

UCMC Solid Organ Transplant

Guidelines for Liver Transplant Candidates on GLP-1 Agonists and/or SGLT-2 Inhibitors

Medication Class Examples	Discontinue and/or Transition to an alternate therapy at Listing?	Perioperative concerns	Management
<p style="text-align: center;"><u>GLP-1 Agonists</u></p> <ul style="list-style-type: none"> • Exenatide (Byetta, Bydureon) • Lixisenatide (Adlyxine) • Liraglutide (Victoza, Saxenda) • Dulaglutide (Trulicity) • Semaglutide (Ozempic, Wegovy, Rybelsus, etc.) • Insulin Degludec and Liraglutide (Xultophy) • Insulin Glargine and Lixisenatide (Soliqua) • Tirzepatide (Mounjaro, Zepbound) 	No	Increased aspiration risk during surgery due to delayed gastric emptying	<ul style="list-style-type: none"> • Make patient NPO immediately when called in for transplant surgery • Treat as a full stomach for anesthesia induction
<p style="text-align: center;"><u>SGLT-2 Inhibitors</u></p> <ul style="list-style-type: none"> • Bexagliflozin (Brenzavvy) • Canagliflozin (Invokana, Invokamet, Invokamet XR) • Dapagliflozin (Farxiga, Xigduo, Xigduo XR, Qtern, Qternmet XR) • Empagliflozin (Jardiance, Synjardy, Synjardy XR, Glyxambi, Trijardy XR) • Ertugliflozin (Steglatro, Segluromet, Steglujan) 	Yes¹	Euglycemic DKA	<ul style="list-style-type: none"> • Postoperative monitoring for euglycemic DKA (metabolic acidosis with anion gap) and institute dextrose/insulin as needed

¹ Process for discontinuation/transition to a different drug to be individualized per candidate situation and to be discussed by the transplant anesthesiologist, surgeon, hepatologist and coordinator. Need to consider risk/benefit of stopping therapy especially in candidates with glycemic control difficulty. After plan is determined, transplant coordinators to work with the prescribing physician to discontinue/transition to a different drug.

- For candidates with a known wait period (ie. DAPT duration, exception points) discontinuation/transition should be delayed until close to being active on waitlist.
- For candidates of a scheduled living donor liver transplant (LDLT) discontinue therapy 72 hours prior to transplant surgery.

References:

1. <https://www.asahq.org/about-asa/newsroom/news-releases/2023/06/american-society-of-anesthesiologists-consensus-based-guidance-on-preoperative>. American Society of Anesthesiologists Consensus-Based Guidance on Preoperative Management of Patients (Adults and Children) on Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists
2. Perioperative Management of Oral Glucose-lowering Drugs in the Patient with Type 2 Diabetes. *Anesthesiology* August 2020, Vol. 133, 430–438.