Table 9: Pharmacotherapies for obesity management[219,223,224,226-243]

Medication name and medication class	Mechanism of action	TGA indications for obesity management in adults*	Dose	Common side effects	Efficacy for weight loss (approximate % of total body weight lost¥§)	Impact on CV outcomes compared with placebo
Incretin-based agents						
Semaglutide (Wegovy) GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 0.25 mg subcut. once weekly • Titrate: - Weeks 1–4: 0.25 mg - Weeks 5–8: 0.5 mg - Weeks 9–12: 1 mg - Weeks 13–16: 1.7 mg - Maintenance dose: 2.4 mg once weekly	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	9–10%[228]	• Reduced risk of CV death, non-fatal MI and non-fatal stroke in people with established atherosclerotic CVD (without type 2 diabetes)[228] and in people with type 2 diabetes at high risk of CVD[229] • Reduced risk of CV events in people with type 2 diabetes and chronic kidney disease[244]
Tirzepatide (Mounjaro) GIP/GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 2.5 mg subcut. once weekly. After four weeks, increase dose to 5 mg subcut. once weekly • If needed, dose increases can be made in 2.5 mg increments • Maximum dose is 15 mg once weekly	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	11–12%[245]	Reduced risk of CV death, non-fatal MI and non-fatal stroke in people with type 2 diabetes and atherosclerotic CVD[245#]
Liraglutide (generics available) GLP-1 receptor agonist	• Enhances satiety • Delays gastric emptying • Decreases appetite	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 0.6 mg subcut. once daily • Increase weekly by 0.6 mg (as tolerated) to a maintenance dose of 3.0 mg once daily	Nausea, vomiting, diarrhoea, constipation, dyspepsia, abdominal pain, injection site reactions	6–8%[246 ζ]	Reduced risk of CV death, non-fatal MI or non-fatal stroke in people with type 2 diabetes at high risk of CVD[227]

Footnotes:

* Consult TGA indications and Pharmaceutical Benefits Scheme criteria to guide pharmacotherapy choice, tailored to the individual context.

¥ Approximate percentage total body weight lost is based on trials including people with type 2 diabetes where pharmacotherapy dose may not represent the highest dose available for weight loss.

§ Weight loss efficacy for each agent varies by patient cohort; figures for injectable medications have been derived from published cardiovascular outcome trials.

Non-inferiority cardiovascular outcome trial with dulaglutide as comparator (not placebo controlled).

ζ The SCALE trial was used as the reference for approximate percentage of total body weight lost, in preference to the LEADER cardiovascular outcome trial (used approximately half the maintenance dose of liraglutide that is indicated for obesity management).

Table 9: (Continued)

Medication name and medication class	Mechanism of action	TGA indications for obesity management in adults*	Dose	Common side effects	Efficacy for weight loss (approximate % of total body weight lost)	Impact on CV outcomes compared with placebo
Oral agents						
Naltrexone/ bupropion Opioid antagonist/ noradrenaline-dopamine reuptake inhibitor	• Not fully known; may impact central appetite regulation and reward system	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• Start at 8 mg/90 mg tablet once daily. Dose should be escalated over a period of four weeks: - Week 1: one tablet AM - Week 2: one tablet AM + one tablet PM - Week 3: two tablets AM + one tablet PM - Week 4 ongoing: two tablets twice daily	Nausea, vomiting, constipation, dizziness, headache, insomnia, dry mouth, anxiety, agitation, difficulty concentrating	~5–6%	Unknown
Orlistat Lipase inhibitor	• Inhibits gastrointestinal lipase, reducing absorption of consumed dietary fat	BMI ≥ 30 kg/m^2 OR ≥ 27 kg/m^2 in the presence of one or more weight-related complications	• 120 mg orally up to three times a day with main meals	Flatulence, faecal urgency/incontinence, loose oily stools, headache, fatigue, decreased absorption of fat-soluble vitamins, oxalate kidney stones	~3–4%	Unknown
Phentermine Anorectic, sympathomimetic amine	• Stimulates central nervous system to reduce appetite	BMI ≥ 25 kg/m^2	• 15mg orally once daily at breakfast. Increase to maximum of 40 mg once daily if required • Recommended for short term treatment only (up to 12 weeks)	Tachycardia, arrhythmia, elevated blood pressure, precordial pain, restlessness, agitation, insomnia, tremor, dizziness, headache, diarrhoea, rash	~2–5%	Unknown

Footnotes:
* Consult TGA indications and Pharmaceutical Benefits Scheme criteria to guide pharmacotherapy choice, tailored to the individual context.

Abbreviations: BMI, body mass index; CV, cardiovascular; CVD, cardiovascular disease; MI, myocardial infarction; TGA, Therapeutic Goods Administration