NHS
Buckinghamshire
Clinical Commissioning Group

Guide to Prescribing and Titrating Gliclazide Therapy

Background for Use:

Local diabetes guidelines recommend adding a second treatment when the HbA1c is >58mmols and the patient is on maximum tolerated mono-therapy. When starting a second therapy aim for an HbA1c target of ≤ 53mmols/molHbA1c targets should be individualised (see targets below)
Gliclazide can also be used first-line if patient unable to tolerate Metformin or it is contra-indicated or if patient symptomatic with high HbA1c(Remember to add in Metformin at a later stage).
Gliclazide can lower the HbA1c by 11mmol/mol on average.

There is considerable clinical experience of the efficacy and safety of gliclazide[1]

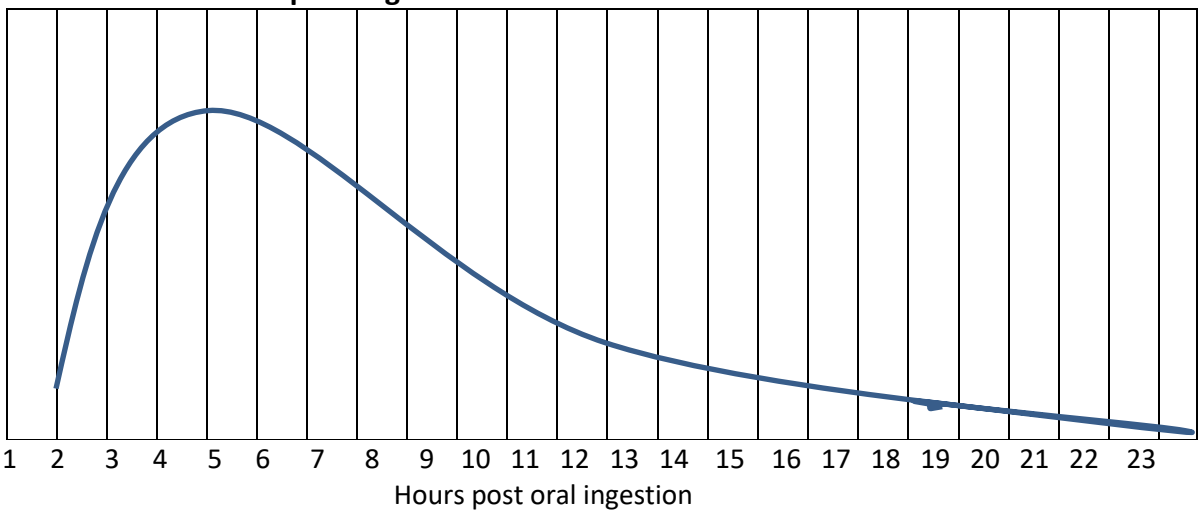
Initiation:

Gliclazide works by directly stimulating insulin secretion, so has the potential for causing hypoglycaemia. It is important to consider the time-action profile of gliclazide together with information about the patient's diet and activity.

If given with breakfast it will potentially lower blood glucose levels up to the evening meal.
If given with evening meal it will lower blood glucose levels pre bed and during night.

Onset 1-2 hours Peak 4-6 hours Half-life 8-12 hours

Time action profile gliclazide immediate release tablets



The starting dose is usually 80mgs with a meal but consider starting with 40mgs if there are any particular concerns about hypoglycaemia. A blood glucose profile will help you identify whether to initiate a dose with breakfast or the evening meal.

Initial Dose: Always with food	40-80mgs with one meal.
Titrate to:	40-80mgs BD with breakfast and evening meal
Maximum Dose:	160mgs BD

Targets:

Individual blood glucose (BG) targets may need to be agreed , especially for those where the risk of hypoglycaemia would cause significant problems or harm for example the frail elderly[2]

Remember: **LOW HbA1c (<48mmols/mol) THINK HYPOGLYCAEMIA!** It may be necessary to reduce or stop gliclazide.

For those patients not at risk titrate the dose to achieve target capillary BG levels or until maximum dose tolerated.

Blood Glucose Target Levels: **Aim for 5-7mmols fasting or pre-meal** and **<8.5mmol 2 hours post meal**

GliclazideTitration:

An Hba1c is used as a guide to determine overall diabetes control, but is unable to indicate daily variability of BG levels or hypoglycaemia- so to titrate Gliclazide it is more appropriate to use a BG profile.

The BG profile and information regarding the patient's activity and diet allows an informed decision to be made as to which dose needs to be adjusted.

Remember the time-action profile of Gliclazide:

If BG readings are consistently high from breakfast to the evening meal consider increasing the morning dose.

If BG readings are high after evening meal and on waking consider increasing the evening dose.

Dose Increments:

Increments of 40-80mgs can be made depending on how high the BG levels are:

E.g. If fasting glucose levels are only just above target (7-9) you can titrate up by 40mgs, however if BG levels are all in double figures 80mgs would be more appropriate.

Initial Review: 4-6 weeks:

- ✓ To target- review again in 3 months thereafter 6 months
- X Not to target- Increase dose and review 4-6 weeks

Follow-Up Review:

- ✓ To target- review again in 3 months thereafter 6 months
- X Not to target- Increase dose and review 4-6 weeks

When to Test:

Refer to local leaflet: Patient Information on Home Blood Glucose Testing in Type 2 Diabetes.
http://shared.bucksnet.nhs.uk

Advise patient to return to routine testing when target is achieved or to seek advice if blood glucose readings not to target.

Contraindications and Side–Effects: For full list see SPC

Renal and Hepatic Impairment:	Gliclazide should be used with care in those with mild to moderate renal impairment because of the increased risk of hypoglycaemia. They should be avoided where possible in severe renal impairment.
Hypoglycaemia:	Consider the time-action profile of the drug and its effect on the patient's lifestyle, eating pattern, occupation, age and hypo awareness. Ensure the patient understands what a hypo is/ how to recognise /treat and prevent a hypo. **TREND Leaflet: http://trend-uk.org/**
Hypo's and Driving:	The DVLA advise that patients should test their BG levels at times relevant to driving and every 2 hours on a long journey. See DVLA Guidelines www.gov.uk/government/publications/at-a-glance). Group 2 class drivers need to record their BG levels at least twice a day when on gliclazide. NB: Patients must be taught how to test their blood glucose levels (HBGM) and receive education on Hypoglycaemia and DVLA regulations. It is important to give written information and document in notes that it has been given. TREND Leaflet: Safe Driving and the DVLA **http://trend-uk.org**
Weight Gain:	Associated with 1-4kg weight gain in first 6 months of therapy.

References:

1. NICE: Medicines Evidence Commentary- Type 2 Diabetes: Meta-analysis finds no increased risk of mortality, MI or stroke with sulfonylureas. July 2016.
2. Internationl Diabetes Federation Guideline: managing older people with type 2 diabetes.