Reviva Reports Full Year 2023 Financial Results and Recent Business Highlights

– RECOVER-1 Phase 3 global trial successfully met all primary and secondary endpoints with statistically significant reductions across all major symptom domains in schizophrenia –

– Initiation of registrational RECOVER-2 trial expected in the second quarter of 2024; topline data expected Q2 2025 –

– Topline data from 1-year open-label extension (OLE) trial expected Q4 2024 –

– Most non-clinical activities completed and preparation is underway to support a New Drug Application (NDA) submission for brilaroxazine in schizophrenia targeted for Q3 2025 –

CUPERTINO, Calif., April 15, 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 reported financial results for the full year ended December 31, 2023 and summarized recent business highlights.

"2023 was an exciting and productive year for Reviva that included significant progress in the late-stage development of our brilaroxazine program for schizophrenia. Building on the clinical momentum in 2023, we plan to initiate a registrational RECOVER-2 Phase 3 trial in the second quarter of 2024 which will replicate the successful trial design of our positive pivotal RECOVER-1 Phase 3 trial," said Laxminarayan Bhat, Ph.D., Founder, President, and CEO of Reviva. "In the year ahead, we also expect topline data from our 1-year OLE trial in the fourth quarter which will inform on the long-term safety and efficacy of brilaroxazine. With these important trials advancing and most non-clinical activities complete, we are targeting a potential NDA submission in the third quarter of 2025."

Full Year 2023 and Recent Business Highlights

Corporate Highlights

- Hosted key opinion leader (KOL) webinar on topline RECOVER-1 Phase 3 data for brilaroxazine and the unmet medical need and current treatment landscape for schizophrenia, featuring presentations by Larry Ereshefsky, PharmD, BCPP, FCCP, of Follow the Molecule and Mark Opler, PhD, MPH of WCG (February 2024)
- Completed $30 million registered direct offering (November 2023)
- Joined the Russell Microcap® Index with automatic inclusion in the appropriate growth and value style indexes (June 2023)

- Hosted KOL webinar on brilaroxazine for the treatment of schizophrenia, featuring a presentation by Larry Ereshefsky, PharmD (Follow the Molecule LLC) (May 2023)

Clinical Program Highlights

- Announced positive topline results and successful completion of Reviva's pivotal Phase 3 RECOVER-1 trial evaluating the efficacy, safety and tolerability of once-daily brilaroxazine in adults with schizophrenia (October 2023)
    - Trial successfully met its primary endpoint, with brilaroxazine at the 50 mg dose achieving a statistically significant and clinically meaningful 10.1-point reduction in Positive and Negative Syndrome Scale (PANSS) total score compared to placebo (-23.9 brilaroxazine 50 mg vs. -13.8 placebo, $p<0.001$) at week 4.
    - Brilaroxazine achieved statistically significant and clinically meaningful reductions in all major symptom domains and secondary endpoints at week 4 with the 50 mg dose vs. placebo.
    - The 15 mg dose of brilaroxazine was numerically superior to placebo on the primary endpoint and most secondary endpoints and reached statistical significance on two key secondary endpoints.
    - Generally well-tolerated with a side effect profile comparable to placebo for the 15 and 50 mg doses of brilaroxazine; discontinuation rates for brilaroxazine lower than placebo.
- Presented promising clinical pharmacology and safety data for brilaroxazine at the American Society for Pharmacology and Experimental Therapeutics (ASPET) 2023 annual meeting (May 2023)

Preclinical Program Highlights

- Announced positive preclinical data for brilaroxazine in idiopathic pulmonary fibrosis (IPF) at the 2023 American Thoracic Society (ATS) International Conference and publication in Medical Research Archives (May 2023)
- Presented on preclinical data on the potential of a brilaroxazine liposomal-gel formulation in psoriasis at the International Societies for Investigative Dermatology (ISID) Meeting (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)

Anticipated Milestones and Events

- Initiation of registrational Phase 3 RECOVER-2 trial evaluating brilaroxazine for the treatment of schizophrenia expected in Q2 2024

- Topline data from 1-year open-label extension (OLE) trial expected Q4 2024
- Topline data from registrational Phase 3 RECOVER-2 trial expected Q2 2025
- Potential NDA submission for brilaroxazine in schizophrenia targeted for Q3 2025
- May initiate Phase 2a studies in bipolar disorder, major depressive disorder, and attention deficit hyperactive disorder in 2024
- Investigational new drug application (IND) submission for liposomal-gel formulation of brilaroxazine in psoriasis expected in 2025
- 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

Financial Results for 2023 and Restatement

For the year ended December 31, 2023, net loss was approximately $39.3 million, or $1.65 per share, compared to approximately $28.3 million, or $1.45 per share, for the year ended December 31, 2022 (as restated).

As of December 31, 2023, the Company's cash and cash equivalents totaled approximately $23.4 million compared to approximately $18.5 million as of December 31, 2022.

The financial and related data for 2022 included in this press release, including in this "Financial Results" section and in the attached tables, is reflective of the restatement adjustments to the Company's previously issued financial statements for the year ended December 31, 2022. As previously disclosed, on April 12, 2024, the Company concluded that the Company's previously issued financial statements for the restatement periods, including the fiscal year ended December 31, 2022, should be restated to correct historical errors due primarily to the Company's failure to properly review and evaluate expenses incurred in those clinical trial contracts resulting in the Company not properly accruing for clinical trial expenses that were incurred but for which invoices were not yet received. This impacted the Company's previously-issued financial statements for the year ended December 31, 2022, which had understated by approximately $3.9 million certain R&D expenses and associated accrued liabilities, representing the under accrual of clinical expenses which would have otherwise been accounted for in the year ended December 31, 2023. The financial information in this press release has been updated to reflect the effects of the restatement adjustments.

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-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 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, clinical and regulatory timelines and expenses, planned or additional studies, planned or intended regulatory submissions, 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, 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.

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

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

Media Contact:
Kristin Politi
kpoliti@lifescicomms.com
(646) 876-4783

REVIVA PHARMACEUTICALS HOLDINGS, INC.
CONSOLIDATEDBALANCE SHEETS

	December 31, 2023	December 31, 2022 (As restated)
Assets		

Cash and cash equivalents	$ 23,367,456	$ 18,519,856
Prepaid expenses and other current assets	332,932	403,819
Total Assets	**$ 23,700,388**	**$ 18,923,675**
Liabilities and Stockholders' Equity		
Liabilities		
Accounts payable	$3,849,108	$3,520,271
Accrued clinical expenses	11,966,812	5,578,374
Accrued compensation	958,607	564,646
Other accrued liabilities	400,490	298,699
Total current liabilities	17,175,017	9,961,990
Warrant liabilities	806,655	567,439
Total Liabilities	**17,981,672**	**10,529,429**
Commitments and contingencies		
Stockholders' Equity		
Common stock, par value of $0.0001; 115,000,000 shares authorized; 27,918,560 and 20,447,371 shares issued and outstanding as of December 31, 2023 and 2022, respectively	2,792	2,045
Preferred Stock, par value of $0.0001; 10,000,000 shares authorized; 0 shares issued and outstanding as of December 31, 2023 and 2022	–	–
Additional paid-in capital	140,070,172	103,485,612
Accumulated deficit	(134,354,248)	(95,093,411)
Total stockholders' equity	**5,718,716**	**8,394,246**
Total Liabilities and Stockholders' Equity	**$ 23,700,388**	**$ 18,923,675**

REVIVA PHARMACEUTICALS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
For the Years Ended December 31, 2023 and 2022

	Year Ended December 31,	
	2023	**2022**
		(As restated)
Operating expenses		
Research and development	$ 31,419,817	$ 22,870,024
General and administrative	8,083,819	5,358,734
Total operating expenses	39,503,636	28,228,758
Loss from operations	(39,503,636)	(28,228,758)
Other income (expense)		
Loss on remeasurement of warrant liabilities	(239,216)	(194,709)
Interest and other income, net	498,964	182,802

Total other income (expense), net	259,748	(11,907)
Loss before provision for income taxes	(39,243,888)	(28,240,665)
Provision for income taxes	(16,949)	(20,777)
Net loss	$(39,260,837)	$(28,261,442)
Net loss per share:		
Basic and diluted	$ (1.65)	$ (1.45)
Weighted average shares outstanding		
Basic and diluted	23,798,203	19,516,479

REVIVA PHARMACEUTICALS HOLDINGS, INC.
RESTATEMENT ADJUSTMENTS
For the Years Ended December 31, 2022

Balance Sheet and Statement of Changes in Stockholders' Equity	December 31, 2022 As Previously Reported	Adjustment	December 31, 2022 As Restated
Accrued clinical expenses	$1,656,224	$3,922,150	$5,578,374
Total current liabilities	6,039,840	3,922,150	9,961,990
Total liabilities	6,607,279	3,922,150	10,529,429
Accumulated deficit	(91,171,261)	(3,922,150)	(95,093,411)
Total Stockholders' Equity	12,316,396	(3,922,150)	8,394,246

Statement of Operations	Year Ended December 31, 2022 As Previously Reported	Adjustment	Year Ended December 31, 2022 As Restated
Research and development	$ 18,947,874	$ 3,922,150	$ 22,870,024
Total operating expenses	24,306,608	3,922,150	28,228,758
Loss from operations	(24,306,608)	(3,922,150)	(28,228,758)
Net loss	(24,339,292)	(3,922,150)	(28,261,442)
Basic and diluted	$ (1.25)	$ (0.20)	$ (1.45)

Statement of Cash Flows	Year Ended December 31, 2022 As Previously Reported	Adjustment	Year Ended December 31, 2022 As Restated

Cash flows from operating activities			
Net loss	$ (24,339,292)	$ (3,922,150)	$ (28,261,442)
Adjustments to reconcile net loss to net cash used in operating activities			
Changes in operating assets and liabilities			
Accrued expenses and other current liabilities	684,341	3,922,150	4,606,491
Net cash used in operating activities	(18,960,581)	–	(18,960,581)