

Type 2 Diabetes Care 2024

Look at the patient in front of you. Which category do they fall into?

Relatively recent diagnosis, little comorbidity

Aim for Remission – should be first choice in most

In those with Diabetes < 6 years duration in 18-65 age group discuss + refer to the Diabetes Remission Pathway

Explain the concept of 'Good glycaemic legacy'. Cannot afford to wait. Quick up titration of medication needed to achieve good control within first 12 months. Aim HbA1c ≤ 53mmol/mol. If EOT2D (diagnosis at age <40 = more aggressive phenotype) aim for an HbA1c ≤48mmol/mol.

1a. REDUCE CV RISK	STOP SMOKING AIM FOR A BP<140/90mmHg (NICE & QOF) STATIN if QRISK3 score ≥10% or raised ACR/CKD Aim reduction in non HDL Cholesterol by 40%
1b. Glucose + cardiorenal	Start Metformin in all <i>If ASCVD/HF also start an SGLT-2i</i> <i>If CKD + on max tolerated ACE/ARB start an SGLT-2i</i>
2. 3m later if HbA1c>53	<i>If high risk of CVD (QRISK3 ≥ 10%) SGLT-2i</i> <i>Not at high CV risk add DPP4i/ TZD/ SU/ SGLT-2i</i> <i>If CKD add SGLT-2i</i>
3. 3m later if HbA1c>53	<i>If ASCVD/high CV risk consider GLP-1 + stop DPP4i if on</i> <i>If EOT2D + obese consider Tirzepatide stop DPP4i if on</i> <i>Not at high CV risk add DPP-4i/ TZD/ SU</i>
4. 3m later if HbA1c>53	If on Metformin + 2 others can switch one for GLP-1 (as per NICE NG28) + stop DPP4i if on OR Tirzepatide (as per NICE TA924) + stop DPP4i if on OR add insulin (NPH insulin or biosimilar)
Exception s to note	If HbA1c is ≥ 75mmol/mol at diagnosis consider dual therapy; start 2 nd drug after 2 week interval If HbA1c ≥ 86 mmol/mol at diagnosis , or patient symptomatic ++, consider insulin, SU or combo injectable short term only (review at 4-6 weeks)

Long duration of Diabetes with historical suboptimal control +/- significant cardiovascular disease

Think about life expectancy
Is this likely to be >10 years to be able to benefit from microvascular risk reduction?

Would encourage you to *individualise the HbA1c* target according to the extent of co-morbidity

Aim HbA1c <64mmol/mol + avoid hypos

Very Frail elderly, lots of comorbidity

Rockwood Clinical Frailty Score (CFS) >6.
Aim is for good symptom control rather than tight glucose control. **Aim HbA1c <75mmol/mol**

Accept CBGs 6-15
Really important to avoid significant hypos in this group which often go unrecognised

Consider dose reduction or withdrawal of sulphonylureas and short acting insulins due to hypoglycaemia risk

If a long acting insulin continues to be needed and your patient is on an NPH insulin then consider a switch to a long acting insulin analogue with less hypo risk such as Toujeo or Degludec

All women of Childbearing age

Check if using contraception at each consult and ask about their future pregnancy plans. Give Preparation for Pregnancy advice leaflet (on DXS)

- If planning pregnancy, advise on need for**
- ⇒ HbA1c <48 mmol/mol (if safe to do so)
 - ⇒ Folic acid 5mg i.e. higher dose **(needs to be prescribed)**
 - ⇒ 'Safe medicines' for pregnancy
 - ⇒ Refer to pre pregnancy clinic

When referring any patient for an operation

- ⇒ **Highlight current HbA1c** in the referral letter to the surgeon
- ⇒ **Optimise control** (please make the patient aware that the operation date will be deferred in those with planned moderate or major surgical intervention unless the HbA1c is <69mmol/mol)

Prior to prescribing any medication check individual contra-indications to ensure treatment is suitable for your patient.

<p><u>Remission</u></p>	<p>Please refer to the Oviva T2DR program. The DIRECT Trial has shown us that two thirds of those who lost 10 kgs or more are still in remission after 2 years. Look AHEAD, a study of 5,000 people with Type 2 Diabetes found that diabetes remission, even if short lived, was associated with a 33% lower rate of CKD and a 40% lower rate of CVD compared to those who did not achieve remission. Referral eligibility criteria – age 18-65, Diabetes for < 6 years, BMI 27 or above (BMI 25 or above if BAME origin), HbA1c 43-87mmol/mol (if on diabetic medication), 48-87mmol/mol (if not), not a current insulin user. Link to pathway is on DXS.</p>
<p><u>EOT2D</u></p>	<p>Early onset Type 2 Diabetes (EOT2D) = diagnosis in 18-39 age group. EOT2D has a much more aggressive phenotype than older onset Type 2 Diabetes, despite this, much less likely to receive the recommended care processes and tend to have a higher HbA1c and worse outcomes. The ask is as follows 1. Remission is key – please refer to the DRP as above. 2. Aim for the lower HbA1c target of 48mmol/mol 3. Focus on contraception and preconception planning 4. Prioritise completion of care processes and 5. Ensure the diagnosis is correct especially in those with relatively low BMI or no features of insulin resistance or metabolic syndrome. Remember to ask about family history of diabetes in detail. Consider Type 1 Diabetes if one or more of ketosis, rapid weight loss, BMI<25, personal and/or FH of AI disease. Request GAD and Tyrosine IA-2 antibodies and discuss with the specialist team. C -peptide is a more useful discriminator in those who have had diabetes for at least 3-5 years. Consider MODY if strong FH of Diabetes (multiple generations) especially if diagnosed in family members at a young age (<30). Please refer to guidance on the Exeter Diabetes App Exeter Diabetes App (diabetesgenes.org) or discuss with the specialist team.</p>
<p><u>Kidneys</u></p>	<p>Diabetes is the leading cause of ESRF. CKD = ACR>3mg/mmol or eGFR<60 on at least one repeat check. Early detection of kidney damage using ACR is key – it is a far earlier warning signal than a drop in eGFR. It is OK to do an opportunistic ACR check on the day if no early morning sample provided, if within normal range, this will suffice. Approach to raised ACR 1. start ACE inhibitor or ARB and aim to increase over 4 weekly intervals to the maximal tolerated dose independent of the BP 2. Add SGLT2i 3. Consider finerenone as per NICE (TA 877) only if eGFR>25 and ACR >3mg/mmol. Do not start if K>5. BP target if ACR>70 ; aim <130/80 clinic, <125/75 home.</p>
<p><u>Heart</u></p>	<p>A statin induced reduction of LDL-C by 1mmol/L is associated with a 21% reduction in CV events. In primary prevention patients with a calculated QRISK3 score ≥10% or a raised ACR/CKD qualify for a statin. NICE recommends Atorvastatin 20 mg once daily. Aim to reduce the baseline non HDL C by 40%. In secondary prevention aim for a non HDL C of ≤2.6 or LDL C of ≤1.8 mmol/L. If a patient is already on a statin and their total cholesterol comes back as >5, look back at historical results and check medication adherence. Evidence indicates the majority who report statin intolerance are able to take a statin when rechallenged. Consider rosuvastatin (start with 5mg dose) Summary https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/statin-intolerance-pathway-v2.pdf. HF – systematic screening for heart failure symptoms or signs is recommended. Advise pro NT BNP check if has symptoms to suggest HF.</p>
<p><u>Feet</u></p>	<p>Strongly advise your patient to report any foot issues ASAP to the practice (new redness/warmth/deformity/ small wound) as ‘time is of the essence’ Anyone with an ulcer (any size) warrants immediate referral to community podiatry or the hospital foot protection team (pathway on DXS with numbers) If you suspect a Charcot foot – please advise your patient to be strictly non weight bearing until seen at the hospital – same day referral Urgent referral to Wexham Park Hospital Hot Foot Phonenumber 07827843005 or email fhft.podiatryhwph@nhs.net Urgent referral to Frimley Park Foot Care Team fhft.diabeticfootfph@nhs.net (photo of lesion to help triage helpful but not essential)</p>
<p><u>New drug Tirzepatide</u></p>	<p>Tirzepatide is a dual GLP-1 and GIP agonist. It works similarly to GLP-1 agents but with greater efficacy. Outperforms Semaglutide, Degludec and Glargine in terms of HbA1C lowering. 81-97% of patients in the SURPASS Trials achieved a HbA1c of <53mmol/mol. Superior weight reduction to Semaglutide. CVOT trial results anticipated in 2025. Licensed for treatment of adults with insufficiently controlled Type 2 diabetes as monotherapy when metformin is not tolerated or CI and in addition to other medicinal products for the treatment of diabetes. NICE TA924 has approved its use in adults with Type 2 Diabetes on triple therapy metformin + 2 others with insufficient control + BMI ≥ 35 or BMI <35 and weight loss would benefit other obesity related complications (same as for GLP-1) Weekly subcutaneous injectable – comes in a Kwipen – each pen contains 4 doses – can inject into abdomen/thighs/upper arms – must rotate injection sites Initiate at a dose of 2.5mg weekly and increase to 5mg after 4 weeks. Majority of the glucose lowering effect is seen at the 5mg dose. Based on the SURPASS trials there is likely to be substantially more weight reduction seen with the higher doses of Tirzepatide. If needed further dose adjustments should be in 2.5mg steps (ie 5mg > 7.5mg> 10mg> 12.5mg> 15 mg weekly) at no less than 4 weekly intervals to minimise GI SEs No dose adjustment required for renal or hepatic impairment. Avoid if history of pancreatitis or severe GI disease. Caution with retinopathy (same as semaglutide) Women of childbearing age – advise switching to a non oral contraceptive or add a barrier method of contraception for 4 weeks after initiating Tirzepatide or for 4 weeks after each dose escalation.The medication should be stopped for a minimum of 1 month before trying to get pregnant. Please read the full prescribing info in https://www.lillydiabetes.co.uk/hcp/mounjaro + updated guidance on the GLP-1 shortage which suggests Tirzepatide or oral Rybelsus as alternatives in https://diabetesonthenet.com/wp-content/uploads/GLP-1-RA-Shortage-2024-ABCD-PCDS-FINALISED-170324.pdf</p>