

# GLP 1 AGONISTS IN PATIENTS WITH ADVANCED CANCER:

## Insights from case series of patients seen by palliative care physicians

Daniel Gilbey, MD, MS, Sonal Admane MD, MPH, Haneen Abdelkhaleq, DO, Akhila Reddy, MD, Eduardo Bruera, MD  
MD Anderson Cancer Center, Department of Palliative, Rehabilitation and Integrative Medicine, Houston, TX

### KEY POINTS

- In the United States, 1 in 8 adults have trialed a GLP-1 medications
- Indications continue to increase; including for cardio & renovascular benefits, treatment of opioid and alcohol use disorders
- Patients with cancer may be at higher risk of developing increased symptoms and reduced quality of life when co-prescribed GLP-1 agonists.

### REFERENCES

- Harris E. Polt: Roughly 12% of US Adults Have Used a GLP-1 Drug, Even If Unaffordable. JAMA. 2024; 332(1):8. doi: 10.1001/jama.2024.10333

- Baggio LL, Drucker DJ. Biology of incretins: GLP-1 and GIP. Gastroenterology. 2007 May; 132(6):2131-57. doi: 10.1053/j.gastro.2007.03.054. PMID: 17498508.

- Rivera FB, Cruz LLA, Magalong JV, et al. Cardiovascular and renal outcomes of glucagon-like peptide 1 receptor agonists among patients with and without type 2 diabetes mellitus: A meta-analysis of randomized placebo-controlled trials.

- Am J Prev Cardiol. 2024 May 7;18:100679. doi: 10.1016/j.ajpc.2024.100679. PMID: 38779187;

- Marso, S. P. et al. Liraglutide and cardiovascular outcomes in type 2 diabetes. N. Engl. J. Med. 375, 311–322 (2016).

### INTRODUCTION

- **Glucagon-like peptide type-1 (GLP-1) analogs have emerged as the new paradigm for management of metabolic syndrome.**
- **Developed in the 1980's for treating diabetes, now with popularity souring as a miracle drug combating the national obesity epidemic.**
- **Long-term safety profiles remain under investigation and data is limited in patients with active cancer, as malignancy has been an exclusion criterion in clinical trials**

### CASE STUDIES

#### CASE I

- A 60-year-old male with metastatic renal cell carcinoma continued to experience severe appetite loss refractory to Megestrol and Mirtazapine.
- His family eventually correlated symptoms to Semaglutide that he used sporadically for glycemic control.
- The patient continued to decline, developing multiorgan SA . He passed away 2 weeks after his final dose of Semaglutide.

#### CASE II

- A 45yr old female with stage IV B-cell lymphoma experienced nausea, anxiety and constipation. She continued Semaglutide for management of weight gain and diabetes whilst receiving opioids for cancer pain.
- Metoclopramide reduced nausea, with little benefit from Ondansetron. Olanzapine addressed anxiety.
- The patient opted to continue her GLP-1 after completing disease directed treatments, requiring ongoing supportive care follow-up for symptom manage.

#### CASE III

- A 64-year-old female diagnosed with metastatic breast cancer had lost 60lbs whilst taking Tirzepatide, but self-discontinued due to side effects.
- She commenced metoclopramide for nausea, olanzapine for anxiety, and opioids for pain. She experienced regain of weight with hyperglycemia prompting reinitiation of her GLP-1
- The patient opted to stay on olanzapine at a reduced dose of 2.5 mg, along with reducing her GLP-1 to 25% of initial dose.
- Ongoing supportive care follow-up remains for symptom management

### CONCLUSION

- **We observed an increase in symptom burden in patients with cancer – particularly nausea, loss of appetite and constipation in those receiving GLP-1 medications.**
- **Co-prescribing GLP-1 agonists with opioids increased GI symptom burden.**
- **Some patients continue to take GLP-1 agonists whilst receiving cancer treatment requiring close monitoring.**

### DISCUSSION

- **Awareness of documented side effects from GLP-1 medications in cancer patients are necessary as ones symptom burden may be enhanced, negatively impacting quality of life.**
- **Further research can create guidelines for cancer patients co-prescribed GLP-1 medications.**

Patient ID	Primary Malignancy	GLP-1 Prescribed	Side Effects Related to GLP-1	Medications Trialed for Symptoms
1	Renal Clear Cell	Semaglutide	-Loss of Appetite -Constipation	-Megestrol (discontinued due to risk of VTE) -Mirtazapine (with no improvement on appetite)
2	Diffuse Large B Cell Lymphoma	Semaglutide	-Loss of Appetite -Nausea -Constipation	-Ondansetron -Metoclopramide -Olanzapine -Senna -Polyethylene glycol
3	Metastatic Breast Cancer	Tirzepatide	-Loss of Appetite -Nausea -Constipation	-Metoclopramide -Polyethylene glycol -Senna -Olanzapine

Table 1