

## **PRESS RELEASE**

# Relief Provides Update on Progress and Plans with ACER-001 for the Treatment of Urea Cycle Disorders

Geneva, Switzerland, May 18, 2021 – RELIEF THERAPEUTICS Holding AG (SIX: RLF, OTCQB: RLFTF) ("Relief"), a biopharmaceutical company with its lead compound RLF-100™ (aviptadil) in advanced clinical development to treat severe COVID-19 patients, today provided an update on the development of ACER-001, a proprietary powder formulation of sodium phenylbutyrate (NaPB) designed to be both taste-masked and immediate release, in the lead indication, urea cycle disorders (UCDs). UCDs are a group of rare genetic metabolic disorders which can lead to an excess accumulation of ammonia in the bloodstream, causing different symptoms such as somnolence, coma, and, in the worst case, may lead to multi-organ failure. Better, more affordable treatment options for UCDs are urgently needed.

Regulatory update U.S.: Relief's partner, Acer Therapeutics, recently announced that it had held a Type B pre-New Drug Application (NDA) meeting with the U.S. Food and Drug Administration (FDA). Acer remains on track to submit an NDA for ACER-001 for the treatment of patients with UCDs in mid-2021, provided that no additional data are requested by the FDA and ongoing development activities are successfully completed (including evaluation of product stability data and reaching agreement on the Pediatric Study Plan (PSP)).

Regulatory update Europe: Relief is responsible for the development and commercialization of ACER-001 in Europe and expects to discuss its plans with the European Medicines Agency this summer. Pending the outcome of these discussions and provided that Acer submits an NDA in the U.S. mid this year as planned, Relief then anticipates submitting a Marketing Authorization Application (MAA) for approval of ACER-001 for the treatment of UCDs in the European Union before the end of 2021.

Based on the timelines outlined above and pending a positive decision by regulators, ACER-001 could be launched in both the U.S. and Europe during 2022.

ACER-001 is also being developed for the treatment of Maple Syrup Urine Disease (MSUD).

**Jack Weinstein, Chief Financial Officer and Treasurer of Relief**, said, "It is great to see the progress being made with ACER-001. We are excited to continue moving forward with the Acer team to develop and commercialize this product candidate around the globe to address important unmet needs for patients with UCDs, a rare and debilitating set of diseases. Following on the important steps being made by our partner in the U.S., we expect to be able to move forward rapidly in Europe."

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## ABOUT UREA CYCLE DISORDERS (UCDS)

UCDs are a group of disorders caused by genetic mutations that result in a deficiency in one of the six enzymes that catalyze the urea cycle, which can lead to an excess accumulation of ammonia in the bloodstream, a condition known as hyperammonemia. Acute hyperammonemia can cause lethargy, somnolence, coma, and multi-organ failure, while chronic hyperammonemia can lead to headaches, confusion, lethargy, failure to thrive, behavioral changes, and learning and cognitive deficits. Common symptoms of both acute and chronic hyperammonemia also include seizures and psychiatric symptoms.<sup>1,2</sup>



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The current treatment of UCDs consists of dietary management to limit ammonia production in conjunction with medications that provide alternative pathways for the removal of ammonia from the bloodstream. Some patients may also require individual branched-chain amino acid supplementation.

Current medical treatments for UCDs include nitrogen scavengers, RAVICTI® and BUPHENYL®, in which the active pharmaceutical ingredients are glycerol phenylbutyrate (GPB) and sodium phenylbutyrate (NaPB), respectively. According to a 2016 study by Shchelochkov et al., published in *Molecular Genetics and Metabolism Reports*, while nitrogen scavenging medications have been shown to be effective in helping to manage ammonia levels in some patients with UCDs, non-compliance with treatment is common. Reasons referenced for non-compliance associated with some available medications include unpleasant taste, the frequency with which medication must be taken, the number of pills, and the high cost of the medication.<sup>3</sup>

#### **ABOUT ACER-001**

ACER-001 is a proprietary powder formulation of sodium phenylbutyrate (NaPB). The formulation is designed to be both taste-masked and immediate release. ACER-001 is being developed using a microencapsulation process for the treatment of various inborn errors of metabolism, including Urea Cycle Disorders and Maple Syrup Urine Disease. ACER-001 microparticles consist of a core center, a layer of active drug, and a taste-masking coating that quickly dissolves in the stomach, to avoid a bitter taste while still allowing for rapid systemic release. If ACER-001 is approved, its taste-masked properties could make it a compelling alternative to existing NaPB-based treatments, as the unpleasant taste associated with NaPB is cited as a major impediment to patient compliance with those treatments.<sup>3</sup> Acer has been granted orphan drug designation by the FDA for the MSUD indication. ACER-001 is under clinical investigation and its safety and efficacy have not been established. There is no guarantee that this product candidate will receive U.S. FDA approval or become commercially available for the uses being investigated.

### ABOUT RELIEF THERAPEUTICS HOLDING AG

Relief focuses primarily on clinical-stage programs based on molecules with a history of clinical testing and use in human patients or a strong scientific rationale. Relief's lead drug candidate RLF-100<sup>TM</sup> (aviptadil), a synthetic form of Vasoactive Intestinal Peptide (VIP), is in late-stage clinical testing in the U.S. for the treatment of respiratory deficiency due to COVID-19. As part of its pipeline diversification strategy, in March 2021, Relief entered into a Collaboration and License Agreement with Acer Therapeutics for the worldwide development and commercialization of ACER-001. ACER-001 is a taste-masked and immediate release proprietary powder formulation of sodium phenylbutyrate (NaPB) for the treatment of Urea Cycle Disorders and Maple Syrup Urine Disease.

RELIEF THERAPEUTICS Holding AG is listed on the SIX Swiss Exchange under the symbol RLF and quoted in the U.S. on OTCQB under the symbol RLFTF.

For more information, visit www.relieftherapeutics.com. Follow us on LinkedIn.

#### **REFERENCES**

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- 2. Häberle J, et al. Suggested guidelines for the diagnosis and management of urea cycle disorders. Orphanet Journal of Rare Diseases. 2012;7(32).
- 3. Shchelochkov OA, et al. Barriers to drug adherence in the treatment of urea cycle disorders: Assessment of patient, caregiver and provider perspectives. Mol Genet Metab. 2016;8:43-47.

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Disclaimer: This communication expressly or implicitly contains certain forward-looking statements concerning RELIEF THERAPEUTICS Holding AG and its businesses. The results reported herein may or may not be indicative of the results of future and larger clinical trials for ACER-001 for the treatment of UCDs and MSUD, nor whether the ongoing clinical trials of Relief's lead compound, RLF-100™ (aviptadil) in advanced clinical development to treat respiratory deficiency due to COVID-19, will be successful. Such statements involve certain known and unknown risks, uncertainties and other factors, which could cause the actual results, financial condition, performance or achievements of RELIEF THERAPEUTICS Holding AG to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. RELIEF THERAPEUTICS Holding AG is providing this communication as of this date and does not undertake to update any forward-looking statements contained herein as a result of new information, future events or otherwise.