

## OBESITY

## Naltrexone combined with bupropion shows promise for weight loss

Weight loss, reduced food cravings and improved insulin resistance are all effects of treatment with naltrexone plus bupropion, according to the results of a trial published recently in *The Lancet*.

Few safe and effective drugs are available for the treatment of obesity. "Combination treatment with sustained-release naltrexone and bupropion was developed to produce complementary actions in CNS pathways that regulate bodyweight," explains Frank Greenway, lead author of the trial. The multicenter, randomized, double-blind, placebo-controlled trial was designed to assess the effect of this drug combination on bodyweight in overweight and obese individuals.

870 overweight or obese individuals finished 56 weeks of treatment with either 16 mg naltrexone plus 360 mg bupropion, 32 mg naltrexone plus 360 mg bupropion or placebo. Weight loss was 5% and 6.1% in the 16 mg and 32 mg active drug groups

versus 1.3% in the placebo group. Insulin resistance, which is associated with an increased risk of developing diabetes and cardiovascular disease, was improved; however, blood pressure was generally unchanged. Finally, food cravings were decreased, as unlike other obesity drugs this drug combination acts on the reward system in addition to the appetite system.

"Treatment with sustained-release naltrexone and bupropion offers a new approach to the management of obesity that might improve the ability to control eating behaviour and response to food cravings," says Greenway. He hopes to explore the effect of craving on the development of obesity in future trials.

*Rachel Jones*

**Original article** Greenway, F. L. *et al.* Effect of naltrexone plus bupropion on weight loss in overweight and obese adults (COR-1): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet* 376, 595–605 (2010)