A Phase III Prospective Active and Placebo- Controlled Randomized Trial of Vilazodone in the Treatment of Major Depressive Disorder

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Abstract

Statement of the Problem:

Depression is a leading cause of psychiatric morbidity in the modern world, and the introduction of selective serotonin reuptake inhibitors (SSRIs) is a revolution in the treatment of depression. Vilazodone, a novel SSRI and 5-HT1A partial agonist, received FDA approval in 2011 to treat the major depressive disorder (MDD) in adults. This study conducted in India aimed to evaluate the efficacy and safety of vilazodone when compared to escitalopram or placebo in patients with MDD.

Methodology

This was a prospective, multicentre, randomized, comparative study of 375 participants over eight weeks of treatment with either vilazodone (10-40mg/day) or escitalopram (10-40 mg/day) or placebo in adult patients with MDD. Primary efficacy was assessed using the Hamilton Rating Scale for Depression (HAM-D-17); secondary efficacy was assessed using the Montgomery-Asberg Depression Rating Scale (MADRS) score and Hamilton Anxiety Scale (HAM-A) score. Safety parameters included adverse events (AEs), clinical laboratory results, vital signs, electrocardiogram (ECG), and Columbia-Suicide Severity Rating Scale (C-SSRS).

Findings

Mean change in the HAM-D-17 total score from baseline to week 8 for vilazodone, escitalopram, and placebo-treated patients in intent-to-treat (ITT) population was: -18.9 (± 7.49), -17.8 (± 6.06), and -7.4 (± 6.32); in ITT population (with Last Observation Carried Forward(LOCF) imputation) was: -17.9 (± 7.71), - 17.4 (± 6.19), and -6.4 (± 6.84), and in per-protocol (PP) population was: -19.1 (± 7.20), -17.8 (± 6.08), and -7.7 (± 6.29), respectively. The upper limit of 95% CI (0.56 (ITT); 0.90 (ITT with LOCF Imputation); 0.23 (PP)) of difference in HAM-D-17 between vilazodone 40mg and escitalopram 40mg, which is lower than the defined non-inferiority margin (3.56), proving non-inferiority. The difference between

vilazodone 40mg, escitalopram 40mg, and the placebo was statistically significant ($p<0.0001$). No deaths or serious adverse events were reported in this study.

Conclusion & Significance

Vilazodone demonstrated comparable efficacy to escitalopram and superior efficacy over the placebo in the treatment of MDD.

Recent Publications

1. Hellerstein DJ, Flaxer J. Vilazodone for the treatment of major depressive disorder: an evidence-based review of its place in therapy. Core Evid. 2015; 10:49-62.
2. Zhang X, Wu L, Wan D, Liu R, Dong Z, Chen M, Yu S. Evaluation of the efficacy and safety of vilazodone for treating major depressive disorder. Neuropsychiatr Dis Treat. 2015; 11:1957-1965.
3. Mathews M, Gommoll C, Chen D, Nunez R, Khan A: Efficacy and safety of vilazodone 20 and 40 mg in major depressive disorder: a randomized, double blind, placebo-controlled trial. Int Clin Psychopharmacol. 2015, 30:67-74.
4. Khan A, Cutler AJ, Kajdasz DK, et al.: A randomized, double blind, placebo-controlled, 8-week study of vilazodone, a serotonergic agent for the treatment of major depressive disorder. J Clin Psychiatry. 2011, 72:441-7.
5. Coplan JD, Gopinath S, Abdallah CG, Berry BR: A neurobiological hypothesis of treatment-resistant depression - mechanisms for selective serotonin reuptake inhibitor non-efficacy. Front Behav Neurosci. 2014, 8:189



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