For people with T2D inadequately controlled with one or two OADs, UK NICE guidelines recommend the following:

- HbA1c ≥7.5% (≥58 mmol/mol)
- HbA1c ≥9% (≥75 mmol/mol)

Switch to insulin-based treatment

Premixed insulin is an option

**Objective**

To investigate the real-world effectiveness of premix regimens for achieving glycaemic control in routine clinical practice in the UK

**Study design**

**Introduction**

**Key results**

- Probability of achieving glycaemic control (HbA1c <7.5%) following premix initiation

- Associations between baseline characteristics and incidence of glycaemic control achievement or improvement

**Conclusion**

The incidence of achieving glycaemic control (HbA1c <7.5% for T2D) was low at 6 months, with little additional clinical benefit beyond 12 months in people with uncontrolled T2D (HbA1c ≥9%). This suggests a high unmet need for early, timely treatment changes with more effective, simpler therapies in these patients.

**Abbreviations**

- BMI, body mass index
- HbA1c, glycated haemoglobin
- NICE, National Institute for Health Care and Excellence
- OADs, oral antihyperglycaemic drugs
- THIN, The Health Improvement Network
- T2D, type 2 diabetes
- UK, United Kingdom

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**Glycaemic control**

Probability of achieving glycaemic control (HbA1c <7.5%) following premix initiation:

| Baseline HbA1c 9–10% (ref >11%) | ≥1% HbA1c decrease from baseline | Age 45–54 years (ref >75 years) | Baseline HbA1c 9–10% (ref >11%) | Stroke during baseline period | Baseline HbA1c >10–11% (ref >11%) | Nephropathy during baseline period | Peripheral vascular disease during baseline period |
|---|---|---|---|---|---|---|---|
| Less likely | More likely |
| Baseline HbA1c 9–10% (ref >11%) | | | | | | | |
| 21% HbA1c decrease from baseline | | | | | | | |
| Baseline HbA1c 9–10% (ref >11%) | | | | | | | |
| Stroke during baseline period | | | | | | | |
| Baseline HbA1c >10–11% (ref >11%) | | | | | | | |
| Nephropathy during baseline period | | | | | | | |
| Peripheral vascular disease during baseline period | | | | | | | |