

directly related to the extent of weight loss during treatment (Jensen et al., 2024). Take semaglutide or ctipatide as examples. Within one year of drug withdrawal, the patient's weight rebounded by approximately 75%, but was still lower than the pre-treatment level. This indicates that obesity is a chronic disease that requires long-term management (Berg et al., 2025; Budini et al., 2025).

In terms of intervention strategies, maintaining weight without rebound requires a combination of medication and lifestyle adjustments, such as increasing physical activity. Jensen (2024) pointed out that this comprehensive approach can slow down the rate of weight rebound after drug withdrawal, and the weight loss effect of GLP-1 RAs is more obvious in the initial stage. Long-term effects rely on continuous personalized management and support to reduce the risk of rebound (Berg et al., 2025; Budini et al., 2025). Therefore, when using GLP-1 RAs to manage body weight, a long-term follow-up plan needs to be formulated and practical and sustainable treatment goals should be set.

## **6 Practical Treatment Strategies**

### **6.1 Patient selection**

In clinical practice, glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are more commonly used in overweight or obese patients with type 2 diabetes (T2D), especially those with significant weight concerns or those at high risk of cardiovascular disease with complications. Current guidelines and studies show that patients with a BMI of  $\geq 27$  kg/m<sup>2</sup>, especially those with concurrent hypertension, dyslipidemia or non-alcoholic fatty liver disease, have a better response to these drugs (Alfaris et al., 2024; Hamed et al., 2024). GLP-1 RAs is also applicable to patients with atherosclerotic cardiovascular disease or those at high risk of cardiovascular disease. Studies have confirmed that such drugs can reduce the risk of cardiovascular problems and contribute to the recovery of kidney function (Ussher and Drucker, 2023; Yao et al., 2024; Sheth et al., 2025).

Patient screening is mainly based on individualized assessment and requires a comprehensive judgment based on previous medication response, hypoglycemia risk, patient preference, as well as weight status and comorbidities information (Alfaris et al., 2024). Patients who experienced weight gain or still failed to reach the target blood glucose level after insulin or sulfonylurea treatment were often given priority in the consideration of GLP-1 RAs, which was associated with a higher risk of weight gain and hypoglycemia with traditional regimens (Hamed et al., 2024; Yao et al., 2024). Patients with obesity-related problems such as obstructive sleep apnea and fatty liver are more suitable for incorporating GLP-1 RAs into the overall management plan (Popoviciu et al., 2023; Sheth et al., 2025). The rationality of population selection directly affects the presentation of therapeutic effect and the control of medication risk.

### **6.2 Administration method**

The treatment of GLP-1 RA usually adopts the dose-titration method, that is, starting with a low dose and gradually increasing the dose to improve patient tolerance and reduce gastrointestinal adverse reactions. Nausea, vomiting and diarrhea often occur in the early stage of treatment or when the dose is increased rapidly (Hamed et al., 2024). In clinical practice, it is generally started from the lowest recommended dose and the dose is gradually adjusted within 1 to 2 weeks to enable patients to gradually adapt to the drug effect, thereby reducing the risk of treatment interruption due to discomfort (Madsbad and Holst, 2025).

Gradually adjusting the dosage can help patients develop the habit of taking medicine on time for a long time. Tell the patient that if any symptoms occur, they should consult a doctor immediately. If the reaction is mild, there are corresponding solutions (Yao et al., 2024). Some patients may need a relatively long time to find the appropriate dosage during treatment, or adjust the dosage regularly to ensure correct medication. Formulating treatment plans based on the patient's condition can make the patient more willing to take medicine and help stabilize blood sugar and control weight (Alfaris et al., 2024).

### **6.3 Joint processing and plan adjustment**

When GLP-1 RAs is used in combination with insulin or sulfonylurea drugs, it is usually necessary to reduce the dosage of other hypoglycemic drugs. This approach is more effective and can also reduce the risk of