

Linee guida ESC 2023 per il trattamento della cardiopatia ischemica nei diabetici



HOT TOPICS IN CARDIOLOGIA 2023

13 e 14 Novembre 2023

Villa Doria D'Angri - Via F. Petrarca 80,
Napoli

Vincenzo Nicastro



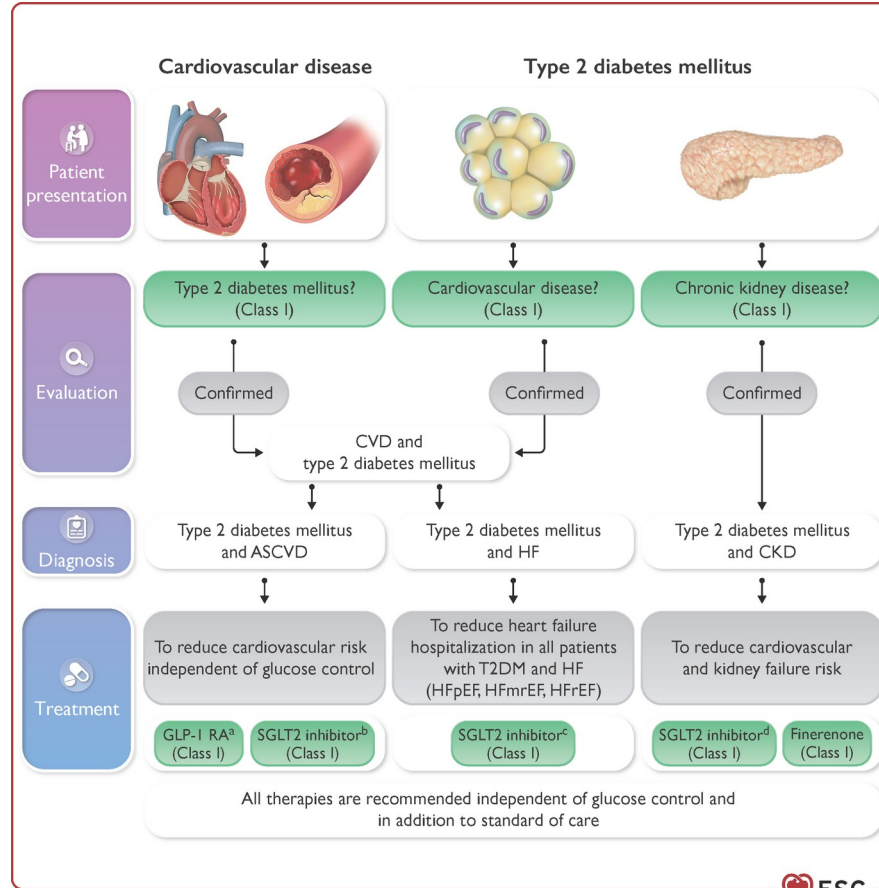
2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes

Developed by the task force on the management of cardiovascular disease in patients with diabetes of the European Society of Cardiology (ESC)

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Central figure

Management of cardiovascular disease in patients with type 2 diabetes: clinical approach and key recommendations



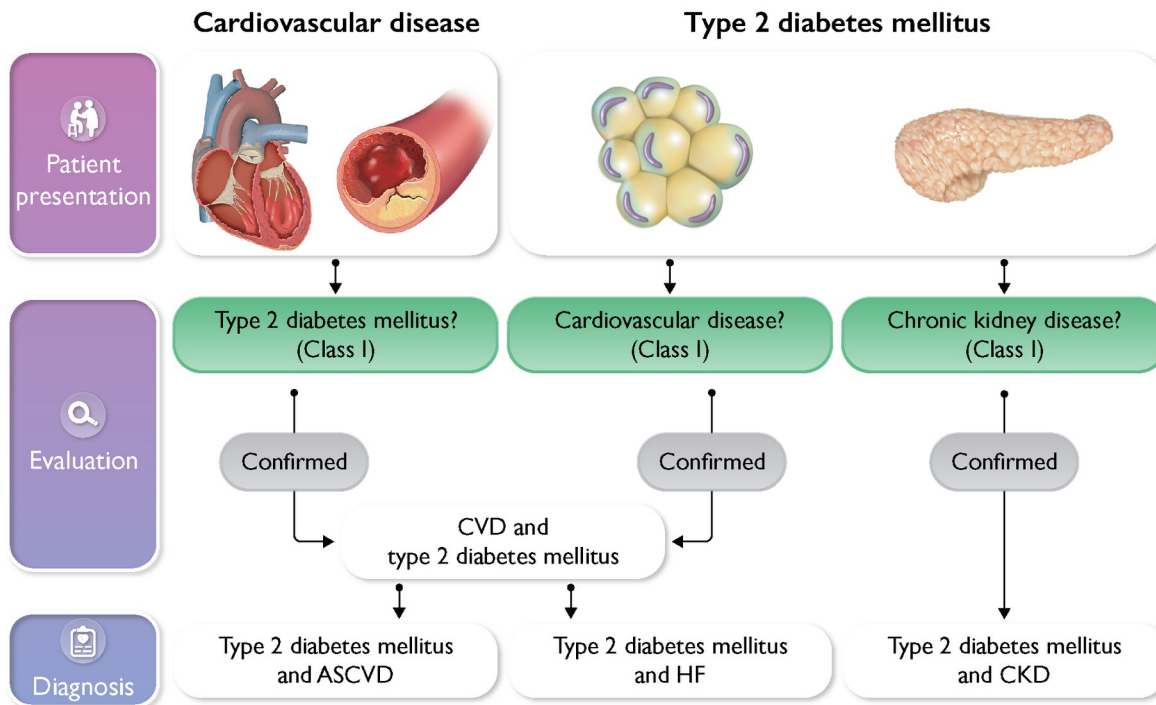
Recommendations for glucose-lowering treatment for patients with type 2 diabetes and ASCVD to reduce cardiovascular risk

Novel concept

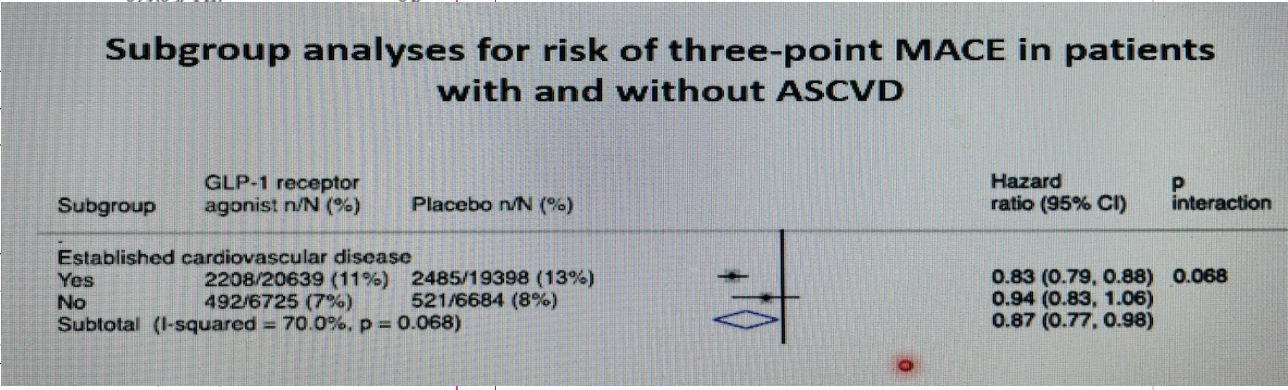
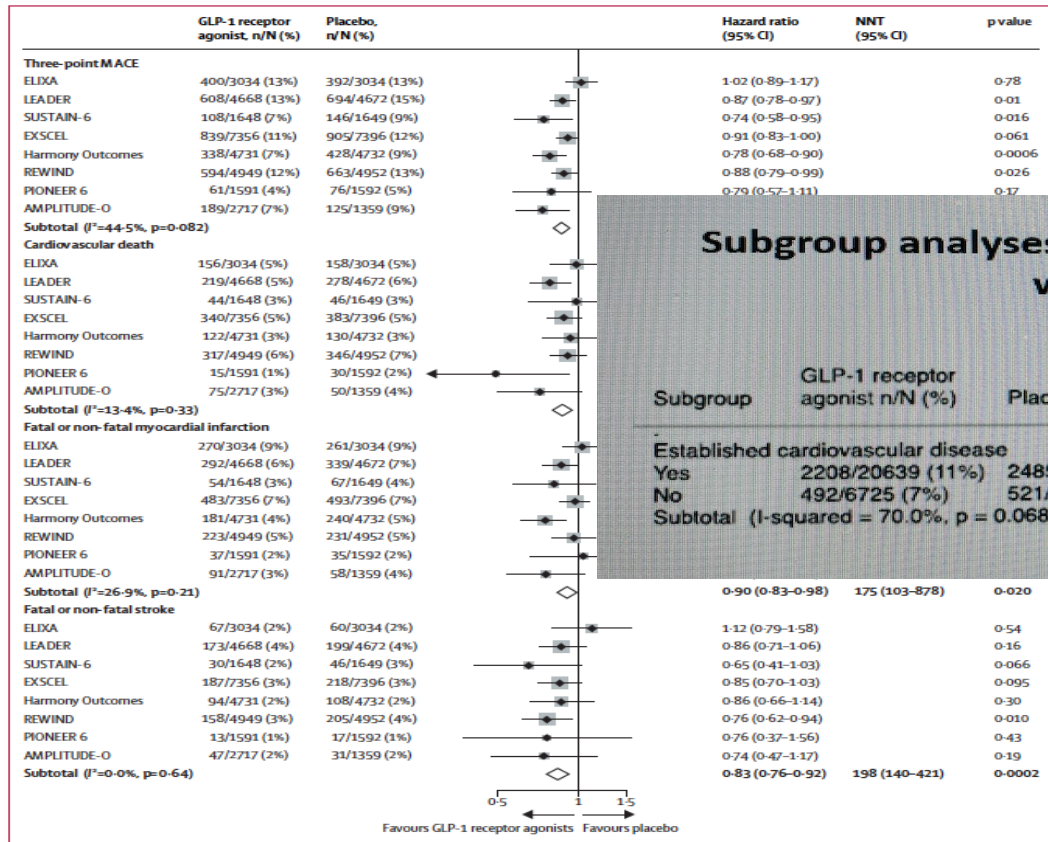
Special attention is given on the aspect of proven CV benefit and/or safety of glucose-lowering medications.

Recommendations	Class	Level
It is recommended to prioritize the use of glucose-lowering agents with proven CV benefits followed by agents with proven CV safety over agents without proven CV benefit or proven CV safety.	I	C
It is recommended to switch glucose-lowering treatment from agents without proven CV benefit or proven safety to agents with proven CV benefit.	I	C

Management of cardiovascular disease in patients with type 2 diabetes

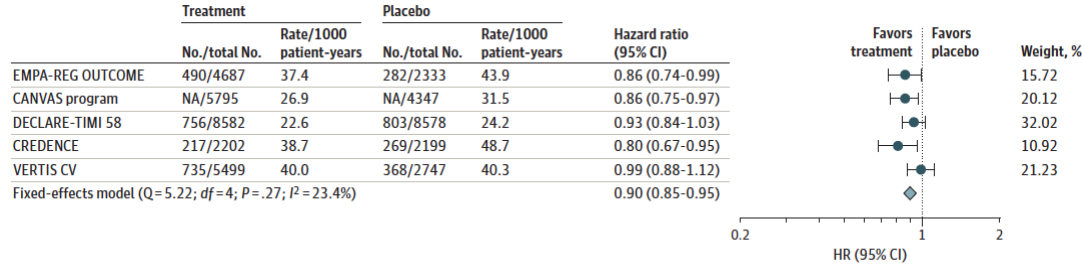


Meta-analyses of CVOTs with GLP1 RA: Risk of MACE/components

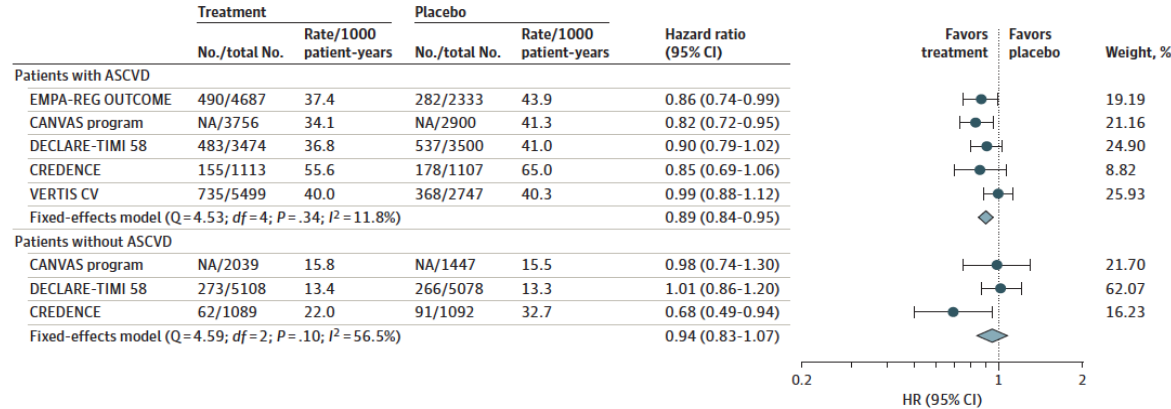


Meta-analyses of CVOTs with SGLT2 inhibitors:

Overall major adverse cardiovascular events



Major adverse cardiovascular events by ACSVD status



Recommendations for glucose-lowering medications for patients with type 2 diabetes and ASCVD to reduce risk

Recommendations	Class	Level
<i>Glucagon-like peptide-1 receptor agonists</i>		
GLP-1 Ras with proven CV benefit are recommended in patients with T2DM and ASCVD to reduce events, independent of baseline or target HbA1c and independent of concomitant glucose-lowering medications.	I	A
<i>Sodium-glucose co-transporter-2 inhibitors</i>		
SGLT2 inhibitors with proven CV benefit are recommended in patients with T2DM and ASCVD to reduce events, independent of baseline or target HbA1c and independent of concomitant glucose-lowering medications.	I	A

Recommendations for other glucose-lowering medications for patients with type 2 diabetes and ASCVD

Recommendations	Class	Level
<i>Other glucose-lowering medications to reduce cardiovascular risk</i>		
If additional glucose control is needed, metformin should be considered in patients with T2DM and ASCVD.	IIa	C
If additional glucose control is needed, pioglitazone may be considered in patients with T2DM and ASCVD without HF.	IIb	B

Another great focus of the 2023 ESC Guidelines

Cardiovascular risk assessment in diabetes



Novel concept

For patients with T2DM without ASCVD or severe target-organ damage,
a novel T2DM-specific risk score is introduced:
SCORE2-Diabetes

4.1. Assessing cardiovascular risk in type 2 diabetes

When assessing CV risk in individuals with T2DM, it is important to consider medical and family history, symptoms, findings from examination, laboratory and other diagnostic test results, and the presence of ASCVD or severe TOD. There is not enough robust evidence to suggest that assessment of coronary artery calcium (CAC) or intima media thickness help reclassify CV risk in people with T2DM. Severe TOD is defined as:

- (i) Estimated glomerular filtration rate (eGFR) <45 mL/min/1.73 m² irrespective of albuminuria, or
- (ii) eGFR 45–59 mL/min/1.73 m² and microalbuminuria (urinary albumin-to-creatinine ratio [UACR] 30–300 mg/g; stage A2), or
- (iii) Proteinuria (UACR >300 mg/g; stage A3), or
- (iv) Presence of microvascular disease in at least three different sites (e.g. microalbuminuria (stage A2) plus retinopathy plus neuropathy; see [Section 9.1](#) for CKD screening).^{43–45}

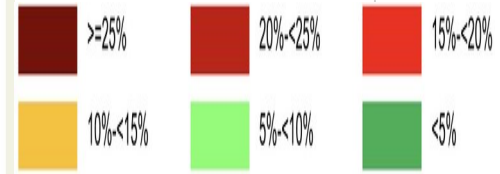
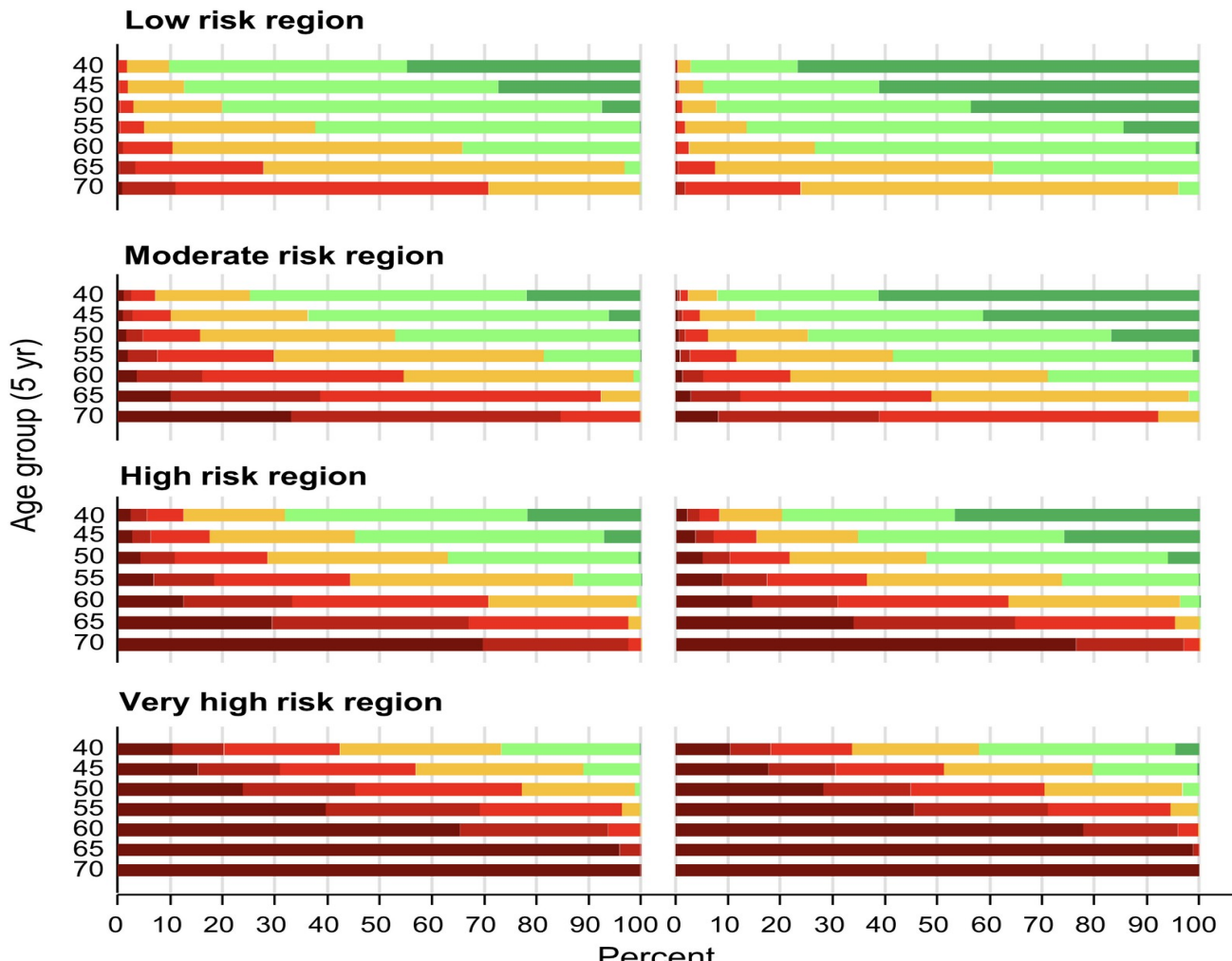
Key features

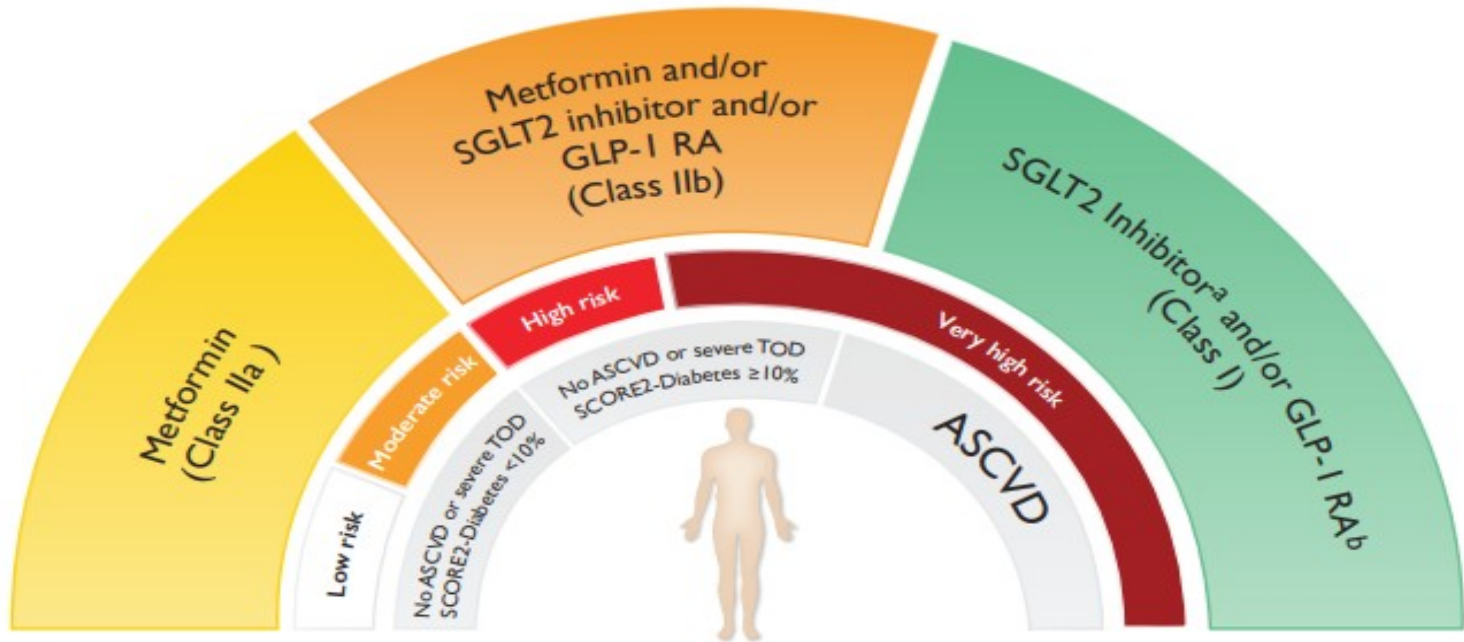
- Estimates 10-year risk of CVD events in individuals with type-2 diabetes
- Discriminates risk in individuals with type-2 diabetes using conventional CVD risk factors and those specifically related to diabetes
- Calibrated to predict CVD risk in:
low, moderate, high and very high risk regions of Europe
- Aligned with SCORE2 risk predictions for individuals without diabetes
- Separate risk scores for men and women with type-2 diabetes

Pennells L et al, *Eur Heart J* 2023

Men

Women





Risk assessment for patients with type 2 diabetes based on the presence of ASCVD/severe TOD and 10-year CVD risk estimation via SCORE2-Diabetes

Recommendations for glucose lowering medications for patients with T2D without ASCVD or severe TOD considering ASCVD risk

Recommendations

Recommendations	Class Level	
CVD risk $\geq 10\%$, treatment with SGLT2 inhibitors or GLP-1 RAs may be considered to reduce CV risk.	IIb	C
Recommendations	Class	Level
In patients with T2DM without ASCVD or severe TOD at a low or moderate risk, treatment with metformin should be considered to reduce CV risk.	IIa	C
In patients with T2DM without ASCVD or severe TOD at a high or very high risk, treatment with metformin may be considered to reduce CV risk.	IIb	C
<i>Heart failure treatments in patients with diabetes and LVEF >40%</i>		

Excellent tool to implement evidence-based, person-centred treatment strategies to reduce CV risk in patients with type 2 diabetes



