

Nuove terapie nel diabete di tipo 2

Edoardo Mannucci

Agenzia Diabetologia, AOU Careggi, Firenze

DUALITY OF INTEREST DISCLOSURE

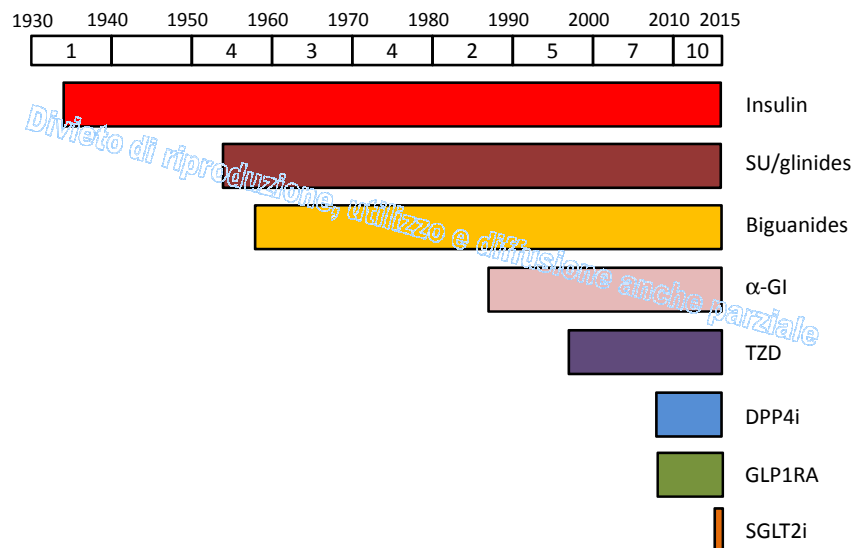
Dr Mannucci has received speaking and/or consulting fees from:

Abbott, AstraZeneca, BMS, Boehringer Ingelheim, Eli Lilly, Janssen, Lifescan, Novartis, Novo Nordisk, Sanofi, Takeda

Dr Mannucci and his research unit received research grants from:

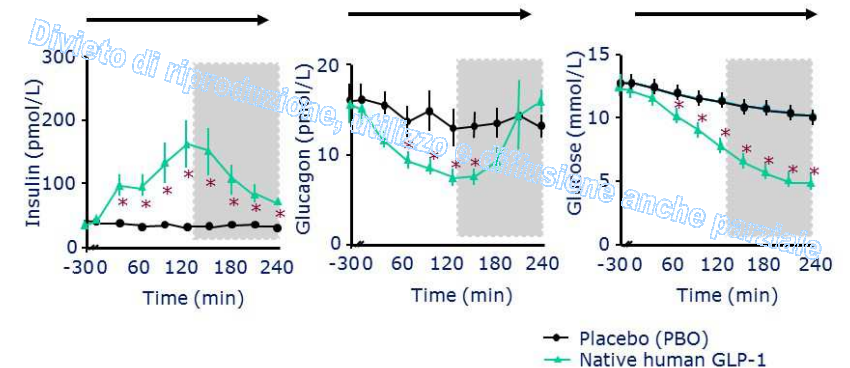
AstraZeneca, BMS, Boehringer Ingelheim, Eli Lilly, Janssen, Novartis, Novo Nordisk

Drugs for T2DM



Pancreatic actions of GLP-1

Effects on T2DM of ev GLP-1





DPP-4 inhibitors and efficacy

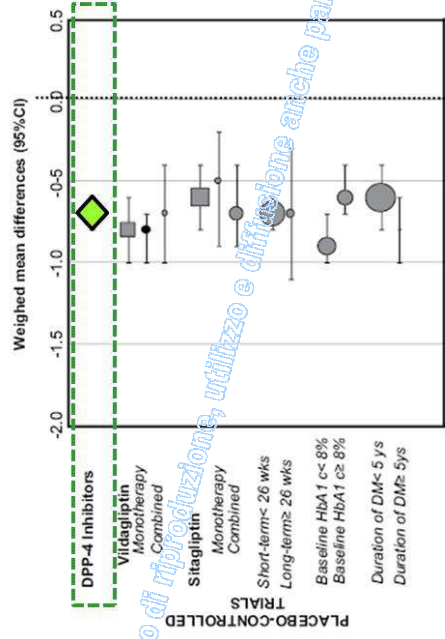


Figure 2 Standardized differences (with 95% CI) of mean HbA1c at endpoint.

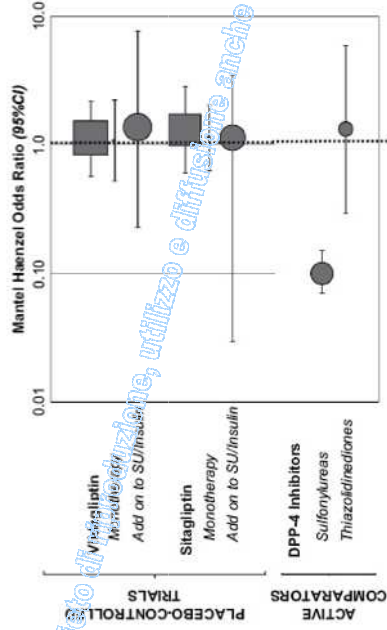
Monami M, Iacomelli I, Marchionni N, Mannucci E.
Nutr Metab Cardiovasc Dis. 2010; 20:224-35

Divieto di riproduzione, utilizzo e diffusione anche parziale



DPP4i and hypoglycemia

Meta-analysis of RCTs



Mantel-Haenszel odds ratio (with 95% CI) for any hypoglycemia (logarithmic scale).

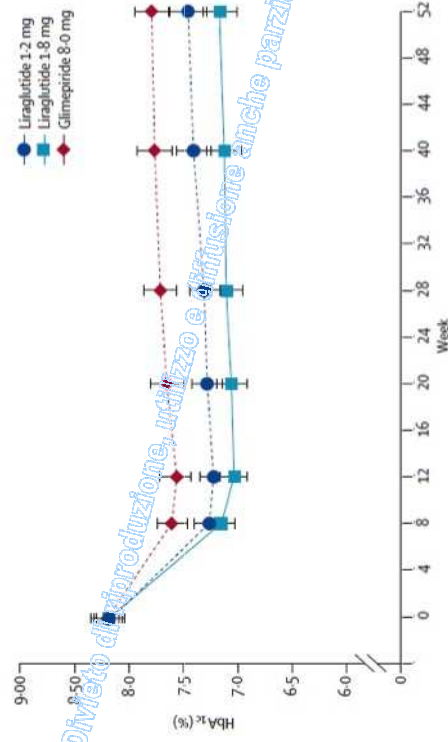
Monami M, Iacomelli I, Marchionni N, Mannucci E.
Nutr Metab Cardiovasc Dis. 2009

Divieto di riproduzione, utilizzo e diffusione anche parziale



Liraglutide vs Glimepiride monotherapy

The LEAD-3 trial



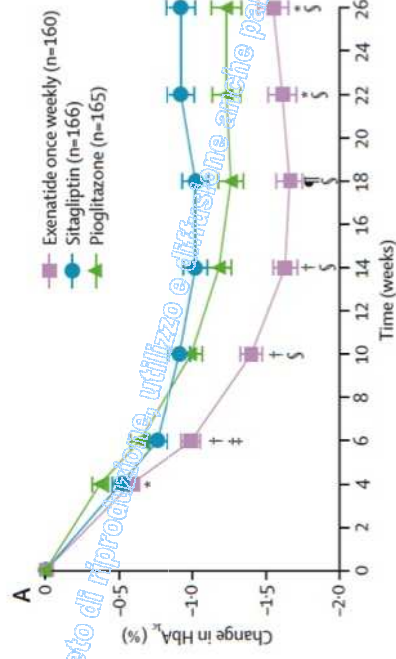
Garber A et al. Lancet. 2008

Divieto di riproduzione, utilizzo e diffusione anche parziale



Exenatide LAR add-on to metformin

The DURATION-2 trial



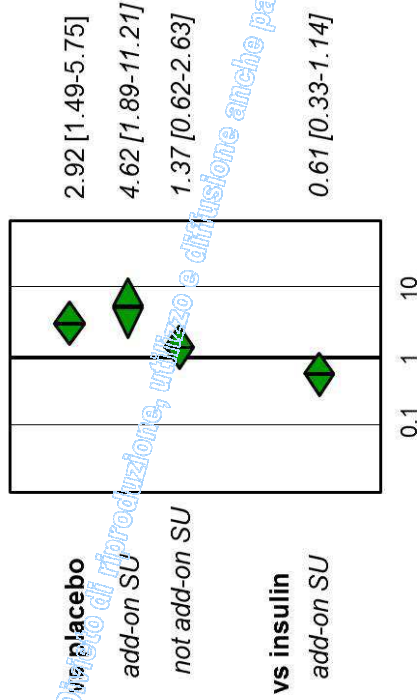
Bergensdal RM et al. Lancet. 376:431-9; 2010

Divieto di riproduzione, utilizzo e diffusione anche parziale



Exenatide bid and hypos

Meta-analysis of RCTs



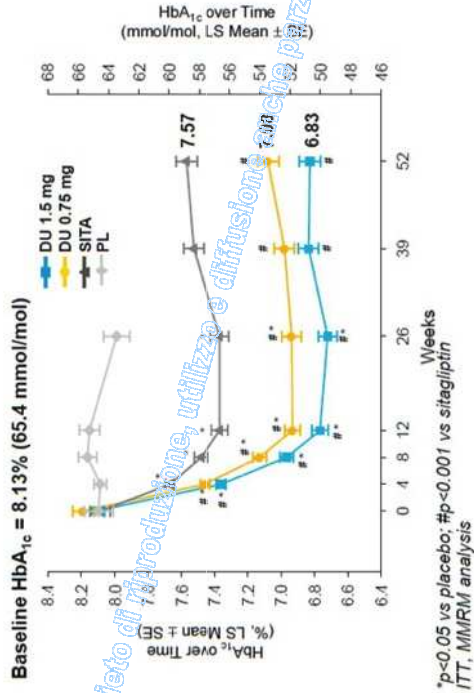
Divieto di riproduzione, utilizzo e diffusione anche parziale

Monami M et al., Eur J Endocrinol 2009; 160: 909-917.



Dulaglutide add-on to metformin

AWARD-5

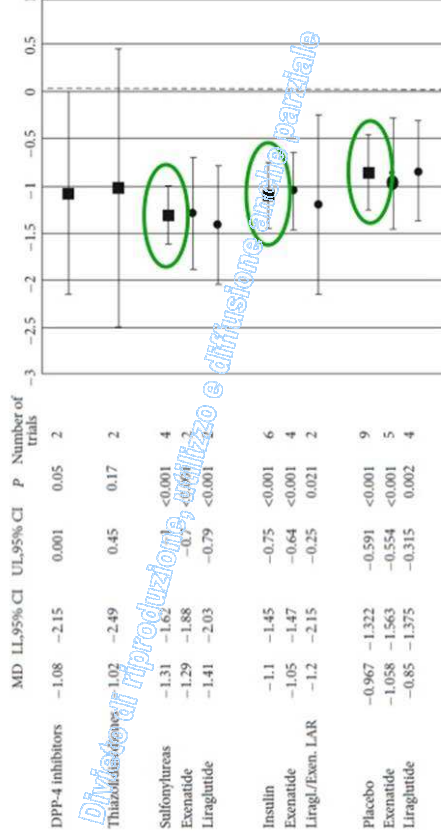


Nauck MA, et al, EASD, Barcelona, Spain, September 23-27, 2013, Poster 921



GLP-1 RA and body weight

A meta-analysis of available RCTs



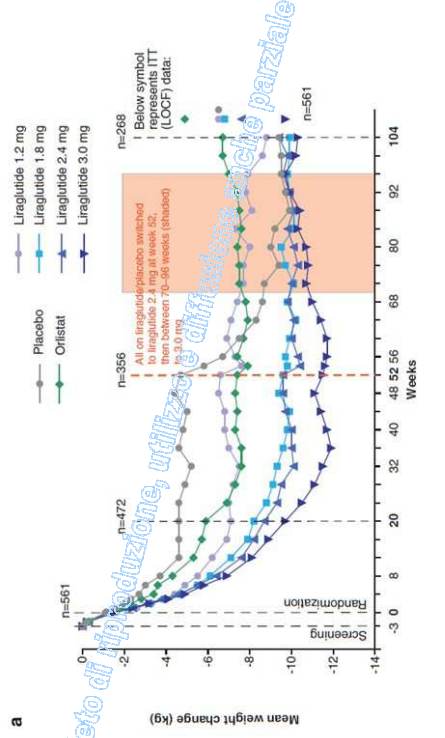
Divieto di riproduzione, utilizzo e diffusione anche parziale

Monami M, Dicembrini I, Marchionni N, Rotella CM, Mannucci E.
Exp Diabetes Res ID 672658, 2012



Liraglutide in obesity

Effects on BW, RCT vs pbo and orlistat



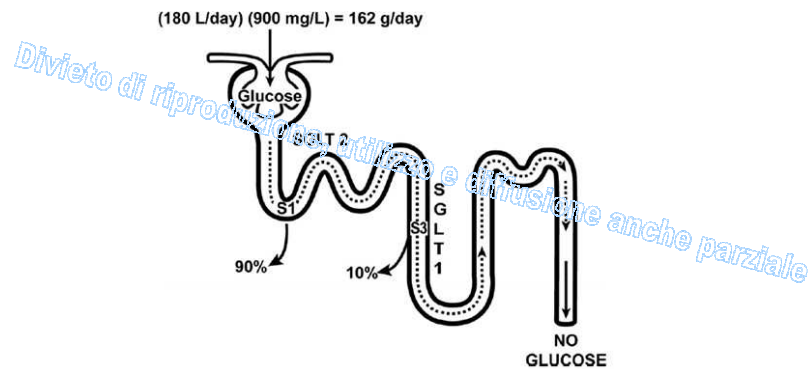
Divieto di riproduzione, utilizzo e diffusione anche parziale

Astrup A et al. Int J Obes 2011; 1-12.



SGLT-2 MOA

Tubular reabsorption of glucose

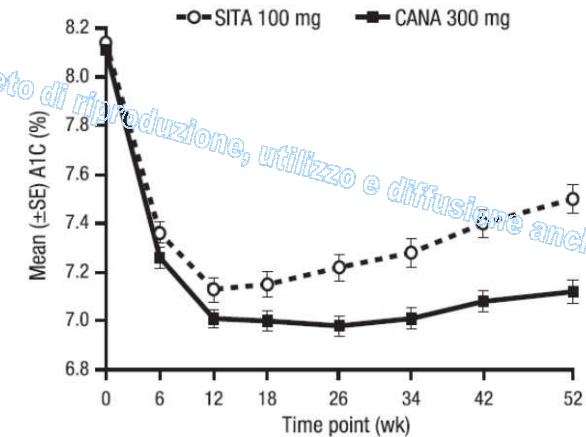


Abdul-Ghani MA, *Endocrine Reviews* 2011; 35:515-531.



Canagliflozin vs sitagliptin

RCT add-on to metformin and SU

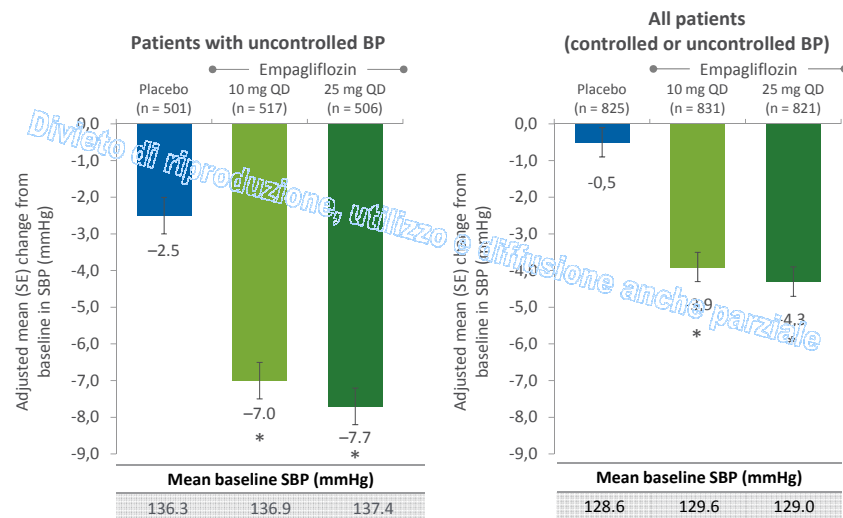


Scherthaner G et al., *Diabetes Care* 36: 2508-2515, 2013



Empagliflozin and CV risk

Effect on blood pressure– Pooled phase III trials

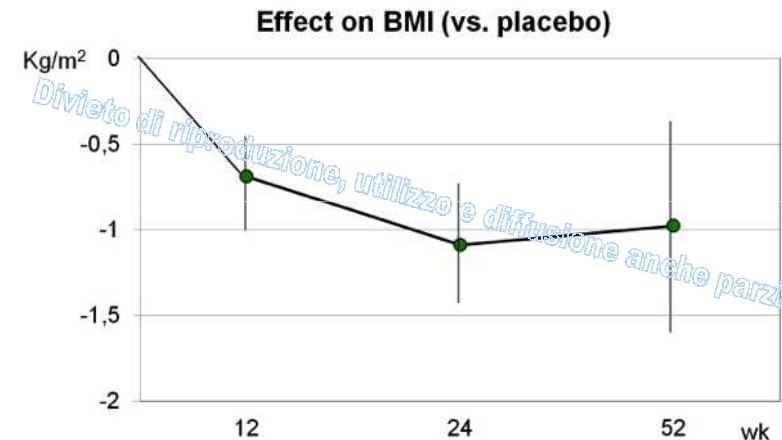


Hach T, et al. *Diabetes*. 2013;(Suppl 1) (P69-LB).



Effect of SGLT2 inhibitors

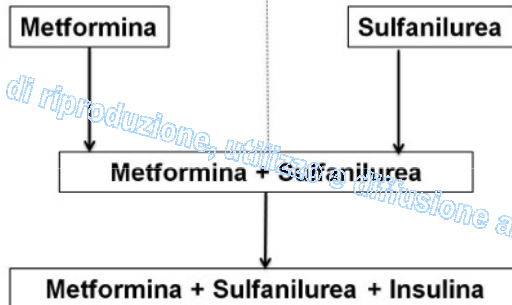
Meta-analysis of available RCTs



Monami M, Nardini C, Mannucci E. *Diabetes Obes Metab* 2013

Obeso

Non obeso



AMD, SID, SIMG, SIMI, SIF, SIGG, FAND, CeRGAS.
Progetto per l'organizzazione dell'assistenza al diabete dell'adulto.
Ed. Health Alliance S.r.L., Milano 1998.

Management of Hyperglycemia in Type 2 Diabetes, 2015: A Patient-Centered Approach

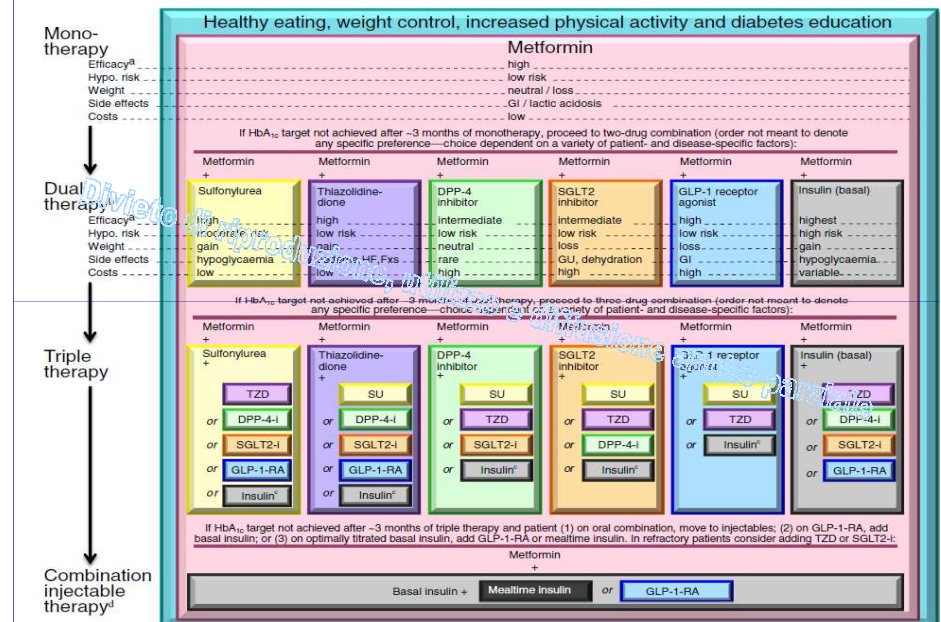


Figure 2—Anthyperglycemic therapy in type 2 diabetes: general recommendations

Inzucchi et al. Diabetes Care 2015;38:140–149.



DPP4 inhibitors



Advanced age

Young/middle aged

Lean or mild overweight

Obese

Moderate hyperglycemia

Severe hyperglycemia

Postprandial hyperglycemia

Fasting hyperglycemia

Short duration of diabetes

Long duration of diabetes



GLP1 agonists



Obese

Lean

Hypertensive

Previous pancreatitis

Very long duration of diabetes



SGLT-2 inhibitors



Obese

Reduced renal function

Hypertensive

Recurrent genitourinary infection

High hypoglycemic risk



New drugs and diet in T2DM



No hypoglycemic risk (unless associated with SU/Insulin)

➤ **No need to snack between meals**

No weight gain / weight loss

➤ **Enhancement of patients' motivation**