Reviva Announces Closing of \$30 Million Registered Direct Offering Priced At-the-Market Under Nasdaq Rules

CUPERTINO, Calif., Nov. 20, 2023 — 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 that it has closed its previously announced registered direct offering with several healthcare-focused institutional investors, and an investment vehicle managed by a firm affiliated with a member of the Company's Board of Directors, for the sale and issuance of 5,853,660 shares of the Company's common stock (or prefunded warrants in lieu thereof) and warrants to purchase up to 5,853,660 shares of common stock at a combined offering price of \$5.125 per share of common stock (or prefunded warrant in lieu thereof) and accompanying warrant priced at-the-market under the Nasdaq rules. The warrants have an exercise price of \$5.00 per share, are immediately exercisable and will expire five years following the date of issuance.

H.C. Wainwright & Co. acted as the exclusive placement agent for the offering.

The gross proceeds to Reviva from this offering were approximately \$30,000,000, before deducting the placement agent's fees and other offering expenses. Reviva intends to use the net proceeds from this offering, together with its existing cash and cash equivalents, to fund research and development activities, including the registrational Phase 3 RECOVER-2 trial and other clinical and regulatory development and the continued development of Reviva's product candidates and for working capital and other general corporate purposes. Reviva may also use a portion of the net proceeds and its existing cash and cash equivalents for acquisitions or investments in businesses, products or technologies that are complementary to its own. However, Reviva currently does not have agreements or commitments to complete any such transaction.

The securities described above were offered pursuant to a "shelf" registration statement (File No. 333-262348) that was filed with the Securities and Exchange Commission ("SEC") on January 26, 2022 and was declared effective on February 2, 2022. The offering of the securities was made only by means of a prospectus, including a prospectus supplement, forming a part of an effective registration statement. A prospectus supplement and accompanying prospectus relating to the offering was filed with the SEC. Electronic copies of the prospectus supplement and accompanying prospectus may be obtained on the SEC's website at www.sec.gov or by contacting H.C. Wainwright & Co., LLC at 430 Park Avenue, 3rd Floor, New York, NY 10022, by phone at (212) 856-5711 or e-mail at placements@hcwco.com.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or jurisdiction in

which such offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About Brilaroxazine

Brilaroxazine is an in-house discovered new chemical entity with potent affinity and selectivity against key serotonin and dopamine receptors implicated in schizophrenia and its comorbid symptoms. Positive topline data from the global Phase 3 RECOVER 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 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, respiratory and metabolic 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 offering, the amount and anticipated use of proceeds from the offering, 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, clinical and regulatory timelines and expenses, market opportunity, ability to raise sufficient funding, competitive position, possible or assumed future results of operations, business strategies, potential growth 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, 2022, and the Company's other filings from time to time with the SEC. 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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