Management of Type 2 Diabetes NICE Guideline

NICE recommends that care be tailored to the needs and circumstances of the individual patient, taking into account their personal preferences, comorbidities, risks from polypharmacy, and ability to benefit from long-term interventions.

If symptomatically hyperglycaemic, consider insulin or sulfonylurea. Review treatment when blood glucose control achieved.

**Determine individual target HbA\(_1c\) and trial lifestyle measures**

- ≥48mmol/mol (6.5%)\(^a\)
- ≥48mmol/mol (6.5%)\(^a\)
- ≥48mmol/mol (6.5%)\(^a\)
- ≥58mmol/mol (7.5%)\(^a\)
- ≥58mmol/mol (7.5%)\(^a\)

**Metformin standard-release\(^b\)**

Unless:
- Metformin contraindicated/ not tolerated

**≥58mmol/mol (7.5%)\(^a\)**

**DPP4 inhibitor or Pioglitazone\(^c\) or Sulfonylurea or (if sulfonylurea and pioglitazone not appropriate) SGLT2 inhibitor**

- ≥58mmol/mol (7.5%)\(^a\)
- <58mmol/mol (7.0%)\(^a\)

**Metformin + DPP4 inhibitor or Pioglitazone\(^c\) or Sulfonylurea or Metformin + SGLT2 inhibitor\(^d\)**

- ≥58mmol/mol (7.5%)\(^a\)

**Consider insulin-based treatment (see box)**

If symptomatically hyperglycaemic, consider insulin or sulfonylurea. Review treatment when blood glucose control achieved.

**Monitor for deterioration**

**Triple therapy:**

- Metformin + DPP4 inhibitor + sulfonylurea
- Metformin + pioglitazone\(^c\) + sulfonylurea
- Metformin + pioglitazone\(^c\)/sulfonylurea + SGLT2 inhibitor\(^d\) or Sulfonylurea + GLP-1 agonist

**Insulin-based treatment:**

- Continue metformin if tolerated. Review continued need for other hypoglycaemics.
- Offer NPH insulin once or twice daily according to need.
- Consider starting both NPH + short-acting insulin, separately or as biphasic human insulin (particularly if HbA\(_1c\) ≥75mmol/mol (9%); consider biphasic preparations containing a short-acting insulin analogue if person prefers injecting immediately before a meal, hypoglycaemia is a problem or blood glucose levels rise markedly after meals).

**Alternative to NPH insulin:**

- Insulin detemir or glargine if person needs assistance to inject insulin, lifestyle restricted by recurrent symptomatic hypoglycaemia or would otherwise need twice daily NPH insulin + oral hypoglycaemics.
- Offer insulin + GLP-1 agonist only with specialist advice and consultant-led multidisciplinary support.
- An SGLT2 inhibitor\(^d\) + insulin +/- other antidiabetic drugs is an option.

**BOX 1**

**Insulin-based treatment:**

- Continue metformin if tolerated. Review continued need for other hypoglycaemics.
- If triple therapy not effective, not tolerated or contraindicated, consider metformin + sulfonylurea + GLP-1 agonist if:
  - BMI ≥35kg/m\(^2\) in patients of European descent (adjust for other ethnic groups) who have problems associated with obesity
  - BMI <35kg/m\(^2\) and insulin has significant occupational implications or weight loss would benefit other comorbidities.

Continue GLP-1 agonist only if HbA\(_1c\) and weight decline by ≥11mmol/mol (1%) and ≥3%, respectively, in 6 months

Adapted from NICE Clinical Guideline 28 (December 2015; updated May 2017) - Type 2 diabetes in adults: management. The full guideline is available at www.nice.org.uk/NG28.