



GLP-1 Agonist in Type-2 DM

Indication:

HbA1c \geq 7.5% (\geq 59mmol/mol) on maximum tolerated doses of metformin and sulphonylurea/other oral agents.

AND

A body mass index (BMI) \geq 35 Kg/m² in those of European descent (with appropriate adjustment for other ethnic groups) and specific psychological or medical problems associated with high body weight,

OR

A body mass index(BMI) $<$ 35.0 kg/m², and therapy with insulin would have significant occupational implications or weight loss would benefit other significant obesity-related co-morbidities

Contraindications:

- Type 1 DM/Ketoacidosis
- Pregnancy and breast feeding
- Renal impairment (see table)
- Liraglutide: History of medullary thyroid cancer/ MEN 2
- History of pancreatitis (relative contraindication- depending on aetiology; consider specialist review)

Available agents:

Exenatide (Byetta)- Twice daily injection (pre-meal)

Liraglutide (Victoza)- once daily injection

Exenatide once weekly (Bydureon)- once weekly injection

Choice of specific agent is determined by:

- the selection of injection devices
- patient preference regarding frequency and ease of administration
- cost

Service provision:

Wolverhampton PCT offers a Local Enhanced Service payment for GLP-1 initiation in people with Type 2 Diabetes. Practices wishing to start-up GLP-1 are required to attend the locally arranged training event supported by the specialist team.

Initiation of therapy:

- Confirm indication and check for contraindication
- Document baseline weight and BMI
- Blood tests - HbA1c, LFT, U & E
- Demonstrate correct injection technique
- Warn regarding side effects especially:
 - Nausea is common but usually mild & self limiting
 - Pancreatitis - if patient develops abdominal pain/nausea and vomiting they must stop the treatment and seek prompt medical attention. If pancreatitis confirmed, treatment must be discontinued
- Driving: Inform DVLA if on a sulphonylurea and holds Group 2 (LGV or PCV)

Review current diabetic treatment:

- Continue metformin
- **Stop** glitazone & gliptin.
- Consider discontinuing sulphonylureas if the primary driver is weight loss.

Monitoring after start-up	
Week 1	Start Exenatide 5 g sc twice daily (within 1 hour before breakfast and evening meal at least 6 hours apart), OR Liraglutide 0.6 mg sc once daily (can be taken at any time of day), OR Bydureon 2mg (once weekly)
Week 2	Enquire about side effects. Exenatide once weekly (BYDUREON) may take up to 2 weeks to reach therapeutic levels.
Week 4	Increase Exenatide dose to 10 g sc BD OR Liraglutide 1.2mg once daily
3 months	Document weight (BMI) and review weight loss. Assess glycaemic control, check HbA1c, LFT's and U & E's Check BP and review anti-hypertensive treatment
6 months	Document weight (BMI). Assess glycaemic control, check HbA1c, LFT's and U & E's

Continuation of GLP-1 agonists beyond 6 months:

- Continue treatment if: 1 % (11 mol/mol) fall in HbA1c and 3% reduction in body weight at six months
- If parameters not achieved, consider alternative treatment, including addition of insulin