

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Proposed Health Technology Appraisal

Phentermine with topiramate for the treatment of obesity and overweight

Draft scope (Pre-referral)

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of phentermine with topiramate within its licensed indication for the treatment of adults who are obese or who are overweight and have weight-related co-morbidities.

Background

Obesity is a chronic condition characterised by increased body fat, which poses a significant risk to health. The most common method for measuring obesity is body mass index (BMI) which is calculated as the ratio of weight to height squared. In adults, overweight is typically defined by a BMI of 25 kg/m² to 29 kg/m² and obesity by a BMI of 30 kg/m² or more. People with obesity are at increased risk of developing cardiovascular disease, type-2 diabetes, atherosclerosis (the presence of fatty deposits in the arteries), hypertension and dyslipidaemia (abnormal levels of fats in the blood). In 2009, almost two-thirds of adults in England were classed as being overweight or obese and almost a quarter of adults were obese.

Current treatment of obesity includes dietary and lifestyle advice, pharmacological treatments, and surgical intervention. NICE has produced several public health guidance documents which address weight management. NICE clinical guideline 43 for the prevention, identification, assessment and management of overweight and obesity in adults and children recommends that drug therapy with orlistat should only be considered after dietary, exercise and behavioural approaches have been started and evaluated. The clinical guideline also recommends that surgical intervention (such as bariatric surgery) is considered as a first-line option for adults with a BMI > 50. For adults with BMI > 40 or BMI > 35 with other significant obesity-related disease (such as type II diabetes) it is recommended that surgery is considered only after all appropriate non-surgical measures have been tried but have failed to achieve or maintain adequate weight loss for at least 6 months.

The technology

Phentermine with topiramate (Brand name unknown, Vivus) is an oral low-dose combination of immediate-release phentermine and prolonged-release topiramate. Phentermine is an appetite suppressant and topiramate is an anti-convulsant with weight loss properties.

Phentermine with topiramate does not have a UK marketing authorisation. It has been studied in clinical trials in combination with behaviour modification

compared with placebo in obese (BMI at least 30 kg/m²) and overweight adults with weight-related co-morbid conditions (no BMI limit) such as hypertension, type 2 diabetes, dyslipidemia, or central adiposity (abdominal obesity).

Intervention(s)	Phentermine with topiramate in combination with behaviour modification
Population(s)	<ul style="list-style-type: none"> • Obese adults • Obese and overweight adults with weight-related comorbid conditions
Comparators	<ul style="list-style-type: none"> • Orlistat • Lorcaserin (subject to ongoing NICE appraisal)
Outcomes	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> • BMI/body weight • waist or hip circumference • development of type II diabetes • cardiovascular events • mortality • adverse effects of treatment • health-related quality of life <p>Where information on clinical endpoints is unavailable, consideration may be given to surrogate end-points such as:</p> <ul style="list-style-type: none"> • cholesterol levels and lipid profiles (including LDL and HDL) • blood pressure • insulin resistance
Economic analysis	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p>

Other considerations	Guidance will only be issued in accordance with the marketing authorisation.
Related NICE recommendations	<p>Related Technology Appraisals</p> <p>Technology Appraisal in preparation, 'Lorcaserin hydrochloride for the treatment of obesity and overweight'. Earliest anticipated date of publication end 2013.</p> <p>Related Clinical Guidelines</p> <p>Clinical Guideline 43, December 2006. Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children. Expected review date: December 2011.</p> <p>Related Public Health Guidance</p> <p>Public Health Guidance 2, March 2006. Four commonly used methods to increase physical activity. Review date: March 2013.</p> <p>Public Health Guidance 8, January 2008. Physical activity and the environment. Review date: February 2014.</p> <p>Public Health Guidance 13, May 2008. Promoting physical activity in the workplace. Review date: July 2014.</p> <p>Public Health Guidance 27, July 2010. Dietary interventions and physical activity interventions for weight management before, during and after pregnancy. Review date: to be confirmed.</p> <p>Public Health Guidance in preparation: BMI and waist circumference – black and minority ethnic groups. Earliest anticipated date of publication: to be confirmed.</p> <p>Public Health Guidance in preparation: Obesity – working with local communities. Earliest anticipated date of publication: to be confirmed.</p> <p>Public Health Guidance in preparation: Overweight and obese adults - lifestyle weight management. Earliest anticipated date of publication: to be confirmed.</p>

Questions for consultation

Should BMI ranges be used to specify the obese and overweight populations for consideration in this appraisal? If so, which values should be used?

Where is phentermine with topiramate likely to be used in the current treatment pathway for obesity and overweight? Is it intended to be used before surgical intervention?

Have the most appropriate comparators for phentermine with topiramate for the treatment of obesity and overweight been included in the scope? Are there any other treatments which are routinely used in clinical practice?

Are there any subgroups of people in whom the technology is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Please consider whether in the remit or the scope there are any issues relevant to equality. Please pay particular attention to whether changes need to be made to the remit or scope in order to promote equality, eliminate unlawful discrimination, or foster good relations between people who share a characteristic protected by the equalities legislation and those who do not share it, or if there is information that could be collected during the assessment process which would enable NICE to take account of equalities issues when developing guidance.

Do you consider the technology to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of the technology can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

Should NICE appraise this technology through its Single Technology Appraisal (STA) Process, or should it be appraised alongside lorcaserin through the Multiple Technology Appraisal (MTA) Process? We welcome comments on the appropriateness of appraising this topic through these processes. (Information on the Institute's Technology Appraisal processes is available at http://www.nice.org.uk/aboutnice/howwework/devnicetech/technologyappraisalprocessguides/technology_appraisal_process_guides.jsp)