

Did You Know? Approach to treatment of type 2 diabetes

If your goals have not been achieved, please consider the following:

Lifestyle

- Weight management.
- Healthy food choices.
- Portion control.
- Physical activity: 150 minutes total per week (three to five days) of aerobics, plus two to three sessions of resistance exercises, flexibility, stretching, and balance.

Metformin

- Always first-line therapy.
- Try extended release (ER) formulation for fewer gastrointestinal (GI) side effects.
- OK to use if glomerular filtration rate (GFR) is greater than 30 ml/minute.
- May need to hold temporarily for dehydration or for dye study.
- Continue as long as tolerated or not contraindicated, even if adding other medications.
- May develop B12 deficiency with long-term use.

Metformin: 500 mg, 850 mg, and 1,000 mg dosages; ER dosages of 500 mg and 750 mg.

Medications to avoid hypoglycemia

DPP-4:

- Moderate efficacy.
- May need real dose adjustment.
- Weight loss neutral.
- Potential risk for acute pancreatitis.
- May cause joint pain.

Do not use GLP-1.

On VIP formulary

- **Alogliptin** 12.5 mg, 25 mg, 6.25 mg; renal dosing.
- **Januvia® (sitagliptin)** 100 mg, 25 mg, 50 mg; renal dosing.
- **Tradjenta® (linagliptin)** 5 mg; no renal dosing.
- **Combo:**
 - **Alogliptin-metformin** 12.5/1,000 mg and 12.5/500 mg.
 - **Janumet® XR** 100/1000 mg, 50/1000 mg, 50/500 mg.

SGLT-2:

- Moderate efficacy.
- Cardiovascular benefits.
- Avoid if estimated GFR is less than 45 ml/minute.
- Can cause genitourinary infections.
- Can cause volume depletion.

On VIP formulary

- **Jardiance® (empagliflozin)** 10 mg and 25 mg.
- **Invokana® (canagliflozin)** 100 mg and 300 mg (risk of bone fractures).

GLP-1:

- High efficacy.
- Weight loss.
- GI side effects; usually improve over time.
- Injectable.
- May be associated with pancreatitis.
- Risk of thyroid C cell tumors.
- Some protect the cardiovascular system.

Do not use DPP-4.

On VIP formulary

- **Trulicity® (dulaglutide)** 0.75 mg and 1.5 mg; once weekly.
- **Ozempic® (semaglutide)** 0.25 mg, 0.5 mg, and 1 mg; once weekly.
- **Victoza® (liraglutide)** 0.6 mg; once daily.

Medications to promote weight loss	Medications with cardiovascular protection	Medications beneficial with chronic kidney disease	Medications for step therapy
<p>GLP-1: Refer to VIP formulary.</p> <p>SGLT-2: Refer to VIP formulary.</p>	<p>GLP-1: Refer to VIP formulary.</p> <p>SGLT-2: Refer to VIP formulary if GFR is greater than 45 ml/minute.</p>	<p>SGLT-2: Hold for GFR < 30</p> <p>GLP-1</p>	<p>GLP-1: Refer to VIP formulary.</p> <p>SGLT-2: Refer to VIP formulary.</p> <p>DPP-4: Refer to VIP formulary.</p> <p>To get approval for second-line therapy, record must indicate metformin was tried and was not tolerated, was contraindicated, or did not achieve full control of diabetes.</p>

If patient still needs better control, please consider the following:

- Add basal insulin — start at 10 units/day or 0.1 – 0.2 IU/kg a day.
- Titrate every three to five days by 2 units to reach fasting plasma goal.
- If patient develops hypoglycemia, lower dose by 10 – 20 percent.
- **Lantus® SoloStar® U-100.**
- **Levemir® Flextouch® pen U-100.**
- **Toujeo® SoloStar® U-300.**