Sodium-glucose cotransporter-2 (SGLT-2) inhibitors – New warning

- On August 29, 2018, the FDA announced a new warning that cases of a rare but serious infection of the genitals and area around the genitals have been reported with the class of SGLT-2 inhibitors. This serious rare infection, called necrotizing fasciitis of the perineum, is also referred to as Fournier’s gangrene.
  - The FDA is requiring that a new warning about this risk be added to the prescribing information of all SGLT-2 inhibitors and to the patient medication guide.

- The SGLT-2 inhibitors include Invokana® (canagliflozin), Farxiga® (dapagliflozin), Jardiance® (empagliflozin), and Steglatro™ (ertugliflozin). Combination products containing a SGLT-2 inhibitor include Invokamet® (canagliflozin/metformin), Invokamet® XR (canagliflozin/metformin extended-release), Xigduo® XR (dapagliflozin/metformin extended-release), Qtern™ (dapagliflozin/saxagliptin), Glyxambi® (empagliflozin/linagliptin), Synjardy® (empagliflozin/metformin), Synjardy® XR (empagliflozin/metformin extended-release), Stegluromet™ (ertugliflozin/metformin), and Steglujan™ (ertugliflozin/sitagliptin).
  - These products are all FDA-approved as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.
  - Jardiance is also approved to reduce the risk of cardiovascular death in adults with type 2 diabetes and established cardiovascular disease.

- Fournier’s gangrene is an extremely rare but life-threatening bacterial infection of the tissue surrounding the perineum. The bacteria usually get into the body through a cut or a break in the skin, where they quickly spread and destroy the tissues they infect. Having diabetes is a risk factor for developing Fournier’s gangrene; however this condition is still rare among these patients. Publications report that Fournier’s gangrene occurs in 1.6 out of 100,000 males per year in the U.S.

- In the five years from March 2013 to May 2018, 12 cases of Fournier’s gangrene in patients taking an SGLT-2 inhibitor were reported to the FDA Adverse Event Reporting System (FAERS) or found in the medical literature. These 12 cases included 7 men and 5 women. Fournier’s gangrene developed within several months of the patients starting an SGLT-2 inhibitor, and all 12 patients required hospitalization and surgery, resulting in one death.
  - In comparison, only six cases of Fournier’s gangrene (all in men) were identified in review of other antidiabetic drug classes over a period of more than 30 years.

- Patients should seek immediate medical attention if they experience any symptoms of tenderness, redness, or swelling of the genitals or from the genitals back to the rectum, and have a fever above 100.4 degrees Fahrenheit or a general feeling of being unwell.

- Healthcare professionals should assess patients for Fournier’s gangrene if they present with the above symptoms. Start treatment immediately with a broad-spectrum antibiotic and surgical debridement if necessary. The SGLT-2 inhibitor should be discontinued and patients should be provided with an appropriate alternative therapy for glycemic control.