Healthy/pre-frail/mild frailty
Re-evaluate level of frailty annually and within 3 months of any intervention

HbA$_1c$ $\geq$ 58 mmol/mol ($\geq$ 7.5%)

Metformin* ± DPP4i$^A$
*(If eGFR $\geq$ 30 ml/min/1.73 m$^2$)

HF detected or suspected (BNP measurement)
Pre-existing or high risk for stroke/MI
No ASCVD (after screening for HF)

SGLT2i as appropriate$^B$
GLP-1RA semaglutide or dulaglutide
DPP-4i or SGLT2i or GLP-1RA

A long acting basal insulin with low risk of hypoglycaemia (e.g. degludec or iGlar u300)

HbA$_1c$ < 53 mmol/mol (< 7.0%)

HF detected or suspected (BNP measurement)
Reduced renal function (eGFR < 30 ml/min/1.73 m$^2$)

Discontinue pioglitazone ± Initiate SGLT2i
Discontinue metformin

Reduce insulin dose in 20% increments to maintain HbA$_1c$ in the target range

Switch from NPH or twice-daily premix insulins to...

Basal insulin analogue + SGLT2i or GLP-1RA (e.g. IDegLira or LixiLan), with a 30% reduction$^C$ in total insulin dose and reduction in dose of any concomitant SU

ASCVD=atherosclerotic cardiovascular disease; BNP=B-type natriuretic peptide; DPP-4i=dipeptidyl peptidase-4 inhibitor; eGFR=estimated glomerular filtration rate; GLP-1=glucagon-like peptide 1; GLP-1RA=glucagon-like peptide 1 receptor agonist; HbA$_1c$=glycated haemoglobin; HF=heart failure; iGlar=insulin glargine; MI=myocardial infarction; NPH=neutral protamine Hagedorn; SGLT2i=sodium-glucose cotransporter-2 inhibitor.

[A] Saxagliptin has been associated with an increased risk of symptomatic heart failure. [B] At time of publication, any SGLT-2i can be initiated at eGFR > 60 ml/min/1.73 m$^2$ for the management of hyperglycaemia: canagliflozin can be initiated at > 45 ml/min/1.73 m$^2$ or > 30 ml/min/1.73 m$^2$ in people with proteinuria, dapagliflozin can be initiated at any HbA$_1c$ for the management of heart failure. All SGLT-2i are less efficacious at reducing hyperglycaemia at lower eGFRs. [C] Expert recommendation.
Moderately frail
Re-evaluate level of frailty annually and within 3 months of any intervention

HbA\textsubscript{1c} \geq 64 mmol/mol (\geq 8.0%)

- HF detected or suspected (BNP measurement)
- Pre existing stroke/MI

Metformin
If eGFR \geq 30 ml/min/1.73 m\textsuperscript{2}

- SGLT2i as appropriate\textsuperscript{[6]}
- Consider GLP-1RA (semaglutide or dulaglutide)
  Providing self-administration feasibility

- Add DPP4i
- Add insulin

A long acting basal insulin with low risk of hypoglycaemia
(e.g. idegludec or IGLar u300)

HbA\textsubscript{1c} < 58 mmol/mol (<7.5%)

- HF detected or suspected (BNP measurement)

No

Reduced renal function (eGFR \geq 30 ml/min/1.73 m\textsuperscript{2})

- Discontinue pioglitazone ± initiate SGLT2i

Discontinue metformin

- Reduce or discontinue SUs and TZDs

Yes

- Hypoglycaemias suspected
  Remembering adrenergic symptoms less frequent

Reduce insulin dose in 20% increments to maintain HbA\textsubscript{1c} in the target range

Switch from twice-daily NPH or twice-daily premix insulins to basal insulin analogue (e.g. degludec or IGLar U300) with a 20% dose reduction

BNP=B-type natriuretic peptide; DPP-4i=dipeptidyl peptidase-4 inhibitor; eGFR=estimated glomerular filtration rate; GLP-1RA=glucagon-like peptide 1 receptor agonist; HbA\textsubscript{1c}=glycated haemoglobin; HF=heart failure; IGLar=insulin glargine; MI=myocardial infarction; NPH=neutral protamine Hagedorn SGLT2i=sodium-glucose cotransporter-2 inhibitor; SUs=sulfonylureas; TZDs=thiazolidinediones.
Severely frail
Re-evaluate level of frailty annually and within 3 months of any intervention

- **HbA$_{1c}$ ≥69 mmol/mol (≥8.5%)**
  - HF detected or suspected (BNP measurement)
  - Add DPP4i
    - Saxagliptin may increase risk of HF
    - Commence or continue SGLT2i as appropriate$^{[D]}$
    - A long acting basal insulin with low risk of hypoglycaemia (e.g. degludec or IGlar U300)

- **When becomes severely frail at any HbA$_{1c}$**
  - No HF
    - Consider stopping metformin and GLP-1RA$^{[E]}$ (substitute with DPP4i)
  - Discontinue TZDs$^{[F]}$ (substitute with DPP4i)
  - Discontinue SUs$^{[G]}$

- **HbA$_{1c}$ <58 mmol/mol (<7.5%)**
  - Consider discontinuation of SGLT2is
    - If no evidence of HF, and with active screening for HF after stopping, ask patient to report if weight climbs >2 kg in 24 hours or 5 kg in a week
  - Switch from twice-daily NPH or twice-daily premix insulins to DPP-4i ± basal insulin analogue (e.g. degludec or IGlar U300), with a 30% dose reduction

- Reduce insulin dose in 20% increments to maintain HbA$_{1c}$ in the target range

$^{[D]}$ Mitigate risk of dehydration/infection. $^{[E]}$ Risks of reduced appetite and weight loss. $^{[F]}$ HF and fracture risk. $^{[G]}$ Risk of hypoglycaemia. BNP=B-type natriuretic peptide; DPP-4i=dipeptidyl peptidase-4 inhibitor; eGFR=estimated glomerular filtration rate; GLP-1RA=glucagon-like peptide 1 receptor agonist; HbA$_{1c}$=glycated haemoglobin; HF=heart failure; NPH=neutral protamine Hagedorn; SGLT2i=sodium-glucose cotransporter-2 inhibitor; SUs=sulfonylureas; TZDs=thiazolidinediones.