## **Doncaster & Bassetlaw Medicines Formulary**

**Section 6.1.2 Antidiabetic Drugs** 

Metformin 500mg and 850mg Tablets Metformin 500mg, 750mg and 1g MR Tablets

Gliclazide 80mg Tablets

**Alogliptin 6.25mg, 12.5mg and 25mg Tablets**Sitagliptin 25mg, 50mg and 100mg Tablets
Linagliptin 5mg Tablets

Pioglitazone 15mg, 30mg and 45mg Tablets

Liraglutide 6mg/ml Injection

Semaglutide 0.25mg, 0.5mg and 1mg Injection

Semaglutide 3mg, 7mg and 14mg Tablets

Canagliflozin 100mg and 300mg Tablets Empagliflozin 10mg and 25mg Tablets Dapagliflozin 5mg and 10mg Tablets Ertugliflozin 5mg and 15mg Tablets

Repaglinide 500microgram, 1mg and 2mg Tablets

**Approved by Drug and Therapeutics Committee: January 2022** 

**Review Date: January 2025** 

## Prescribing Guidance:

NICE guidance relating to prescribing in Type 2 diabetes can be found via: NICE Guidance CG87.

Metformin may cause abdominal cramps and diarrhoea on initiation. This may be minimised by co-administering with food, and also starting low and increasing gradually. Metformin MR is available and may be prescribed where there is gastrointestinal intolerance to standard release Metformin, despite the measures outlined above.

Metformin is contraindicated in renal and hepatic impairment due to the risk of lactic acidosis. NICE advise stopping Metformin if serum creatinine is greater than 150mmol/l, or if eGFR falls below 30ml/min/1.73m<sup>2</sup>. Lactic acidosis is a very rare clinical condition, but is associated with high mortality rates.

**KEY:** [UL] Unlicensed Preparation; **Drug** – first line choice; **Drug** – hospital only; **Drug** – Amber (TLS), **Drug** – Red (TLS), see <a href="http://medicinesmanagement.doncasterccg.nhs.uk/traffic-light-system/">http://medicinesmanagement.doncasterccg.nhs.uk/traffic-light-system/</a>

Interaction between metformin and contrast media:

There is no need to stop metformin after contrast in patients with serum creatinine within the normal reference range and/or eGFR>60ml/min. If serum creatinine is above the normal reference range (>130mmol) or eGFR is below 60, metformin should usually be stopped 24 hours prior to administration of the contrast media and restarted only following rechecking of serum creatinine 24 hours after administration.

(Adapted from RCR Guidance, 2010: http://www.rcr.ac.uk/docs/radiology/pdf/BFCR(10)4 Stand contrast.pdf)

Alogliptin is listed as the gliptin (DPP-4 inhibitor) of choice, because it is the most cost-effective option and as a result of data suggesting cardiovascular safety (http://www.nejm.org/doi/full/10.1056/NEJMoa1305889).

For guidance on management of blood pressure in type 2 diabetes, see <u>NICE</u> Guidance CG87.

## SGLT2 Inhibitor Prescribing:

## See also linked NICE guidance

- Ertugliflozin
- Canagliflozin
- Dapagliflozin
- Empagliflozin

SGLT2 inhibitors should be considered for those patients with established cardiovascular disease or chronic kidney disease if eGFR is adequate as add-on therapy to metformin (or as monotherapy if patient is contra-indicated to metformin) to achieve adequate glycaemic control. Canagliflozin and Empagliflozin demonstrated significant cardiovascular events reduction in clinical trials and therefore remain first line choices.

Dapagliflozin and empagliflozin are the only SGLT2 inhibitors licensed for use in heart failure. Dapagliflozin is the only SGLT2 inhibitor licensed in chronic kidney disease.

Ertugliflozin is the least expensive SGLT2 inhibitor but should be reserved for low cardiovascular risk diabetic patients, where it can be considered a first-line therapy.

Patients should be informed the risk of developing DKA with SGLT2 inhibitors and how to recognise its signs and symptoms and seek medical attention if symptoms occur.

Canagliflozin may increase the risk of lower-limb amputation (mainly toes) in patients with type 2 diabetes.

MHRA have published reports of Fournier's gangrene from SGLT2 inhibitors use in February 2019 and patients should be advised to seek urgent medical attention if they experience severe pain, tenderness, erythema or swelling in genital or perineal area.