

Barnsley Treatment algorithm for the management of Type 2 diabetes

To be used in conjunction with the Barnsley Diabetes Guidelines 2016 available at: <http://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Barnsley%20Diabetes%20Guidelines.pdf> and the Summary of Product Characteristics for the individual drugs, available at: www.medicines.org.uk

- Reinforce advice on diet, lifestyle and adherence to drug treatment
- Agree individualised HbA1c target (taking into account hypoglycaemia risk, disease duration, life expectancy, co-morbidities, vascular disease and motivation). Check HbA1c 3-6 monthly and support individual to achieve target.(see below)
- Do not routinely offer blood glucose self-monitoring unless patient is on insulin or other drugs likely to cause hypoglycaemia, pregnant or likely to become pregnant or suffering from hypoglycaemia.

Adult with T2D able to take metformin

If HbA1c rises to 48mmol/mol (6.5%) on lifestyle interventions:

- Metformin 500-850mg bd-tds with or after meals. Adjust dose after 10-15 days according to response. Max 3g daily.
- If standard metformin not tolerated consider MR metformin.

Aim for HbA1c level of 48mmol/mol (6.5%)

First Intensification if HbA1c rises to 58mmol/mol (7.5%). Consider **dual therapy**:

- Metformin plus a DPP-4inhibitor (e.g. Sitagliptin 100mg od)
- Metformin plus pioglitazone (15mg to 30mg od. Increase to 45mg od if necessary).
- Metformin plus a sulfonylurea (e.g. Gliclazide initially 40mg to 80mg od. Increase to 160mg od if needed.
- Metformin plus a SGLT2inhibitor (e.g. Empagliflozin 10mg once daily, increasing to 25mg once daily if necessary)

Aim for HbA1c level of 58mmol/mol (7.5%)

Second Intensification if HbA1c rises to 58mmol/mol (7.5%). Consider **triple therapy***:

- Metformin **plus** DPP-4inhibitor (e.g. Sitagliptin) **plus** sulfonylurea (e.g. Gliclazide)
- Metformin **plus** pioglitazone **plus** sulfonylurea (e.g. Gliclazide)
- Metformin **plus either** pioglitazone **or** a sulfonylurea (e.g. Gliclazide) **plus** SGLT2inhibitor (e.g. Empagliflozin)
- Addition of insulin

Aim for HbA1c level of 53mmol/mol (7.0%)

Adult with T2D where metformin is contraindicated or not tolerated

If HbA1c rises to 48mmol/mol (6.5%) on lifestyle interventions. Consider one of the following:

- DPP-4inhibitor (e.g. Sitagliptin) **or** pioglitazone **or** sulfonylurea (e.g. Gliclazide)
- Aim for HbA1c level of 48mmol/mol (6.5%) in patients taking a DPP-4inhibitor or pioglitazone
- Aim for HbA1c level of 53mmol/mol (7.0%) in patients taking a sulfonylurea

First Intensification HbA1c rises to 58mmol/mol (7.5%)

Consider **dual therapy**:

- DPP-4inhibitor (e.g. Sitagliptin) **plus** pioglitazone
- DPP-4inhibitor (e.g. Sitagliptin) **plus** sulfonylurea (e.g. Gliclazide)
- Pioglitazone **plus** sulfonylurea (e.g. Gliclazide)

Aim for HbA1c level of 53mmol/mol (7.0%)

Second Intensification HbA1c rises to 58mmol/mol (7.5%)

Consider:

- Addition of insulin
- Aim for HbA1c level of 53mmol/mol (7.0%)

*If **triple therapy** is not effective, not tolerated or contraindicated, consider combination therapy with metformin **plus** sulfonylurea **plus** GLP-1 mimetic for adults with type 2 diabetes who:

- Have BMI of ≥ 35 kg/m² (adjust for people from black, Asian and other minority ethnic groups) and specific psychological or other medical problems associated with obesity **OR**
- Have BMI lower than 35 kg/m² and for whom insulin therapy would have significant occupational implications or weight loss would benefit other significant obesity-related co-morbidities