



Ad hoc announcement pursuant to Art. 53 LR

# Santhera and ReveraGen Announce FDA Acceptance of New Drug Application for Vamorolone in Duchenne Muscular Dystrophy

Pratteln, Switzerland, and Rockville, MD, USA, January 9, 2023 – Santhera Pharmaceuticals (SIX: SANN) and ReveraGen BioPharma, Inc announce that the U.S. Food and Drug Administration (FDA) has accepted the new drug application (NDA) for vamorolone for the treatment of Duchenne muscular dystrophy (DMD) for filing. The FDA has set October 26, 2023, as the Prescription Drug User Fee Act (PDUFA) target action date.

The PDUFA date is the target date for the FDA to complete its review of the NDA. Furthermore, the FDA stated that it does not currently plan to hold an advisory committee meeting to discuss the application. Subject to approval, Santhera plans to launch vamorolone in the U.S. in Q4-2023.

"We are delighted that the FDA has accepted Santhera's vamorolone NDA for filing. We believe this product addresses a clear unmet medical need and for Santhera, this represents the achievement of an important milestone with key significance for our future success," said **Dario Eklund, CEO of Santhera**. "We look forward to working closely with U.S. regulators to advance vamorolone towards approval."

"This is an exciting time for the Duchenne community as the data generated across the clinical trial program indicate that vamorolone has the potential to address relevant aspects in patient care that could also enhance treatment outcomes," said **Eric Hoffman**, **PhD**, **President and CEO of ReveraGen BioPharma**. "If approved, vamorolone will emerge as an additional treatment option in current standards of care in DMD, with the potential to address unmet medical needs and treat a majority of Duchenne patients starting at an early age."

The NDA submission for vamorolone was supported by clinical data from the positive pivotal Phase 2b VISION-DMD study which met the primary endpoint with statistical significance over placebo [1]. The data package also included data from four open-label studies (including extension) in which vamorolone was administered at doses between 2 and 6 mg/kg/day for a total treatment period of up to 30 months [2].

In Europe, a marketing authorization application (MAA), seeking approval for vamorolone in the European Union, has been validated and is under review by the European Medicines Agency (EMA).

Vamorolone has been granted Orphan Drug status in the U.S. and in Europe for DMD, and has received Fast Track and Rare Pediatric Disease designations by the U.S. FDA and Promising Innovative Medicine (PIM) status from the UK MHRA for DMD.

#### About Vamorolone

Vamorolone is an investigational drug candidate with a mode of action based on binding to the same receptor as corticosteroids but modifying its downstream activity and as such is considered a dissociative

anti-inflammatory drug [2-5]. This mechanism has shown the potential to 'dissociate' efficacy from steroid safety concerns and therefore vamorolone could emerge as an alternative to existing corticosteroids, the current standard of care in children and adolescent subjects with DMD. In the pivotal VISION-DMD study, vamorolone met the primary endpoint Time to Stand (TTSTAND) velocity versus placebo (p=0.002) at 24 weeks of treatment and showed a good safety and tolerability profile [1]. The most commonly reported adverse events versus placebo from the VISION-DMD study were cushingoid features, vomiting and vitamin D deficiency. Adverse events were generally of mild to moderate severity. Vamorolone is an investigational medicine and is currently not approved for use by any health authority.

#### References:

- [1] Guglieri M et al (2022). JAMA Neurol. Published online August 29, 2022. doi:10.1001/jamaneurol.2022.2480. Link.
- [2] Mah JK et al (2022). JAMA Netw Open. 2022;5(1):e2144178. doi:10.1001/jamanetworkopen.2021.44178. Link.
- [3] Guglieri, et al (2022) JAMA. doi:10.1001/jama.2022.4315
- [4] Heier CR at al (2019). Life Science Alliance DOI: 10.26508
- [5] Liu X, et al (2020). Proc Natl Acad Sci USA 117:24285-24293

#### About Duchenne Muscular Dystrophy

Duchenne muscular dystrophy (DMD) is a rare inherited X-chromosome-linked disease, which almost exclusively affects males. DMD is characterized by inflammation which is present at birth or shortly thereafter. Inflammation leads to fibrosis of muscle and is clinically manifested by progressive muscle degeneration and weakness. Major milestones in the disease are the loss of ambulation, the loss of selffeeding, the start of assisted ventilation, and the development of cardiomyopathy. DMD reduces life expectancy to before the fourth decade due to respiratory and/or cardiac failure. Corticosteroids are the current standard of care for the treatment of DMD.

#### **About Santhera**

Santhera Pharmaceuticals (SIX: SANN) is a Swiss specialty pharmaceutical company focused on the development and commercialization of innovative medicines for rare neuromuscular and pulmonary diseases with high unmet medical need. The Company has an exclusive license for all indications worldwide to vamorolone, a dissociative steroid with novel mode of action, which was investigated in a pivotal study in patients with Duchenne muscular dystrophy as an alternative to standard corticosteroids. Santhera has a new drug application (NDA) under review by the U.S. FDA and a marketing authorization application (MAA) under review by the European Medicines Agency (EMA) for vamorolone for the treatment of DMD. The clinical stage pipeline also includes lonodelestat to treat cystic fibrosis (CF) and other neutrophilic pulmonary diseases. Santhera out-licensed rights to its first approved product, Raxone<sup>®</sup> (idebenone), outside North America and France for the treatment of Leber's hereditary optic neuropathy (LHON) to Chiesi Group. For further information, please visit <u>www.santhera.com</u>.

*Raxone<sup>®</sup> is a trademark of Santhera Pharmaceuticals.* 

#### About ReveraGen BioPharma

ReveraGen was founded in 2008 to develop first-in-class dissociative steroidal drugs for Duchenne muscular dystrophy and other chronic inflammatory disorders. The development of ReveraGen's lead compound, vamorolone, has been supported through partnerships with foundations worldwide, including Muscular Dystrophy Association USA, Parent Project Muscular Dystrophy, Foundation to Eradicate Duchenne, Save Our Sons, JoiningJack, Action Duchenne, CureDuchenne, Ryan's Quest, Alex's Wish, DuchenneUK, Pietro's Fight, Michael's Cause, Duchenne Research Fund, and Defeat Duchenne

Canada. ReveraGen has also received generous support from the US Department of Defense CDMRP, National Institutes of Health (NCATS, NINDS, NIAMS), and European Commission (Horizons 2020). www.reveragen.com

## For further information please contact:

Santhera

Santhera Pharmaceuticals Holding AG, Hohenrainstrasse 24, CH-4133 Pratteln public-relations@santhera.com or Eva Kalias, Head Investor Relations & Communications Phone: +41 79 875 27 80 eva.kalias@santhera.com **ReveraGen BioPharma** Eric Hoffman, PhD, President and CEO Phone: + 1 240-672-0295 eric.hoffman@reveragen.com

### **Disclaimer / Forward-looking statements**

This communication does not constitute an offer or invitation to subscribe for or purchase any securities of Santhera Pharmaceuticals Holding AG. This publication may contain certain forward-looking statements concerning the Company and its business. Such statements involve certain risks, uncertainties and other factors which could cause the actual results, financial condition, performance or achievements of the Company to be materially different from those expressed or implied by such statements. Readers should therefore not place undue reliance on these statements, particularly not in connection with any contract or investment decision. The Company disclaims any obligation to update these forward-looking statements.

###