controlled trials of at least 16 weeks duration concluded that the topiramate-treated group had additional weight loss of 5.3 kg compared with the placebo-treated group (46). Effective doses are between 25 and 100 mg per day. Side effects include depression, difficulty concentrating, paraesthesia (common) and closed angle glaucoma (rare). Topiramate can be considered for use "off label" in people with obesity who have not responded to other weight loss medications or in whom other therapies are contraindicated.

Combined low dose phentermine and topiramate

The combination of these two monotherapies is useful for weight management. An Australian study investigating the safety, tolerability and efficacy of the combination showed that in about 40% of people the combination was not well tolerated, predominantly due to topiramate (25 mg mane) side effects. In those who tolerated the combination, the 10% weight loss achieved with a VLED was maintained over a mean duration of pharmacotherapy of 10 months. A group of people who continued phentermine-topiramate for 22 months had a further mean weight loss of 6.7 kg (47).

Tirzepatide (Mounjaro®)

Tirzepatide, a single molecule dual GLP-1 and glucose-dependent insulinotropic peptide (GIP) co-agonist has been TGA-approved for type 2 diabetes, but not obesity. It has been approved for obesity management in the USA, Europe and the UK. In a 72 week trial in people with obesity tirzepatide 5 mg, 10 mg and 15 mg weekly resulted in 15.0%, 19.5% and 20.9% weight loss respectively (49). Tirzepatide has also been shown to reduce blood pressure, improve lipids and reduce glucose and CRP levels (49). In a 52-week phase 2 trial of people with MASH and moderate to severe fibrosis, tirzepatide resulted in greater resolution of MASH without worsening of fibrosis (50). In patients with moderate to severe obstructive sleep apnoea, tirzepatide 10-15 mg once weekly reduced the apnoea-hypopnoea index, hypoxia, systolic blood pressure, weight and hsCRP and improved sleep-related patient-reported outcomes (51). The side effect profile of tirzepatide is similar to other GLP-1 agonist based therapies – these include gastrointestinal effects (nausea, vomiting, constipation and diarrhoea) and increased risk of acute pancreatitis.

3. Bariatric surgery

Bariatric surgery remains the most efficacious weight loss intervention for the treatment of obesity. Bariatric surgery should be considered as part of a comprehensive treatment delivered by a multidisciplinary team including primary care practitioners, physicians, surgeons, dietitians and psychologists. The potential benefits of surgery need to be assessed for each individual by suitably trained and experienced practitioners and balanced against the individual risk profile. Components of successful bariatric surgery care include an informed patient, tailored operation, optimisation of health prior to surgery, committed multi-professional team care and long-term follow up. All individuals considered for bariatric surgery need a careful risk to benefit assessment and optimisation of health prior to surgery. Not all individuals in whom surgery is a potential treatment option will