

## NORTHERN IRELAND MEDICINES MANAGEMENT

May 2023

### Newsletter Supplement:

## Ensuring appropriate quantities of injectable GLP-1 mimetics in type 2 diabetes are prescribed

[NICE](#) recommends that glucagon-like peptide-1 (GLP-1) mimetics are an option in the treatment of type 2 diabetes mellitus if triple therapy with metformin and two other oral drugs is not effective, not tolerated or contraindicated, and the person meets the criteria specified in the [NICE](#) guidance.

This newsletter supplement aims to highlight prescribing issues with GLP-1 mimetics.

Injectable GLP-1 mimetics for type 2 diabetes:

- Exenatide (Byetta®, Bydureon®)
- Liraglutide (Victoza®)
- Dulaglutide (Trulicity®)
- Lixisenatide (Lyxumia®)
- Semaglutide (Ozempic®)

## GLP-1 mimetics prescribing information

### Product type

- Injectable GLP-1 mimetic products are available as prefilled pens.
- GLP1 mimetics are biological medicines and therefore must be prescribed by brand (i.e. not generically)

### Dosing

Dosing depends on the product, it is either:

- **A once or twice daily dose OR**
- **A weekly dose.**

**Note: some products need to be titrated before the maximum dose is reached.**

Unlike insulin, the dose does NOT depend on the patient's food intake. The actual fixed dose should be written on the prescription.

**There should be no 'dose as required' or 'dose as directed' prescriptions for GLP-1 mimetics.**

### Pack size and prescribing quantities

- All products come in a pack size which is sufficient for a one month supply.
- Care should be taken to ensure that larger quantities are not mistakenly prescribed.
- Monthly prescription quantities are generally encouraged to avoid waste and for safety reasons.
- SPPG has developed a useful Ready reckoner tool (see Table 1 on page 3) which can assist prescribers when ensuring that only a one month supply is issued. This is also available on the [Primary Care Intranet](#).

### Over supply

Recent routine monitoring of GLP-1 mimetic prescriptions has highlighted a number of occurrences of these drugs being over-prescribed by GPs and dispensed by pharmacies. As well as the cost implications there are potential patient safety concerns with over supply. We would encourage both prescribers and dispensers to review quantities on prescriptions for GLP-1 mimetics to ensure that they are prescribed, and dispensed, appropriately.

### Stopping Rules ([NICE NG28](#))

GLP-1 mimetic therapy should only be continued if the person with type 2 diabetes has had a beneficial metabolic response, defined as:

- A reduction of at least 11 mmol/mol (1.0%) in HbA1c **AND**
- A weight loss of at least 3% of initial body weight in 6 months.

The patient should be advised of these targets (and a record made in their notes) at initiation of the drug, so that they are fully informed.



## Examples of over supply

The following two case examples highlight when prescriptions were issued with the incorrect quantities:

### Case example one

A patient was prescribed 4 pens each month of semaglutide 0.5mg (Ozempic<sup>®</sup>) at a dose 0.5mg weekly.

- **The correct quantity to prescribe was ONE pen per month.**
  - The annual cost of prescribing 4 pens of semaglutide 0.5mg is £3,513
  - The annual cost of prescribing 1 pen per month (correct amount) is £878
- ⇒ **This cost of over supply for this patient was £2635 per year.**

### Case example two

A patient was prescribed 8 pens each month of liraglutide 6mg/ml (Victoza<sup>®</sup>) at a dose of 1.2mg daily.

- **The correct quantity to prescribe for this dose is TWO pens per month**
  - The annual cost of prescribing 8 pens per month is £3,767
  - The annual cost of prescribing 2 pens per month (correct amount) is £942
- ⇒ **This cost of over supply for this patient was £2,825 per year.**

## Actions

### GP practices

- GP practices should review prescribing of GLP-1 mimetics to ensure they are prescribed in line with NICE guidance. Discontinue treatment if NICE criteria have not been met.
- For patients who remain on GLP-1 mimetics, prescribing quantities should be reviewed using the SPPG Ready reckoner tool in Table 1.
- Routinely, only one month supply should be issued on a prescription.
- The availability of some of GLP-1 injections has fluctuated over the last year. Current supply status of medicines can be checked on [SPS](#) (registration required) or [BSO](#) website.
- Occasionally when an injection has not been available, the patient is changed to two injections of a half dose, until the higher strength injection has become available again. It is important to check the stock status frequently and revert back to the original strength, if stocks become available again. This is for reasons of both cost and patient convenience.
- GP Practices should have systems in place to prevent over prescribing of GLP-1 mimetics.



### Community pharmacists

- Pharmacists should as part of their clinical check review quantities of GLP1 agonists prescribed to ensure they are appropriate (refer to the ready reckoner in Table 1)
- Community pharmacists should highlight to the GP practice if patients are prescribed excessive quantities per month.
- If patients have been changed to two injections of a half dose (due to stock shortages of the higher dose) alert the GP practice if the higher strength stock issue resolves, so that the patient can revert back to the original strength.
- Community pharmacies should have systems in place to prevent over dispensing of GLP-1 mimetics.

This newsletter has been produced for GPs and pharmacists by the Regional Pharmacy and Medicines Management Team. If you have any queries or require further information on the contents, please contact one of the [Pharmacy Advisors](#)

Every effort has been made to ensure that the information included in this newsletter is correct at the time of publication. Throughout the newsletter, external links are provided to other sites. These links are provided to improve access to information and exist only for the convenience of readers of the Newsletter; SPPG cannot accept responsibility for their content. The SPPG does not necessarily endorse the views expressed within these external websites. We cannot guarantee that these links will work all of the time and we have no control over the availability of the linked pages. This newsletter is not to be used for commercial purposes.

## Table 1: Injectable GLP-1 mimetics Ready reckoner tool

Name of GLP-1 mimetic	Dose	Pack size and strength	Monthly Cost (April 2023 NI Drug Tariff)	Packs needed for 1 month supply
<b>Exenatide</b> (twice-daily injection) <b>Byetta</b>	5 micrograms twice daily before meals, increased if necessary to 10 micrograms twice daily	5 micrograms /0.02ml 1.2 ml pre-filled pen	£81.89	Each pack contains ONE pre-filled pen (60 doses) <b>ONE PEN is sufficient for 30 days supply</b>
		10 micrograms /0.04ml 2.4 ml pre-filled pen	£81.89	Each pack contains ONE pre-filled pen (60 doses) <b>ONE PEN is sufficient for 30 days supply</b>
<b>Exenatide</b> (once-weekly injection) <b>Bydureon</b>	2mg once weekly	4 x 2mg prolonged-release suspension for injection in pre-filled pen	£73.36	Each pack contains 4 pre-filled disposable injections <b>FOUR PENS are sufficient for 4 weeks</b>
<b>Liraglutide</b> (once-daily injection) <b>Victoza</b>	Initially 0.6mg once daily for at least 1 week, then increased to 1.2mg once daily for at least 1 week, then increased if necessary to 1.8mg once daily	2 x 6mg /ml 3ml pre-filled pens	£78.48	<b>For a 1.2mg daily dose:</b> <b>TWO PENS are sufficient for 30 days</b>
		3 x 6mg /ml 3ml pre-filled pens	£117.72	<b>For a 1.8mg daily dose</b> <b>THREE PENS are sufficient for 30 days</b>
<b>Lixisenatide</b> (once-daily injection) <b>Lyxumia</b>	Initially 10 micrograms once daily for 14 days, then increased to 20 micrograms once daily. To be taken within 1 hour before a meal	2 x 20 micrograms /0.2ml 3ml pre-filled pens	£57.93	For a 20 microgram dose <b>TWO PENS are sufficient for 30 days</b>
<b>Note: the 10 micrograms / 0.2ml pre-filled pens and the titration pack were discontinued in June 2022. Therefore no new patients can be commenced on Lixisenatide (Lyxumia®)</b>				
<b>Dulaglutide</b> (once-weekly injection) <b>Trulicity</b>	0.75mg once weekly as monotherapy. 1.5mg once weekly in combination treatment; increased if necessary to 3mg once weekly after at least 4 weeks; then increased, if necessary to 4.5mg once weekly after another 4 weeks	4 x 0.75mg /0.5ml pre-filled pens	£73.25	<b>FOUR PENS are sufficient for 4 weeks</b>
		4 x 1.5 mg /0.5ml pre-filled pens	£73.25	<b>FOUR PENS are sufficient for 4 weeks</b>
		4 x 3mg /0.5ml pre-filled pens	£73.25	<b>FOUR PENS are sufficient for 4 weeks</b>
		4 x 4.5 mg /0.5ml pre-filled pens	£73.25	<b>FOUR PENS are sufficient for 4 weeks</b>
<b>Semaglutide</b> (once weekly injection) <b>Ozempic</b>	Initially 0.25mg once weekly for 4 weeks, then increased to 0.5mg once weekly for at least 4 weeks, then increased if necessary to 1mg once weekly	0.25mg /0.19ml 1.5ml pre-filled pen <b>(Titration dose only for first 4 weeks of treatment)</b>	£73.25	<b>0.25mg strength is a TITRATION dose, therefore 0.25mg pens should not be added to repeat prescriptions</b> <b>ONE PEN is sufficient for 4 weeks</b>
		0.5mg /0.37ml 1.5ml pre-filled pen	£73.25	<b>ONE PEN is sufficient for 4 weeks</b>
		1mg /0.74ml 3ml pre-filled pen	£73.25	<b>ONE PEN is sufficient for 4 weeks</b>

Refer to [BNF](#) and [product information](#) for full details.