Formulary Fact Sheet:
DPP-4 inhibitors
Alogliptin

NHS
Kernow Clinical Commissioning Group

The purpose of this fact sheet is to provide guidance to clinicians when prescribing DPP-4 inhibitors

DPP-4 inhibitors (gliptins)

NICE guidance suggests that when prescribing DPP-4 inhibitors the drug with the lowest cost acquisition should be prescribed where appropriate. Alogliptin is currently the least expensive DPP-4 inhibitor and should be considered as first choice for new patients prescribed a DPP-4 inhibitor.

However if the eGFR is below 30mL/min, linagliptin (5mg) should be considered as linagliptin is excreted by the biliary system and no dose adjustment is required. If the eGFR is between 30mL/min and 50mL/min the need for regular renal monitoring and potential dose reduction of alogliptin should be considered (linagliptin does not require dose reduction if eGFR falls below 30mL/min).

Existing Patients on DPP-4 inhibitors

At routine review, patients who are prescribed a DPP-4 inhibitor with a higher acquisition cost than alogliptin (i.e. saxagliptin, sitagliptin, vildagliptin and linagliptin) could be considered for a switch to alogliptin if the eGFR is above 30mL/min. If the eGFR is between 30 and 50 and the patient is on linagliptin it may be appropriate to continue with linagliptin to avoid the need for dose reduction if renal function deteriorates further.

Hence if deemed appropriate, consider a switch from existing sitagliptin, vildagliptin, linagliptin and saxagliptin therapy to alogliptin within its licensed indication. The following guide to dosing is suggested. It is expected that this switch will not cause any marked change in diabetes control, hence patients can be followed up with the usual review process.

Renal function	Alogliptin	Linagliptin	Saxagliptin	Sitagliptin	Vildagliptin
Normal	25mg OD	5mg OD	5mg OD	100mg OD	50mg BD (or 50mg OD with an SU)
Mild eGFR ≥60ml/min/1.73m^2	25mg OD	5mg OD	5mg OD	100mg OD	50mg BD (or 50mg OD with an SU)
Moderate eGFR 30-59ml/ min/1.73m^2	12.5mg OD	5mg OD	2.5mg OD	50mg OD	50mg OD
Hepatic impairment	Not recommended in severe hepatic impairment	No reduction but limited experience	Not recommended in severe hepatic impairment	Use cautiously in severe hepatic impairment	Not recommended

OD: Once daily; BD: twice daily

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