Reviva to Host Virtual KOL Event to Discuss Vocal Biomarker Data from Phase 3 RECOVER Trial of Brilaroxazine in Schizophrenia on September 4, 2024

CUPERTINO, Calif., Aug. 27, 2024 — Reviva Pharmaceuticals Holdings, Inc. (NASDAQ: RVPH) ("Reviva" or the "Company"), a late-stage pharmaceutical company developing therapies that seek to address unmet medical needs in the areas of central nervous system (CNS), inflammatory and cardiometabolic diseases, today announced it will host a virtual key opinion leader (KOL) event on Wednesday, September 4, 2024 at 2:00 PM ET. To register for the event, click here.

The event will feature Brian Kirkpatrick, MD (Professor, Psychiatric Research Institute, University of Arkansas for Medical Sciences, Arkansas) and Mark Opler, PhD, MPH (Chief Research Officer at WCG Inc., Executive Director of the PANSS Institute, New York), who will discuss the unmet medical need and current treatment landscape for patients suffering from symptoms of schizophrenia, and application of speech latency as an objective vocal biomarker in schizophrenia clinical trials for evaluation of negative symptoms.

The discussion will focus on reviewing results of the vocal biomarker data and their relationship to the primary efficacy endpoint and key efficacy secondary endpoints negative symptoms, social functioning, social cognition and CGI from brilaroxazine Phase 3 RECOVER-1 trial in schizophrenia.

A live question and answer session will follow the formal presentations.

About Brian Kirkpatrick, MD, MSPH

Brian Kirkpatrick, MD, MSPH, Professor in the University of Arkansas for Medical Sciences (UAMS) Department of Psychiatry, is a nationally and internationally renowned expert on schizophrenia and related disorders, whose pioneering research has advanced many lifechanging treatments.

Dr. Kirkpatrick graduated from the University of Texas Medical School at Houston and completed his residency in psychiatry at the University of North Carolina at Chapel Hill (UNC). After residency, he participated in the UNC Robert Wood Johnson Clinical Scholars Program, receiving a Master of Science in Public Health with a concentration in epidemiology. He also completed a fellowship in neuropharmacology at UNC.

Dr. Kirkpatrick joined the Maryland Psychiatric Research Center at the University of Maryland School of Medicine in Catonsville and later served as vice chair of psychiatry at the Medical College of Georgia. He subsequently served as chair of the Department of Psychiatry at Scott & White Hospital and the Texas A&M School of Medicine, and the Department of Psychiatry and Behavioral Sciences at the University of Nevada, Reno School of Medicine. He joined the

UAMS Department of Psychiatry in 2022.

Throughout his career, Dr. Kirkpatrick has focused on schizophrenia and related disorders. He co-chaired the Consensus Development Conference on Negative Symptoms sponsored by the National Institute of Mental Health (NIMH). He has received competitive funding from NIMH, the National Institute of Diabetes and Digestive and Kidney Diseases, the Brain and Behavior Research Foundation, and the Scottish Rite Foundation. He served as an associate editor of Clinical Schizophrenia and Related Psychoses and is on the editorial board of Schizophrenia Bulletin.

About Mark Opler, PhD, MPH

Mark Opler, PhD, MPH holds the titles of Chief Research Officer at WCG Inc. and Executive Director of the PANSS Institute.

Dr. Opler has served as a faculty member in the Departments of Psychiatry and Environmental Medicine at New York University School of Medicine and in the Department of Neuroscience at Columbia University, College of Physicians and Surgeons. His academic research focuses on the etiology, phenomenology, and treatment of serious and persistent mental disorders. He is a co-author and developer of several clinical assessment tools, including the SNAPSI, CGI-DS, and NY-AACENT. He is a contributor to the latest edition of the PANSS Manual©.

Dr. Opler has received research support from the US NIMH, the Brain & Behavior Foundation (formerly NARSAD), the Stanley Medical Research Institute, and the Qatar National Research Fund. He has co-authored more than 50 peer-reviewed publications and has contributed to multiple book chapters and review articles on clinical assessment, research methodology, and mental health.

He received his PhD and MPH from Columbia University and his BSc from SUNY at Stony Brook. He is a graduate of the Psychiatric Epidemiology Training Program at Columbia University and completed his postdoctoral fellowship at the New York State Psychiatric Institute.

About Brilaroxazine

Brilaroxazine is an in-house discovered new chemical entity with potent affinity and selectivity against key serotonin and dopamine receptors implicated in the pathobiology of several conditions including schizophrenia, psoriasis and interstitial lung diseases like pulmonary hypertension, pulmonary arterial hypertension (PAH) and idiopathic pulmonary fibrosis (IPF).

Positive topline data from the global Phase 3 RECOVER-1 trial in schizophrenia demonstrated the trial successfully met all primary and secondary endpoints with statistically significant and clinically meaningful reductions across all major symptom domains including reduction in

key proinflammatory cytokines implicated in the pathobiology of schizophrenia and comorbid inflammatory conditions at week 4 with 50 mg of brilaroxazine vs. placebo with a generally well-tolerated side effect profile comparable to placebo and discontinuation rates lower than placebo. Positive data from a clinical drug-drug interaction (DDI) study investigating the potential effect of CYP3A4 enzyme on brilaroxazine in healthy subjects supports no clinically significant interaction when combined with a CYP3A4 inhibitor. Reviva believes that a full battery of regulatory compliant toxicology and safety pharmacology studies has been completed for brilaroxazine. Reviva intends to develop brilaroxazine for other neuropsychiatric indications including bipolar disorder, major depressive disorder (MDD) and attention-deficit/hyperactivity disorder (ADHD).

Additionally, brilaroxazine has shown promising nonclinical activity for inflammatory diseases psoriasis, pulmonary arterial hypertension (PAH) and idiopathic pulmonary fibrosis (IPF) with mitigation of fibrosis and inflammation in translational animal models. Brilaroxazine has already received Orphan Drug Designation by the U.S. FDA for the treatment of PAH and IPF conditions. To learn more about the clinical and preclinical data available for brilaroxazine, please visit revivapharma.com/publications.

About Reviva

Reviva is a late-stage biopharmaceutical company that discovers, develops, and seeks to commercialize next-generation therapeutics for diseases representing unmet medical needs and burdens to society, patients, and their families. Reviva's current pipeline focuses on the central nervous system (CNS), inflammatory and cardiometabolic diseases. Reviva's pipeline currently includes two drug candidates, brilaroxazine (RP5063) and RP1208. Both are new chemical entities discovered in-house. Reviva has been granted composition of matter patents for both brilaroxazine and RP1208 in the United States, Europe, and several other countries.

Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act, as amended, including those relating to the Company's 1-year open label extension (OLE) trial evaluating the long-term safety and tolerability for brilaroxazine in schizophrenia, the registrational Phase 3 RECOVER-2 trial, the Company's expectations regarding the anticipated clinical profile of its product candidates, including statements regarding anticipated efficacy or safety profile, and those relating to the Company's expectations, intentions or beliefs regarding matters including product development and clinical trial plans, clinical and regulatory timelines and expenses, planned or intended additional trials or studies and the timing thereof, planned or intended regulatory submissions and the timing thereof, trial results, market opportunity, ability to raise sufficient funding, competitive position, possible or assumed future results of operations, business strategies, potential opportunities for development including partnerships, growth or

expansion opportunities and other statements that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential, "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2023, and the Company's other filings from time to time with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

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