

Current Safety Data⁷⁵

Drug	Adverse effects			Not recommended or Contraindicated
	Confirmed	Cannot confirm or reject	Case reports	
SUs	Dose related GI effects Skin hypersensitivity reactions		Various blood dyscrasias	Sulfa allergy G6PD deficiency
TZDs	edema, weight gain, macular edema ↑ fracture risk ↑ risk of pneumonia			Heart failure IHD Bladder cancer
DPP-4 Inhibitors	Skin hypersensitivity reactions ↓ lymphocyte count	Acute and chronic, fatal and nonfatal pancreatitis, pancreatic cancer [#]	Joint pain Possible renal events noted for saxa, sita & alo Thrombocytopenia with sita	Heart Failure • lina & sita not recommended • saxa & alo use cautiously Lina + insulin not recommended
GLP-1 receptor agonists	Dose related GI effects Skin hypersensitivity reactions, anaphylaxis ↑ HR, PR interval prolongation Injection site reactions	Acute and chronic, fatal and nonfatal pancreatitis, pancreatic cancer [#]	Possible renal events	Inflammatory bowel disease, diabetic gastroparesis Hx of medullary thyroid cancer or in Multiple Endocrine Neoplasia syndrome type 2
SGLT-2 inhibitors	Dose related - dehydration, hypovolemia, orthostatic hypotension, hypotension, osmotic diuresis, LDL ↑ ↑ SrCr, ↓ eGFR Acute kidney injury* ↑ fracture risk (canagliflozin) UTIs and genital infections ↑ potassium, ↑ hemoglobin, hematocrit		Ketoacidosis Serious UTIs	Volume depletion Bladder cancer

GI- gastrointestinal; G6PD - glucose 6 phosphate dehydrogenase deficiency; IHD – Ischemic heart disease;

HR- heart rate; saxa-saxagliptin; sita- sitagliptin; alo- alogliptin; lina- linagliptin; UTI- urinary tract infection; SrCr – serum creatinine; eGFR (estimated glomerular filtration rate)

* Summary Safety Review, Health Canada Oct 16,2015 (www.hc-sc.gc.ca)⁷⁶

[#] A CNODES population cohort study of ~ 1 million people found no increased risk of pancreatic cancer associated with the use of incretin based drugs compared with SUs after a median follow up of 1.2 – 2.8 years. This potential adverse drug reaction will need to be monitored long term owing to the latency of the cancer.⁷⁷ <http://dx.doi.org/10.1136/bmj.i581>