

# GLP-1 Receptor Agonists

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are a class of drugs used in the management of:

- Type 2 diabetes mellitus
- Obesity and overweight
- Cardiovascular risk reduction

They mimic the action of the GLP-1 hormone, enhancing glucose-dependent insulin secretion and reducing appetite.

## □ Mechanism of Action

- Stimulates **insulin secretion** (glucose-dependent)
- Inhibits **glucagon release**
- **Slows gastric emptying**
- Promotes **satiety** via CNS pathways

## □ Examples of GLP-1 RAs

Generic Name	Brand Name(s)	Dosing Frequency
Exenatide	Byetta / Bydureon	BID / Weekly
Liraglutide	Victoza / Saxenda	Daily
Dulaglutide	Trulicity	Weekly
Semaglutide	Ozempic / Wegovy	Weekly
Tirzepatide *	Mounjaro	Weekly

- Tirzepatide is a dual GLP-1/GIP receptor agonist.

## □ Clinical Indications

- Type 2 diabetes mellitus (T2DM)
  - Reduces HbA1c with low hypoglycemia risk
- Obesity and overweight (with or without T2DM)
  - Significant weight loss, especially with semaglutide and tirzepatide
- Cardiovascular risk reduction
  - CV benefit shown with liraglutide, dulaglutide, and semaglutide in high-risk patients

## ⚠ Common Side Effects

- Nausea, vomiting, diarrhea, constipation
- Gallbladder disease
- Pancreatitis (rare but serious)

- Injection site reactions

## ❑ Contraindications

- Personal/family history of **medullary thyroid carcinoma (MTC)**
- **MEN type 2** syndrome
- History of **pancreatitis** (use with caution)

## ❑ Ongoing Research

- Non-alcoholic steatohepatitis (NASH)
- Cognitive and neurodegenerative disease modulation
- Multi-agonist therapies (dual/triple incretin agonists)

# GLP-1 Receptor Agonists in Idiopathic Intracranial Hypertension

[GLP-1 Receptor Agonists in Idiopathic Intracranial Hypertension.](#)

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