



GLP-1 Receptor Agonists Precautions (Numbered in order from high to low frequency)



Gastrointestinal Symptoms

(nausea, vomiting, diarrhea>constipation, abdominal pain, etc.)

Dose-dependent

May be worse in patients with gastroparesis or GERD

Often improves with time



Hypoglycemia

Typically only occurs when used with insulin or sulfonylurea therapy

In patients already achieving target HbA1c, preemptively lower insulin / sulfonylurea dose



Injection Site Reactions

Typically mild



Acute kidney injury

Attributed to pre-renal factors from GI side effects in patients with AKI risk factors

Rare instances of allergic interstitial nephritis have also been reported



Pancreatitis

Inconsistent finding in clinical studies

Consider avoiding in patients with risk factors for OR history of pancreatitis



Contraindications

Contraindicated in patients with:

- Personal or family hx of medullary thyroid cancer or multiple endocrine neoplasia type 2 (based on findings from animal studies, not observed in clinical trials)
- Pregnancy or breastfeeding
- Allergy to GLP-1 RAs

Severity of Precaution:



Low



Moderate



Severe [Severe side effects are rare]



SGLT2 Inhibitors

Precautions (Numbered in order from high to low frequency)

Severity of Precaution:

- Low
- Moderate
- Severe

¹canagliflozin
²dapagliflozin
 TDD = total daily dose;
 SU – sulfonyleurea;
^aHeyward, 2020
^bDicembrini, 2019
^cQiu, 2021

1

Genital Mycotic Infections

Avoid if high risk, severe hx

- Treat severe hyperglycemia first, then start SGLT2
- Treat if mild, stop if recurrent

2

Low Blood Sugar

If HbA1c < 8.5%

- reduce TDD insulin 20%
- reduce SU 50% or hold

If HbA1c > 8.5%
adjust as needed

3

Low Blood Pressure

Consider holding diuretic and other anti-HTN med **if BP well controlled or age > 65**

4

Risk of Dehydration

Treat severe hyperglycemia prior to starting SGLT2i
Drink water!

5

Diabetic Ketoacidosis

Euglycemic Ketoacidosis

Avoid use with ketogenic (<50g carbs/day) diet
Hold for sick days, dehydration or with fasting such as pre- procedures (i.e. colonoscopy or surgery).

6

Low Renal Function

eGFR<45

Closely monitor GFR

Early fall in eGFR is expected (less than 10%)
Hold SGLT2i on sick days
Hold SGLT2i 24-48H preop

7

Necrotizing Fasciitis of Perineum

Anticipatory guidance
Monitor closely

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Bladder Cancer^{2,b}

Screen for high risk or history of bladder cancer

*

Bone fracture^{1,c}

Screen for fall risk.
Manage low blood pressure

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Lower Limb / Toe Amputation^{1,a,c}

Avoid in prior amputation, severe PVD or high risk.
Monitor foot health

● These risks have been reported in some clinical trials. Recent meta-analyses show no statistically significant risk. Use caution.