(Nasdaq: RVPH)

Reviva Pharmaceuticals

Corporate Presentation

December 2025

Forward-Looking Statements

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Reviva Clinical Development Pipeline

			Discovery	Preclinical	Phase I	Phase II	Phase III	Est. Market Opportunity ($B)
Brilaroxazine – Serotonin/ dopamine modulator (NCE)	Neuropsychiatric	Schizophrenia						$15.9[1]
		Bipolar Disorder						$15.6[2]
		Major Depressive Disorder						$15.8[3]
		Attention Deficit Hyperactivity Disorder						$30.2[4]
	Inflammatory	Pulmonary Arterial Hypertension						$13.4[5]
		Idiopathic Pulmonary Fibrosis						$8.6[6]
		Psoriasis (topical gel)						$68.24[7]
RP1208 – Triple reuptake inhibitor (NCE)		Depression						$26.4[8]
		Obesity						$130.0 [9]

**Opportunity to expand into other indications including Parkinson's Psychosis and Alzheimer's (Psychosis/agitation)*

(1) Schizophrenia by 2035, per IMARC Schizophrenia Market Forecast 2025. (2) Bipolar Disorder by 2034, per Towards Healthcare Forecast Nov-2025. (3) MDD by 2034, per Future Market Insights 2025. (4) ADHD by 2034, per Polaris Market Research Jun-2025. (5) PAH by 2034 per Precedence Research Nov-2025. (6) IPF by 2033, per Straits Research Jun-2025. (7) Psoriasis by 2034, per Precedence Research Dec-2025. (8) Depression by 2034, per Emergen Research Jun-2025. (9) Obesity by 2034 per IQVIA Jul-2025

Schizophrenia: Common Psychiatric Condition With Multiple Symptom Domains

- Affects ~1.1% of the world's population
  - ~ 24 million globally; ~ 3.5 million people in USA
- Mix of heterogenous psychotic symptoms with varying degrees of severity
- Most patients requires lifelong treatment

Key Unmet Needs:

~30% of patients are treatment refractory

High treatment discontinuation rate (30-74%)

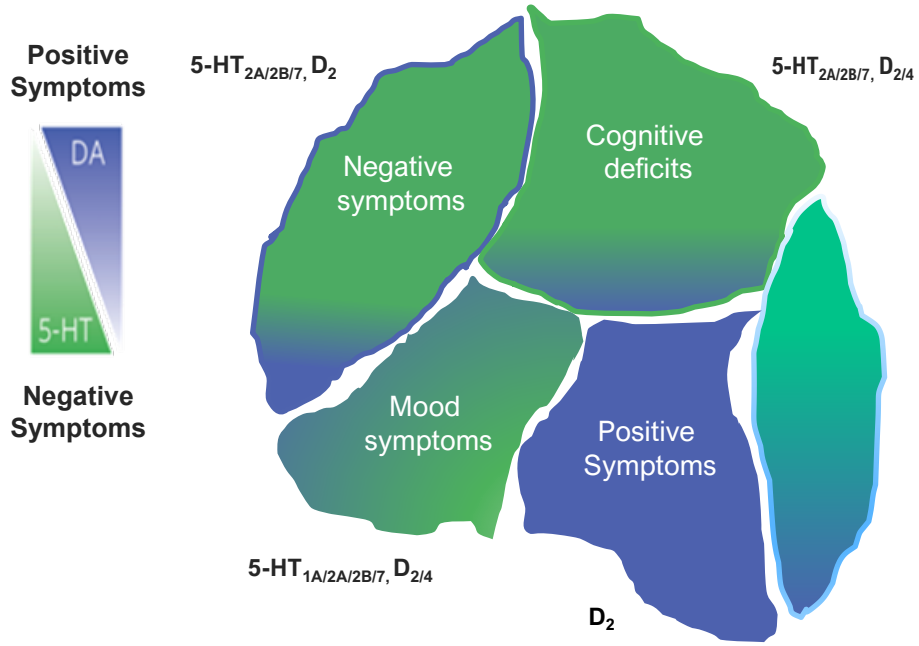
Relapse rate ~25% in 1 year and ~90% in 5 years

Treating neuroinflammation, a major contributing factor

Negative symptoms and nonadherence to treatment

Major Symptom Domains of Schizophrenia

Primarily driven by dysfunctional serotonin and dopamine signaling

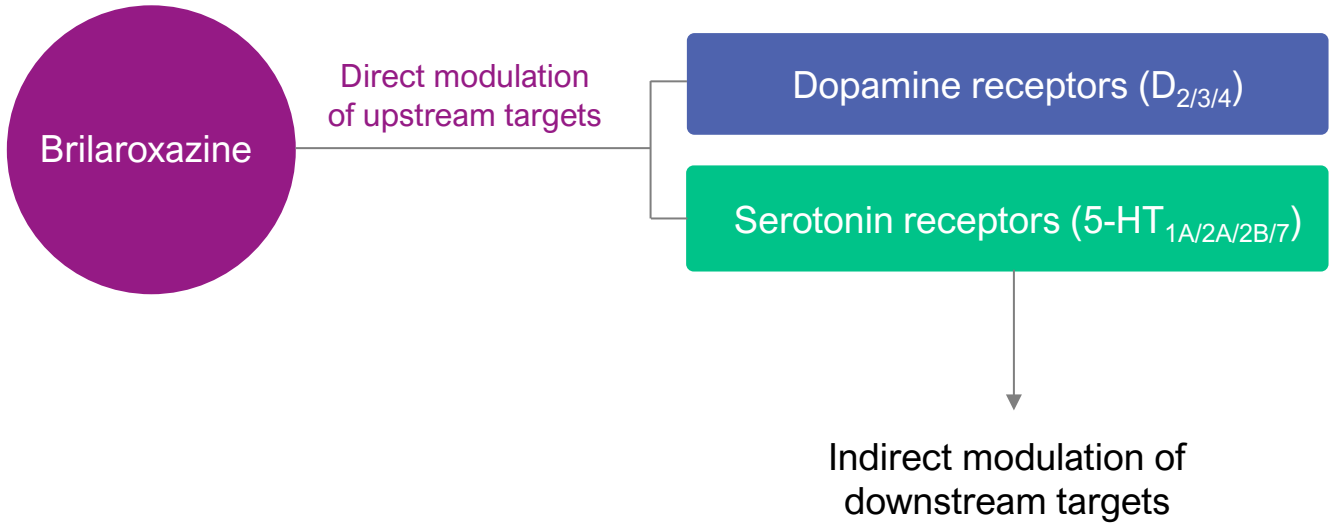


D = Dopamine signaling/ and 5-HT = Serotonin signaling
Negative symptoms include social withdrawal, avolition, alogia, anhedonia, disorganized behavior, and poor self-care.

Source: Delveinsight Market Research 2023; https://www.mentalhelp.net/schizophrenia/statistics/; https://www.who.int/news-room/fact-sheets/detail/mental-disorders; https://fherehab.com/schizophrenia/statistics; https://www.nimh.nih.gov/health/statistics/schizophrenia; Kane JM et al. J Clin Psychology 2019, 80(2):18com12123..Divroye C et al. Neuropsychopharmacology 2016, 109:59068; peng l et al. Expert Review of Neurotherapeutics 2018, 18(5):435-442; Nikiforuk et al. CNS Drugs 2015, 29:265-275; Tan T et al. Schizophrenia Bulletin 2017, 45(5):1012-1023; Horvitz-Lennon et al. Am J Psych 2017, 17(5):421-426; Bhat L, et al. Medical Research Archives 2023, 11(4):3834.

Brilaroxazine: Novel Serotonin-Dopamine & Neuroinflammatory Signaling Modulator

Multi-faceted direct and indirect activities on critical pathways implicated in schizophrenia



Brilaroxazine Receptor Activities

High (Ki, nM)*	Dopamine D_2	0.47
	Dopamine D_3	3.7
	Dopamine D_4	6
(5-HT_{2B} > D_2)	Serotonin 5-HT_{1A}	1.5
	Serotonin 5-HT_{2A}	2.5
	Serotonin 5-HT_{2B}	**0.19**
	Serotonin 5-HT_7	2.7
Moderate (Ki, nM)	Nicotine $\alpha_4\beta_2$	36.3
	Serotonin 5-HT_6	51
Weak or no significant activity	No significant activities at therapeutic dose for off-targets 5-HT_{2C}, $\alpha_{1,2,}$ and $M_{1\text{-}4}$ implicated in cardiometabolic, metabolic, or GI side effects	

**partial agonists for $D_{2,3,4}$ and 5-$HT_{1A/2A}$ receptors*

Inflammatory cytokines

Implicated in inflammation and immune dysfunction

Nicotinic receptors

Implicated in positive symptoms and cognition

NMDA/Glycine receptors

Implicated in negative symptoms and cognition

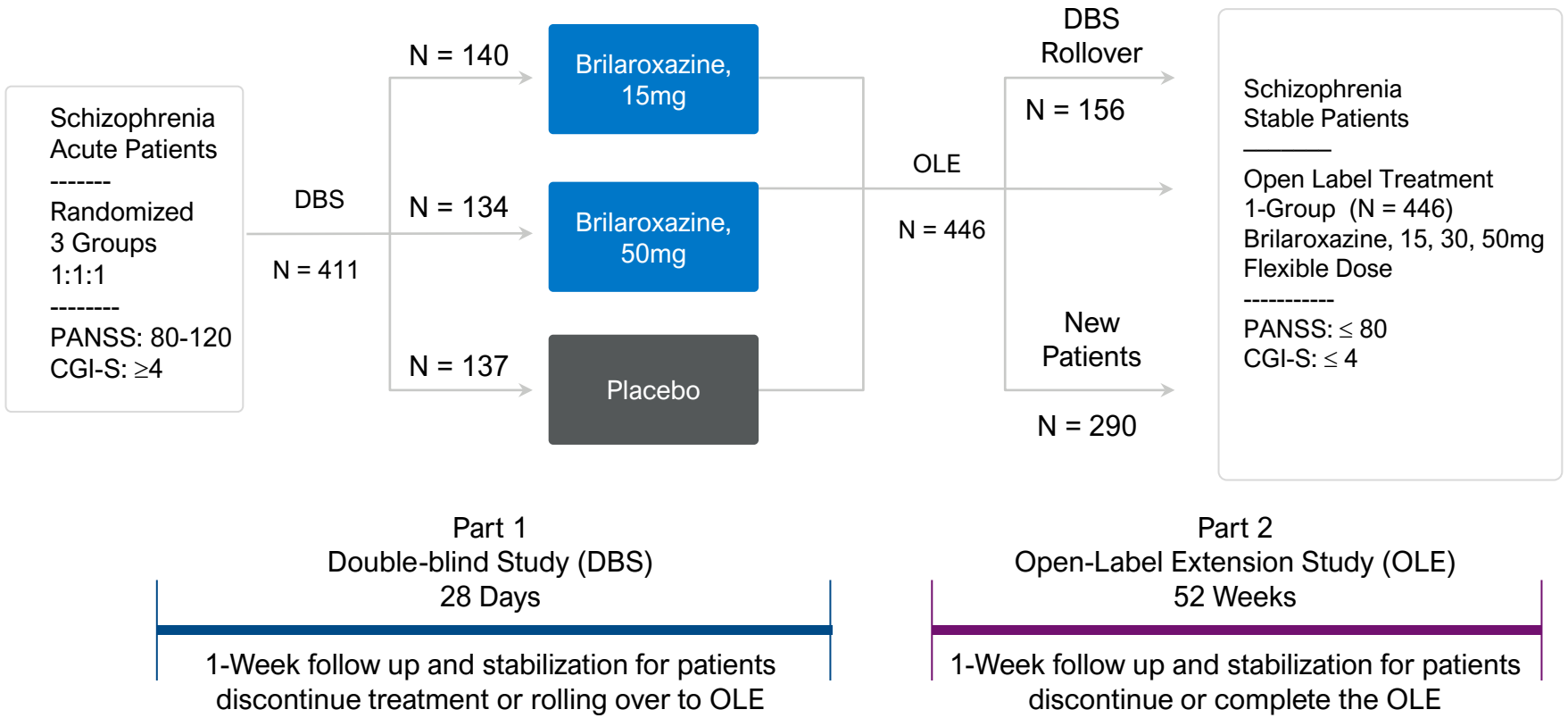
GABA receptors

Implicated in mood

Bhat L, et al. Medical Research Archives 2023, 11(4):3834; Rajagopal et al, Behavioral Brain Research 2017, 332;180-199

Brilaroxazine Phase 3 RECOVER Trial For Schizophrenia

Phase 3, Randomized, 28 Days, Double-blind, Placebo-controlled, Multicenter Study to Assess the Safety and Efficacy of Brilaroxazine in Subjects with an Acute Exacerbation of Schizophrenia, Followed by a 52-Week Open-label Extension



Study Overview

Primary Endpoint (DBS):
Reduction in total PANSS at the end of treatment in a brilaroxazine arm from baseline versus placebo

Safety (DBS, OLE):
Clinical, labs, body weight, lipids, fasting glucose, prolactin

Pharmacokinetics:

Population pharmacokinetics

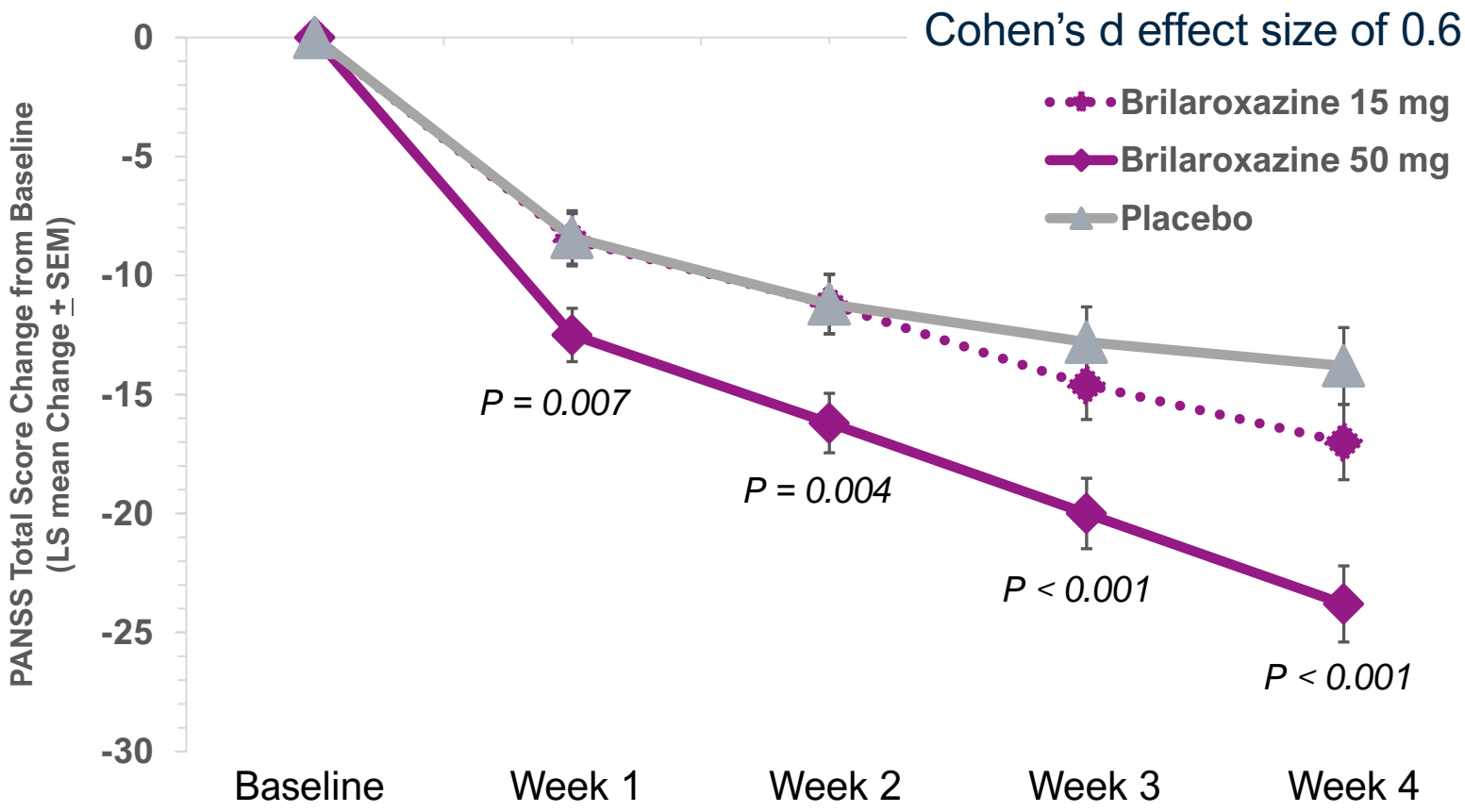
For details see: www.clinicaltrials.gov (search key word, RP5063)

Brilaroxazine Phase 3 RECOVER Trial Primary Endpoint: PANSS Total Score

10.1-point reduction in PANSS total score vs. placebo, p <0.001 (-23.9 brilaroxazine 50 mg vs. -13.8 placebo)

Decrease in PANSS Total Score

- Successfully met PANSS Total Score primary endpoint for brilaroxazine 50 mg
- Separation for brilaroxazine 50 mg from placebo within a week
- Brilaroxazine 15 mg numerically separated from placebo
- Results further supported by vocal and blood biomarkers data

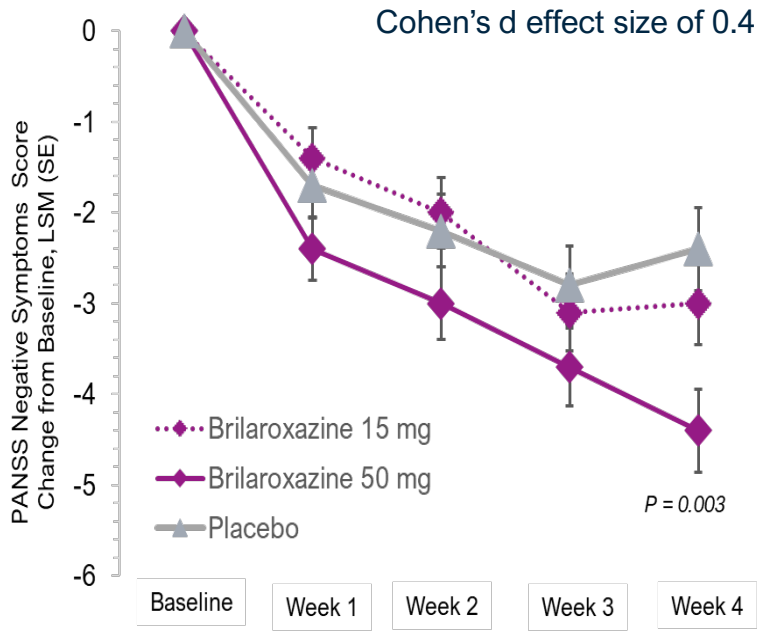


Bhat L et al ASCPT 2024 (Poster #LB008) and SIRS 2024 (Poster #T291)
PANSS: Positive and Negative Syndrome Scale

Phase 3 RECOVER Trial Efficacy for Negative Symptoms

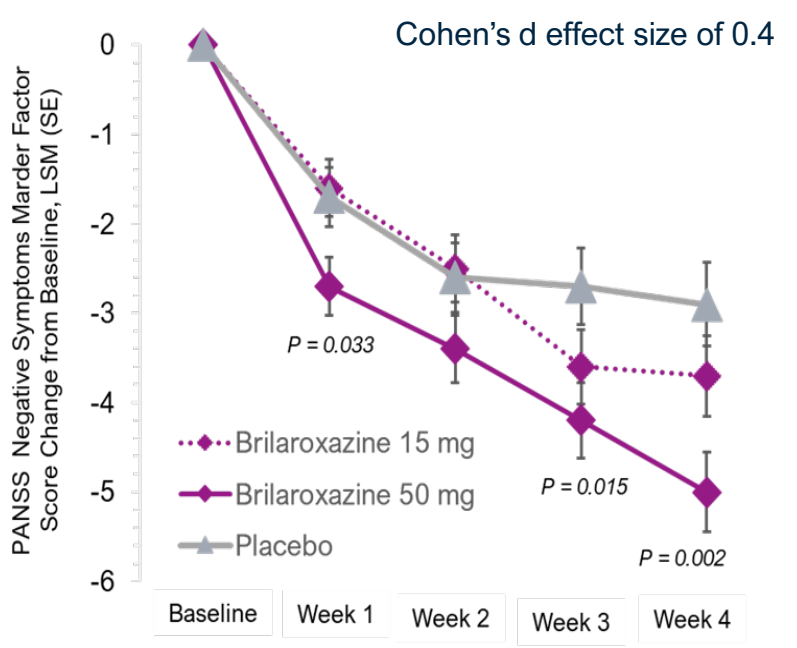
Significant efficacy for negative symptoms further supported by voice biomarker (VB)

PANSS Negative Symptom Scores



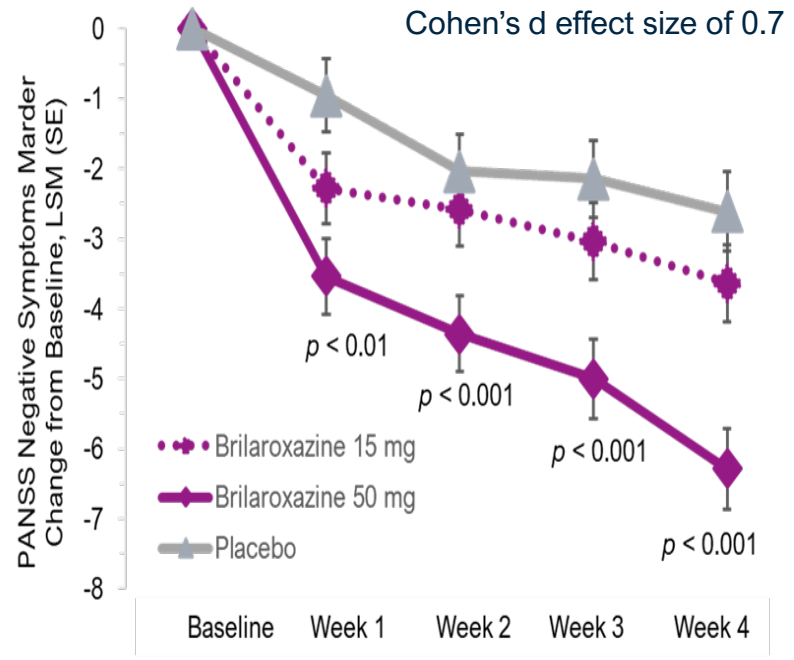
- 2.0 points decrease in Brila-50mg vs placebo (P=0.003) over 4 weeks
- Early onset strong and progressive efficacy

PANSS Negative Marder Scores



- 2.1 points decrease in Brila-50mg vs placebo (P=0.002) over 4 weeks
- Early onset strong and progressive efficacy
- *Significant improvement in Marder scores for depression, hostility & disorganized thoughts*

PANSS Negative Marder Scores in VBP



- 3.7 points decrease in Brila-50mg vs placebo (P= <0.001) over 4 weeks in VB positive patients
- Early onset strong and progressive efficacy
- *Significant improvement in Marder scores for depression, hostility & disorganized thoughts*

Cohen et al . Biological Psychiatry , 2026 (accepted)

Brilaroxazine Phase 3 Trial: Favorable Efficacy, Safety & Adherence

Early onset with strong broad-spectrum efficacy further supported by vocal biomarker (VBM) & blood biomarkers

	Acute Schizophrenia Patients Brilaroxazine 50mg vs Placebo		Primary Negative Symptom Patients Vocal Biomarker Positive Brilaroxazine 50mg vs Placebo	
Symptom Domains	**Point Improvement***	***Cohen's d Effect Size***	**Point Improvement***	***Cohen's d Effect Size***
PANSS Total Score	-10.1	*0.6*	-15	*0.9*
PANSS Positive Symptoms	-2.8	*0.5*	-3.5	*0.8*
PANSS Negative Symptoms	-2.0	*0.4*	---	---
PANSS Negative Marder Factor	-2.1♦♦	*0.4*	-3.7	*0.6*
PANSS Social Cognition	-1.6	*0.5*	-3.8	*0.8*
PANSS Excitement/Agitation	-2.1	*0.5*	---	---
PANSS Gen Psychopathology	-5.3	*0.6*	---	---
Personal & Social Performance	6.3	*0.5*	6.3	*0.6*
CGI-S Score	-0.5 *(≥1-point in 78%)*	*0.5*	-0.7	*0.7*
Treatment Discontinuation	16% (vs. placebo, 22%)			

Acute Patients Blood Biomarkers
Neurotrophins*
BDNF
Hormones*
Prolactin
Thyroid T3
Cytokines*
IL-6
IL-8
IL-10
IFN-γ/IP-10
TNF-α
MIP-1

*Improved vs placebo

♦Mean Change; ♦♦Significant improvement in Marder scores for depression, hostility, and disorganized thoughts

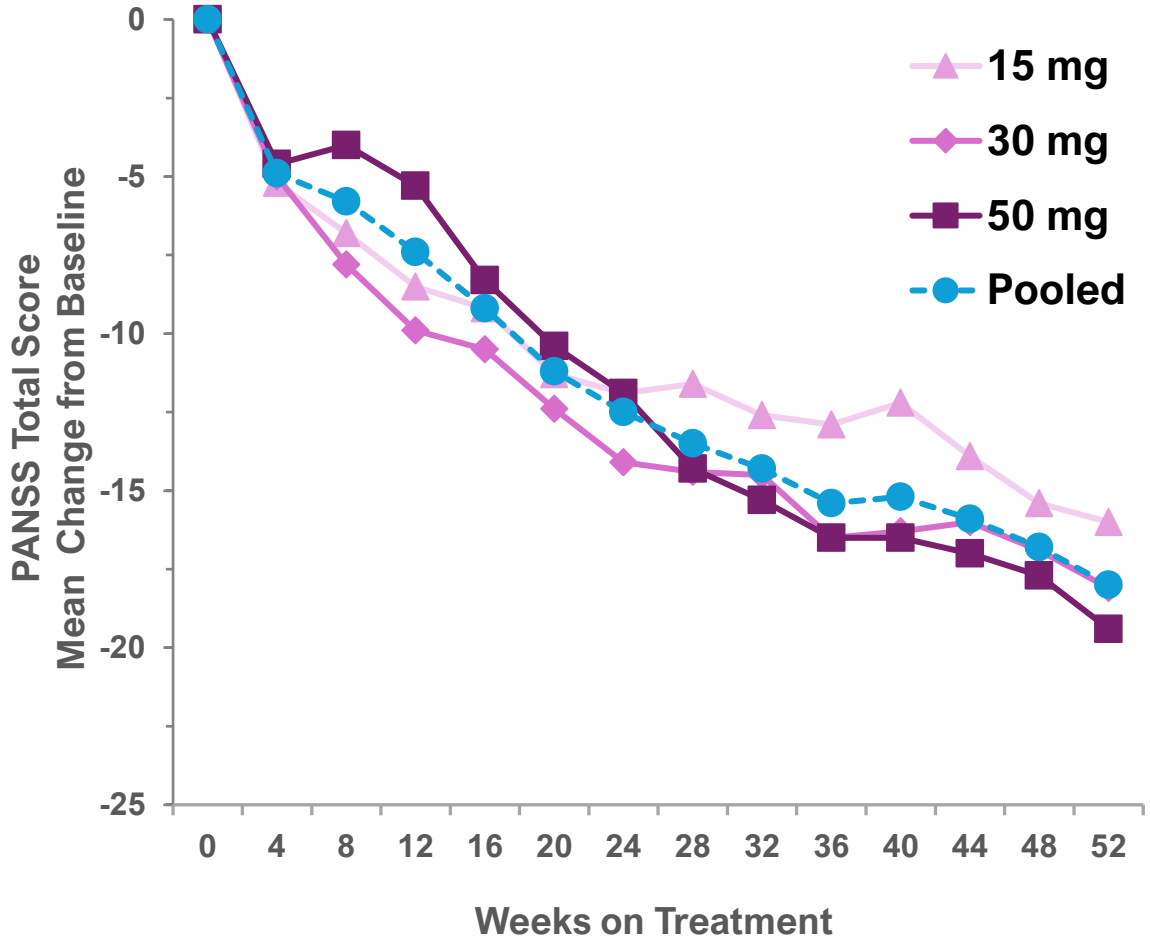
Bhat L et al ASCPT 2024 (Poster #LB008) and SIRS 2024 (Poster #T291); Cohen et al Biological Psychiatry 2026 (accepted)

PANSS Total Score: Progressive & Durable Effect Sustained Over 1-year

18-point decrease with brilaroxazine pooled (15, 30, and 50 mg) at Week-52 vs baseline (*$p \leq 0.0001$; n = 159)

CHANGE IN PANSS TOTAL SCORE

- Strong, progressive and durable effect on PANSS score from acute through maintenance treatment with <1% report of exacerbation or relapse of symptoms over 1-year treatment
- Dose dependent decrease from baseline to Week-52 (1-year)
  - 16.0-point decrease in 15 mg (61.2 → 45.2)
  - 18.1-point decrease in 30 mg (69.7 → 51.7)
  - 19.4-point decrease in 50 mg (75.6 → 56.2)
  - 18.0-point decrease in pooled (69.9 → 51.8)
- Decrease in PANSS total score in rollover patients (N=50) from the double-blind trial to OLE over 1-year treatment (Baseline to Week-56):
  - 46.1-point decrease in 15 mg (97.4 → 51.3)
  - 49.7-point decrease in 50 mg (102.7 → 53.1)



PANSS: Positive and Negative Syndrome Scale; *P = nominal p-value

Brilaroxazine Phase 3 Trial OLE: Favorable Efficacy and Adherence Results

Progressive and durable broad-spectrum efficacy results across all three doses of brilaroxazine (15, 30 and 50 mg)

Clinically Stable Schizophrenia Patients (N=446, 52 Weeks / 12 Months)

Mean Change from Baseline in Brilaroxazine overall (15+30+50mg)

Symptom Domains	OLE Point Improvement at 6M (N=303)	OLE Point Improvement at 12 M (N=159)	Rollover Patients** DB Trial to OLE Point Improvement at 13 M (N= 50)
PANSS Total Score	-10.7	-18.1	-47.7
PANSS Positive Symptoms	-3.3	-5.0	-14.0
PANSS Negative Symptoms	-2.8	-4.4	-10.5
PANSS Negative Marder Factor	-3.0♦	-4.4♦	-10.5♦
PANSS Social Cognition	-1.5	-2.9	-7.9
PANSS Excitement/Agitation	-1.4	-3.1	-8.3
PANSS Gen Psychopathology	-4.7	-8.7	-23.2
Personal & Social Performance (PSP)	4.5	11.3	32.7
CGI-S Score	-0.4 *(≥1 point in 37%)*	-0.8 *(≥1 point in 59%)*	-2.5 *(≥1 point in 100%)*
Treatment Adherence	Discontinuation rate, 36% *(Historical, up to 80%)*[1]		

Blood Biomarkers

Neurotrophins*
BDNF

Hormones*
Prolactin
Thyroid T3

Cytokines*
IL-6
IL-8
IL-10
IFN-γ/IP-10
TNF-α
MIP-1

*Improved vs Baseline

♦Significant improvement in Marder scores for depression, hostility and disorganized thoughts

*Baseline to EOT, P = ≤0.001; OLE: Open Label Extension; **Brila-15 & 50mg patients rolled over from DB to OLE;

[1]*Khandkar R et al. Schizophrenia Res. 2025, 283:152-162; Desai R et al. JMCP 2019, 25(1):37-44*

Brilaroxazine Phase 3 RECOVER Trial Safety Data Over 52 Weeks / 1-year

Acute Schizophrenia (Double-blind, 4-week) and Stable Schizophrenia (Open-label, 52-week)

Adverse Events	Acute Schizophrenia (N=411, 4-Week)		Stable Schizophrenia (N=446, 52-Week)	
	Placebo (N=137)	Brila-50 mg (N=134)	Brila-50 mg (N=148)	Brila-(Pool:15+30+50mg) (N=446)
Number of subjects with any TEAE	58 (42.3%)	62 (46.3%)	67 (45.3%)	166 (37.2%)
TEAE occurring in >2% participants				
Headache	3 (2.2%)	7 (5.2%)	4 (2.7%)	12 (2.7%)
Insomnia	3 (2.2%)	2 (1.5%)	10 (6.8%)	18 (4.0%)
Somnolence	3 (2.2%)	10 (7.5%)	0	0
Metabolic Changes (weight and lipids), TEAE				
Body Weight Change in kg, Mean (SD)	0.90 (2.9)	2.5 (3.5)	1.0 (3.7)	0.89 (3.4)
≥7% Increase in Body Weight, n (%)	4 (2.9)	8 (5.9)	6 (4.1%)	11 (2.5%)
Cholesterol change in mg/dl, Mean (SE)	2.3 (2.61)	–5.1 (2.4)*	–9.0 (2.36)	–7.0 (1.36)
LDL change in mg/dL, Mean (SE)	3.0 (2.17)	–6.1(1.97)*	–9.8 (2.04)	–6.9 (1.19)
HDL change in mg/dL, Mean (SE)	–2.4 (0.89)	0.2 (1.19)	0.4 (0.79)	–0.3 (0.44)
Extrapyramidal Symptoms, TEAE				
Barnes Akathisia Rating Score, Mean (SD)	0.1 (0.35)	0.0 (0.19)	0.0	0.0
Abnormal Involuntary Movement Score, Mean (SD)	0.0 (0.48)	-0.0 (0.28)	-0.0 (0.31)	-0.0 (0.36)
Simpson-Angus Score, Mean (SD)	0.3 (0.71)	0.2 (0.48)	0.0	0.0

TEAE = Treatment Emergent Adverse Event; Brila = Brilaroxazine

**P ≤0.05 vs Placebo*

Reviva PHARMACEUTICALS

RECOVER DB Trial Efficacy & Safety Biomarker: Reduction in Elevated Prolactin

Clinically significant decrease in elevated prolactin in brilaroxazine (15 and 50mg) vs placebo over 4-week

Decrease in Elevated Serum Prolactin Levels

- Clinically significant decrease on Day 14 and Day 28 in brilaroxazine (15 and 50 mg) vs placebo
- Elevated prolactin reduced to normal level* in 4 weeks and maintained the normal level over 1 year

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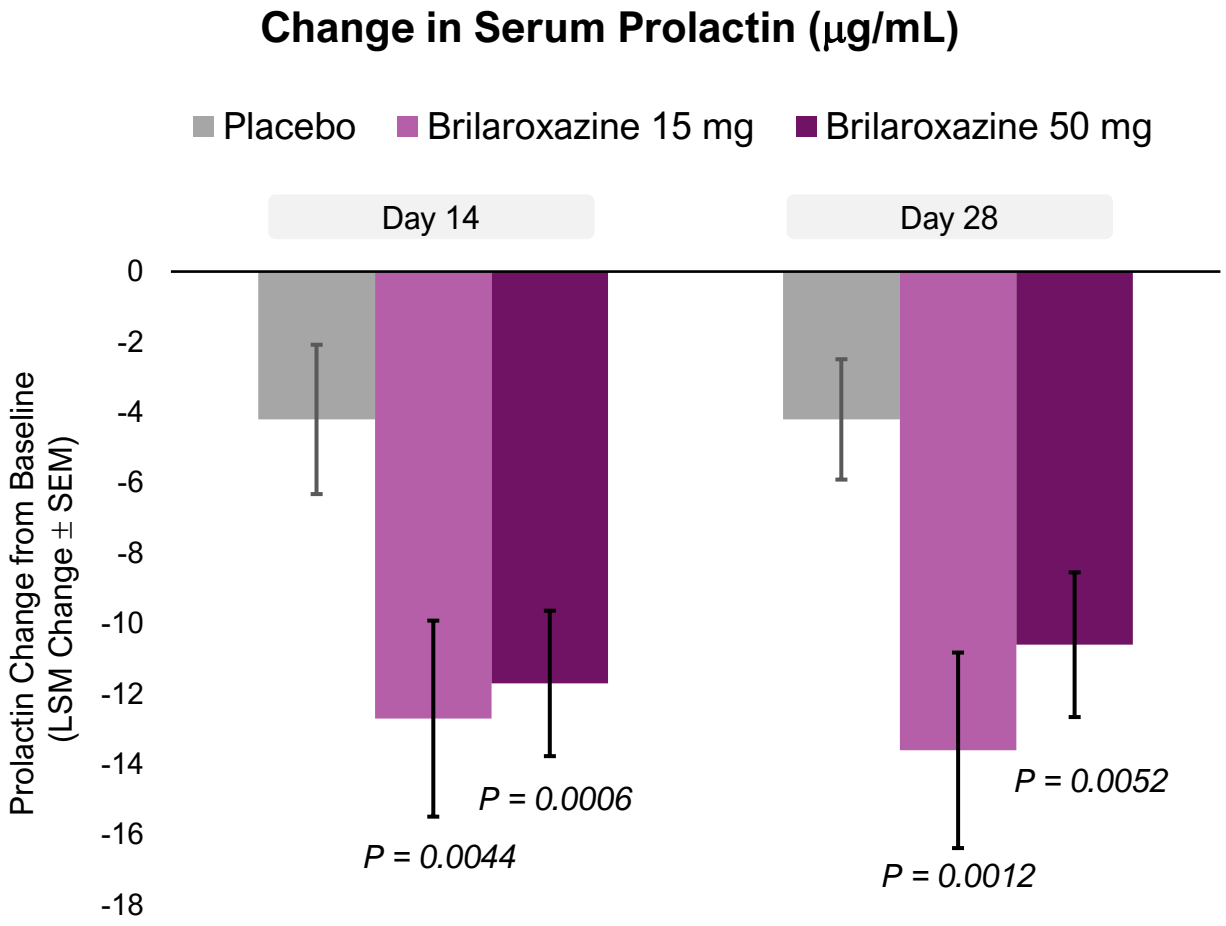
Hyperprolactinemia is:

- a common condition in schizophrenia/psychiatric disorders
- associated with immune disorders / diseases and believed to play crucial role in their pathogenesis
- associated with weight gain, breast tenderness and enlargement, sexual dysfunction (lack of libido) in both men and women, and erectile dysfunction in men

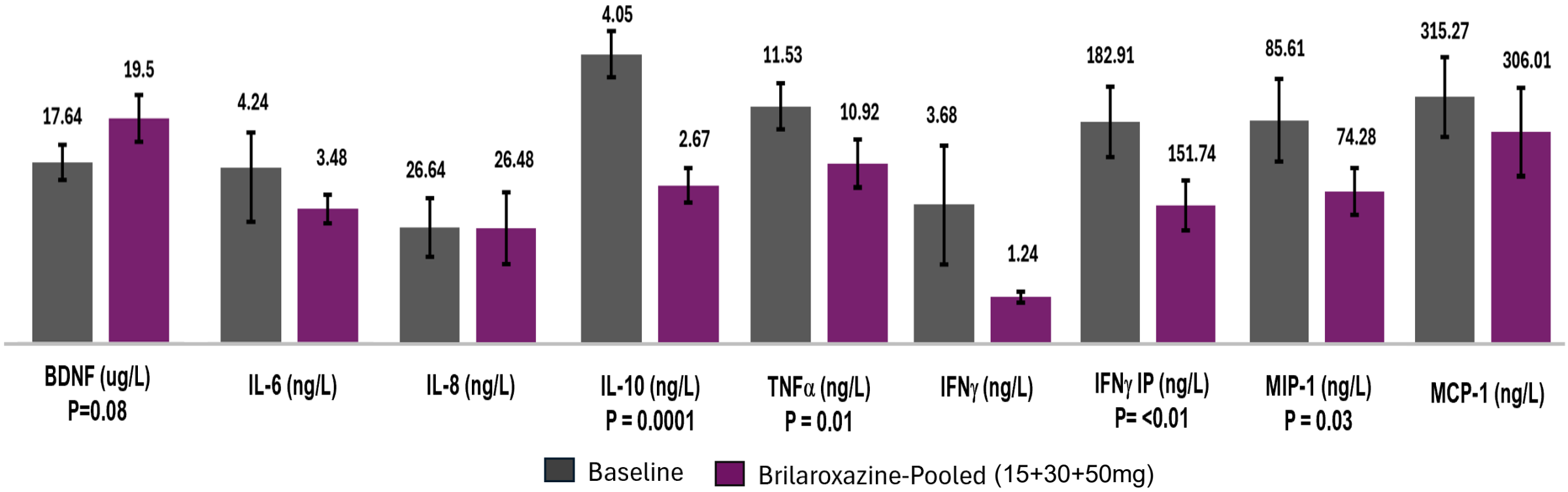


*Normal blood level of prolactin in men, <15 µg/L and in female (not pregnant), <20 µg/L

Bhat L et al ASCPT 2024 (Poster #LB008) and SIRS 2024 (Poster #T291)
Kadiri SK et al. BMS-EMIDDT 2025, e18715303352625; Borba VV et al. Front Immunol. 2018, 9:73; Rajkumar RP. Schizophrenia Research & Treatment 2014:175360.

Brilaroxazine Phase 3 RECOVER OLE Trial Inflammatory Biomarker Data

Increase in BDNF & decrease in inflammatory cytokines and chemokines over 12 months



Bhat L et al. Brilaroxazine treatment effect on BDNF and inflammatory cytokines in schizophrenia. Society for Neuroscience Annual Meeting 2025, Abstract #16342 / Poster Board #LBP097

Reduced BDNF is implicated in cognitive and memory impairments in schizophrenia and depression

Elevated proinflammatory cytokines IL-6, IL-8, IL-10, TNFα, IFNγ, IFNγ -IP, and MIP-1 reported in schizophrenia, bipolar and depression patients

Chemokine MCP-1 dysregulation is associated with neuroinflammation in schizophrenia

Liberona et al Int J Mol Sci 2024, 25:11204; Li et al. Front Psych 2024, 15:1417213; Reale et al. Front Psych 2021, 12:536257; Ermakov et al. Int J Mol Sci 2023, 24(3):2215

Brilaroxazine: Strong Efficacy Results & Generally Well-Tolerated with Favorable Discontinuation Over 1-Year

RECOVER Phase 3 trials in acute and stable schizophrenia patients (total patients enrolled, N=857)

Strong, Durable Efficacy Results	Demonstrated a significant, sustained, and durable broad-spectrum efficacy results in both acute and stable schizophrenia patients with <1% patients reported symptom relapse on treatment over 1-year. Favorable treatment adherence observed both in acute and stable patients
Well-Tolerated over 1 year	Generally safe and well-tolerated after 1-year of treatment. Most common TEAEs (>2%) were headache, insomnia, sleep disturbance and tremor. No drug related SAEs or major safety concerns.
No Motor Side Effects	No clinically meaningful changes in movement disorder scales used for evaluating motor side effects such as akathisia and extrapyramidal symptoms
Low Metabolic Side Effects	Benign weight gain (1.52 kg) in pooled dose group over 1 year; not dose dependent with least weight gain (1.28 kg) at 50 mg dose. Decrease in lipid levels (cholesterol, LDL cholesterol) and no significant change in blood sugar levels
No Endocrine / Sexual Effects	No hormonal imbalance and sexual side effects. Elevated prolactin levels initially during study were significantly reduced to normal or near normal in all three dose groups. Improvement in thyroid hormone levels and sexual function
No Cardiac, GI & Liver Side Effects	No incidence of clinically significant cardiac or gastrointestinal (GI) side effects No incidence of drug induced liver injury (DILI)

TEAE: treatment emergent adverse events; SAE: serious adverse events

Lower Drug-Drug Interactions (DDIs) with Brilaroxazine vs. Standards of Care

DDIs and polypharmacy alter plasma drug concentrations, and can impact efficacy and side effect profiles of a drug[11]

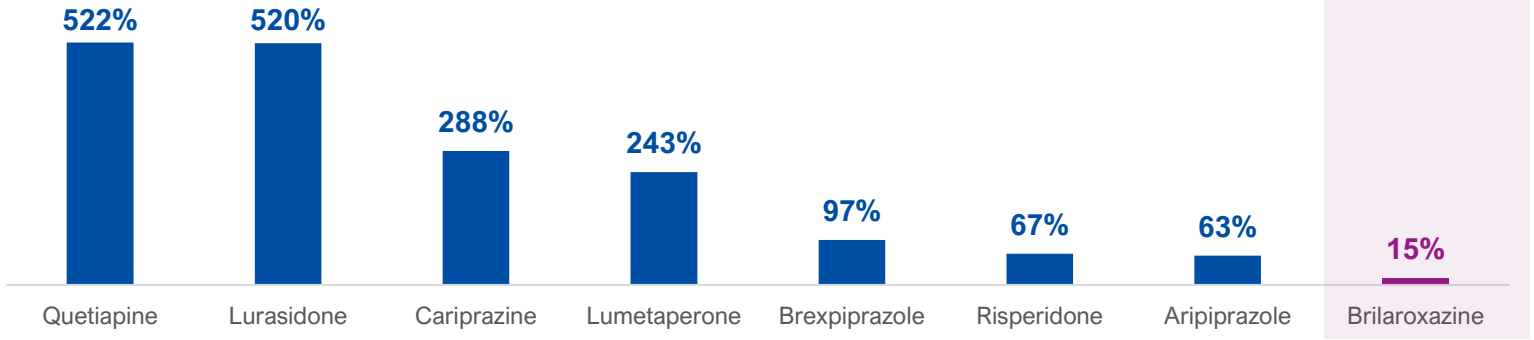
~50% of prescribed drugs and over 25% of approved antipsychotics are known to cause drug interactions in the presence of a strong CYP3A4 inhibitor drug

Change in drug concentration with a CYP3A4 Inhibitor[1]

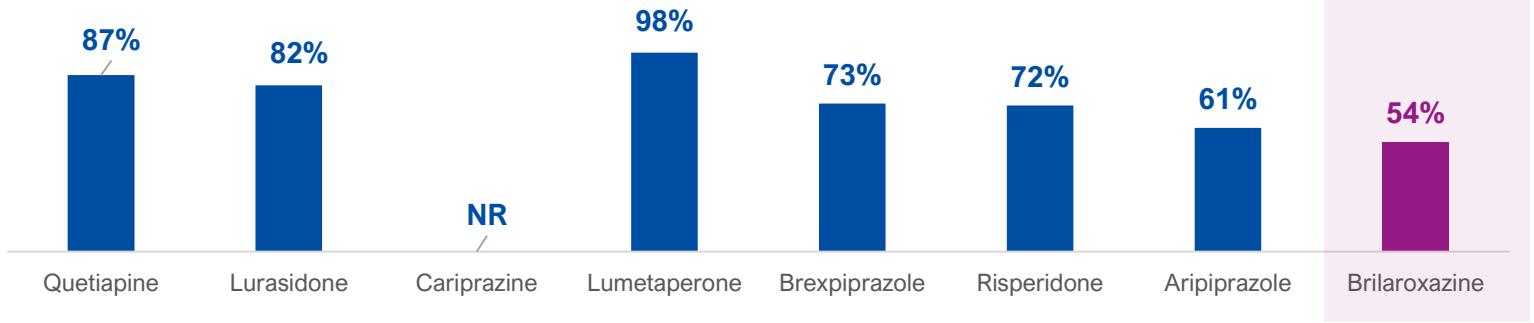
Antipsychotic	Fold increase vs brilaroxazine
Brilaroxazine	--
Aripiprazole	4.2x
Risperidone	4.5x
Brexpiprazole	6.5x
Lumetaperone	16.2x
Cariprazine	19.2x
Lurasidone	34.7x
Quetiapine	34.8x

*Olanzapine[9] not evaluated; metabolized by CYP1A2[10]

% Increase in drug concentration (AUC) with a **CYP3A4 Inhibitor**



% Decrease in drug concentration (AUC) with a **CYP3A4 Inducer**



Lower is better

(1) Brilaroxazine data vs standard of care antipsychotic historical data. Bhat L et al, ASPET 2023 (poster #376); (2) Aripiprazole (Abilify) NDA document, 2001; (3) Mahatthanatrakul et al, J Clin Pharm Thera 2007, 32(2):161-167 ; (4) Brexpiprazole (Rexulti) NDA document, 2014; (5) Lumetaperone (Caplyta) NDA document, 2018; (6) Cariprazine (Vraylar) NDA document 2014; (7) Pharmaceuticals 2020; (8) Quetiapine (Seroquel); Grim et al., Brit J Clin Pharm 2005, 61(1):58-69; (9) Olanzapine NDA document; (10) Vilckova et al., Onco Lett 2023, 25:85; (11) Bole B et al, Medicina 2023, 59:284. NR: not reported

Positive Registrational Trials To Date for Brilaroxazine in Schizophrenia

NDA-enabling safety pharmacology, toxicology & carcinogenicity studies, & CMC development largely complete

PHASE 1A and 1B, Clin Pharm Studies ☑ Completed	**PHASE 2 REFRESH, DB** NCT01490086 ☑ Completed	**PHASE 3 RECOVER, DB** NCT05184335 ☑ Completed	**PHASE 3 RECOVER, OLE** NCT05184335 ☑ Completed	**PHASE 3 RECOVER-2, DB** TBD Planned: H1 2026 - Q2 2027
Phase 1A Healthy subjects, double-blind, safety and tolerability, pharmacokinetics (PK) **Phase 1B** Stable schizophrenia patients, double-blind, POC efficacy, safety and tolerability, PK **ADME & Bioavailability** Once daily brilaroxazine, ~72% bioavailability **Drug-Drug Interactions** No clinically significant drug-drug interactions	**N = 234 (4-Week) Acute schizophrenia or schizoaffective disorder**	**N = 411 (4-Week) Acute schizophrenia**	**N = 446 (52-Week/1-Year) Stable schizophrenia**	**N = 450 (4-Week) Acute schizophrenia**
	Efficacy and safety of brilaroxazine vs placebo	Efficacy and safety of brilaroxazine vs placebo	Long-term safety/tolerability, efficacy and compliance of brilaroxazine	Efficacy and safety of brilaroxazine vs placebo
	3:3:2 Randomized, 4-week, double-blind, placebo-controlled, multicenter	1:1:1 Randomized, 4-week, double-blind, placebo-controlled, multicenter	Open label,1-year outpatient extension of RECOVER	1:1:1 Randomized, 4-week, double-blind, placebo-controlled, multicenter
	Once daily brilaroxazine 15, 30, 50 mg	Once daily brilaroxazine 15, 50 mg	Once daily brilaroxazine 15, 30, 50 mg flexible dose	Once daily brilaroxazine 30, 50 mg
	Completed and met primary and multiple secondary endpoints	Completed and met primary and multiple secondary endpoints	Completed and met primary and multiple secondary endpoints	Expected to start in H1-2026 and topline data in Q2-2027

DB: Double-blind; OLE: Open Label Extension

Brilaroxazine Phase 2 and Phase 3 Trials Data Comparison

Early onset of action with progressive and durable broad-spectrum efficacy results sustained over 52 weeks (1 year)

	Phase 2 REFRESH (DB, 4-Week) Acute Schizophrenia		Phase 3 RECOVER (DB, 4-Week) Acute Schizophrenia		Phase 3 RECOVER (OLE, 1 Year) Stable Schizophrenia
	Brilaroxazine 50mg vs Placebo		Brilaroxazine 50mg vs Placebo		Brilaroxazine (15/30/50mg)[P]
Symptom Domains	**Point Decrease / Improvement***	**P-Value (Effect Size)**	**Point Decrease / Improvement***	***P-Value (Effect Size)***	**Point Decrease / Improvement***
Primary Endpoint: PANSS Total Score	-9.1	*< 0.001 (1.15)*	-10.1	*< 0.001 (0.6)*	-18.1
PANSS Positive Symptoms	-2.6	*<0.01 (1.31)*	-2.8	*< 0.001 (0.5)*	-5.0
PANSS Negative Symptoms	-2.3	*<0.01 (0.78)*	-2.0	*<0.01 (0.4)*	-4.4
PANSS Negative Marder Factor	-1.6♦♦	*0.04 (0.70)*	-2.1♦♦	*< 0.001 (0.4)*	-4.4♦♦
PANSS Social Cognition	-1.7	*<0.01 (0.90)*	-1.6	*< 0.001 (0.5)*	-2.9
PANSS Excitement/Agitation	-1.9	*0.01 (0.70)*	-2.1	*< 0.001 (0.5)*	-3.1
PANSS Gen Psychopathology	-4.3	*<0.01 (0.96)*	-5.3	*< 0.001 (0.6)*	-8.7
Personal & Social Performance	---	---	6.3	*< 0.001 (0.5)*	11.3
CGI-S score	-0.5 *(≥1-point in 72%)*	*< 0.001 (1.25)*	-0.5 *(≥1-point in 78%)*	*< 0.001 (0.5)*	-0.8 *(≥1-point in 59%)*
Treatment Discontinuation	12% *(Placebo 28%)*		16% *(Placebo, 22%)*		36% *(Historical, up to 80%)[1]*

♦Mean Change; ♦♦Significant improvement in Marder scores for depression, hostility and disorganized thoughts

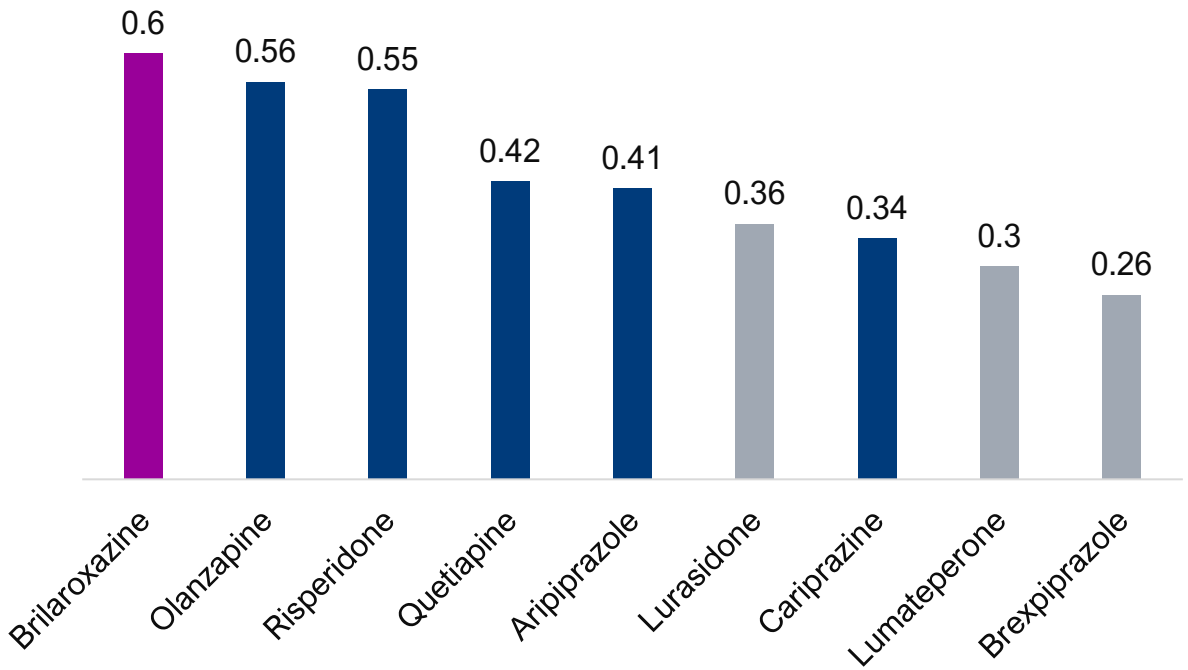
DB=Double-blind (4-week/1 month); OLE=Open-Label Extension (52-week/1 year); P=pooled data of 15, 30 and 50mg doses

[1]*Khandkar R et al. Schizophrenia Res. 2025, 283:152-162; Desai R et al. JMCP 2019, 25(1):37-44*

Comparison of Treatment Effect Size: Brilaroxazine vs Standard of Care Antipsychotics

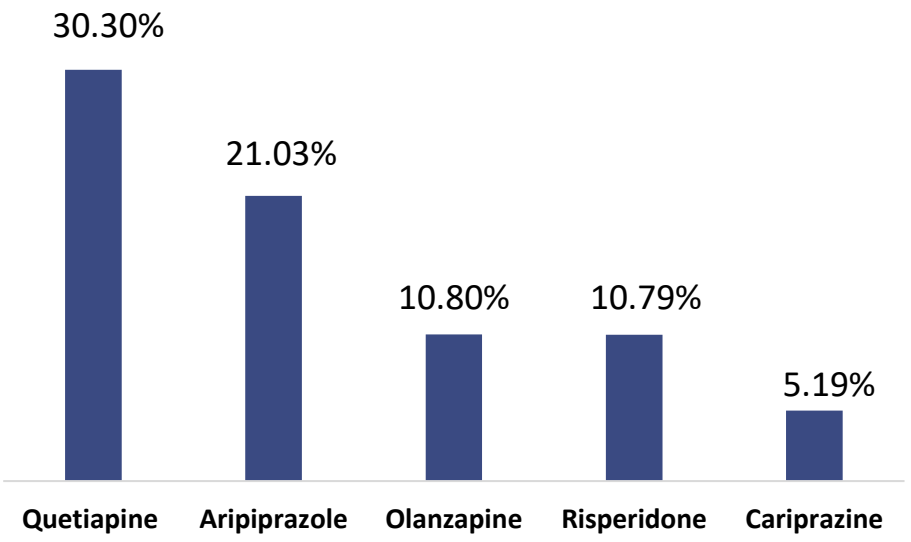
Phase 3 data of brilaroxazine (50 mg) vs. historical data of current standard of care antipsychotics

Brilaroxazine[1] vs Marketed Antipsychotics[2,3]



Top 5 Antipsychotics Market Share in 2024[4]

(United States)



Source: (1) Bhat L et al ASCPT 2024 (Poster #LB008) and SIRS 2024 (Poster #T291); (2) Huhn M et al. Lancet 2019, 394:939-951; (3) Correll CU et al. JAMA Psychiatry 2020, 77(4):349-358 ; (4) Definitive Healthcare 2025

Clinical Profile Comparison of Brilaroxazine and Lumetaperone (Caplyta)*

Johnson & Johnson acquired ITCI/Caplyta[3] in January 2025 for ~$14.6 billion

Efficacy Scale	Brilaroxazine[1] Phase 3 (4-week)[a]	Caplyta[2] Phase 3 (4-week)[b]
Primary Endpoint		
PANSS Total Score	-10.1 P=<0.001 (ES, 0.6)	-4.2 P=0.04 (ES, 0.3)
Secondary Endpoints		
CGI-S score	-0.2 P=<0.001 (ES, 0.5)	-0.3 P=0.04 (ES, 0.3)
PANSS Positive Symptoms	-2.8 P=<0.001 (ES, 0.5)	-1.7 P=0.006 (ES, 0.3)
PANSS Negative Symptoms	-2.0 P=0.003 (ES, 0.4)	-0.9 P=Not Significant
PANSS Negative, Marder Factor	-2.1 P=0.002 (ES, 0.4)	Not reported
PANSS General Psychopathology	-5.3 P=<0.001 (ES, 0.6)	-2.4 P=0.01 (ES, 0.2)
Personal & Social Performance	+6.3 P=<0.001 (ES, 0.5)	+3.3 P=0.05 (ES, 0.2)
PANSS Social Cognition	-2.1 P=<0.001 (ES, 0.5)	Not Reported

Adverse Events	Brilaroxazine[1] Phase 3 (4-week)[a]	Caplyta[2] Phase 3 (4-week)[b]
TEAEs >5%		
Headache	7 (5.2%)	29 (19.3%)
Somnolence	10 (7.5%)	26 (17.3)
Sedation	--	19 (12.7%)
Constipation	--	10 (6.7%)
Fatigue	--	8 (5.3%)
TEAEs of Special Interest (AESIs)		
Body weight change, mean, kg	2.41	1.4
Extrapyramidal Symptoms (EPS)	1 (0.7%)	6 (4%)

- FDA approved Caplyta NDA based on the efficacy outcome of a Phase 2 and a Phase 3 trials in acute schizophrenia. Caplyta did not separate from placebo in the 2nd Phase 3 trial on primary endpoint, PANSS Total.
- Caplyta 42 mg showed -4.2 points separation from placebo in the 1st Phase 3, and -5.8 points in the Phase 2 trials on PANSS Total.

*No head-to-head studies of brilaroxazine and Caplyta have been conducted. Because of differences in patient populations, study designs and numerous other factors, cross trial comparisons must be interpreted with caution, and no conclusions can be drawn.

(a) Brilaroxazine 50 mg once daily; (b) Caplyta 42 mg once daily ; ES = Effect Size

(1) RECOVER: Bhat L et al ASCPT 2024 (Poster #LB008) and SIRS 2024 (Poster #T291); (2) Correll CU et al. JAMA Psychiatry 2020, 77(4): 349-358; (3) J&J Press Release on January 13, 2025

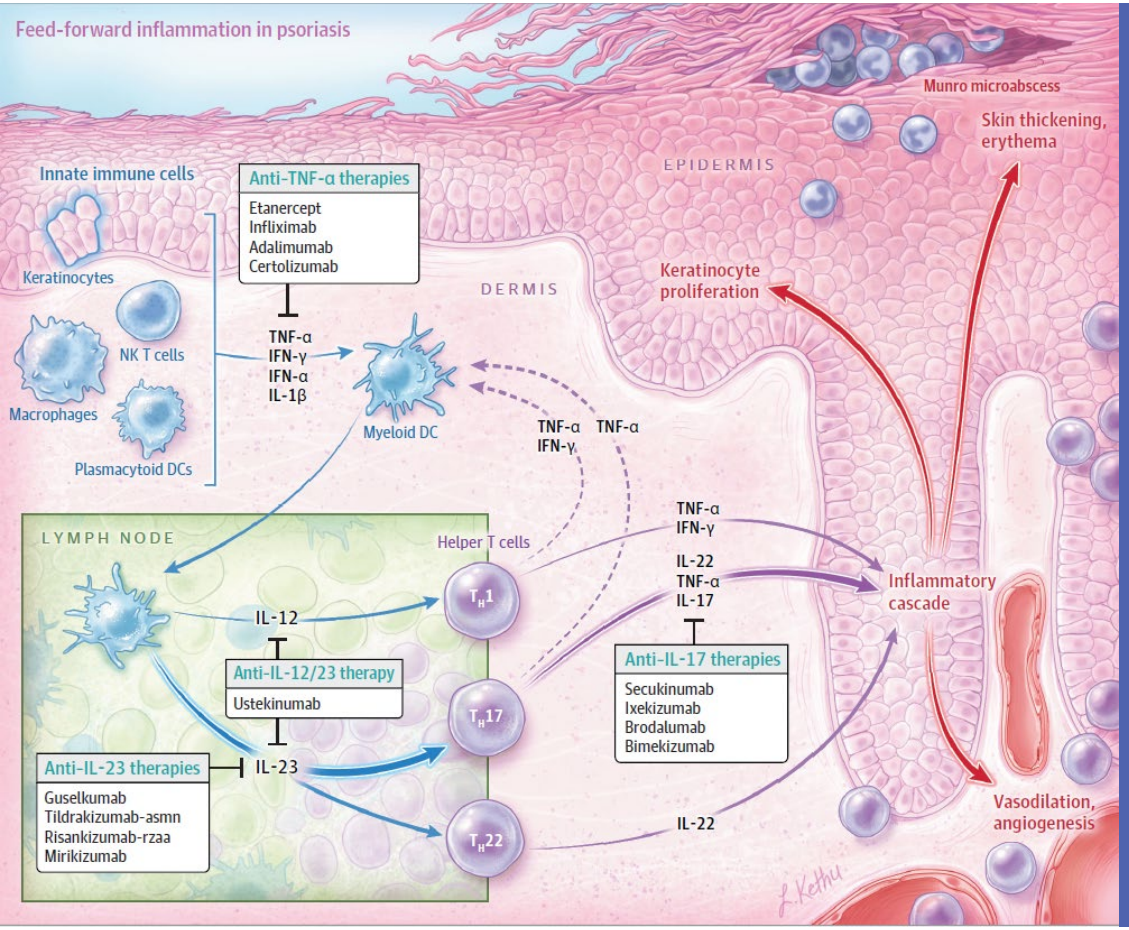
Reviva PHARMACEUTICALS

Inflammatory / Immune Disease Programs

Psoriasis | Pulmonary Arterial Hypertension (PAH) | Idiopathic Pulmonary Fibrosis (IPF)

Brilaroxazine has Potential to Treat Psoriasis

Inflammatory skin disease driven by dysfunctional serotonin-dopamine signaling



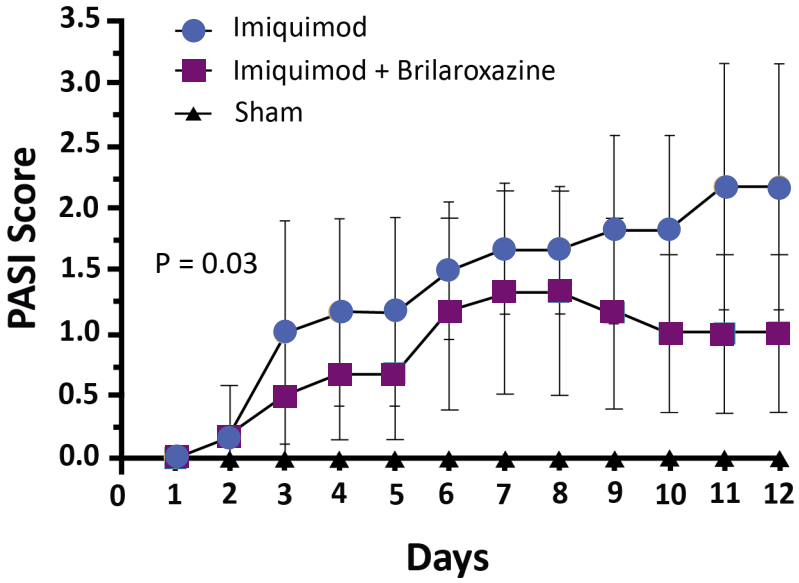
- ~3% of the US population and ~125 million people worldwide suffer from psoriasis
- ~One-third of neuropsychiatric and neurodegenerative disease patients suffer from psoriasis
- Currently there is no known cure for psoriasis
- Approved treatments for management of psoriasis
  - Topical corticosteroids therapies are cornerstone for mild psoriasis
  - Biologics that inhibit cytokines TNF-α, p40IL-12/13, IL-17, and p19Il-23, and oral PDE-4 inhibitor for moderate to severe plaque psoriasis

Bhat L et al. Skin Research & Technology 2024, 30;e13606; Sara Berg, AMA 2023; Armstrong AW. Pathobiology, clinical presentation, and Treatment of psoriasis, JAMA 2020, 323(19):1945-1960;

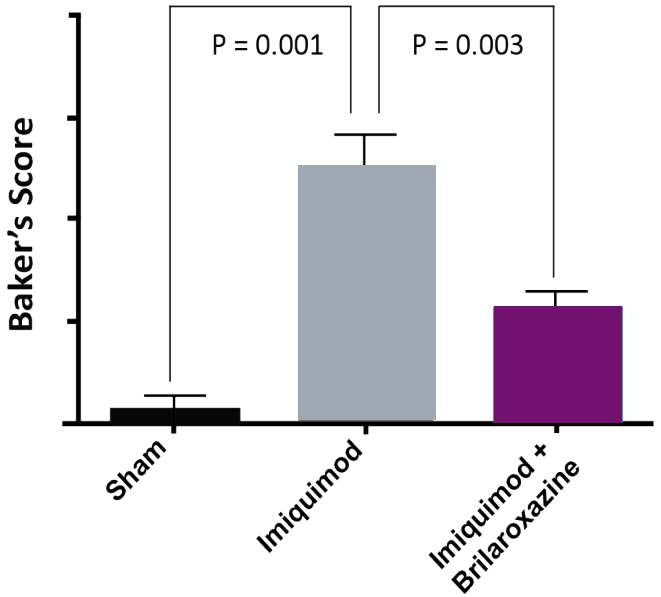
Brilaroxazine Demonstrated Encouraging Preclinical Efficacy

In an imiquimod induced mouse model of psoriasis

Psoriasis Area Severity Index (PASI)



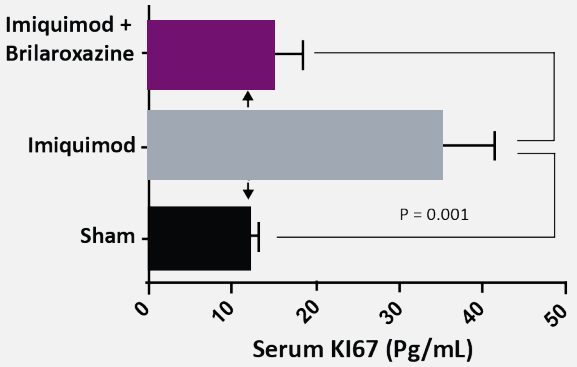
Psoriasis Severity by Baker Score

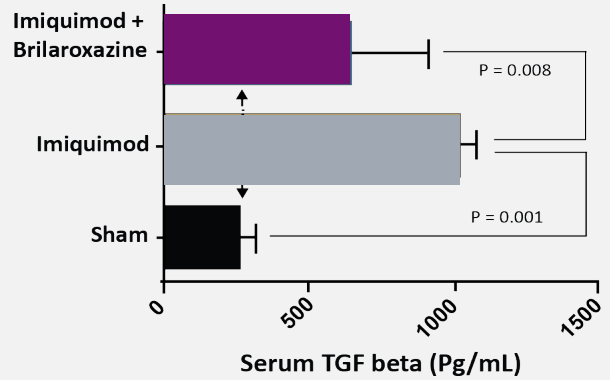


Brilaroxazine topical liposomal gel significantly decreased

- Psoriasis area severity index (P= 0.03)
- Clinical severity of psoriasis, Baker score (p=0.003)
- Proinflammatory and proliferation cytokine, KI67 (P=0.001)
- Profibrotic chemokine, TGF-β (P=0.001)

Decrease in anti-inflammatory and proliferation cytokine (KI67) and profibrotic chemokine (TGF-β)



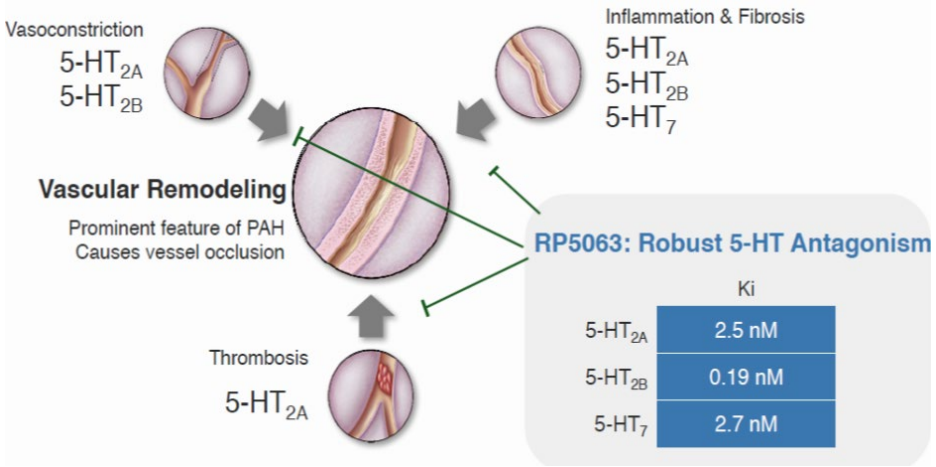


Bhat L, et al. Brilaroxazine lipogel displays psoriasis activity in imiquimod-induced mouse model. *Skin Res Technol*. 2024;e13606. https://doi.org/10.1111/srt.13606

Brilaroxazine: Potential to Delay PAH and IPF Disease Progression

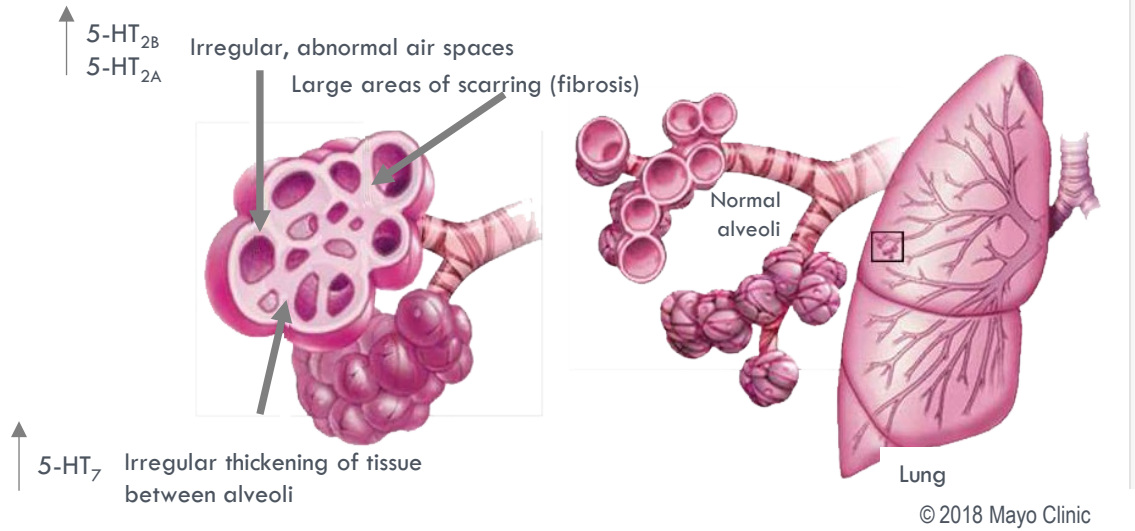
PAH and IPF are Orphan Diseases that involve dysfunctional serotonin signaling

Lung Vascular Remodeling in PAH



- PAH and IPF are rare, chronic, and debilitating conditions
- No therapies significantly delay disease progression
- Patients experience elevated plasma serotonin (5-HT) levels, increased expression of 5-$HT_{2A/2B/7}$ receptors & inflammatory cytokines in lungs

Lung Alveoli Remodeling in IPF



- Lung vascular/alveoli remodeling occurs due to inflammation, fibrosis, and pulmonary hypertension
- Brilaroxazine has robust antagonism against serotonin receptors involved in vasoconstriction, fibrosis, blood clots, and inflammation

Bhat L, et al. Medical Research Archives 2023, 11(4):3837; Bhat et al., Eur J Pharmacol 2018, 827:159-166; Lofdahl et al, Am J Pathobiology 2018, 188(5): 1113-1119; Tawfik and Makary, European J Pharmacology 2017, 814: 114-123; Pulmonary fibrosis image adapted from https://tinyurl.com/y9r6ld48

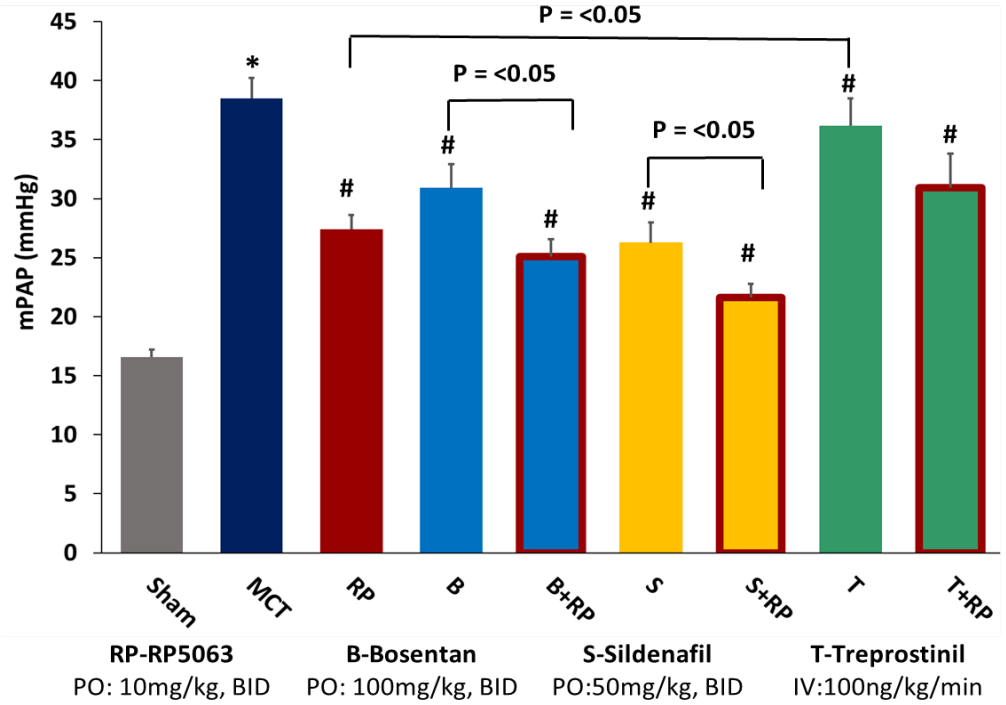
Brilaroxazine: Encouraging Results in PAH Translational Rodent Models

Potential for Improved Treatment Effect Compared to Standard of Care

Brilaroxazine alone and co-administered with standard of care for PAH

- Mitigated PAH in MCT and Sugen-Hypoxia rodent models
- Decreased respiratory resistance and restored blood oxygen saturation
- Decreased vascular remodeling and fibrosis in the small vessels
- Mitigated inflammation & reduced small vessel thickness
- Significantly reduced inflammatory cytokines TNFα, IL-β, IL-6, and chemokine LTB4

Brilaroxazine mitigates pulmonary hypertension and lung fibrosis/collagen



Bhat and Salvail, J Rare Dis Res Treat 2017, 2(5): 5-12. Bhat, et al. European J Pharmacology 2017, 810:83-91 and 92-99.
Bhat, et al. European J Pharmacology 2018, 827: 159-166.

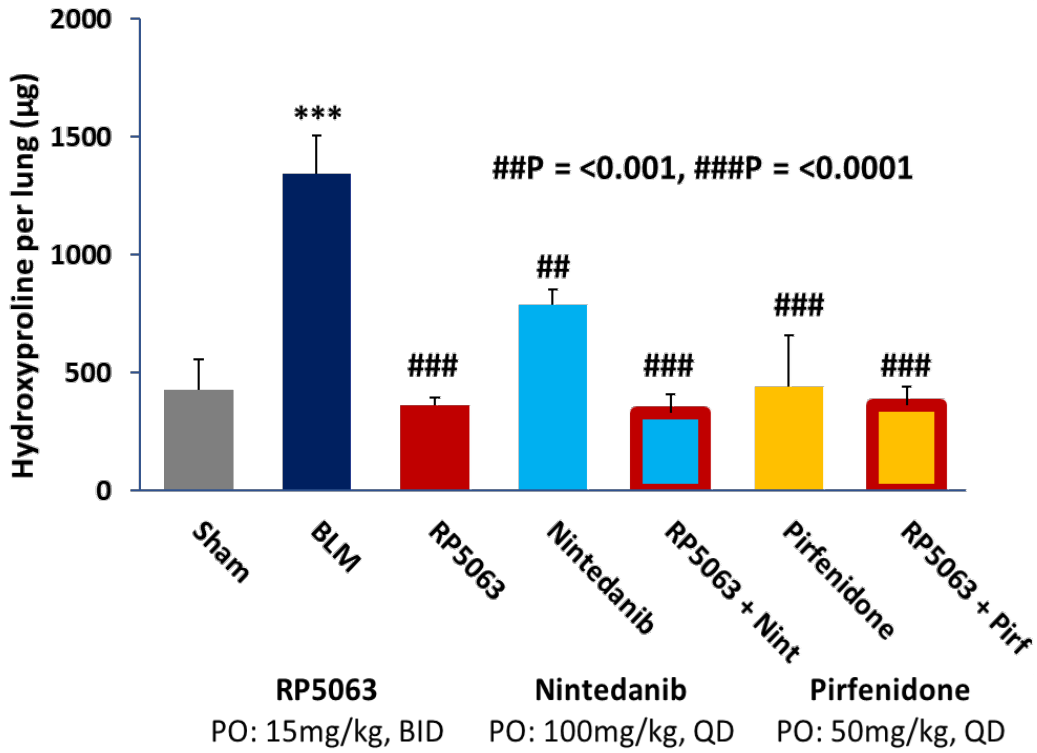
Brilaroxazine: Encouraging Results in Bleomycin-Induced IPF Rodent Model

Potential for Improved Treatment Effect Compared to Standard of Care

Brilaroxazine both alone and co-administered with standard of care for IPF

- Mitigated lung fibrosis and collagen deposits
- Decreased respiratory resistance & improved blood oxygen saturation
- Restored body weight and cardiac output
- Reduced the IPF biomarkers BALF cell counts, hydroxyproline, and blood lactate levels
- Decreased cytokines RANTES, IFNγ, MCP1, IL-6, and IL-17
- Improved survival rates

Brilaroxazine mitigates lung fibrosis / collagen (Decrease in Hydroxyproline)



Bhat L, et al. Medical Research Archives 2023, 11(4):3837

Brilaroxazine: Ready for Phase 2 Trials in PAH and IPF

FDA granted Orphan Drug Designation

Brilaroxazine Phase 2 trials in PAH and IPF

- Preclinical evidence supports the use of Brilaroxazine in PAH and IPF
- A generally well-tolerated safety profile, observed in the over 900 subjects treated to date
- Completed long-term regulatory toxicology studies
- Manufactured API and drug products (clinical trial materials)
- Oral once daily dosing, potential to develop once daily inhaler for enhanced effect and convenience

Key Regulatory Milestones Achieved

- FDA reviewed preclinical pharmacology, toxicology, CMC, and clinical Phase 1 safety data for initiating a Phase 2 study
- FDA reviewed & provided guidance on Phase 2/3 clinical development plan and a potential “Disease Modifying Agent” label claim
- FDA granted Orphan Drug Designation for the treatment of PAH and IPF

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