

Mounjaro (tirzepatide)

Diabetes Clinical Champion Update

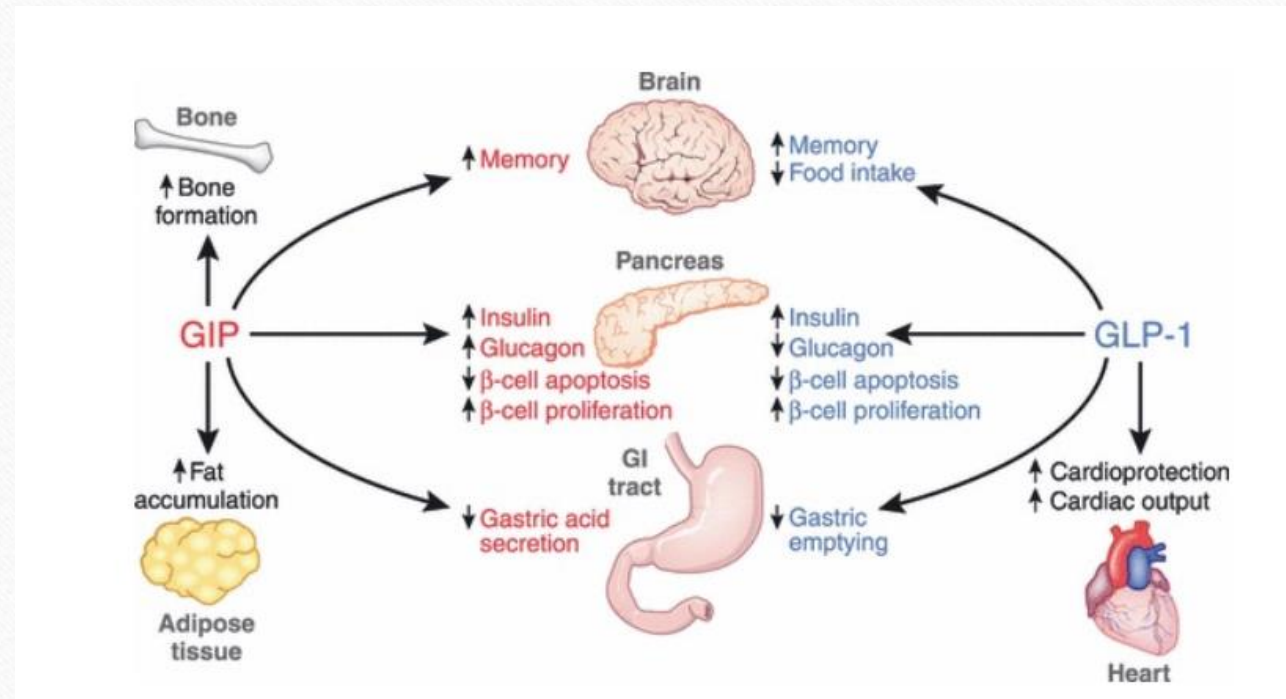
Mechanism of Action

- First and only GLP-1 agonist AND GIP agonist
 - GIP = Gastric Inhibitory Polypeptide
 - GLP-1 and GIP are the two primary incretin hormones secreted from the intestine
 - Upon ingestion of glucose, these hormones are released to stimulate the pancreatic beta cells to release insulin
 - These hormones also affect the brain, fat, and muscle tissues

The effects of GLP-1 and GIP hormones

[J Diabetes Investig. 2010 Apr 22; 1\(1-2\): 8–23.](#)

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Mounjaro (tirzepatide)

- Approved for T2DM only
 - Not for use in T1DM
 - Not for use in pre-diabetes
 - Not approved for morbid obesity/weight loss alone

SURPASS-4 Trial

tirzepatide vs semaglutide (Ozempic)

- 40 week randomized control trial
- Found to be non-inferior AND superior to semaglutide for A1c reduction
- Average weight loss higher with tirzepatide with $P < 0.001$
 - Range 12-25lbs of weight loss
- The estimated mean change from baseline in the A1c level was -2.01 percentage points, -2.24 percentage points, and -2.30 percentage points with 5 mg, 10 mg, and 15 mg of tirzepatide, respectively, and -1.86 percentage points with semaglutide
- Trial underway to evaluate cardiovascular risk reduction

Mounjaro (tirzepatide)

Prescription

- Sig: Inject 2.5mg by SQ route once weekly
- Quantity: 4 pens
 - Each pen is one dose
- Refills: 0
- Doses available: 2.5mg, 5mg, 7.5mg, 10 mg, 12.5mg, 15mg

Info

- Needle included in the individual pens
- Increase at monthly intervals to max dose tolerated and until glycemic control reached
- The 2.5mg dose is only a starting dose to titrate, this is not considered a therapeutic dose
- Plan to send prescription for both the 2.5mg and 5mg dose at your initial prescription
- Copay cards available for those with commercial insurance

Tirzepatide side effects

- As with all GLP-1s, GI upset is common (around 10%)
 - Nausea, vomiting, diarrhea
- Rapid improvement in glucose control can lead to short term worsening of retinopathy. You may want to consider titrating slower in a patient with this history.
- The significant reduction in blood sugars with this medication can lead to hypoglycemia with SUs or insulin. Consider lowering doses when starting this medication.
- Post marketing reports have shown potential for AKI in patients with significant GI side effects. Evaluate patients with these side effects for dehydration, and consider checking renal function if there are concerns.
- Theoretical risks of medullary thyroid cancer (avoid in fam hx of MEN2)
- Risks of pancreatitis, gastroparesis, or worsening of gallbladder disease

Order sets

- New order set called “Diabetes_StartMounjaro”
- This will include the information you need to counsel patients on, as well as how to administer the medication
- Comes in a pen that looks similar to Trulicity (same instructions)
- Nurses have been trained in every center on educating patients to start these medications

Order sets available

Assessment & Plan **+** DIAGNOSES & ORDERS

Supervising Provider

Order Sets (12)

- Diabetes (12)**
 - living smart **diabetes** education referral
 - diabetes** foot health: care instructions
 - diabetes** diary
 - Learning About Carbohydrate (Carb) Counting and Eating Out When You Have **Diabetes**
- Diabetes_StartMounjaro (3)**
- Diabetes_StartOzempic (3)**
- Diabetes_StartTrulicity (3)**
- Glucometer_ContourNext (5)
- Glucometer_FreestyleLite (5)
- Glucometer_Generic (4)
- Glucometer_OneTouchUltra2 (5)
- Glucometer_OneTouchUltraMini (5)

To add an order set:

- Click the + button to add a diagnosis
- Type “Diabetes” and then hit the drop down arrow under order sets
- All of the options will show