

**S.I.C.O.B.
EVENTI**

S.I.C.O.B.



SICOB - EVENTO REGIONALE - ASL CUNEO 1

SALUZZO Venerdì, 22 Marzo 2024

RESP. SCIENTIFICI: ANDREA GATTOLIN, LAURA GIANOTTI

**L'OBESITÀ NEL 2024:
NUOVI MODELLI
E TRAGUARDI DI CURA**

GESTIONE E CURA DEL PAZIENTE CON OBESITÀ E DIABETE

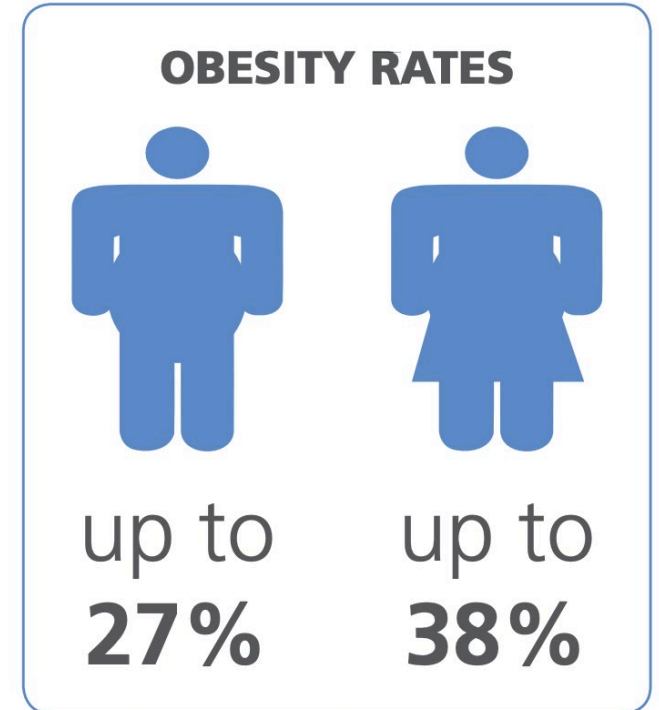
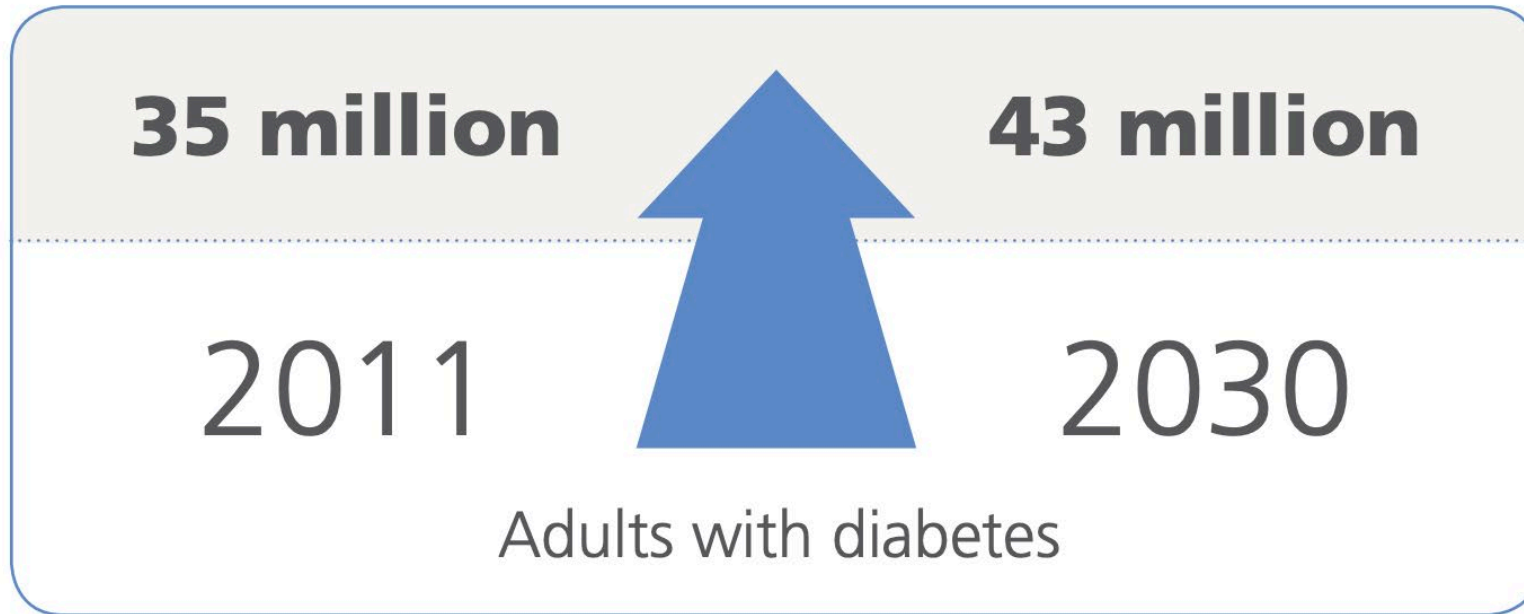
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DIABETES IN EUROPE



Overweight and Obesity

- 89.8% were overweight or had obesity, defined as a body mass index (BMI) of 25 kg/m² or higher. Specifically:
 - 26.9% were overweight (BMI of 25.0 to 29.9 kg/m²).
 - 47.1% had obesity (BMI of 30.0 to 39.9 kg/m²).
 - 15.7% had extreme obesity (BMI of 40.0 kg/m² or higher).

Excess Weight Is Associated with Increased Risk for T2D-related Complications

Table 4

Adjusted odds ratios (95% CIs) for the associations of risk factors with complications in U.S. adults with newly diagnosed diabetes (diagnosed within the past 2 years), NHANES 1988–2018*

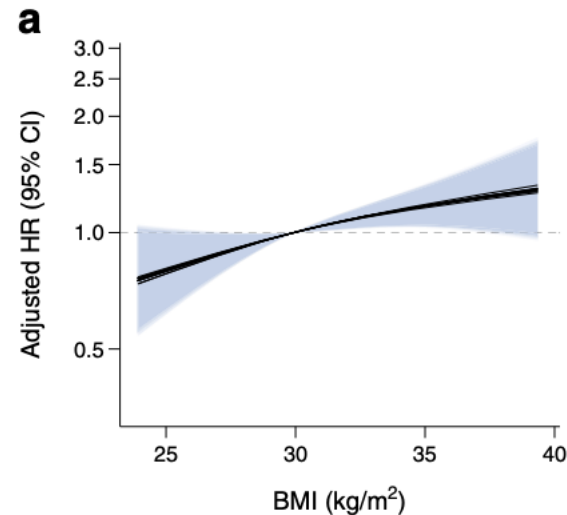
	Any complication†	Any microvascular complication	Any self-reported cardiovascular
Obese (BMI ≥30 kg/m ²)			
No (ref)	1	1	1
Yes	1.50 (1.04–2.18)	1.23 (0.85–1.77) + 23%	1.56 (0.99–2.45) + 56%

Thirty-Year Trends in Complications in U.S. Adults With Newly Diagnosed Type 2 Diabetes

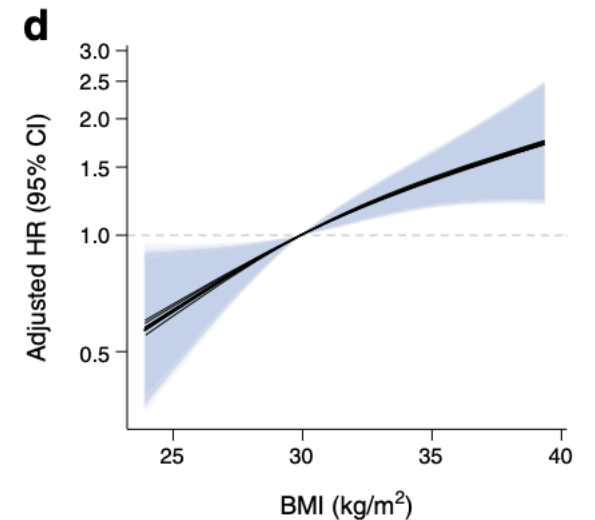
Diabetes Care 2021;44:699–706 | <https://doi.org/10.2337/dc20-2304>

BMI and BMI change following incident type 2 diabetes and risk of microvascular and macrovascular complications: the EPIC-Potsdam study

Elli Polemiti^{1,2} · Julia Baudry^{1,2} · Olga Kuxhaus^{1,2} · Susanne Jäger^{1,2} · Manuela M. Bergmann³ · Cornelia Weikert⁴ · Matthias B. Schulze^{1,2,5}



20% higher risk per 5 kg/m²



38% higher risk per 5 kg/m²

Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people: a modelling study

Steven A Grover¹, Mohammed Kaouache², Philip Rempel², Lawrence Joseph³,
Martin Dawes⁴, David C W Lau⁵, Ilka Lowensteyn²

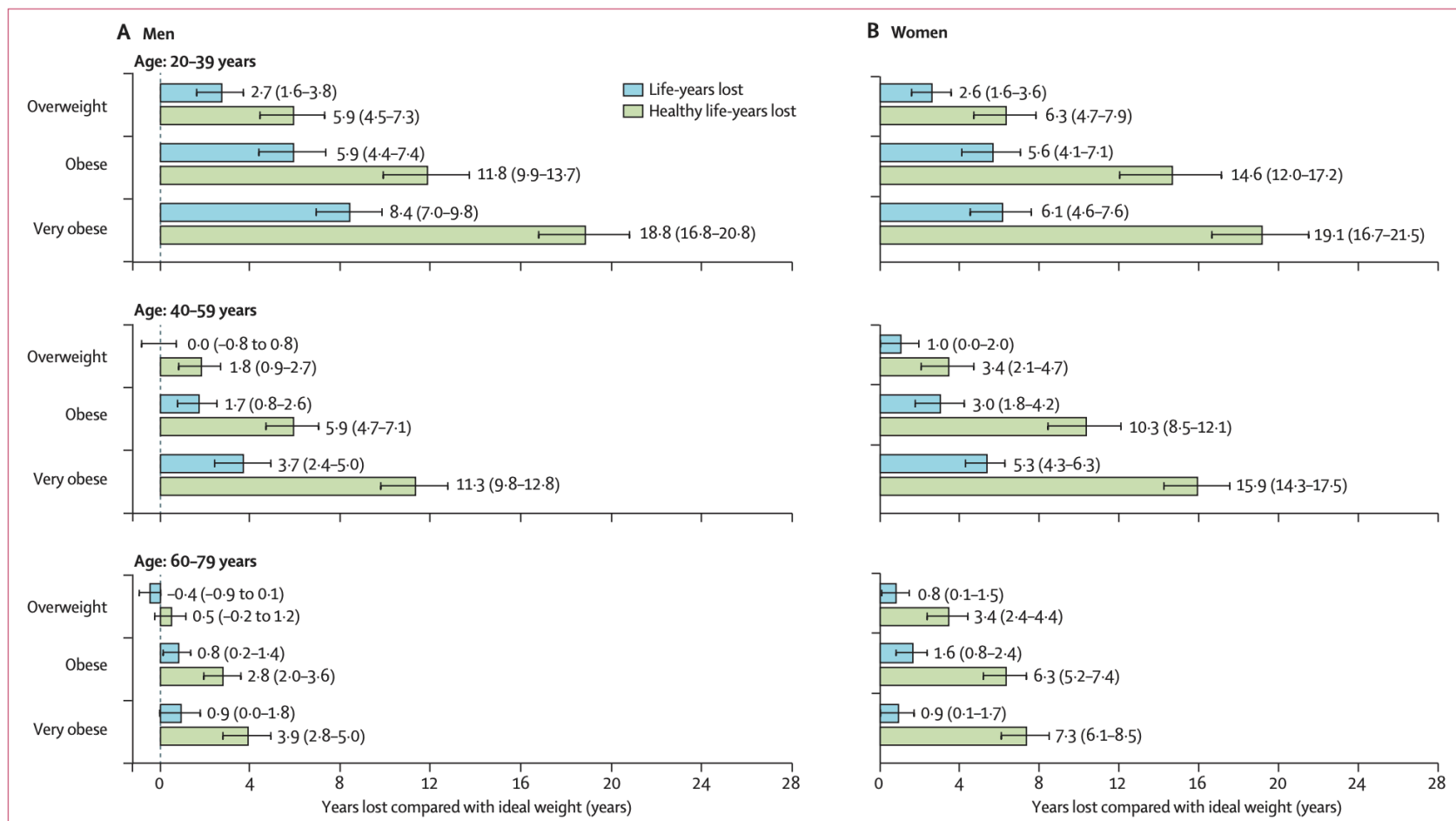


Figure 2: Calculated years of life lost and healthy life-years lost in men (A) and women (B) compared with those with an ideal bodyweight

Bodyweight categories are ideal (BMI 18.5 to <25 kg/m²), overweight (25 to <30 kg/m²), obese (30 to <35 kg/m²), or very obese (≥35 kg/m²). Data are based on cardiometabolic risk factors in US adults in the National Health Examinations and Nutrition Survey data from 2003-10.²⁵ Error bars show the 95% CI for each estimate.

Obesity management as a primary treatment goal for type 2 diabetes: time to reframe the conversation

Ildiko Lingvay¹, Priya Sumithran², Ricardo V Cohen³, Carel W le Roux⁴

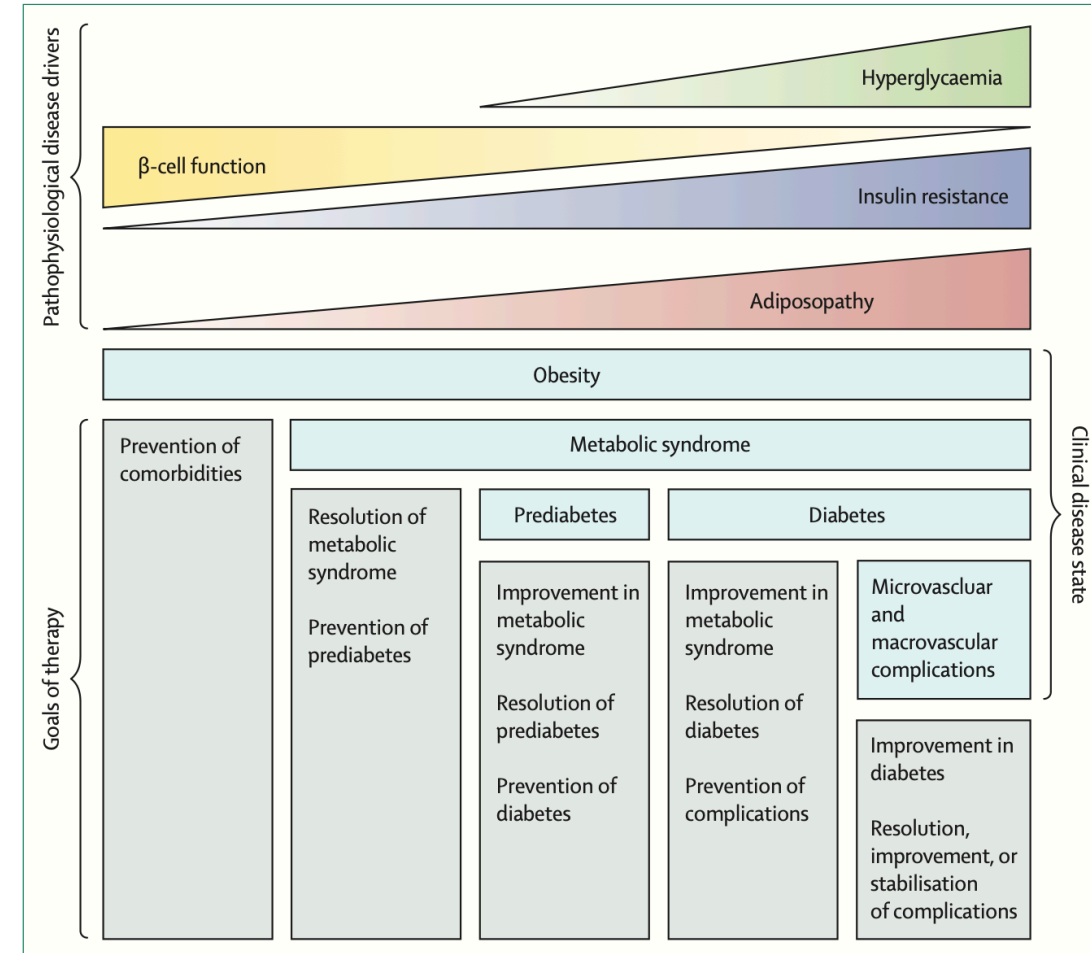
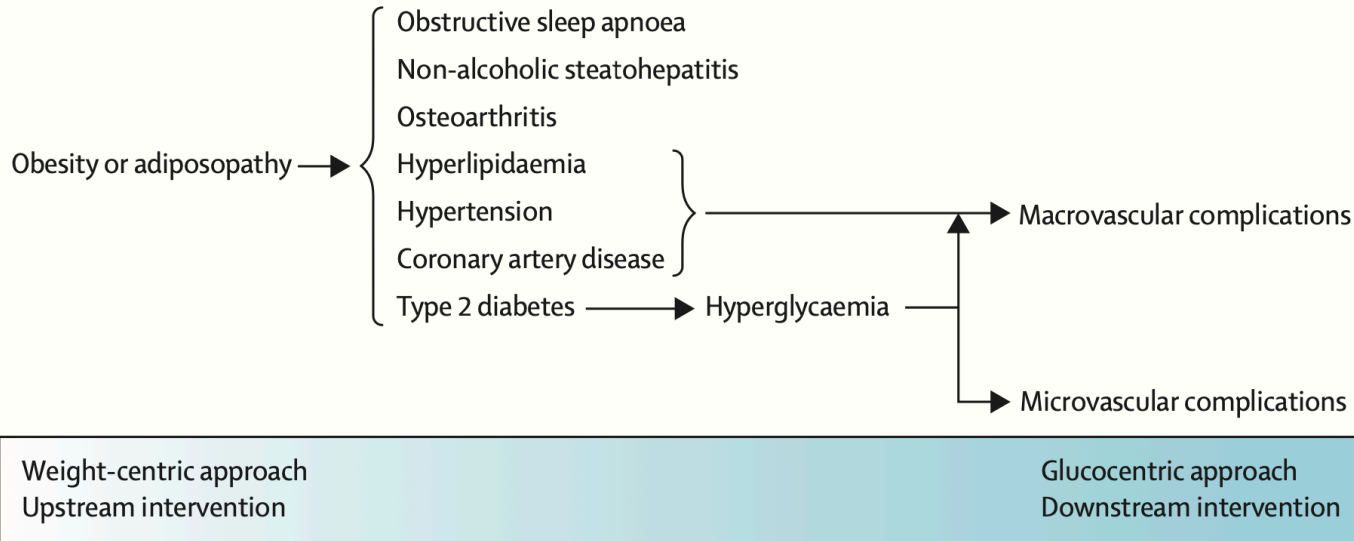
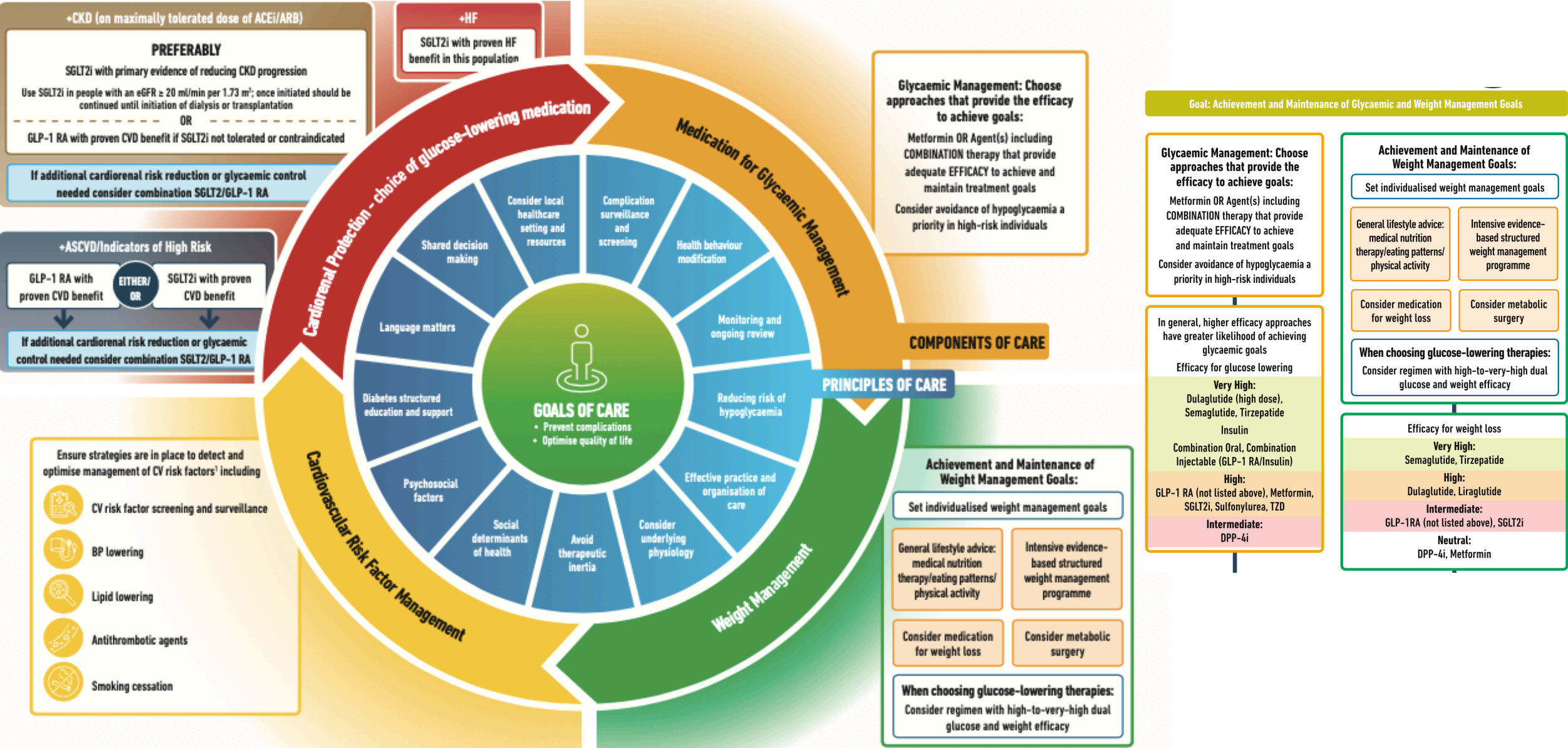


Figure 2: The disease continuum for weight-related type 2 diabetes
Pathophysiology, clinical disease states, and goals of therapy are shown along the continuum.

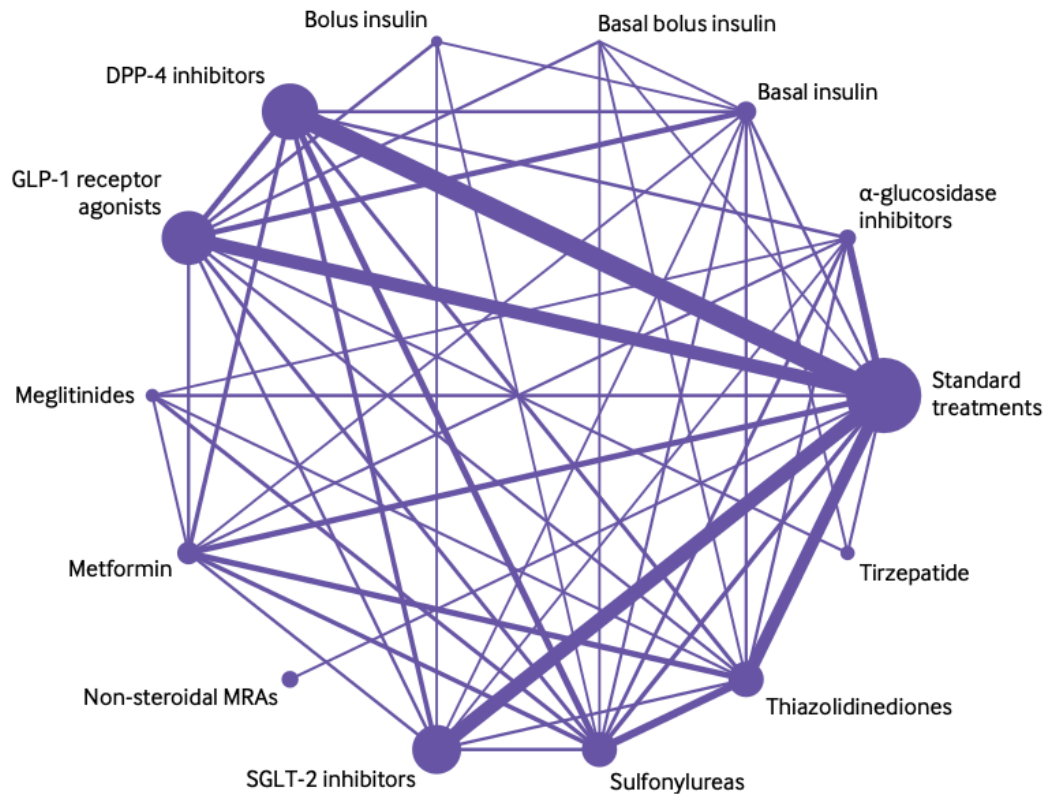
Figure 1: Illustration of the wide-ranging benefits of an upstream weight-centric approach versus a glucocentric management approach

HOLISTIC PERSON-CENTRED APPROACH TO T2DM MANAGEMENT



1 = American Diabetes Association Professional Practice Committee. 10. Cardiovascular Disease and Risk Management: Standards of Medical Care in Diabetes-2022. Diabetes Care. 2022 Jan 1;45(Suppl 1):S144-74.
 ACEi, Angiotensin-Converting Enzyme Inhibitor; ARB, Angiotensin Receptor Blockers; ASCVD, Atherosclerotic Cardiovascular Disease; BP, Blood Pressure; CKD, Chronic Kidney Disease; CV, Cardiovascular; eGFR, Estimated Glomerular Filtration Rate; GLP-1 RA, Glucagon-Like Peptide-1 Receptor Agonist; HF, Heart Failure; SGLT2i, Sodium-Glucose Cotransporter-2 Inhibitor; TZD, Type 2 Diabetes.

Benefits and harms of drug treatment for type 2 diabetes: systematic review and network meta-analysis of randomised controlled trials



Glucometabolic outcomes of GLP-1 receptor agonist-based therapies in patients with type 2 diabetes: a systematic review and network meta-analysis

Irene Caruso,^{a,f} Ludovico Di Gioia,^{a,f} Sergio Di Molfetta,^{a,f} Angelo Cignarelli,^a Suetonia Cressida Palmer,^b Patrizia Natale,^{c,d,e} Giovanni F. M. Strippoli,^{c,d} Sebastio Perrini,^a Annalisa Natalicchio,^a Luigi Laviola,^a and Francesco Giorgino^{a,*}

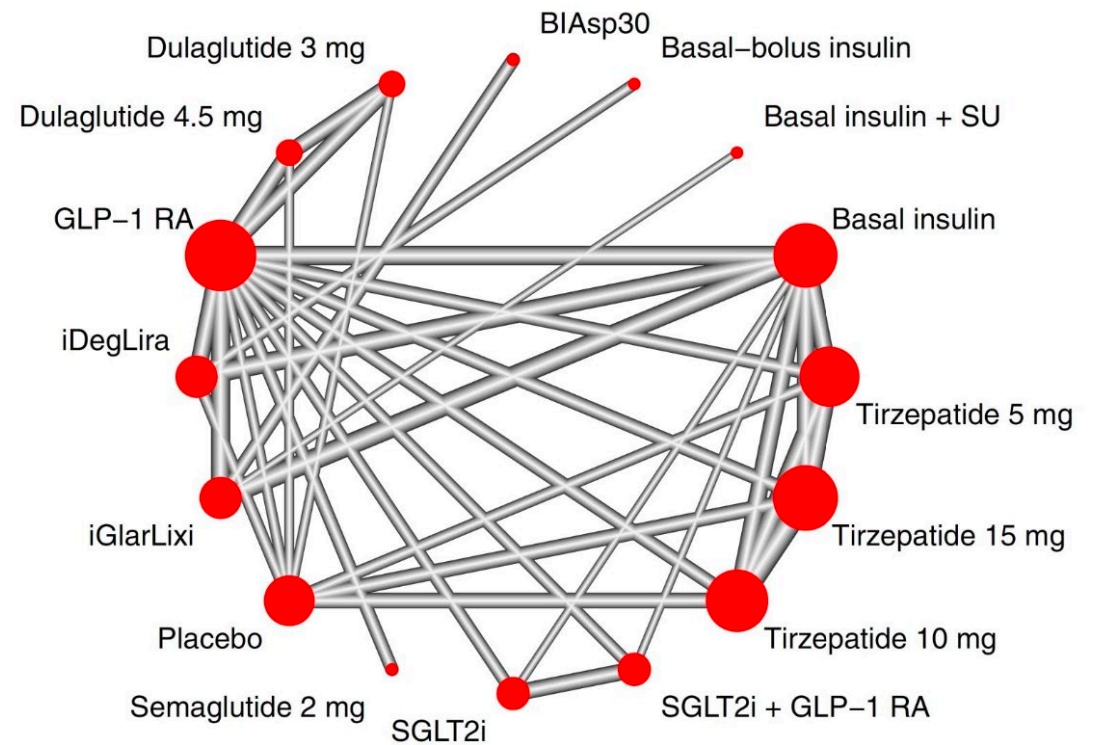
^aDepartment of Precision and Regenerative Medicine and Ionian Area, Section of Internal Medicine, Endocrinology, Andrology and Metabolic Diseases, University of Bari Aldo Moro, Bari, Italy

^bDepartment of Medicine, University of Otago Christchurch, Christchurch, New Zealand

^cDepartment of Precision and Regenerative Medicine and Ionian Area, Section of Nephrology, Dialysis and Transplantation, University of Bari Aldo Moro, Bari, Italy

^dSydney School of Public Health, The University of Sydney, Sydney, Australia

^eNephrology, Dialysis and Transplantation Unit, Department of Medical and Surgical Sciences, University of Foggia, Foggia, Italy



Nota 100

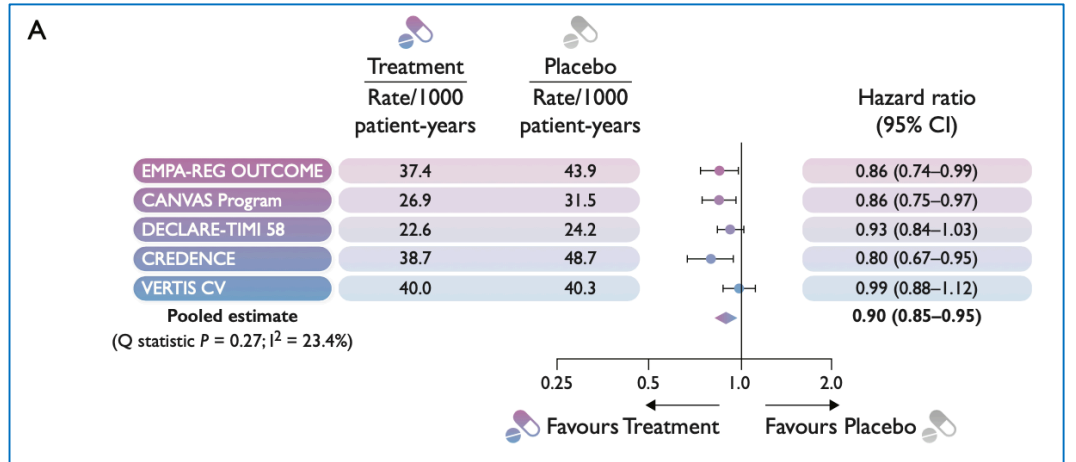
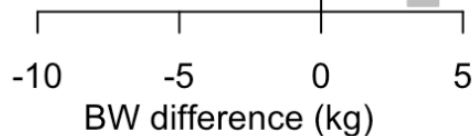
Farmaci a carico SSN inclusi nella Nota 100:

INIBITORI SGLT2: canagliflozin - dapagliflozin - empagliflozin - ertugliflozin

Comparison: other vs 'Placebo' (Random Effects Model)

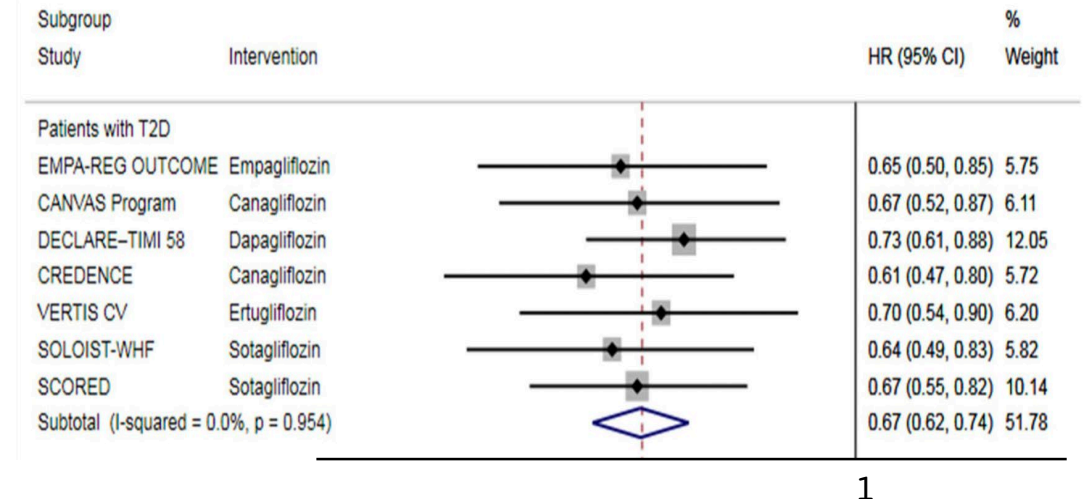
Treatment MD 95% CI

SGLT2i -3.44 [-4.11; -2.77]

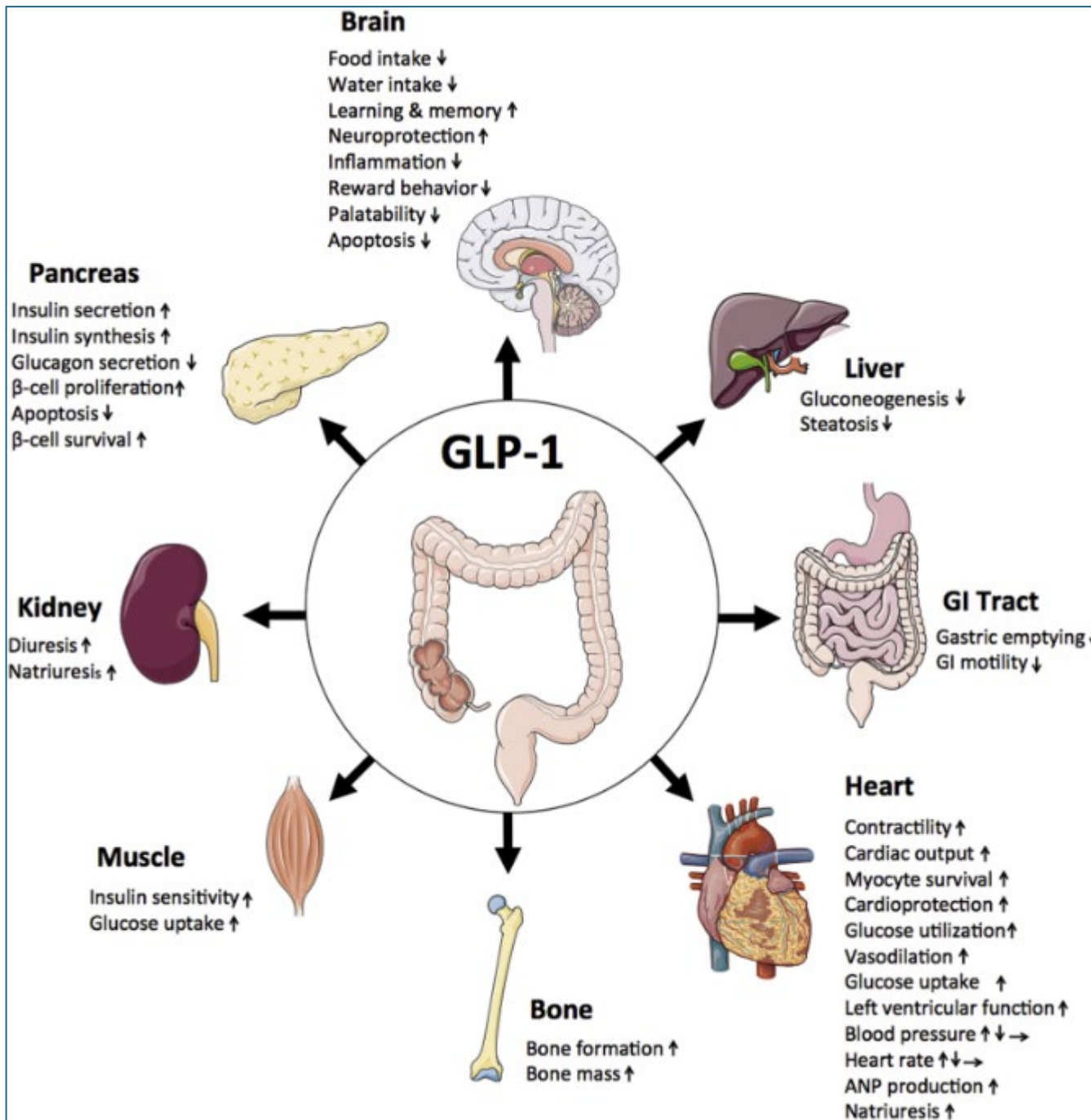


2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes

DM-CVOT



Qiu M, Am J Cardiovasc Drugs, 2022; 22



**TERAPIA
NORMOGLICEMIZZANTE**

VS

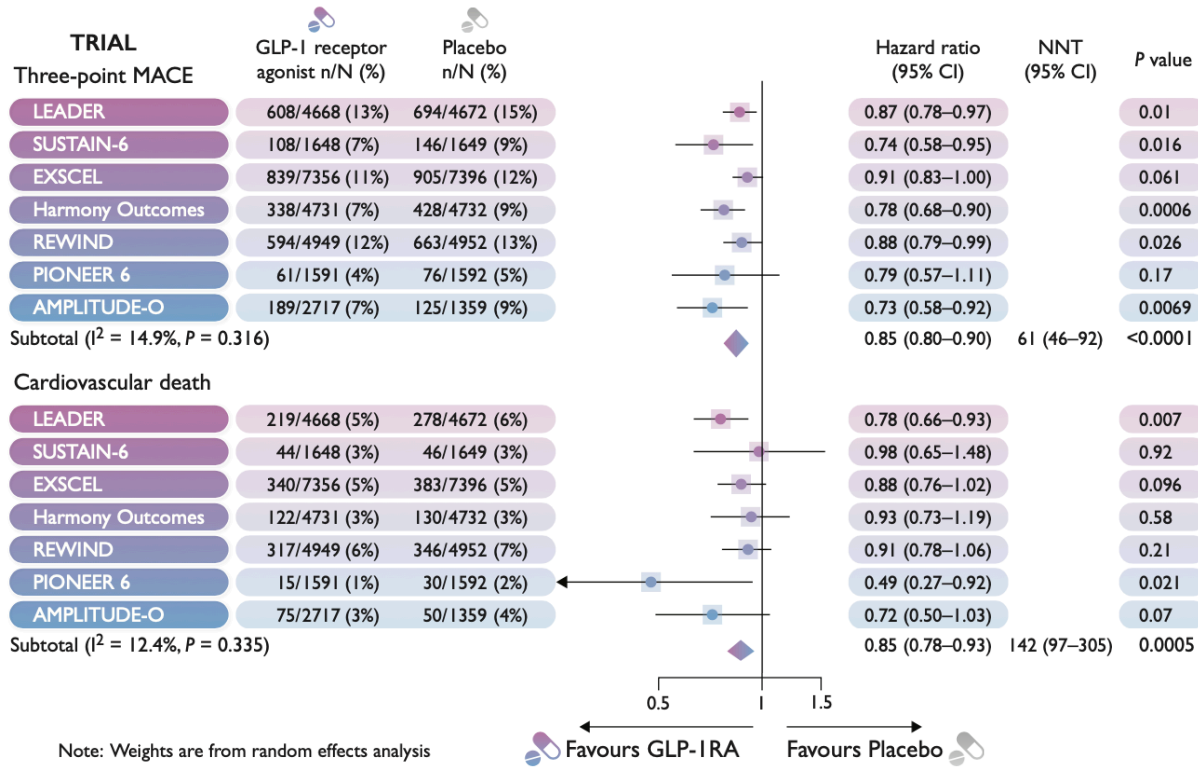
**TERAPIA MULTI-
TARGET**

Nota 100

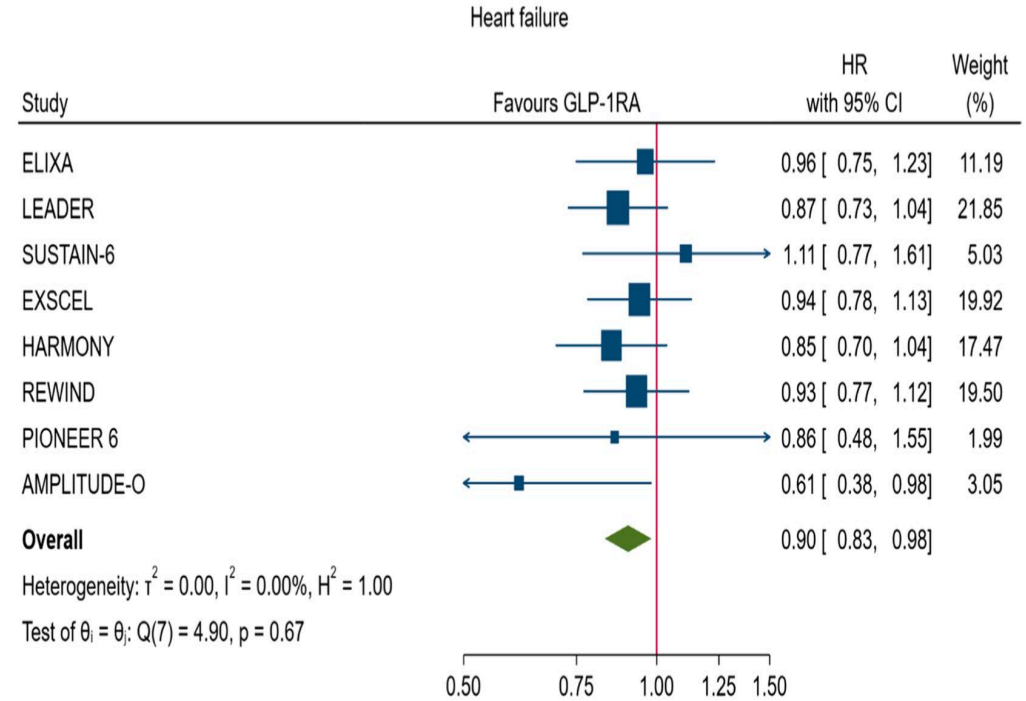
Farmaci a carico SSN inclusi nella Nota 100:

AGONISTI RECETTORIALI GLP1: dulaglutide - exenatide - exenatide LAR - liraglutide - lixisenatide - semaglutide orale - semaglutide sottocutanea + tirzepatide

GLP-1 RA - Major adverse cardiovascular events



GLP-1 RA - HF



Dulaglutide and cardiovascular outcomes in type 2 diabetes (REWIND): a double-blind, randomised placebo-controlled trial

Hertzel C Gerstein ¹, Helen M Colhoun ², Gilles R Dagenais ³, Rafael Diaz ⁴,

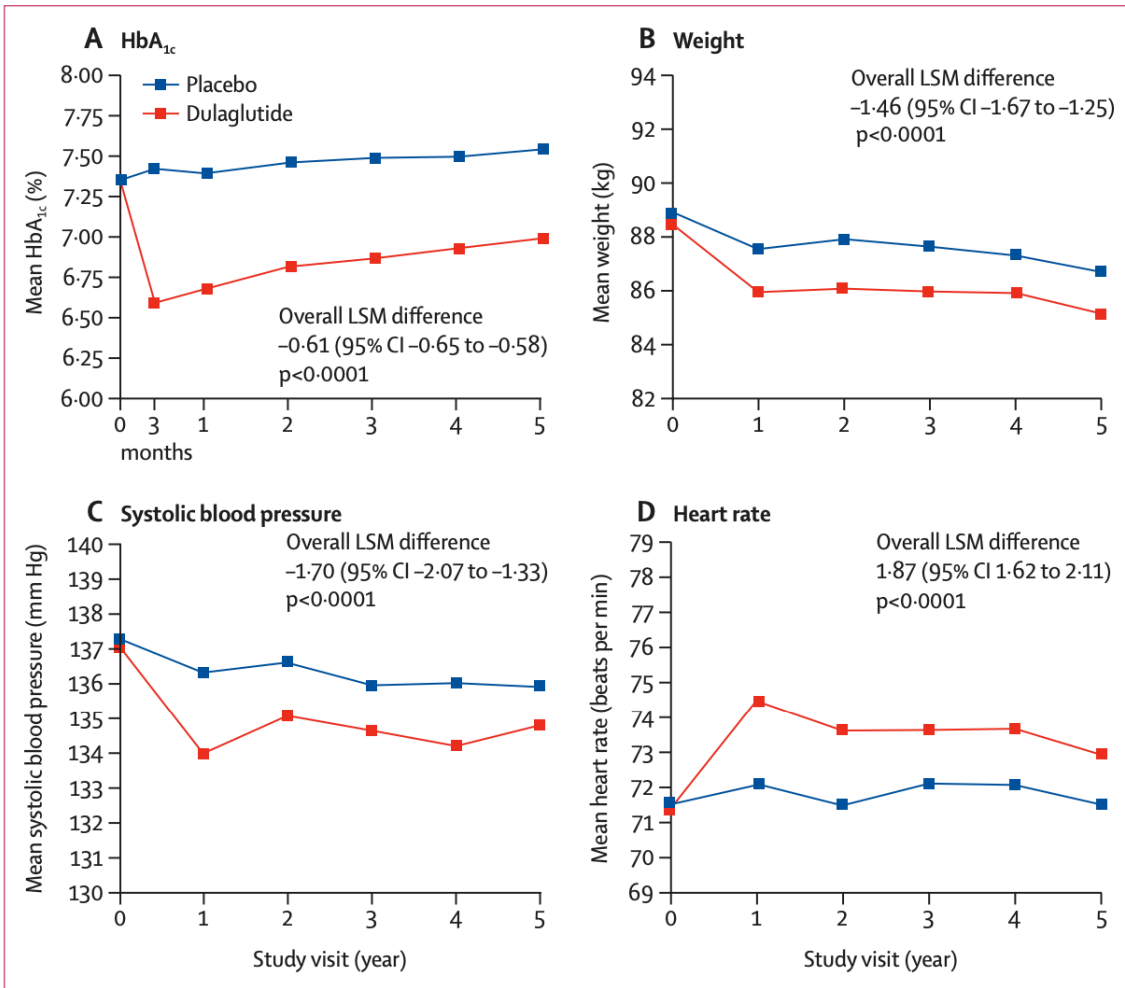
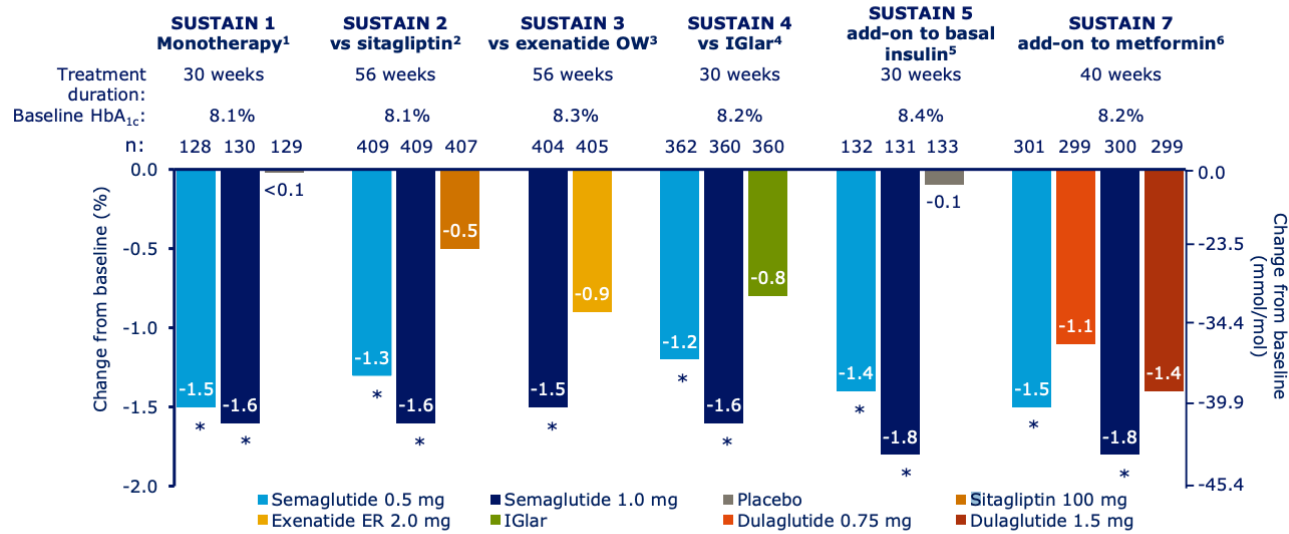


Figure 4: Continuous measures during follow-up

PROGRAMMA DI STUDIO	AWARD
CVOT	REWIND
FORMULAZIONE	Soluzione iniettabile in penna preriempita (monodose)
DOSAGGI AUTORIZZATI (RCP) E DISPONIBILI IN COMMERCIO	0.75 mg s.c. / settimana 1.5 mg s.c. / settimana
<i>DOSAGGI AUTORIZZATI (RCP) MA NON COMMERCIALIZZATI</i>	<i>3 mg s.c. / settimana 4.5 mg s.c. / settimana</i>
FILTRATO RENALE	Nessun aggiustamento dose in categoria G1-G4 Esperienza limitata

SUSTAIN trials

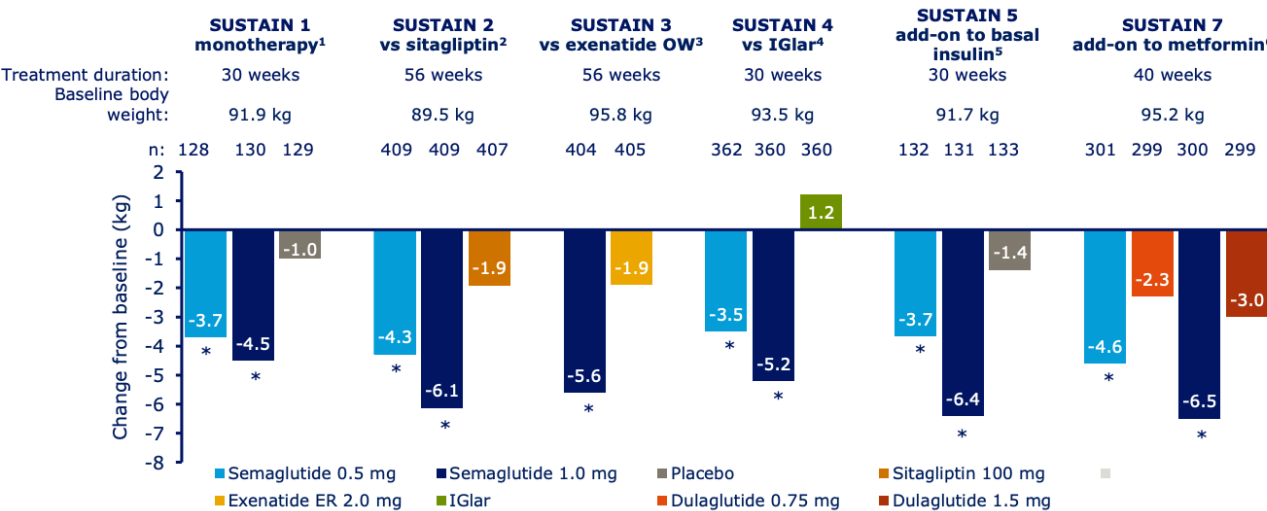
ESTIMATED CHANGE IN HbA_{1c}



*p<0.0001 vs comparator.
 Exenatide OW, exenatide once weekly; IGLar, insulin glargine.
 1. Sorli et al. *Lancet Diabetes Endocrinol* 2017;5:251-260; 2. Ahrén et al. *Lancet Diabetes Endocrinol* 2017;5:341-354; 3. Ahmann et al. *Diabetes Care* 2018;41:258-266; 4. Aroda et al. *Lancet Diabetes Endocrinol* 2017;5:355-366; 5. Rodbard et al. *The Journal of Clinical Endocrinology and Metabolism* 2018, 103(6):2291-2301; 6. Pratley et al. *Lancet Diabetes Endocrinol* 2018; 6(4):275-286

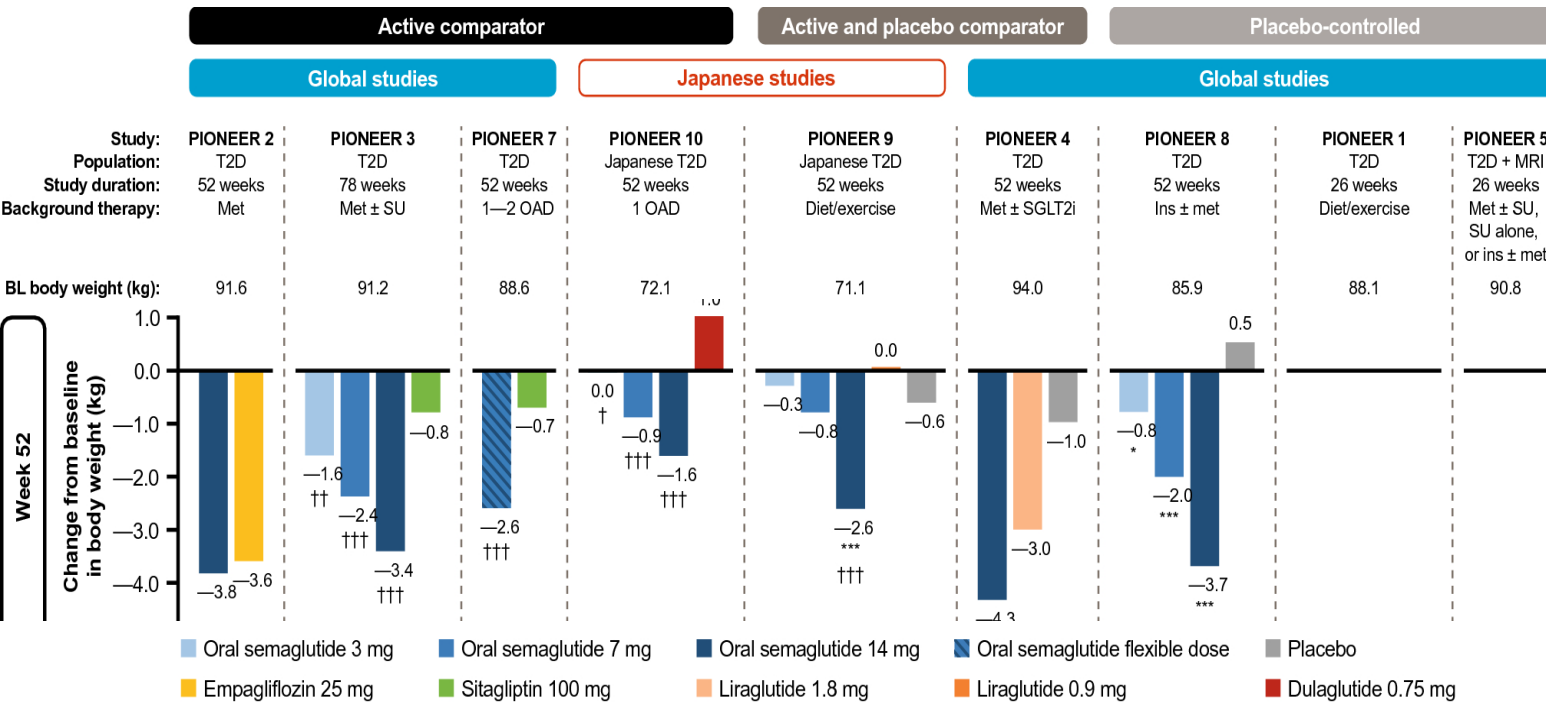
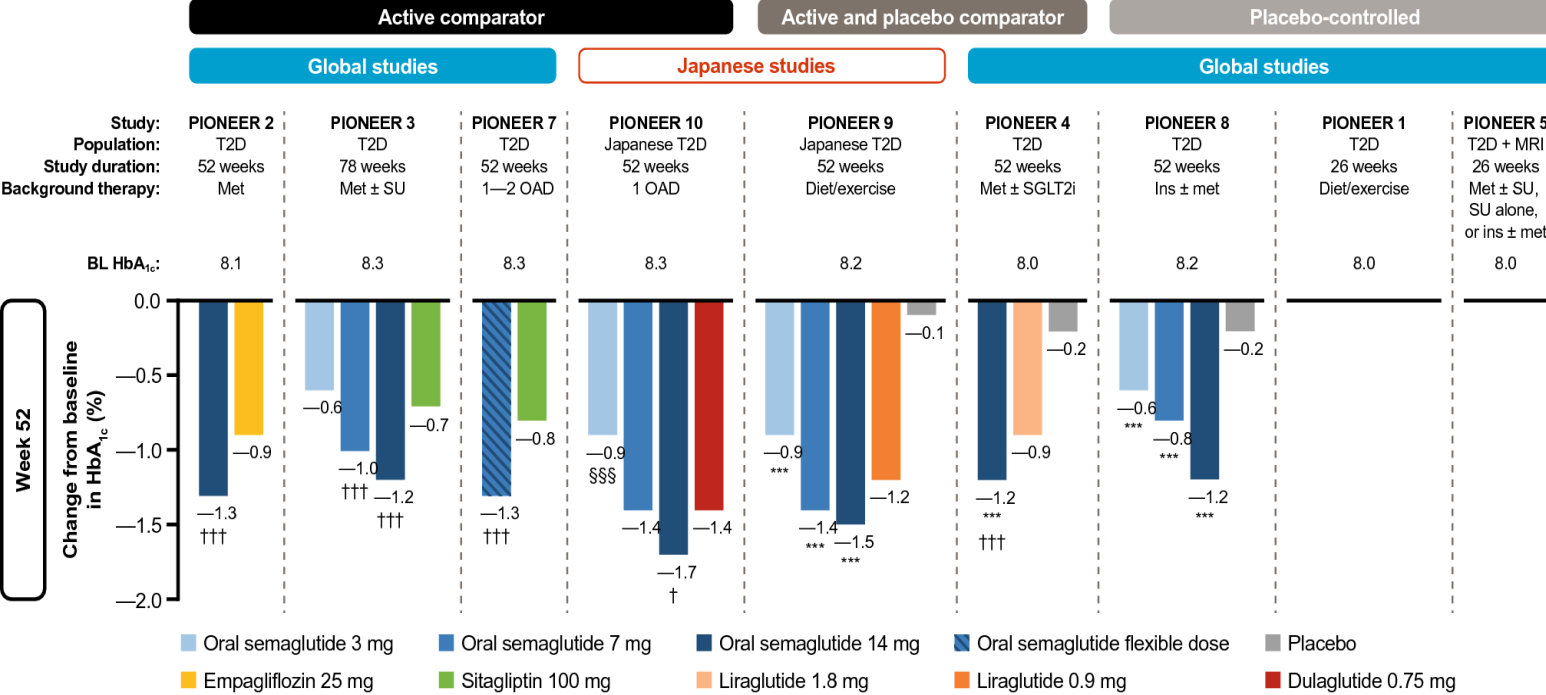
SUSTAIN trials

ESTIMATED MEAN CHANGE IN BODY WEIGHT

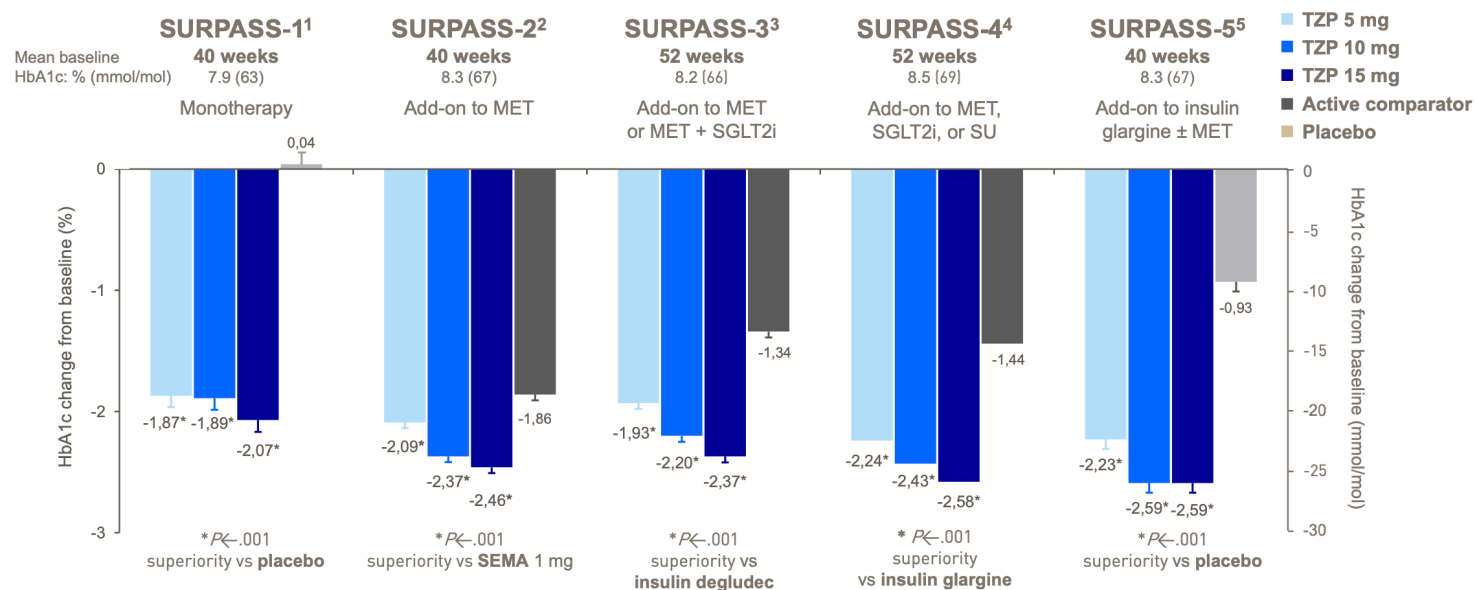


*p<0.0001 vs comparator.
 Exenatide OW, exenatide once weekly; IGLar, insulin glargine.
 1. Sorli et al. *Lancet Diabetes Endocrinol* 2017;5:251-260; 2. Ahrén et al. *Lancet Diabetes Endocrinol* 2017;5:341-354; 3. Ahmann et al. *Diabetes Care* 2018;41:258-266; 4. Aroda et al. *Lancet Diabetes Endocrinol* 2017;5:355-366; 5. Rodbard et al. *The Journal of Clinical Endocrinology and Metabolism* 2018, 103(6):2291-2301; 6. Pratley et al. *Lancet Diabetes Endocrinol* 2018; 6(4):275-286

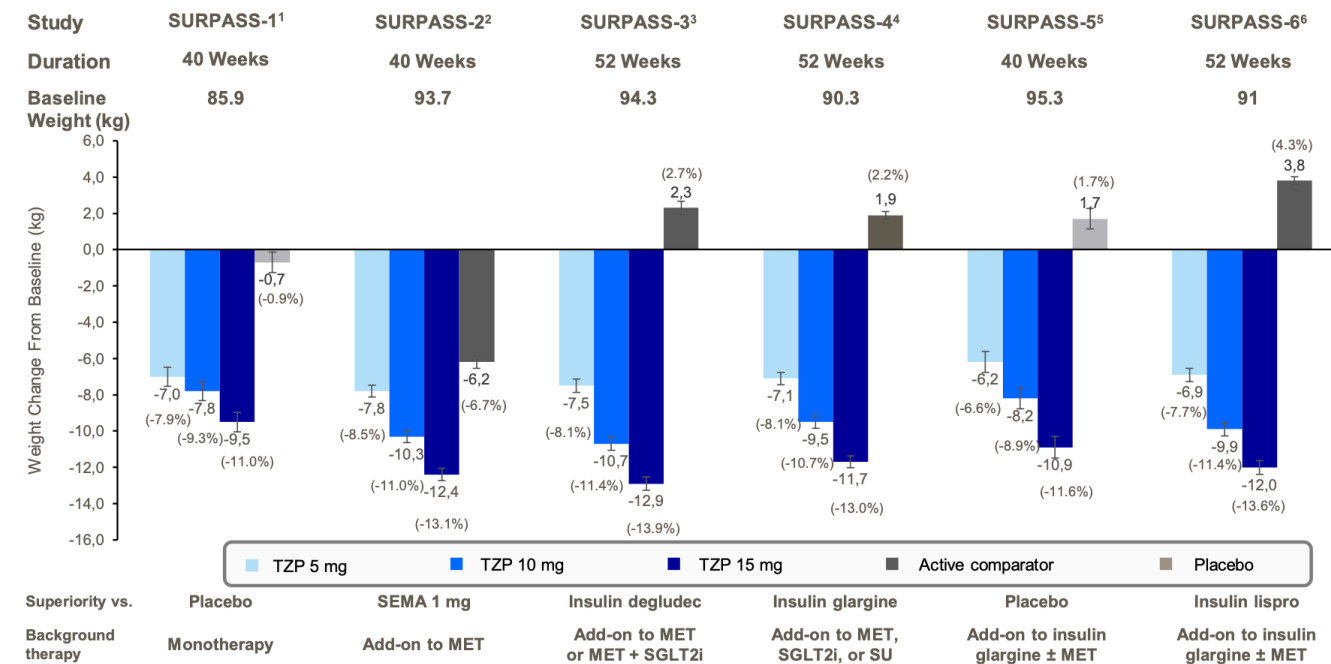
PROGRAMMA DI STUDIO	SUSTAIN
CVOT	SUSTAIN 6
FORMULAZIONE	Soluzione iniettabile in penna preriempita (4 dosi)
DOSAGGI AUTORIZZATI (RCP) E DISPONIBILI IN COMMERCIO	0.25 mg s.c. / settimana 0.5 mg s.c. / settimana 1.0 mg s.c. / settimana
DOSAGGI AUTORIZZATI (RCP) MA NON COMMERCIALIZZATI	2.0 mg s.c. / settimana
FILTRATO RENALE	Nessun aggiustamento dose in categoria G1-G4



PROGRAMMA DI STUDIO	PIONEER
CVOT	PIONEER 6 <i>SOUL (ongoing)</i>
FORMULAZIONE	Orale (compresse)
DOSAGGI AUTORIZZATI (RCP) E DISPONIBILI IN COMMERCIO	3 mg / die 7 mg / die 14 mg / die
FILTRATO RENALE	Nessun aggiustamento dose in categoria G1- G4
ASSOCIAZIONE CON INSULINA	Schema insulinico quadri-



Data are LSM (SE), mITT population (efficacy analysis set), MMRM analysis. Data labels are % HbA1c. HbA1c = glycated haemoglobin; LSM = least squares mean; MET = metformin; mITT = modified intent-to-treat; MMRM = mixed model repeated measures; SGLT2i = sodium-glucose co-transporter-2 inhibitor; SEMA = semaglutide; SU = sulphonylurea; TZP = tirzepatide.



*p<.001 vs. placebo or active comparator.

Data are LSM (SE), mITT population (efficacy analysis set), MMRM analysis.

1. Rosenstock J, et al. *Lancet*. 2021;398(10295):143-155. 2. Frias JP, et al. *N Eng J Med*. 2021;385(6):503-515. 3. Ludvik B, et al. *Lancet*. 2021;398(10300):583-598. 4. Del Prato S, et al. *Lancet*. 2021;398(10313):1811-1824. 5. Dahl D, et al. *JAMA*. 2022;327(6):534-545. 6. Rosenstock J, et al. *JAMA*. 2023;330(17):1631-1640.

PROGRAMMA DI STUDIO	SURPASS
CVOT	<i>SURPASS-CV (ongoing)</i>
FORMULAZIONE	
DOSAGGI AUTORIZZATI (RCP)	<i>2.5 – 5 – 7.5 – 10 – 12.5 – 15 mg s.c. / settimana</i>
FILTRATO RENALE	Nessun aggiustamento dose in categoria G1-G4
ASSOCIAZIONE CON INSULINA	Insulina basale

Clinical Trial > Lancet. 2023 Aug 19;402(10402):613-626.

doi: 10.1016/S0140-6736(23)01200-X. Epub 2023 Jun 26.

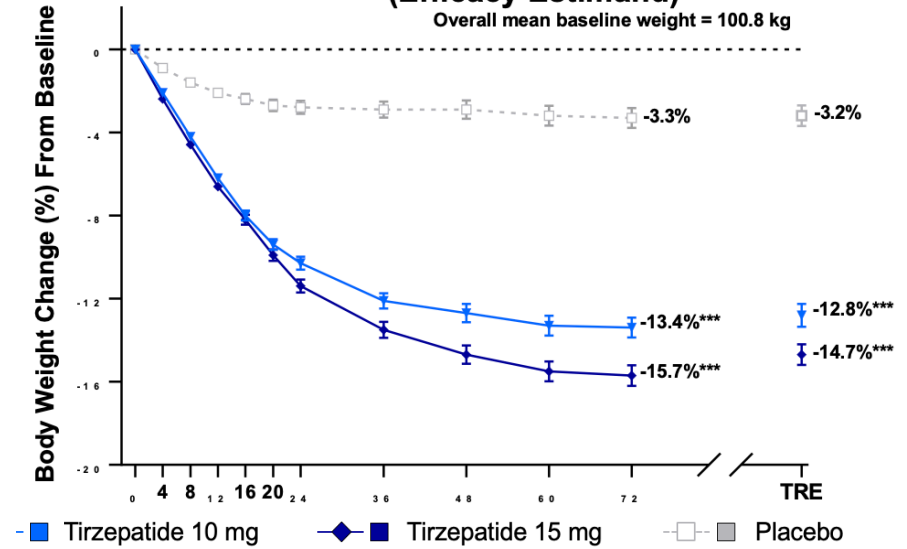
Tirzepatide once weekly for the treatment of obesity in people with type 2 diabetes (SURMOUNT-2): a double-blind, randomised, multicentre, placebo-controlled, phase 3 trial

W Timothy Garvey¹, Juan P Frias², Ania M Jastreboff³, Carel W le Roux⁴, Naveed Sattar⁵,

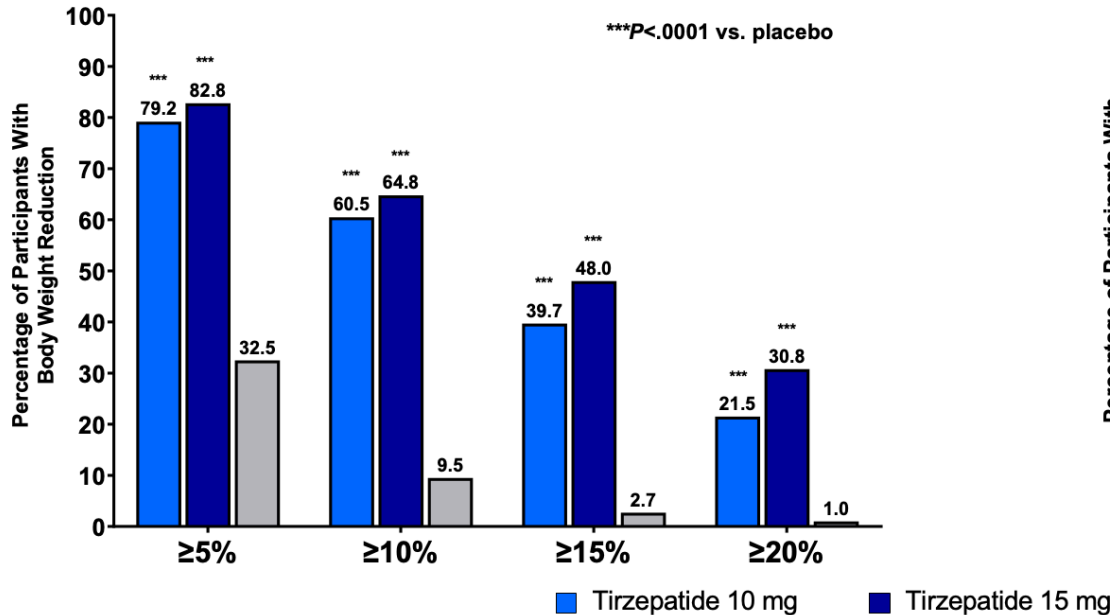
Percentage Change in Body Weight From Baseline (Efficacy Estimand)

(Efficacy Estimand)

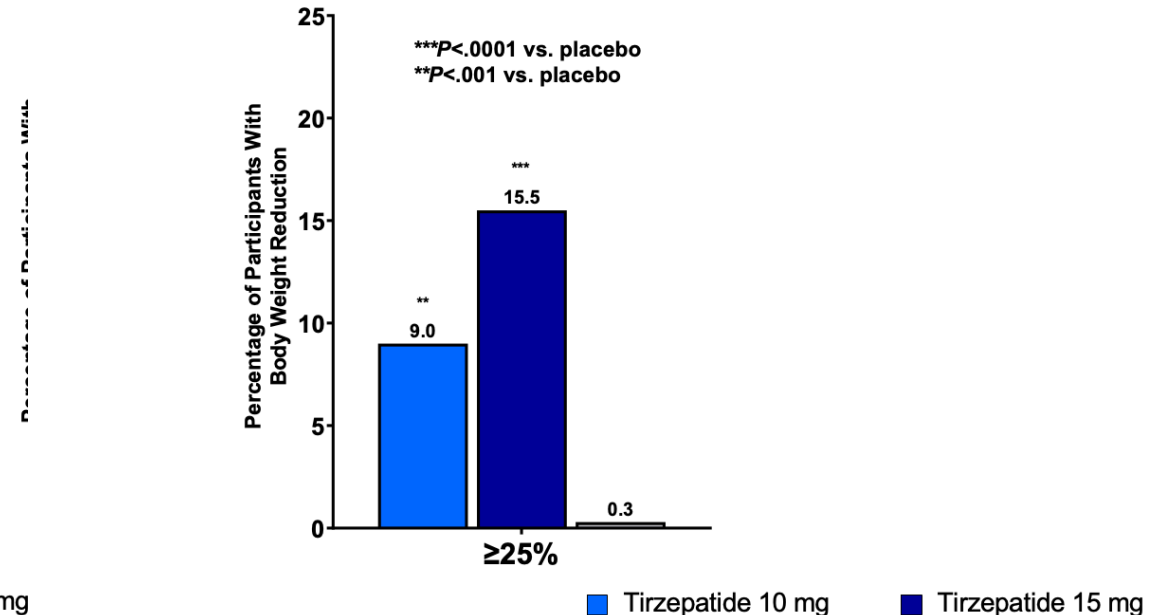
Overall mean baseline weight = 100.8 kg



Participants Who Achieved Weight Reduction Targets at Week 72 (Treatment-Regimen Estimand)



Participants Who Achieved Weight Reduction Target at Week 72 (Treatment-Regimen Estimand)



Glucometabolic outcomes of GLP-1 receptor agonist-based therapies in patients with type 2 diabetes: a systematic review and network meta-analysis

Irene Caruso,^{a,f} Ludovico Di Gioia,^{a,f} Sergio Di Molfetta,^{a,f} Angelo Cignarelli,^a Suetonia Cressida Palmer,^b Patrizia Natale,^{c,d,e} Giovanni F. M. Strippoli,^{c,d} Sebastio Perrini,^a Annalisa Natalicchio,^a Luigi Laviola,^a and Francesco Giorgino^{a,*}



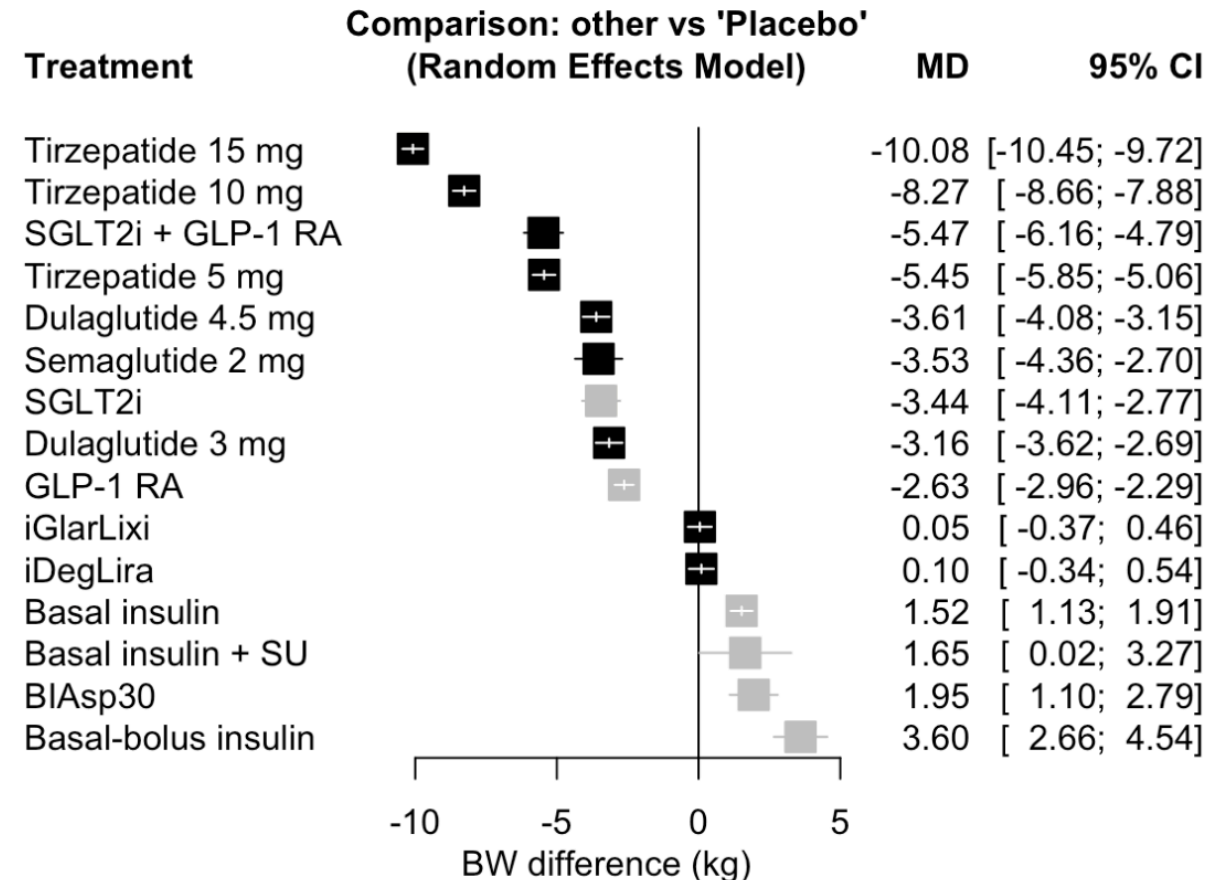
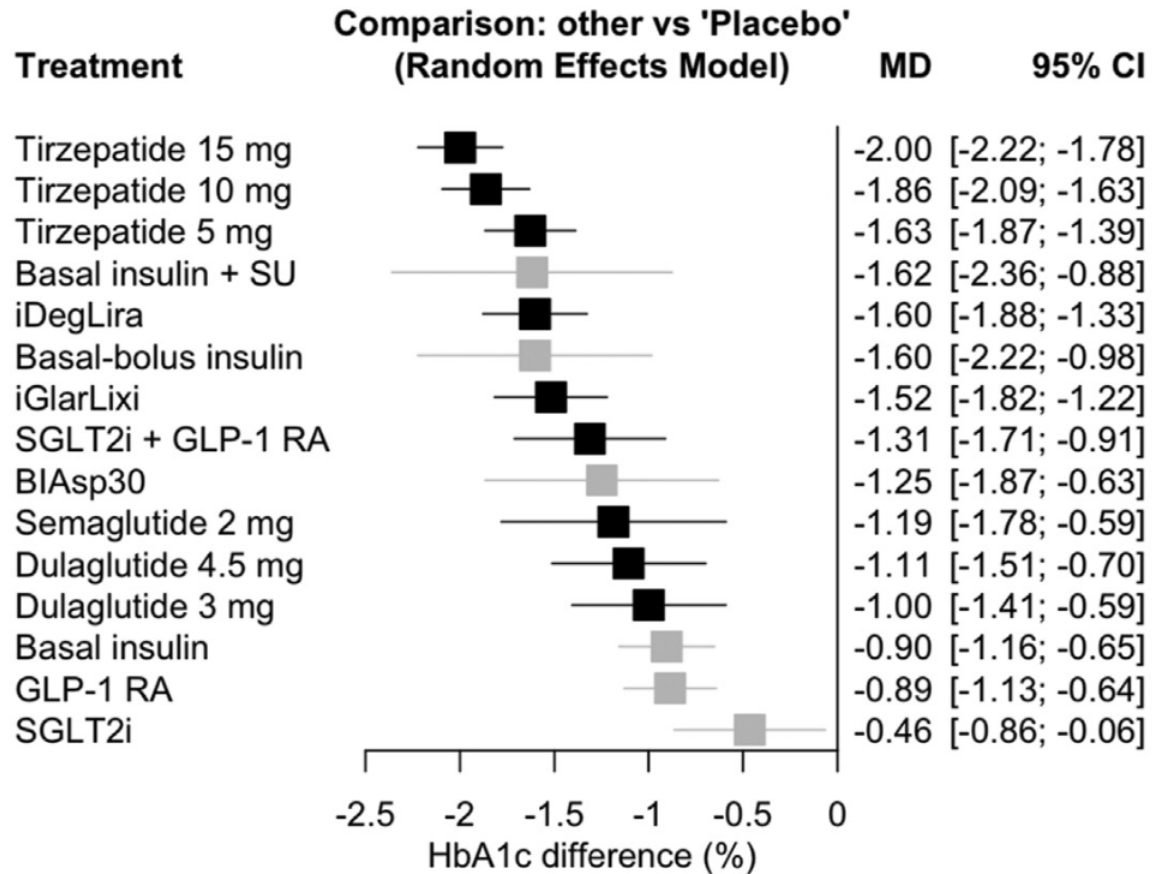
^aDepartment of Precision and Regenerative Medicine and Ionian Area, Section of Internal Medicine, Endocrinology, Andrology and Metabolic Diseases, University of Bari Aldo Moro, Bari, Italy

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^dSydney School of Public Health, The University of Sydney, Sydney, Australia

^eNephrology, Dialysis and Transplantation Unit, Department of Medical and Surgical Sciences, University of Foggia, Foggia, Italy



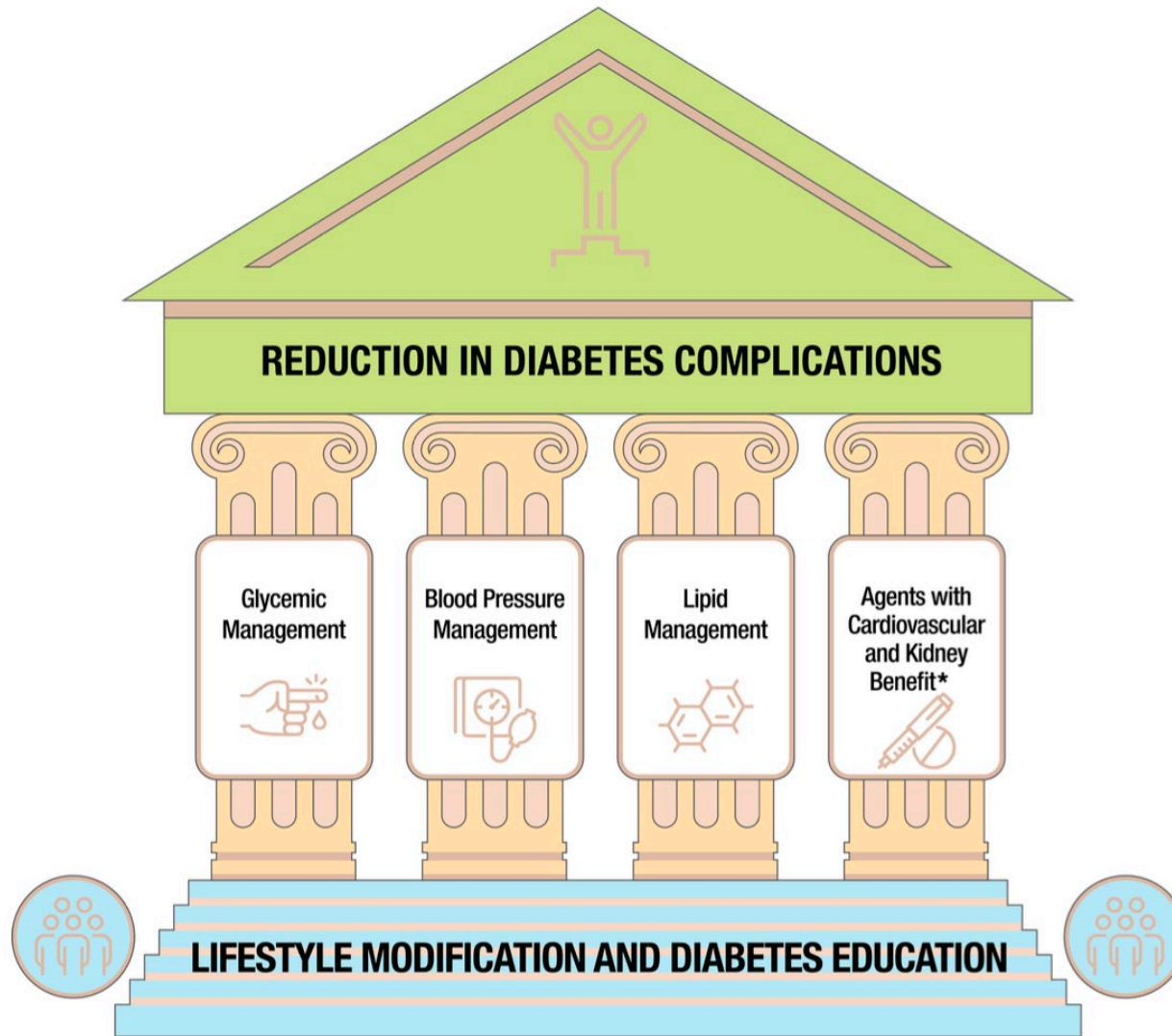


Figure 10.1—Multifactorial approach to reduction in risk of diabetes complications. *Risk reduction interventions to be applied as individually appropriate.

Combattere lo stigma e l'inerzia terapeutica!



S.I.C.O.B. - EVENTO REGIONALE - ASL CUNEO 1
SALUZZO Venerdì, 22 Marzo 2024
RESP. SCIENTIFICI: ANDREA GATTOLIN, LAURA GIANOTTI
**L'OBESITÀ NEL 2024:
NUOVI MODELLI
E TRAGUARDI DI CURA**

GRAZIE PER L'ATTENZIONE!