Tesofensine

Purity: >98% (HPLC on request) I Molecular Formula: C17H23C12NO
Molecular Weight: 3.277 g/mol I Sequence: Non-Peptide

DESCRIPTION:

Tesofensine is serotonin-noradrenaline-dopamine reuptake inhibitor which was originally studied for its effect on Parkinson's and Alzheimer's. Unfortunately, its exploration for these indications were limited because the patients starting losing too much weight. Since then, the tesofensine has been studies as we way to treat obesity via its ability to reduce appetite. This medication indirectly stimulates the cholinergic system and showed to be more successful than average weight loss medication. Tesofensine (TE) increases near transmission of 3 monoaminergic neurotransmitters in the brain. These neurotransmitters are serotonin, no repinephrine, and dopamine which help regulate energy balance and are linked to obesity and depression.On average, its 6 month weight loss results from a phase 2b clinical trial resulted in a weight loss of around 25 pounds.

PROTOCOL:

Content & Potency: 500mcg capsule provided in a quantity of 30 capsules
Suggested dosage: Take one capsule once daily in the morning

CLINICAL RESEARCH:

Effects of Tesofensine on bodyweight loss, body composition, and quality of life in obese patients: a randomised, double-blind, placebo-controlled trial

Weight-loss drugs produce an additional mean weight loss of only 3-5 kg above that of diet and placebo over 6 months, and more effective pharmacotherapy of obesity is needed. We assessed the efficacy and safety of tesofensine-an inhibitor of the presynaptic uptake of noradrenaline, dopamine, and serotonin-in patients with obesity. We undertook a phase II, randomised, double-blind, placebo-controlled trial in five Danish obesity management centres. After a 2 week run-in phase, 203 obese patients (body-mass index 30-4=40 kg/m(2)) were prescribed an energy restricted diet and randomly assigned with a list of randomisation numbers to treatment with tesofensine 0.25 mg (n=52), 0.5 mg (n=50), or 1.0 mg (n=49), or placebo (n=52) once daily for 24 weeks. The primary outcome was percentage change in bodyweight. Analysis was by modified intention to treat (all randomised patients with measurement after at least one dose of study drug or placebo). The study is registered with ClinicalTrials.gov, number NCT00394667. 161 (79%) participants completed the study. After 24 weeks, the mean weight loss produced by diet and placebo was 2.0% (SE 0.60). Tesofensine 0.25 mg, 0.5 mg, and 1.0 mg and diet induced a mean weight loss of 4.5% (0.87), 9.2% (0.91), and 10.6% (0.84), respectively, greater than diet and placebo ($p<0.0001$). The most common adverse events caused by tesofensine were dry mouth, nausea, constipation, hard stools, diarrhoea, and insomnia. After 24 weeks, tesofensine 0.25 mg and 0.5 mg showed no significant increases in systolic or diastolic blood pressure compared with placebo, whereas heart rate was increased by 7.4 beats per min in the tesofensine 0.5 mg group ($p=0.0001$). Our results suggest that tesofensine 0.5 mg might have the potential to produce a weight loss twice that of currently approved drugs. However, these findings of efficacy and safety need confirmation in phase III trials.

Astrup, Arne & Madsbad, Sten & Breum, Leif & J Jensen, Thomas & Peter Kroustrup, Jens & Meinert Larsen, Thomas. (2008). Effect of tesofensine on bodyweight loss, body composition, and quality of life in obese patients: a randomised, double-blind, placebo-controlled trial.