### Further Guidance on Hypoglycaemic Agents

This appendix provides detailed guidance on the formulary choices for oral hypoglycaemic agents. The drug classes are colour coded, with the place in therapy of each drug within that group highlighted. Please refer to the FV diabetes management guidelines available on the intranet for the place in therapy for each class.

<table>
<thead>
<tr>
<th>DRUG</th>
<th>CLASS</th>
<th>PLACE IN THERAPY</th>
<th>DOSE</th>
<th>DOSE CHANGES</th>
<th>CAUTIONS/CONTRAINDICATIONS</th>
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<tbody>
<tr>
<td>METFORMIN</td>
<td>BIGUANIDE</td>
<td>FIRST LINE CAN BE COMBINED WITH ALL ORAL AND INJECTABLE HYPOGLYCAEMIC AGENTS</td>
<td>INITIALLY 500MG DAILY INCREASING TO 2 GRAMS DAILY</td>
<td>STOP IF eGFR &lt;30</td>
<td>• TAKE WITH FOOD • CHANGE TO MR IF GI INTOLERANT • AVOID IN KETOACIDOSIS • CHECK VITAMIN B12 ANNUALLY IF LONGTERM USE • AVOID IF IODINE CONTAINING CONTRAST USED</td>
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<tr>
<td>GLICLAZIDE</td>
<td>SULPHONYLUREA</td>
<td>USE IF BMI&lt;25 or symptomatic or metformin intolerant DOSE SHOULD BE REVIEWED IF ANOTHER ORAL HYPOGLYCAEMIC AGENT ADDED</td>
<td>40-320MG DAILY</td>
<td>AVOID IN SEVERE RENAL IMPAIRMENT AVOID IN HEPATIC IMPAIRMENT</td>
<td>• HYPOGLYCAEMIA • WEIGHT GAIN • AVOID IN PREGNANCY AND BREASTFEEDING • REVIEW DOSE IN ELDERLY PATIENTS (&gt;75 YEARS)</td>
</tr>
<tr>
<td>GLIMEPIRIDE</td>
<td>SULPHONYLUREA</td>
<td>ALTERNATIVE TO GLICLAZIDE IF COMPLIANCE PROBLEMS DOSE SHOULD BE REVIEWED IF ANOTHER ORAL HYPOGLYCAEMIC AGENT ADDED</td>
<td>1-6MG DAILY WITH BREAKFAST</td>
<td>AVOID IN SEVERE RENAL AND HEPATIC IMPAIRMENT</td>
<td>• HYPOGLYCAEMIA • WEIGHT GAIN • AVOID IN PREGNANCY AND BREASTFEEDING • REVIEW DOSE IN ELDERLY PATIENTS (&gt;75 YEARS)</td>
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<tr>
<td>PIOGLITAZONE</td>
<td>THIAZOLIDINEDIONE (TZD)</td>
<td>DUAL OR TRIPLE THERAPY WITH METFORMIN/SU</td>
<td>15-45MG DAILY</td>
<td>AVOID IN HEPATIC IMPAIRMENT DIP URINE BEFORE INITIATING TREATMENT AND IF MICROSCOPIC HAEMATURIA PRESENT DO NOT PRESCRIBE CAN BE USED WITH INSULIN UNDER SPECIALIST SUPERVISION</td>
<td>• AVOID IF HEART FAILURE • ACTIVE OR HISTORY BLADDER CANCER • UNINVESTIGATED MACROSCOPIC HAEMATURIA • AVOID IN ELDERLY • AVOID IF HIGH FRACTURE RISK • MONITOR LFT BEFORE AND DURING TREATMENT • AVOID PREGNANCY AND BREASTFEEDING</td>
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### Alogliptin
**DPP4 Inhibitor**
- **First choice DPP4** dual therapy with either metformin or SU, triple therapy (see consensus statement)
- **Insulin add on**
- **Doses:**
  - eGFR 30-50: 12.5mg
  - eGFR <30: 6.25mg
  - Doses of SU, insulin may require to be reduced if used concomitantly
- **Precautions:**
  - Caution in moderate/severe heart failure
  - Avoid if history acute pancreatitis
  - Avoid pregnancy/breastfeeding
  - Avoid severe hepatic impairment
  - Avoid in ketoacidosis

### Linagliptin
**DPP4 Inhibitor**
- DPP4 for patients with renal impairment
- Mono, dual with metformin or triple (metformin/SU)
- Use with insulin
- **Doses:**
  - 5mg once daily
- **Precautions:**
  - Avoid pregnancy/breastfeeding
  - Avoid if history acute pancreatitis
  - Avoid in hepatic impairment

### Empagliflozin
**SGLT2 Inhibitor**
- **First choice SGLT2** mono, dual, triple
- **Insulin add on**
- **Doses:**
  - Can continue if eGFR <60 when on treatment
  - If eGFR <45 stop
  - Doses of SU, insulin may require to be reduced if used concomitantly
- **Precautions:**
  - No initiation if eGFR <60
  - Avoid in severe hepatic impairment
  - Avoid pregnancy/breastfeeding
  - Avoid in patients >85 years
  - Avoid if on loop diuretics
  - Correct hypovolaemia before initiation
  - Avoid if ketoacidosis
  - Caution if recurrent UTI/genital infection
  - Reinforce the importance of good footcare
  - Stop if develop any foot complications and consider alternative class
<table>
<thead>
<tr>
<th>Dapagliflozin</th>
<th>SGLT2 Inhibitor</th>
<th>Patients already prescribed or intolerant to other SGLT2 dual with Metformin triple insulin add on</th>
<th>10mg daily</th>
<th>5mg in severe hepatic impairment</th>
<th>Avoid if eGFR &lt;60</th>
<th>Avoid pregnancy (2/3 trimester) / breastfeeding</th>
<th>Avoid in patients &gt;75 years</th>
<th>Avoid if on loop diuretics</th>
<th>Avoid if on pioglitazone</th>
<th>Correct hypovolaemia</th>
<th>Avoid in ketoacidosis</th>
<th>Reinforce the importance of good footcare</th>
<th>Stop if develop any foot complications and consider alternative class</th>
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<tr>
<td>Exenatide</td>
<td>GLP1</td>
<td>Hba1c &gt;59</td>
<td>2mg weekly (Bydureon)</td>
<td>Avoid if eGFR &lt;50</td>
<td>Avoid if LFT’s are abnormal</td>
<td>Avoid pregnancy and breastfeeding</td>
<td>Avoid severe GI disease/ gastroparesis</td>
<td>Avoid in pancreatitis / cholecystitis/ high alcohol intake</td>
<td>HbA1C must reduce by 11mmol/mol at 3 months to continue</td>
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<tr>
<td>Liraglutide</td>
<td>GLP1</td>
<td>First choice if patient &lt;55 years Hba1c &gt;59</td>
<td>0.6 mg once daily titrated to a maximum 1.8mg daily</td>
<td>Avoid if eGFR &lt;30</td>
<td>Avoid if LFT’s are abnormal</td>
<td>Avoid pregnancy and breastfeeding</td>
<td>Avoid severe GI disease/ gastroparesis</td>
<td>Avoid in pancreatitis / cholecystitis</td>
<td>HbA1C must reduce by 11mmol/mol at 6 months to continue</td>
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<tr>
<td>Xultophy</td>
<td>Basal insulin / GLP1</td>
<td>Add on to existing oral hypoglycaemic agents</td>
<td>Initially between 10-16 dose steps once daily maximum 50 dose steps daily</td>
<td>Avoid in hepatic and severe renal impairment</td>
<td>Avoid pregnancy and breastfeeding</td>
<td>Avoid severe GI disease/ gastroparesis</td>
<td>Avoid in pancreatitis / cholecystitis</td>
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