

Mazdutide

History and Background

Mazdutide (also known as IBI362 or LY3305677) is a next-generation dual agonist peptide that targets both GLP-1 (glucagon-like peptide-1) and glucagon receptors. Developed by Eli Lilly and Innovent Biologics, it represents an evolution beyond tirzepatide. It is currently in Phase 3 clinical trials for obesity and type 2 diabetes. Early data shows exceptional weight loss—averaging 20-25% body weight reduction in trials, potentially surpassing tirzepatide and approaching surgical weight loss results. Mazdutide is administered once weekly and has a long half-life.

Primary Uses

Mazdutide is investigated for significant weight loss and obesity treatment, type 2 diabetes and glycemic control, reduction of body fat while preserving lean mass, appetite suppression and reduced food intake, improved insulin sensitivity and metabolic health, cardiovascular risk reduction, non-alcoholic fatty liver disease (NAFLD), and metabolic syndrome management.

How It Works

Mazdutide works through dual agonism of GLP-1 and glucagon receptors, creating complementary metabolic effects. GLP-1 activation suppresses appetite, slows gastric emptying, enhances insulin secretion, and reduces food intake. Glucagon receptor activation increases energy expenditure, promotes fat oxidation, and enhances metabolic rate—counteracting the metabolic slowdown seen with pure GLP-1 agonists. This dual action produces greater weight loss than GLP-1 agonists alone. The glucagon component also prevents muscle loss during weight reduction, preserving lean body mass.

Standard Protocol

Dosing: Starting: 3mg weekly. Titrate every 4 weeks: 3mg → 6mg → 9mg. Maintenance: 9-12mg weekly. Higher doses (up to 18mg) used in trials.

Administration: Subcutaneous injection, typically in abdomen, thigh, or upper arm. Likely available as pre-filled pen or reconstituted vial.

Timing: Once weekly on same day each week. Can be taken with or without food. Consistent weekly timing recommended.

Titration Schedule:

Week 1-4: 3mg once weekly (initial titration)

Week 5-8: 6mg once weekly

Week 9-12: 9mg once weekly

Maintenance: 9-12mg once weekly for sustained weight loss

Duration: Long-term use (6-12+ months). Clinical trials show continued weight loss beyond 48 weeks. Designed for ongoing weight management.

What to Expect

Positive Effects (Week 1-2)

Exceptional weight loss (20-25% body weight in trials). Strong appetite suppression without extreme hunger. Preservation of lean muscle mass. Dramatic improvements in metabolic markers (A1C, insulin sensitivity, lipids). Reduced visceral fat. Enhanced energy expenditure. Improved cardiovascular health markers.

Timeline to Results

Initial appetite suppression: 1-2 weeks. Noticeable weight loss: 4-6 weeks. Significant changes: 12-16 weeks (10-15% body weight). Maximal effects: 48+ weeks (20-25% body weight in clinical trials). Among the most potent weight loss peptides available.

Dose Response

Higher doses produce greater weight loss. 12mg weekly shows superior results to 9mg. Gradual titration essential to minimize GI side effects. Individual response very strong in most subjects.

Pros

- Exceptional weight loss results (20-25%, rivaling surgery)
- Once-weekly dosing (very convenient)
- Preserves lean muscle mass (unlike pure GLP-1 agonists)
- Increases metabolic rate (glucagon effect)
- Powerful appetite suppression
- Improves glycemic control and insulin sensitivity
- Reduces cardiovascular risk factors
- Well-tolerated in clinical trials
- Potential game-changer in obesity treatment
- May be more effective than tirzepatide

Cons

- Not yet FDA-approved (Phase 3 trials)
- Extremely limited availability
- Very expensive and difficult to source
- Requires gradual titration over 12+ weeks
- GI side effects (nausea, diarrhea) during titration
- Injection site reactions possible
- Long-term safety data still being collected
- Not suitable for rapid short-term weight loss
- Individual response may vary
- May require lifelong use for weight maintenance

Who Should Consider It

Individuals with severe obesity (BMI >35) seeking maximum weight loss, those who have not responded to other peptides or medications, people with type 2 diabetes and obesity, individuals seeking to preserve muscle during weight loss, those committed to long-term weight management, people with metabolic syndrome or NAFLD, users seeking cutting-edge obesity treatment.

Who Should Avoid It

Pregnant or breastfeeding women, individuals with history of pancreatitis, people with thyroid cancer or MEN2 syndrome, those with severe GI disorders, individuals seeking rapid short-term weight loss, those unable to commit to gradual titration, people on very tight budgets (extremely expensive), those with unrealistic expectations.

Mazdutide is investigational and not FDA-approved. Currently in Phase 3 clinical trials. Should only be used under medical supervision. Individual results vary. Long-term safety still being established. This information is for educational purposes only.

