# QurAlis Doses First Patient With ALS in Phase 1 Clinical Trial Evaluating QRL-101, a First-in-Class Kv7 Precision Therapy for ALS

QRL-101 is the only Kv7 ion channel opener being actively studied for the treatment of hyperexcitability-induced disease progression in ALS, which occurs in nearly 50 percent of patients

Kv7 is a clinically validated target to regulate hyperexcitable state in epilepsy

QurAlis' Phase 1 study in healthy volunteers of QRL-101 to evaluate biomarkers of both ALS and epilepsy also underway

**CAMBRIDGE, Mass.,** *December 4, 2024* – <u>QurAlis Corporation</u> ("QurAlis"), a clinical-stage biotechnology company driving scientific breakthroughs into powerful precision medicines that have the potential to alter the trajectory of amyotrophic lateral sclerosis (ALS), frontotemporal dementia (FTD), and other neurodegenerative and neurological diseases, today announced that the first patient with ALS has been dosed in a Phase 1 clinical trial evaluating QRL-101 in people living with ALS (QRL-101-04). QRL-101 is a first-in-class selective Kv7.2/7.3 ion channel opener for the treatment of hyperexcitability-induced disease progression in ALS, which is present in approximately 50 percent of ALS patients.

Kv7 hyperexcitability occurs in both sporadic and genetic forms of ALS, with the majority caused by the mis-splicing of the KCNQ2 gene pre-mRNA. Kv7 is also a clinically validated target to regulate the hyperexcitable state in epilepsy. QurAlis recently announced the company has expanded the development program for QRL-101 to include epilepsy.

"QRL-101 is the only Kv7 ion channel opener being actively studied for the treatment of hyperexcitability-induced disease progression in ALS. The dosing of the first patient with ALS in the clinical development program of QRL-101 is a significant milestone," said Kasper Roet, Ph.D., CEO and co-founder of QurAlis. "Kv7 is implicated in ALS as well as epilepsy. We believe that the data from this study, along with the data from our Phase 1 study evaluating biomarkers of ALS and epilepsy in healthy volunteers, will be valuable as we advance the clinical program for QRL-101 in ALS so that we can bring a much-needed therapeutic option to patients rapidly."

"Preclinical models of QRL-101 show its strong potential to control motor neuron hyperexcitability-induced neurodegeneration with an attractive side effect profile," said Leonard H. van den Berg, M.D., Ph.D., professor of neurology and chair, TRICALS. "ALS is a devastating, fatal neurodegenerative disease and there are currently no therapies that can significantly extend patients' lives. We look forward to results from this Phase 1 study in ALS patients."

QRL-101-04 (NCT06714396) is a Phase 1 proof-of-mechanism (PoM) single-dose, placebo-controlled clinical trial designed to evaluate the safety and tolerability of QRL-101 in people living with ALS. The study is expected to enroll approximately 12 participants with ALS and will evaluate the impact of QRL-101 on excitability biomarkers including on the strength-duration time constant (SDTC), a known predictor of survival in ALS patients. QurAlis is also conducting a Phase 1 PoM biomarker clinical trial (QRL-101-05; NCT06681441) to evaluate biomarkers of ALS and epilepsy of QRL-101 in healthy

volunteers. These PoM studies together will inform QurAlis' future development program, including dose levels for proof-of-concept studies.

QurAlis anticipates reporting topline data from the QRL-101-04 Phase 1 clinical trial in the first half of 2025.

More information about the QRL-101 Phase 1 clinical trials can be found at www.clinicaltrials.gov.

## **About Amyotrophic Lateral Sclerosis (ALS)**

Amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's disease, is a progressive neurodegenerative disease impacting nerve cells in the brain and spinal cord, reducing muscle function and control. ALS can be traced to mutations in more than 25 different genes and is often caused by a combination of multiple sub-forms of the condition. Cases usually cannot be predicted, although a small percentage are inherited. ALS has a devastating impact on patients and families. ALS patients' average life expectancy is three years; after diagnosis patients only have two years to live. There is currently no cure for the disease.

#### About Kv7

Kv7.2/7.3 is a voltage-gated potassium channel whose role is crucial for the regulation of neuronal excitability and membrane potential. Kv7.2 is mis-spliced in sporadic amyotrophic lateral sclerosis (ALS) leading to loss of function and abnormal electrical activity in the spinal cord and brain. The activation of this channel shows the potential to decrease spinal and cortical/motor neuron excitability and to positively affect CMAP (compound muscle action potential), a disease progression biomarker for ALS. This suggests that this may be an effective therapeutic approach for ALS patients suffering from hyperexcitability-induced motor neuron degeneration.

## **About QurAlis Corporation**

At QurAlis, we are neuro pioneers on a quest to cure. We work with a relentless pursuit of knowledge, a precise attention to craft, and an optimistic mindset to discover and develop effective precision medicines that have the potential to alter the trajectory of amyotrophic lateral sclerosis (ALS), frontotemporal dementia (FTD), and other neurodegenerative and neurological diseases. Founded by an internationally recognized team of neurodegenerative biologists from Harvard Medical School and Harvard University, QurAlis is advancing a robust precision medicine pipeline with therapeutic candidates aimed at modifying severe disease pathology in defined patient populations based on both disease-causing genetic mutation(s) and clinical biomarkers. For more information, please visit <a href="www.quralis.com">www.quralis.com</a> or follow us on X @QurAlisCo or LinkedIn.

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