

EFFICACY AND SAFETY OF ADJUNCTIVE BREXPIRAZOLE (OPC-34712) IN MAJOR DEPRESSIVE DISORDER (MDD): A PHASE III, RANDOMIZED, PLACEBO-CONTROLLED STUDY

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Objective: Brexpiprazole is a serotonin-noradrenaline-dopamine agent that binds with high affinity to multiple serotonin, norepinephrine and dopamine receptors. In particular, Brexpiprazole is a partial agonist at dopamine D2/D3 and 5-HT1A receptors and an antagonist at 5-HT2A and norepinephrine alpha1B receptors.

We assessed the efficacy and safety of brexpiprazole versus placebo as adjunctive therapy to anti-depressant therapy (ADT) in subjects with MDD who demonstrated inadequate response to ADT.

Methods: This trial had 3 phases: a screening phase (7–28 days); a prospective phase (Phase A): 8-week, single-blind placebo plus an investigator-determined, open-label ADT; a randomized phase (Phase B): 6-week, double-blind, adjunctive brexpiprazole (2 mg/day) vs. placebo in patients with an inadequate response to ADT.

The primary efficacy endpoint was the change from the end of Phase A (Week 8) to the end of Phase B (Week 14) in MADRS Total Score. The key secondary endpoint was the change in mean SDS score. Other secondary endpoints were mean change in CGI-S, IDS-R, HAMD and HAMA.

Results: Of 379 randomized patients, completion rates at Week 14 were high (92.9%). Statistically significant improvements in mean MADRS Total score were observed for subjects receiving adjunctive brexpiprazole 2mg/day compared with placebo ($p=0.0001$) at endpoint. In addition, on all secondary endpoints Brexpiprazole showed a statistically significant advantage over placebo.

Commonly reported adverse events in the brexpiprazole group (>5% and more than twice placebo) were weight gain (8.0%), akathisia (7.4%).

Conclusions: Brexpiprazole was effective and well tolerated as adjunctive treatment for MDD patients with an inadequate response to ADT.