

New advice on frailty and type 2 diabetes management: A great start to the year!

Those of you who know me well will be aware that I have a great passion for the care of older people. Achieving safe glucose control, both on a daily basis and concurrently with an individualised HbA_{1c} target range, has been something that I have been speaking and writing about for many years. There is a great need to recognise that hypoglycaemia in this group can go unrecognised, with many undesired consequences. The link between recurrent hypoglycaemia and a resulting increase in frailty is well documented.

Despite our having many guidelines that allude to the importance of relaxing HbA_{1c} targets for the older or frail person, in practice this has not happened consistently. Both in this journal and in *Diabetes & Primary Care*, good practice audits have been suggested to identify those who are put at risk by HbA_{1c} levels that are lower than ideal and indicate a high risk of unrecognised hypoglycaemia. Much good work has been achieved to this end; however, what I hear all too often is, firstly, the lack of confidence to de-escalate therapy and, secondly, uncertainty of what to do if the subsequent HbA_{1c} levels start to rise above the ideal target range.

New frailty advice

The recognition of frailty as an important aspect of care in this year's Quality and Outcomes Framework is a massive step forward in ensuring that this vulnerable group has safer HbA_{1c} targets set. For those with moderate to severe frailty, the target HbA_{1c} level is set at 75 mmol/mol (9.0%). Although this is helpful as a target figure, we still need to be aware of how to achieve it safely, and recognise that this is not an acceptance to withdraw care completely in this vulnerable group.

The recently published position statement from the Association of British Diabetologists, *Managing frailty and associated comorbidities in older adults with diabetes*, addresses this important and challenging area of diabetes care (Sinclair and

Gallagher, 2020). Alan Sinclair himself describes the clinical significance of frailty and describes the statement in greater detail [elsewhere in this Journal](#). However, briefly, the statement divides neatly into three areas:

- Establishing frailty: How we all need to be able to recognise and measure frailty status.
- Key areas for medical management: Targets and advice on all medications, including beyond glycaemic management (blood pressure and lipid management). This section also highlights the importance of avoiding hypoglycaemia.
- Audit tools: These are suggestions of how areas or individual services can assess the effectiveness of any interventions for this population.

This statement is a welcome addition to the current advice in this area, and it neatly encapsulates all the current evidence. It offers practical suggestions and advice to all healthcare providers for not only glucose control but also the challenging decisions to be taken regarding when to reduce and/or withdraw blood pressure and lipid management therapies.

I would like to take this opportunity to also highlight an additional document that focuses on frailty: *Type 2 diabetes mellitus in older people: a brief statement of key principles of modern day management including the assessment of frailty. A national collaborative stakeholder initiative* (Strain et al, 2018). The purpose of highlighting this is the document's focus on suggesting HbA_{1c} thresholds at which to start de-escalating medications and advising on which medication groups to consider stopping (Table 1). These two documents are, I believe, an incredible resource for us all.

Updated ADA/EASD guidance

Other important clinical guidance that has just been released is from the American Diabetes Association and European Association for the Study



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Table 1. HbA_{1c} de-escalation thresholds and recommended treatment targets in older and frail individuals with diabetes (adapted from Strain et al, 2018).

Level of frailty	De-escalation thresholds		Treatment targets	
	Threshold	Suggested interventions	Target	Suggested interventions
Fit older people	53 mmol/mol (7.0%)	Evaluate long-acting sulfonylurea and insulin therapy that may cause hypoglycaemia. Consider renal function when dosing	58 mmol/mol (7.5%)	Avoid initiating new agents that may cause hypoglycaemia or exaggerate weight loss
Moderate to severe frailty	58 mmol/mol (7.5%)	Discontinue sulfonylureas if HbA _{1c} below threshold. Avoid pioglitazone due to risk of heart failure. Cautious use of insulin and metformin, mindful of renal function	64 mmol/mol (8.0%)	DPP-4 inhibitors and longer-acting insulins have demonstrated safety. Pioglitazone may increase risk of heart failure. SGLT2 inhibitors may provide additional benefit in people with heart failure but also exacerbate symptoms of diabetes
Very severe frailty	64 mmol/mol (8.0%)	Withdraw sulfonylureas and short-acting insulins to reduce risk of hypoglycaemia. Review timings and suitability of NPH insulin with regard to risk of hypoglycaemia. Therapies that promote weight loss may exacerbate sarcopenia	70 mmol/mol (8.5%)	DPP-4 inhibitors at renally appropriate dose for those close to target. Consider once-daily morning NPH insulin or analogue alternatives if there is symptomatic nocturnal hyperglycaemia. Educate carers and relatives regarding risk of hypoglycaemia

DPP-4=dipeptidyl peptidase-4; NPH=neutral protamine Hagedorn; SGLT2=sodium-glucose cotransporter 2.

of Diabetes (ADA/EASD), who have updated their consensus report on the management of type 2 diabetes (Buse et al, 2020).

In a [previous editorial](#), I highlighted the significant results seen from cardiovascular outcome trials and the real need for us all to become far more familiar with, and competent in, the recognition of heart failure in our patients with diabetes (Down, 2019). This update to the ADA/EASD consensus statement reinforces the incredible advances seen in two of our therapy classes. In addition to treating people with established atherosclerotic cardiovascular disease, heart failure or chronic kidney disease with either SGLT2 inhibitors or GLP-1 receptor agonists second-line to metformin, the ADA/EASD have taken this advice further, and now recommend these therapies for all patients at high risk of these complications (Figure 1, overleaf). The most crucial factor in the new

advice is that, for this higher-risk population, the use of SGLT2 inhibitors or GLP-1 analogues is irrespective of baseline HbA_{1c}. This signifies the huge benefit of these two classes of medication, over and above their effects on glucose lowering.

This, for me, really signifies an exciting start to 2020! ■

Buse JB, Wexler DJ, Tsapas A et al (2020) 2019 update to: Management of hyperglycaemia in type 2 diabetes, 2018. A consensus report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). *Diabetologia* **63**: 221–8

Down S (2019) We need to increase our awareness of heart failure in our patients with diabetes. *Journal of Diabetes Nursing* **23**: JDN090

Sinclair A, Gallagher A (2020) *Managing frailty and associated comorbidities in older adults with diabetes: Position Statement on behalf of the Association of British Clinical Diabetologists (ABCD)*. ABCD, Solihull. Available at: <https://bit.ly/38ib0kb> (accessed 03.02.20)

Strain WD, Hope SV, Green A et al (2018) Type 2 diabetes mellitus in older people: a brief statement of key principles of modern day management including the assessment of frailty. A national collaborative stakeholder initiative. *Diabet Med* **35**: 838–45

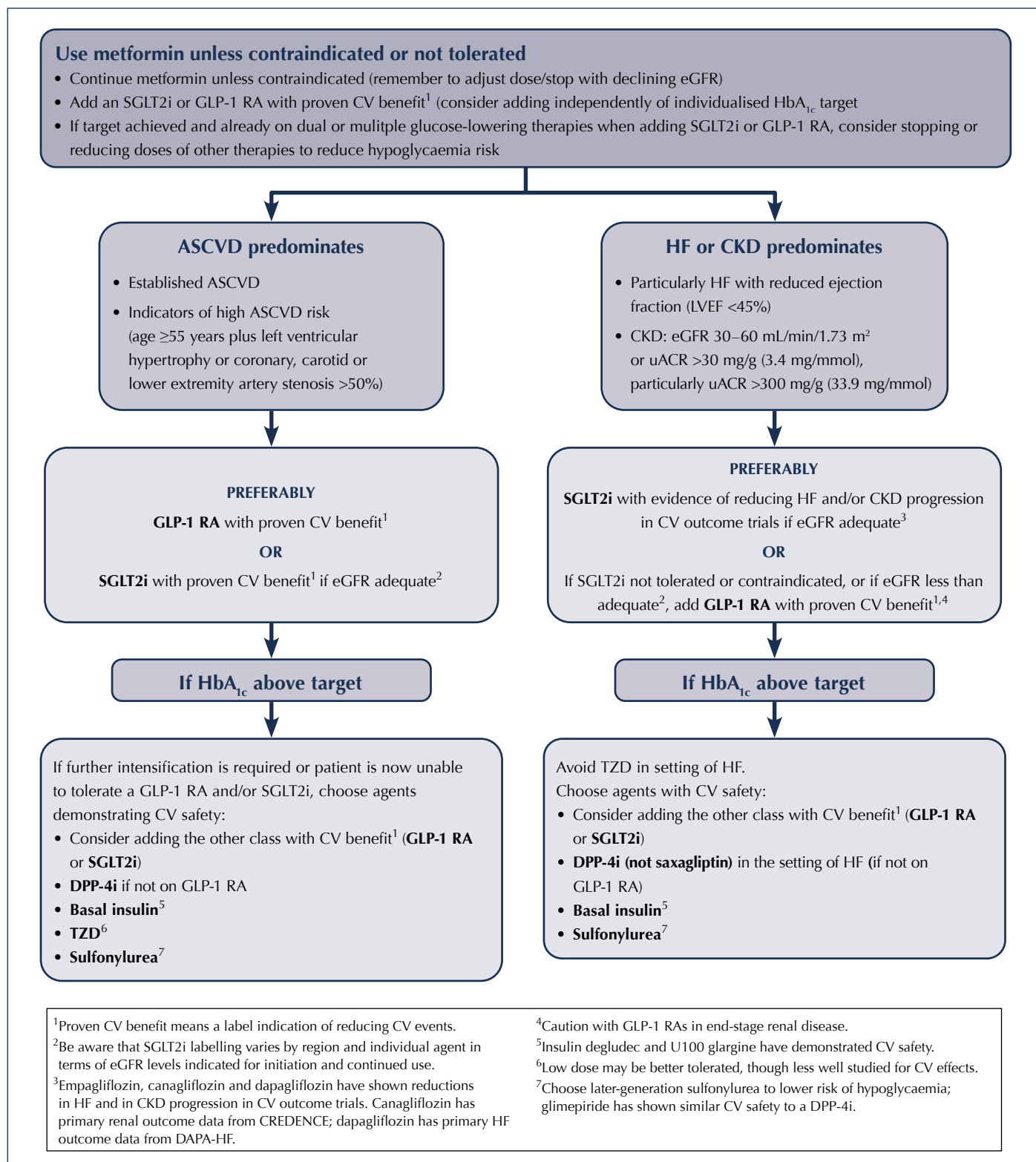


Figure 1. Updated ADA/EASD approach to glucose-lowering therapy in people with type 2 diabetes and a high risk of or established atherosclerotic cardiovascular disease, chronic kidney disease or heart failure (Buse et al, 2020).

ASCVD=atherosclerotic cardiovascular disease; CKD=chronic kidney disease; CV=cardiovascular; DPP-4i=dipeptidyl peptidase-4 inhibitor; eGFR=estimated glomerular filtration rate; GLP-1 RA=glucagon-like peptide-1 receptor agonist; HF=heart failure; LVEF=left ventricular ejection fraction; SGLT2i=sodium-glucose cotransporter 2 inhibitor; TZD=thiazolidinedione; uACR=urinary albumin:creatinine ratio.