Reviva Reports First Quarter 2023 Financial Results and Recent Business Highlights

– Topline data for pivotal Phase 3 RECOVER trial for brilaroxazine in schizophrenia expected mid-2023 –

– Brilaroxazine topical liposomal-gel formulation (brilaroxazine lipogel) demonstrated proof-of-concept efficacy in the imiquimod-induced psoriatic mouse model –

– IND submission for brilaroxazine lipogel in psoriasis expected in 2024 –

CUPERTINO, Calif., May 15, 2023 — Reviva Pharmaceuticals Holdings, Inc. (NASDAQ: RVPH) ("Reviva" or the "Company"), a clinical-stage pharmaceutical company developing therapies that seek to address unmet medical needs in the areas of central nervous system (CNS), respiratory and metabolic diseases, today reported financial results for the first quarter ended March 31, 2023 and summarized recent business highlights.

"We started off 2023 focused on maximizing the broad therapeutic potential of brilaroxazine and executing across our important milestones in the year ahead. With the completion of several clinical and nonclinical prelaunch studies to support our potential new drug application (NDA) submission for brilaroxazine in schizophrenia, we believe we are well-positioned for topline Phase 3 data from our RECOVER trial expected mid-year," said Laxminarayan Bhat, Ph.D., Founder, President, and CEO of Reviva. "We were also pleased to recently present new preclinical data at ISID for our novel topical formulation of brilaroxazine, brilaroxazine lipogel, demonstrating promising potential for the treatment of psoriasis. We have filed patents for this formulation and its use in psoriasis and intend to submit an investigational new drug application (IND) for brilaroxazine lipogel in psoriasis in 2024 to further explore this therapeutic potential."

First Quarter 2023 Highlights and Recent Business Highlights

Corporate Highlights

- Presented on the liposomal-gel formulation of brilaroxazine and potential in psoriasis at the International Societies for Investigative Dermatology (ISID) Meeting (May 2023)
- Hosted key opinion leader webinar on brilaroxazine for the treatment of schizophrenia, featuring a presentation by Larry Ereshefsky, PharmD (Follow the Molecule LLC) (May 2023)
- Presented foundational preclinical data on brilaroxazine in schizophrenia at the 78th Annual Scientific Convention of the Society of Biological Psychiatry (SOBP) and publication in *Medical Research Archives* (May 2023)

- Filed composition of matter patent for brilaroxazine-lipogel and a separate patent for its use in the treatment of psoriasis (March 2023)

Clinical Program Highlights

- Over 60% of approximately 400 patients have been enrolled in the pivotal Phase 3 RECOVER study evaluating brilaroxazine for schizophrenia, in sites in the United States, Europe and Asia

Anticipated Milestones and Events

- Topline data for pivotal Phase 3 RECOVER trial evaluating brilaroxazine for the treatment of schizophrenia anticipated in mid-2023
- May initiate Phase 2a studies in bipolar disorder, major depressive disorder, and attention deficit hyperactive disorder in second half 2023, subject to the receipt of additional financing
- Submit investigational new drug application (IND) for liposomal-gel formulation of brilaroxazine in psoriasis expected in 2024
- Pursue partnership opportunities for the development of our pipeline
- Evaluate grant and other non-dilutive financing opportunities for our product candidates from federal and state healthcare agencies and foundations

First Quarter 2023 Financial Results

The Company reported a net loss of approximately $6.6 million, or $0.30 per share, for the three months ended March 31, 2023, compared to a net loss of approximately $7.4 million, or $0.40 per share, for the same period in 2022.

As of March 31, 2023, the Company's cash totaled approximately $11.3 million compared to approximately $18.5 million as of December 31, 2022.

Reviva believes that based on the current operating plan and financial resources, the Company's cash as of March 31, 2023 will be sufficient to fund current operating plans through the third quarter of 2023.

About Reviva's Lead Drug Candidate Brilaroxazine

Brilaroxazine (RP5063) is a new chemical entity with potent affinity and selectivity against key serotonin and dopamine receptors implicated in schizophrenia and its comorbid symptoms. In a multinational, multicenter, double-blind Phase 2 study in 234 patients with acute schizophrenia or schizoaffective disorder, brilaroxazine met its primary endpoint, reducing Positive and Negative Syndrome Scale (PANSS) total score and demonstrating

statistically significant improvements for secondary endpoints evaluating social functioning, and positive and negative symptoms, and directional improvements for depression and cognition. In this completed Phase 2 study, brilaroxazine met all safety endpoints with no weight gain, no increase in blood sugar and lipids, and no cardiac or endocrine adverse effects compared to placebo. A full battery of regulatory compliant toxicology and safety pharmacology studies has been completed for brilaroxazine. The U.S. Food and Drug Administration (FDA) has agreed to consider a potential superior safety label claim if there is a positive outcome on a relevant endpoint in a pivotal Phase 3 study in patients with schizophrenia. 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 efficacy for pulmonary arterial hypertension (PAH) and idiopathic pulmonary fibrosis (IPF), with mitigation of lung fibrosis and inflammation in translational animal models. Reviva believes brilaroxazine has the potential to delay disease progression in PAH and IPF and intends to develop brilaroxazine for these pulmonary indications. Brilaroxazine has already received Orphan Drug Designation from the U.S. FDA for the treatment of these conditions.

To learn more about the clinical and preclinical data available for brilaroxazine, please visit revivapharma.com/publications.

About Reviva

Reviva is a clinical-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 (U.S.), 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 timing of data and other information related to the Company's RECOVER Phase 3 trial, cash runway, product development, including intentions and plans with respect to current or future product candidates, and studies, applications, and partnership and financing opportunities with respect thereto, expectations and beliefs about our products including statements regarding therapeutic potential and efficacy, 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 detailed in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, and those set forth in the Company's other filings with the Securities and Exchange Commission from time to time. 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.

Corporate Contact:
Reviva Pharmaceuticals Holdings, Inc.
Laxminarayan Bhat, PhD
www.revivapharma.com

Investor Relations Contact:
LifeSci Advisors, LLC
Bruce Mackle
bmackle@lifesciadvisors.com

REVIVA PHARMACEUTICALS HOLDINGS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

March 31, 2023 and December 31, 2022

	March 31, 2023	December 31, 2022
Assets		
Cash and cash equivalents	$ 11,255,552	$ 18,519,856
Prepaid expenses and other current assets	1,645,971	403,819

Total Assets	**$ 12,901,523**	**$ 18,923,675**
Liabilities and Stockholders' Equity		
Liabilities		
Current liabilities:		
Short-term debt	$ 667,500	$ –
Accounts payable	2,860,578	3,520,271
Accrued expenses and other current liabilities	3,032,159	2,519,569
Total current liabilities	6,560,237	6,039,840
Non-current liabilities:		
Warrant liabilities	556,313	567,439
Total Liabilities	**7,116,550**	**6,607,279**
Commitments and contingencies (Note 8)		
Stockholders' equity		
Common stock, par value of $0.0001; 115,000,000 shares authorized; 20,452,121 and 20,447,371 shares issued and outstanding as of March 31, 2023, and December 31, 2022, respectively	2,045	2,045
Additional paid-in capital	103,556,732	103,485,612
Accumulated deficit	(97,773,804)	(91,171,261)
Total stockholders' equity	**5,784,973**	**12,316,396**
Total Liabilities and Stockholders' Equity	**$ 12,901,523**	**$ 18,923,675**

REVIVA PHARMACEUTICALS HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
For the Three Months Ended March 31, 2023 and 2022

	Three Months Ended March 31,	
	2023	**2022**
Operating expenses		
Research and development	$ 5,234,999	$ 5,830,018
General and administrative	1,500,554	1,620,139
Total operating expenses	6,735,553	7,450,157
Loss from operations	(6,735,553)	(7,450,157)
Other income (expense)		
Gain on remeasurement of warrant liabilities	11,126	89,010
Interest expense	(7,655)	–
Interest income	147,011	1,735
Other expense	(14,494)	(1,967)
Total other (expense) income, net	135,988	88,778
Loss before provision for income taxes	(6,599,565)	(7,361,379)
Provision for income taxes	2,978	3,629

Net loss	$ (6,602,543)	$ (7,365,008)
Net loss per share:		
Basic and diluted	$ (0.30)	$ (0.40)
Weighted average shares outstanding		
Basic and diluted	21,833,598	18,466,586