coordinated processes that allow management of anemia with a reduced use of intravenous iron.

"HIF-PH inhibitors represent a major advance in the treatment of anemia of CKD," said Mark Eisner, M.D., M.P.H., Chief Medical Officer, FibroGen. "Roxadustat provides a novel breakthrough for patients who suffer from this condition."

This approval follows the European Medicines Agency's (EMA) Committee for Medicinal Products for Human Use (CHMP) positive opinion to authorize roxadustat in June⁶ based on results from a comprehensive pivotal Phase 3 program comprising of eight multicenter and randomized studies, which involved 9,600 patients worldwide.⁷⁻¹² The results of this program showed roxadustat was efficacious in achieving and maintaining target Hb levels (10-12g/dL) in patients with symptomatic anemia of CKD regardless of dialysis status and irrespective of prior ESA treatment.⁷⁻¹¹ The safety profile observed in the roxadustat development program is reflective of the CKD populations studied and comparable to ESAs.⁷⁻¹²

The EC has the authority to approve medicines for European Union member states, as well as in the European Economic Area (EEA) countries Iceland, Norway, Liechtenstein.¹³

The EC approval of roxadustat triggers a milestone payment of \$120 million by Astellas to FibroGen, and FibroGen will also receive royalties based upon European net sales.

About CKD and Anemia of CKD

Chronic kidney disease (CKD) is a progressive disease characterized by gradual loss of kidney function that may eventually lead to kidney failure or end-stage renal disease, requiring dialysis or kidney transplant.¹⁴ Many patients with CKD die of cardiovascular complications before progressing to kidney failure and as such the prevalence of early kidney disease is much greater than end-stage disease.^{14, 15} CKD impacts one in 10 people globally and is predicted to become the fifth most common cause of premature death globally by 2040.^{1, 16}

Anemia, a serious medical condition in which patients have insufficient red blood cells and low levels of hemoglobin, is a common early complication of CKD affecting approximately 20% of CKD patients.^{2, 17} Anemia of CKD is associated with an increased risk of hospitalization, cardiovascular complications and death, and can also cause significant fatigue, cognitive dysfunction and reduced quality of life.^{4, 18} Blood transfusions are used for treating severe anemia, however, they may reduce a patient's opportunity for kidney transplant and can increase the risk of infection and/or complications such as heart failure and allergic reactions.^{19, 20}

About Roxadustat

Roxadustat, an oral medicine, is the first in a new class of medicines, HIF-PH inhibitors, that promote erythropoiesis, or red blood cell production, through increased endogenous production of erythropoietin; improved iron absorption and mobilization; and downregulation of hepcidin. Roxadustat is also in Phase 3 clinical development for anemia associated with myelodysplastic syndromes (MDS) and Phase 2 for chemotherapy-induced anemia (CIA).

Roxadustat is approved in EU member states, including the EEA countries, as well as in Japan, China, Chile and South Korea for the treatment of anemia of CKD in adult patients on dialysis (DD) and not on dialysis (NDD). Several other licensing applications for roxadustat have been submitted by Astellas and AstraZeneca to regulatory authorities across the globe and are currently in review.

Astellas and FibroGen are collaborating on the development and commercialization of roxadustat for the potential treatment of anemia of CKD in territories including Japan, Europe, Turkey, Russia and the Commonwealth of Independent States, the Middle East, and South Africa. FibroGen and AstraZeneca are collaborating on the development and commercialization of roxadustat for the potential treatment of anemia of CKD in the U.S., China, other markets in the Americas, in Australia/New Zealand, and Southeast Asia.

Important Safety Information

The full European Summary of Product Characteristics (SPC/SmPC) for roxadustat will be available from the European Medicines Agency at www.ema.europa.eu²¹

About Astellas

Astellas Pharma Inc., is a pharmaceutical company conducting business in more than 70 countries around the world. We are promoting the Focus Area Approach that is designed to identify opportunities for the continuous creation of new drugs to address diseases with high unmet medical needs by focusing on Biology and Modality. Furthermore, we are also looking beyond our foundational Rx focus to create Rx+[®] healthcare solutions that combine our expertise and knowledge with cutting-edge technology in different fields of external partners. Through these efforts, Astellas stands on the forefront of healthcare change to turn innovative science into value for patients. For more information, please visit our website at <https://www.astellas.com/en>.

About FibroGen

FibroGen, Inc. is a biopharmaceutical company committed to discovering, developing and commercializing a pipeline of first-in-class therapeutics. The Company applies its pioneering expertise in hypoxia-inducible factor (HIF) and connective tissue growth factor (CTGF) biology to advance innovative medicines for the treatment of unmet needs. The Company is currently developing and commercializing roxadustat, an oral small molecule inhibitor of HIF prolyl hydroxylase activity, for anemia associated with chronic kidney disease (CKD). Roxadustat is also in clinical development for anemia associated with myelodysplastic syndromes (MDS) and for chemotherapy-induced anemia (CIA). Pamrevlumab, an anti-CTGF human monoclonal antibody, is in clinical development for the treatment of locally advanced unresectable pancreatic cancer (LAPC), Duchenne muscular dystrophy (DMD), and idiopathic pulmonary fibrosis (IPF). For more information, please visit www.fibrogen.com.

Astellas Cautionary Notes

In this press release, statements made with respect to current plans, estimates, strategies and beliefs, and other statements that are not historical facts are forward-looking statements about the future performance of Astellas. These statements are based on management's current assumptions and beliefs in light of the information currently available to it and involve known and unknown risks and uncertainties. A number of factors could cause actual results to differ materially from those discussed in the forward-looking statements. Such factors include, but are not limited to: (i) changes in general economic conditions and in laws and regulations, relating to pharmaceutical markets, (ii) currency exchange rate fluctuations, (iii) delays in new product launches, (iv) the inability of Astellas to market existing and new products effectively, (v) the inability of Astellas to continue to effectively research and develop products accepted by customers in highly competitive markets and (vi) infringements of Astellas' intellectual property rights by third parties.

Information about pharmaceutical products (including products currently in development) that is included in this press release is not intended to constitute an advertisement or medical advice.

FibroGen Forward-Looking Statements

This release contains forward-looking statements regarding our strategy, future plans and prospects, including statements regarding the development and commercialization of the Company's product candidates, the prevalence of CKD and anemia, the potential safety and efficacy profile of our product candidates, our clinical and regulatory events. These forward-looking statements include, but are not limited to, statements about our plans, objectives, representations and contentions and are not historical facts and typically are identified by use of terms such as "may", "will", "should", "on track", "could", "expect", "plan", "anticipate", "believe", "estimate", "predict", "potential", "continue" and similar words, although some forward-looking statements are expressed differently. Our actual results may differ materially from those indicated in these forward-looking statements due to risks and uncertainties related to continued progress and timing of our various programs, including the enrollment and results from ongoing and potential future clinical trials, and other matters that are described in our Annual Report on Form 10-K for the fiscal year that ended December 31, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 filed with the Securities and Exchange Commission (SEC), including the risk factors set forth therein. Investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this release, and we undertake no obligation to update any forward-looking statement in this press release, except as required by law.

###

Contacts for inquiries or additional information:

Astellas Portfolio Communications
Anna Otten
TEL: +1-224-205-6651
anna.otten@astellas.com

Astellas Pharma Inc.
Corporate Advocacy & Relations
TEL: +81-3-3244-3201

FibroGen, Inc.
Investors:
Michael Tung, M.D.
Corporate Strategy / Investor Relations
mtung@fibrogen.com

Media:
GCI Health
FibroGenMedia@gcihealth.com

References

1. Nephrology ISo. Chronic kidney disease. Global kidney health atlas 2019 [Accessed August 2021]. Available from: https://www.theisn.org/wp-content/uploads/2021/05/GKHAtlas_2019_WebFile-1.pdf.
2. Dmitrieva O, de Lusignan S, Macdougall IC, Gallagher H, Tomson C, Harris K, et al. Association of anaemia in primary care patients with chronic kidney disease: cross sectional study of quality improvement in chronic kidney disease (QICKD) trial data. *BMC Nephrol.* 2013;14:24.
3. Wong MMY, Tu C, Li Y, Perlman RL, Pecoits-Filho R, Lopes AA, et al. Anemia and iron deficiency among chronic kidney disease Stages 3-5ND patients in the Chronic Kidney Disease Outcomes and Practice Patterns Study: often unmeasured, variably treated. *Clin Kidney J.* 2020;13(4):613-24.
4. Schmidt RJ, Dalton CL. Treating anemia of chronic kidney disease in the primary care setting: cardiovascular outcomes and management recommendations. *Osteopath Med Prim Care.* 2007;1:14.
5. Stauffer ME, Fan T. Prevalence of anemia in chronic kidney disease in the United States. *PLoS One.* 2014;9(1):e84943.
6. European Medicines Agency. Meeting highlights from the Committee for Medicinal Products for Human Use (CHMP) June 2021 [Accessed August 2021]. Available from: <https://www.ema.europa.eu/en/news/meeting-highlights-committee-medicinal-products-human-use-chmp-21-24-june-2021>.
7. Clinicaltrials.Gov. Roxadustat in the Treatment of Anemia in End Stage Renal Disease (ESRD) Patients on Stable Dialysis (Pyrenees). NCT02278341. [Accessed August 2021]. Available from: <https://clinicaltrials.gov/ct2/show/NCT02278341>.
8. Shutov E, Sułowicz W, Esposito C, Tataradze A, Andric B, Reusch M, et al. Roxadustat for the treatment of anemia in chronic kidney disease patients not on dialysis: a phase 3, randomized, double-blind, placebo-controlled study (ALPS). *Nephrol Dial Transplant.* 2021; 1-11. doi: 10.1093/ndt/gfab057.
9. Coyne DW, Roger SD, Shin SK, Kim SG, Cadena AA, Moustafa MA, et al. Roxadustat for CKD-related Anemia in Non-dialysis Patients. *Kidney Int Rep.* 2021;6(3):624-35.
10. Provenzano R, Shutov E, Ereemeeva L, Korneyeva S, Poole L, Saha G, et al. Roxadustat for anemia in patients with end-stage renal disease incident to dialysis. *Nephrol Dial Transplant.* 2021. doi: 10.1093/ndt/gfab051.
11. Fishbane S, El-Shahawy MA, Pecoits-Filho R, Van BP, Houser MT, Frison L, et al. Roxadustat for Treating Anemia in Patients with CKD Not on Dialysis: Results from a Randomized Phase 3 Study. *J Am Soc Nephrol.* 2021;32(3):737-55.
12. Barratt J, Andric B, Tataradze A, Schömig M, Reusch M, Valluri U, et al. Roxadustat for the treatment of anaemia in chronic kidney disease patients not on dialysis: a phase 3, randomised, open-label, active-controlled study (DOLOMITES). *Nephrol Dial Transplant.* 2021. 1-13. doi: 10.1093/ndt/gfab191.
13. European Medicines Agency. Authorizations of Medicines [Accessed August 2021]. Available from: <https://www.ema.europa.eu/about-us/what-we-do/authorisation-medicines>
14. Ojo A. Addressing the global burden of chronic kidney disease through clinical and translational research. *Trans Am Clin Climatol Assoc.* 2014;125:229-43; discussion 43-6.
15. Subbiah AK, Chhabra YK, Mahajan S. Cardiovascular disease in patients with chronic kidney disease: a neglected subgroup. *Heart Asia.* 2016;8(2):56-61.
16. Institute for Health Metrics and Evaluation (IHME). Findings from the Global Burden of Disease Study 2017 2018 [Accessed August 2021]. Available from: http://www.healthdata.org/sites/default/files/files/policy_report/2019/GBD_2017_Booklet.pdf.
17. National Kidney Foundation. Anemia and Chronic Kidney Disease [Accessed August 2021]. Available from: https://www.kidney.org/atoz/content/what_anemia_ckd.
18. Eriksson D, Goldsmith D, Teitsson S, Jackson J, van Nooten F. Cross-sectional survey in CKD patients across Europe describing the association between quality of life and anaemia. *BMC Nephrol.* 2016;17(1):97.
19. Disease NIDaDaK. Anemia in Chronic Kidney Disease: National Institute of Diabetes and Digestive and Kidney Disease; [Accessed August 2021]. Available from: <https://www.niddk.nih.gov/health-information/kidney-disease/anemia>.

20. Sahu S, Hemlata, Verma A. Adverse events related to blood transfusion. *Indian J Anaesth.* 2014;58(5):543-51.
21. Data on file. Northbrook, Ill. Astellas Pharma Inc.