

FAT LOSS

# Tirzepatide

GIP / GLP-1 Dual Agonist

Dual GIP and GLP-1 receptor agonist. Superior fat-loss profile to semaglutide in head-to-head.

**MECHANISM**

Dual GIP / GLP-1 receptor agonist

**DOSAGE**

2.5–15 mg once weekly SC

**HALF-LIFE**

~5 days

**FORMAT**

Lyophilised powder

**BATCH**

NU-TIR-8687

**LOT**

440687

**CAS**

2023788-19-2

**FORMULA**

C225H348N48O...

**ISSUED**

2025-10-06

**RETEST**

2026-10-06

## OVERVIEW

Tirzepatide is a dual agonist co-activating both GIP and GLP-1 receptors via a single molecule. The additive effect of GIP stimulation produces superior weight loss to semaglutide. The SURMOUNT-1 trial reported up to 22.5% mean bodyweight reduction at 15 mg weekly, establishing tirzepatide as the leading dual agonist.

## MECHANISM OF ACTION

Dual GIP / GLP-1 receptor agonist

## KEY RESEARCH BENEFITS

- Up to 22.5% bodyweight reduction in SURMOUNT-1
- Superior to semaglutide in head-to-head (SURPASS-2)
- Potent HbA1c reduction in T2D research
- Improves lipid profiles and blood pressure
- GIP component may reduce GI side-effect burden

## RESEARCH NOTES

SURMOUNT-1 (N = 2,539) showed 15.0–22.5% weight loss vs 2.4% placebo at 72 weeks. SURPASS-2 demonstrated superiority over semaglutide 1 mg across all endpoints.

## STORAGE & STABILITY

Lyophilised: -20 °C, stable >=24 months. Reconstituted: 2–8 °C, use within 28 days.