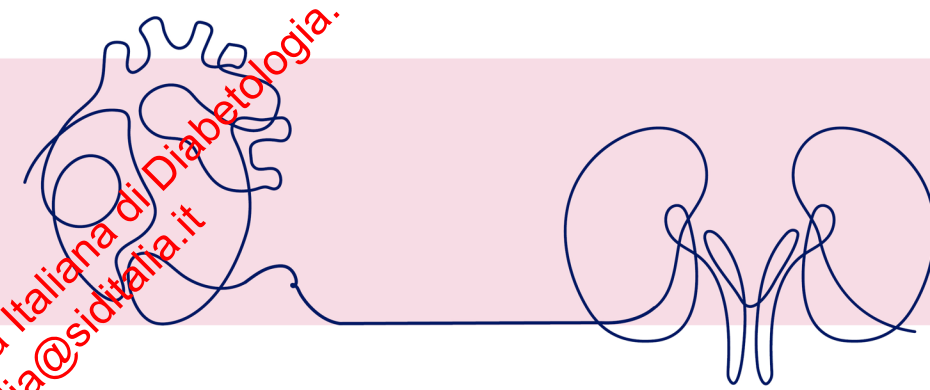


Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



INSULINA SETTIMANALE NEL DIABETE TIPO 2: COME E QUANTO FUNZIONA

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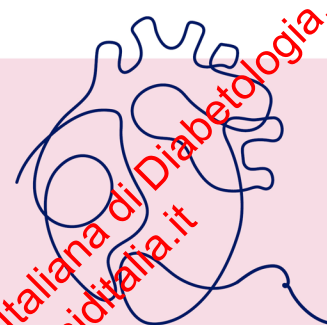
Diagnosi precoce e
trattamento efficace
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**CARDIONEFRO
METABOLICA**



Conflitti di interessi dichiarati:

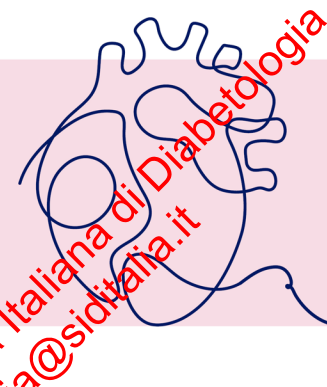
- nessuno



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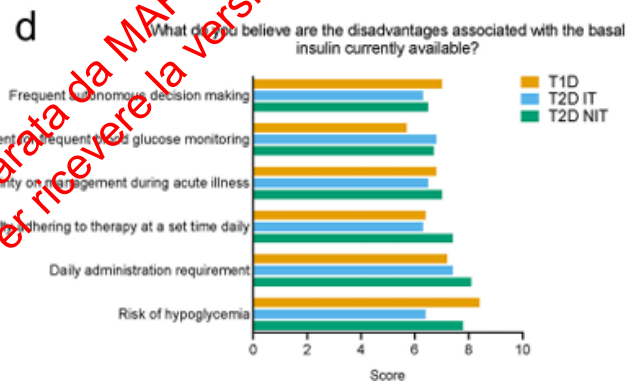
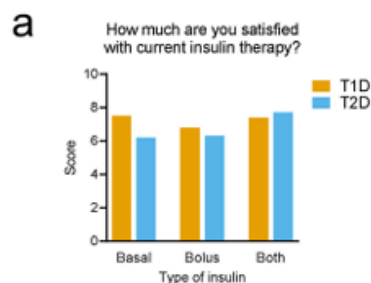
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della patologia

**CARDIONEFR
METABOLICA**



SVANTAGGI PERCEPITI DELLA TERAPIA INSULINICA BASALE QUOTIDIANA

1094 soggetti hanno risposto alla survey della SID



- ☐ Svantaggio della somministrazione quotidiana; **score 8/10**
- ☐ Paura dell'ipoglicemia; **score 7/10**
- ☐ Disagio per il monitoraggio della glicemia; **score 7/10**
- ☐ Incertezza gestione eventi acuti; **score 7/10**

Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



VANTAGGI ATTESI SULLA TERAPIA INSULINICA BASALE SETTIMANALE

1094 soggetti hanno risposto alla survey della SID



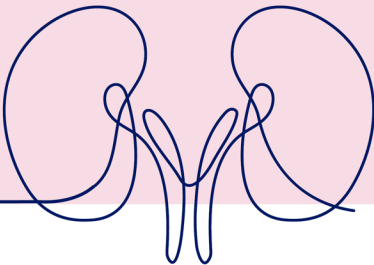
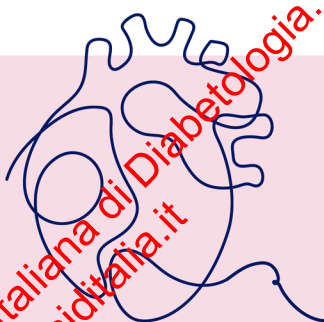
- ☐ Riduzione numero di somministrazioni; **score 9/10**
- ☐ Possibilità di non pensare alla terapia insulinica per 6 giorni su 7; **score 9/10**
- ☐ Riduzione del rischio di dimenticare la terapia; **score 8/10**
- ☐ Maggiore indipendenza della persona; **score 6/10**
- ☐ Maggiore facilità nel gestire variazioni nel dosaggio; **score 7/10**

Diagnosi precoce e
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della patologia

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METABOLICA**



LE INSULINE SETTIMANALI



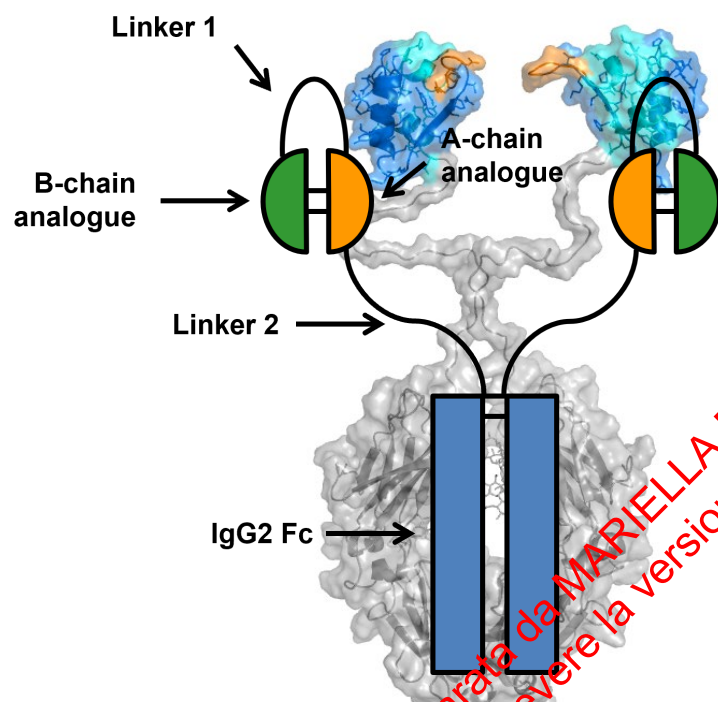
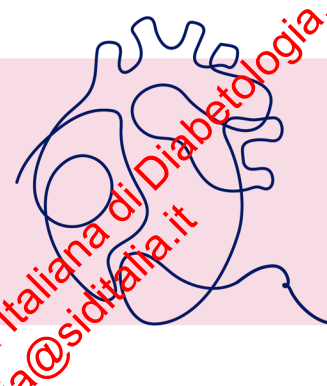
Icodec	BIF
A1 GIVEQCCTSI C S L E Q L E N Y C N B1 FVNQHLCGSHLVEALHLVCGERGFHYPPET Removal of terminal threonine B29 C20 icosane fatty diacid Spacer	
Covalently bound to C20 icosane fatty diacid	Single-chain insulin molecule bound to IgG2 Fc domain
Strong, reversible binding to albumin	Homodimer, molecular mass 64.1 kDa
Half-life: 6.2 days	Half-life: 17 days

Diagnosi precoce e
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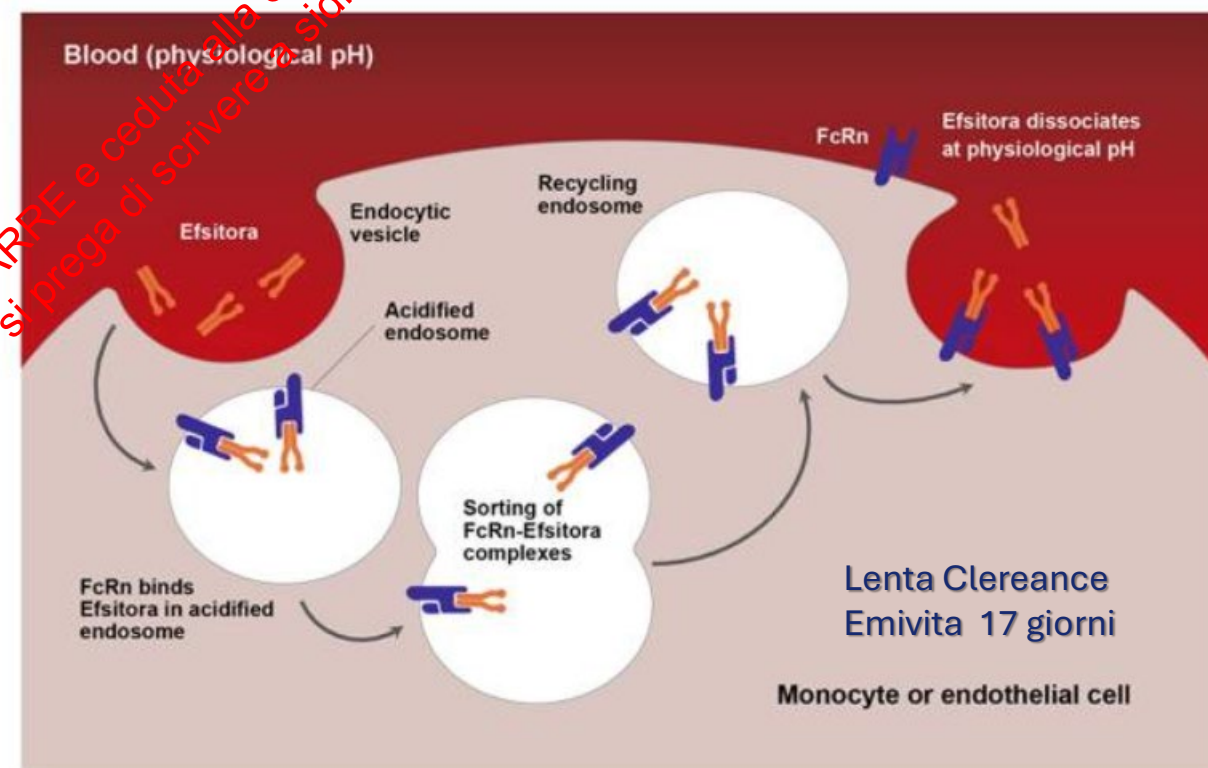
**CARDIONEFRO
METABOLICA**



EFSITORA



Fusione di una variante insulinica a
singola catena con il frammento FC di
un'immunoglobulina umana G

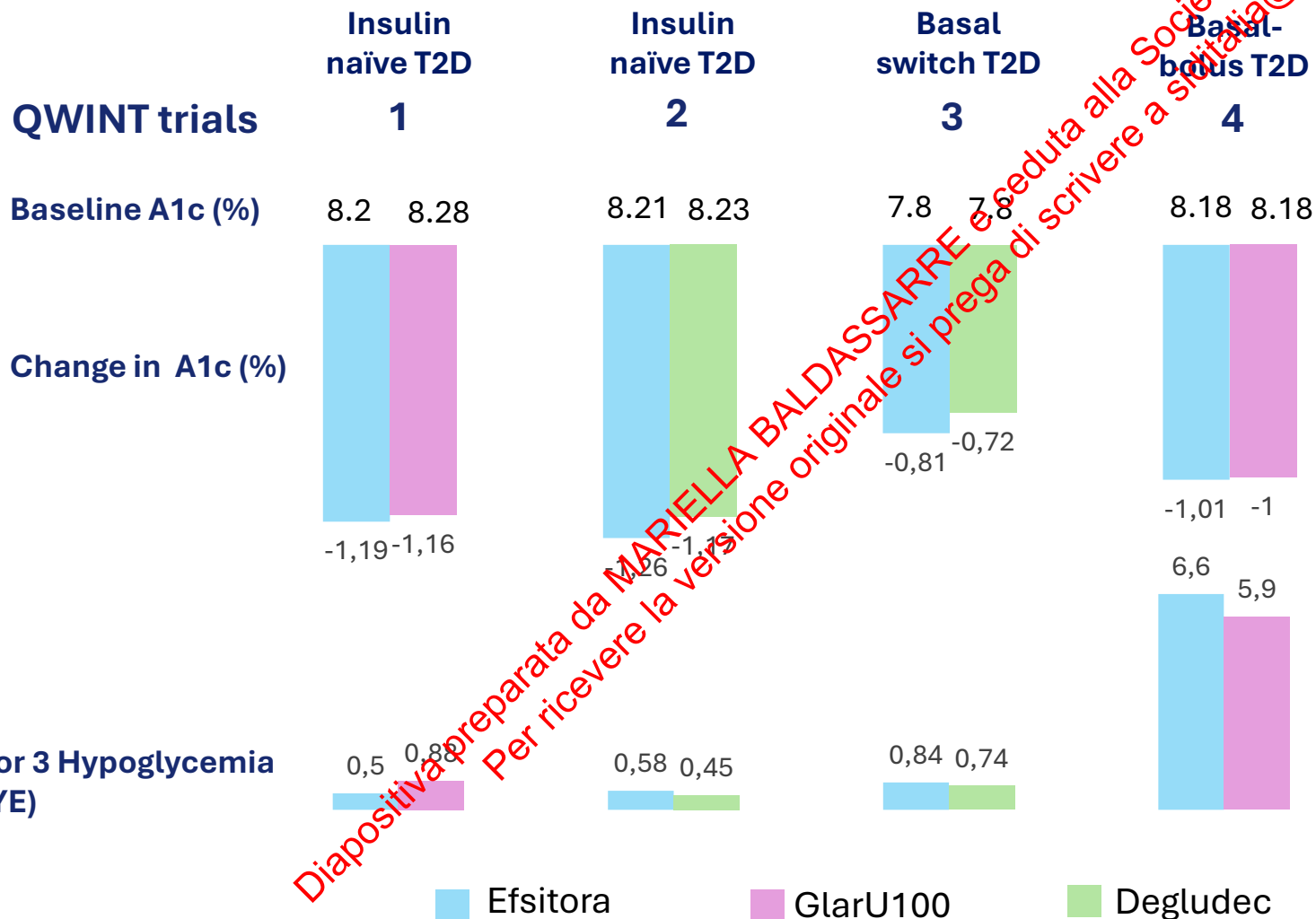
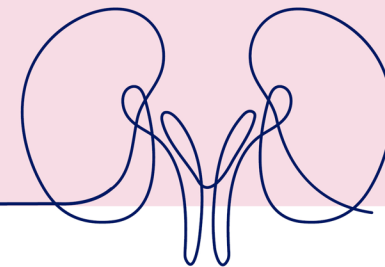
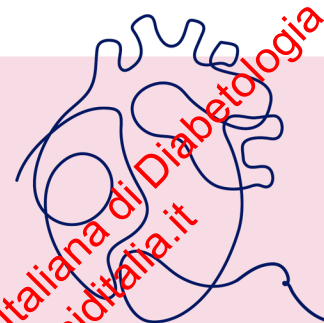


Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



Programma QWINT



Non-inferiority confirmed



Superiority confirmed



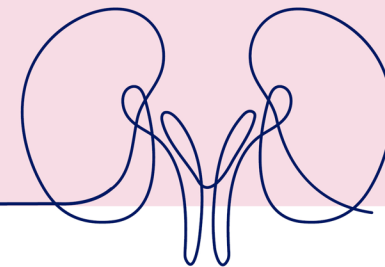
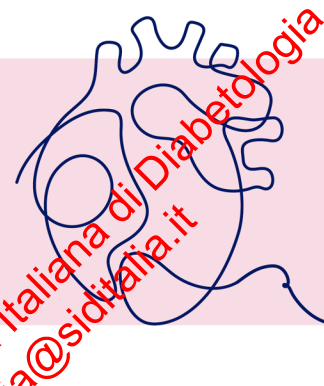
Rosenstock et al, NEJEM (2025)
Wysham et al, NEJEM (2024)
Philis-Tsimikas et al, The Lancet (2025)
Blevins et al, The Lancet (2025)

Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**

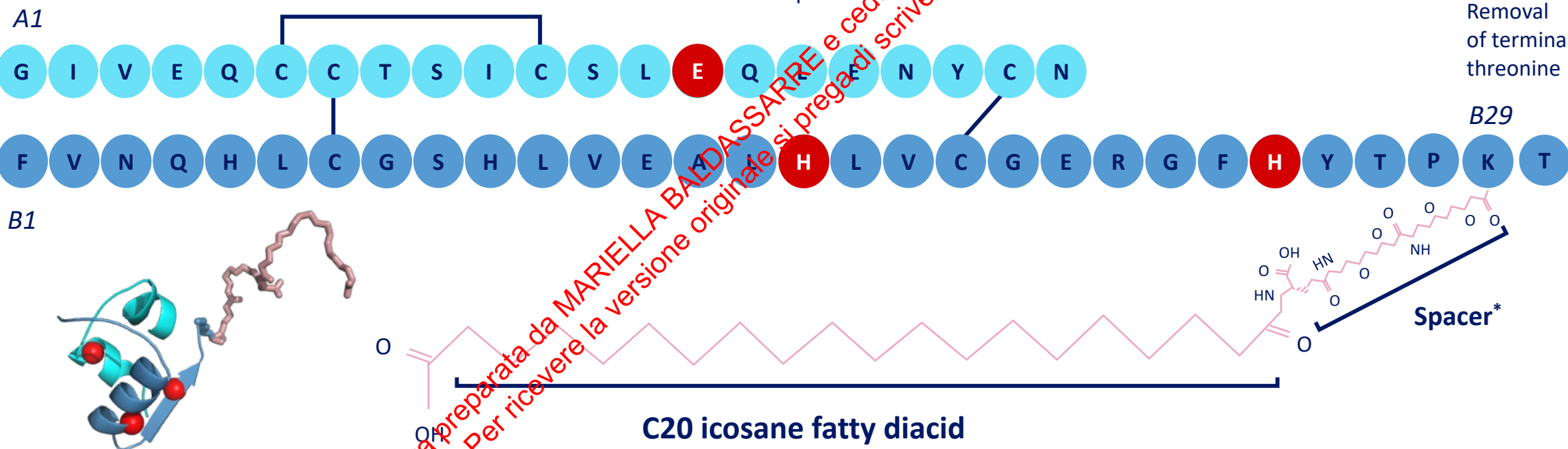


ICODEC



Three amino acid substitutions

- Molecular stability
- Reduced enzymatic degradation
- Slow receptor-mediated clearance



- Strong, reversible binding to albumin
- Slow receptor-mediated clearance

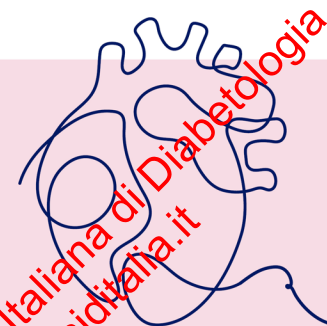
Emivita 8,2 giorni

Diagnosi precoce e
trattamento efficace
della patologia

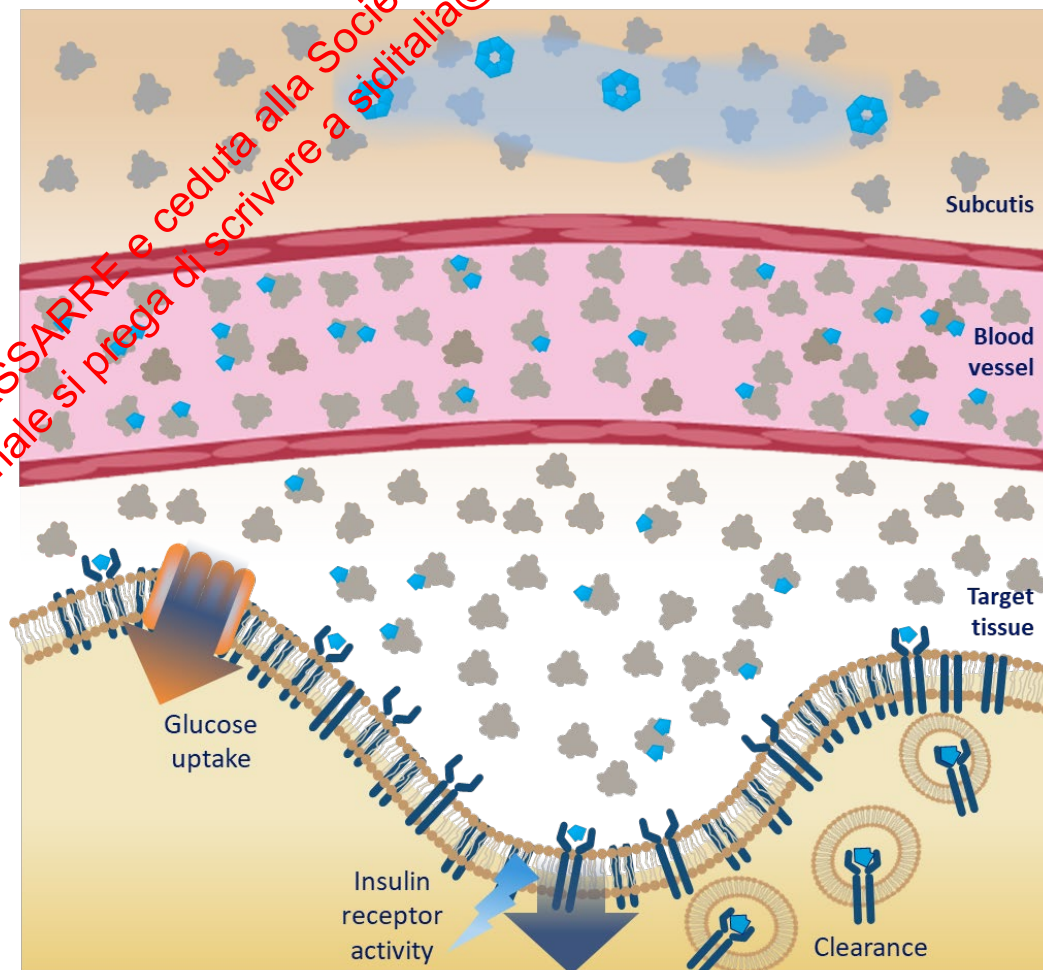
**CARDIONEFRO
METABOLICA**



ICODEC



- Dopo **3–4 iniezioni** si raggiunge lo **steady state**, che garantisce il pieno effetto della dose di icodec.
- Il **deposito circolante** formato dal complesso icodec–albumina è sufficientemente ampio da assicurare un rilascio lento e continuo di icodec, garantendo un **efficace controllo glicemico per tutta la settimana**.
- Una volta raggiunto lo **steady state**, eventuali variazioni nell'orario o nella quantità delle dosi determinano cambiamenti minimi negli effetti ipoglicemizzanti immediati, grazie al lento rilascio dell'icodec.

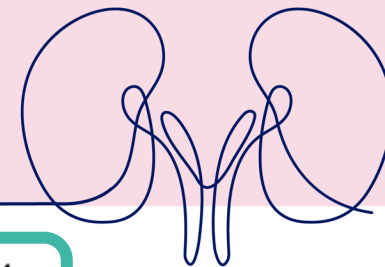
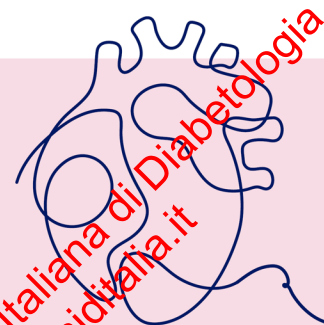


Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



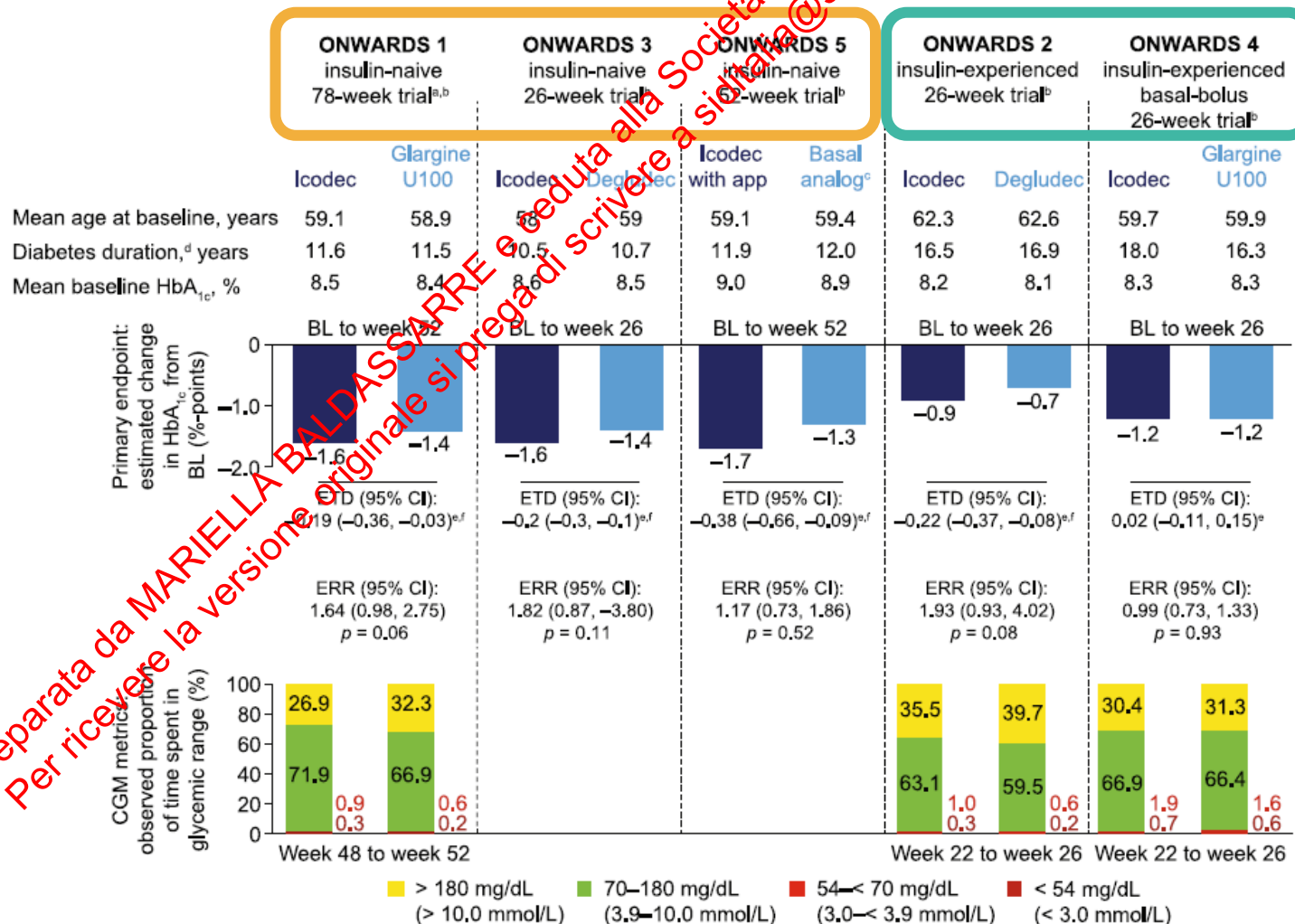
Diabete tipo 2: ONWARDS 1–5



Non-inferiority confirmed



Superiority confirmed



Diagnosi precoce e
trattamento efficace
della patologia

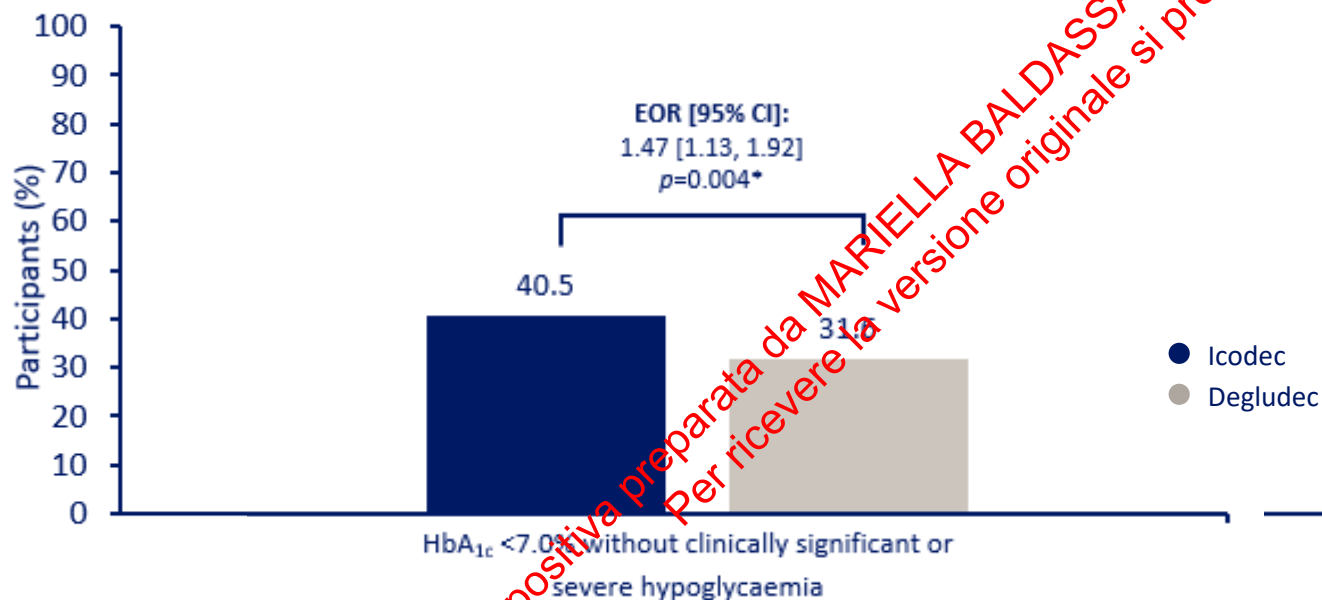
**CARDIONEFRO
METABOLICA**



Participants achieving HbA1c target <7% without clinically significant or severe hypoglycaemia

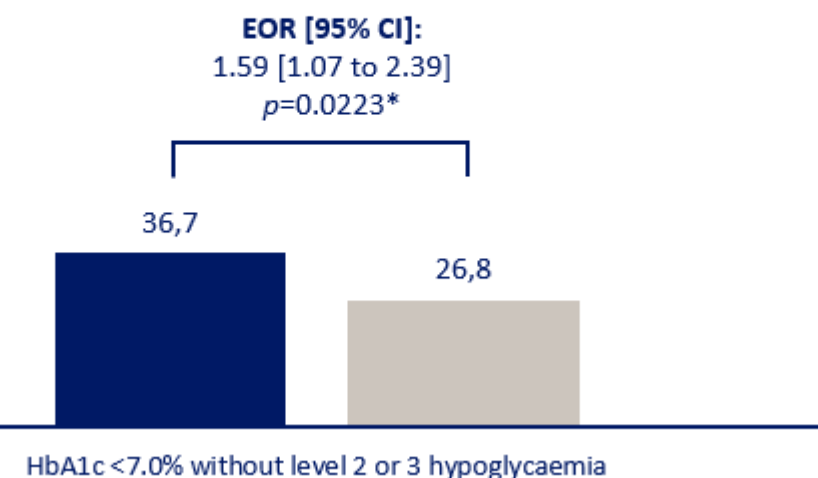
ONWARDS 5

Insulin-naïve T2D



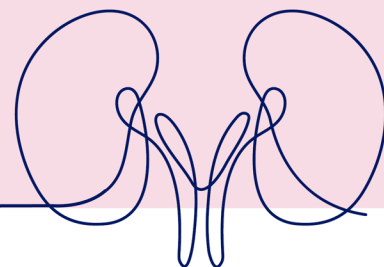
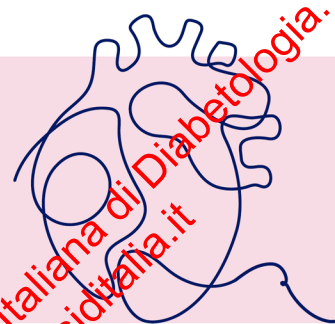
ONWARDS 2

Basal switch in T2D



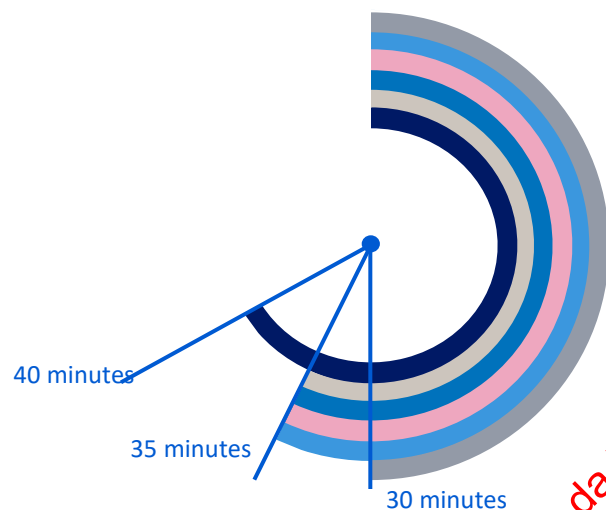
Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



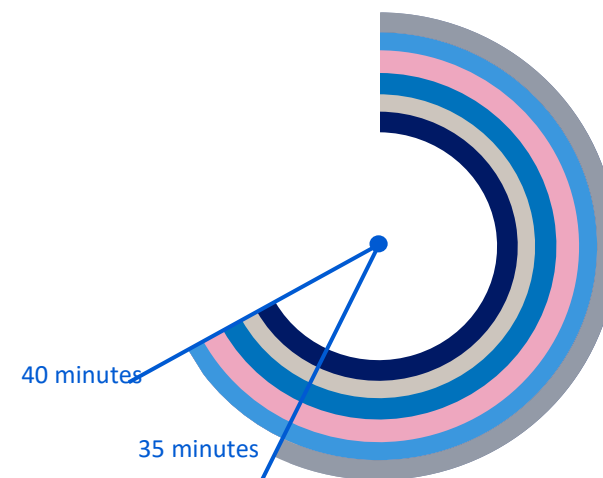
CGM: Durata degli episodi ipoglicemici (<70 mg/dL)

ONWARDS 2: Basal switch trial



Period	Switch		End of treatment		Follow-up	
Diabetes treatment	Icodec	Degludec	Icodec	Degludec	Icodec	Degludec
Overall hypo duration, median (IQR), minutes	40 (20, 75)	35 (20, 65)	35 (20, 70)	35 (20, 65)	35 (20, 70)	30 (20, 60)

ONWARDS 4: Basal-bolus trial



Switch		End of treatment		Follow-up	
Icodec	Glargine U100	Icodec	Glargine U100	Icodec	Glargine U100
40 (25, 70)	40 (25, 75)	40 (25, 75)	40 (20, 70)	40 (25, 70)	35 (25, 65)

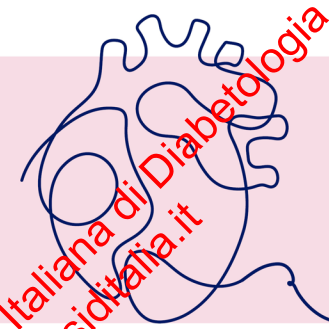
Durata delle ipoglicemie simile con insulina settimanale Icodec rispetto a degludec o glargine U100 nei pazienti con T2DM già in terapia insulinica

Diagnosi precoce e
trattamento efficace
della patologia

**CARDIONEFRO
METABOLICA**



Icodec: Come Iniziare



Guidance based on the
icodec label
(step 1 and step 2)

Step 1: icodec initial dosing

Insulin-naïve
individuals with T2D



Icodec without
a one-time
additional dose

First Injection
(week 1)

70 U

Second Injection
(week 2)

70 U +
titration as needed

Third Injection
(week 3)

Ongoing
titration as needed

Insulin-experienced
individuals with T2D



Icodec without
a one-time
additional dose*

Daily basal dose × 7

7 × daily
basal dose + titration
as needed

Ongoing
titration as needed

Insulin-experienced
individuals with T2D



Icodec with
a 50% one-time
additional dose*

Daily basal dose × 7
+ 50% one-time
additional dose

7 × daily
basal dose

7 × daily
basal dose + titration
as needed

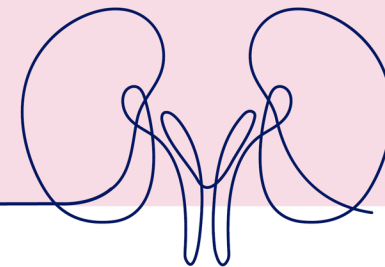
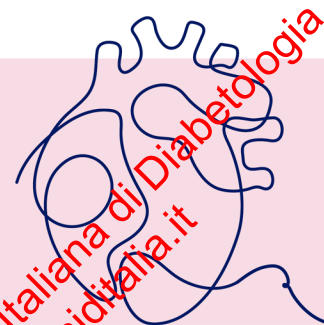
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Diagnosi precoce e
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**CARDIONEFRO
METABOLICA**



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(week 3)

Ongoing
titration as needed

Insulin-experienced
individuals with T2D



Icodec **without**
a one-time
additional dose*

Daily basal dose $\times$ 7

7 $\times$ daily
basal dose + titration
as needed

Ongoing
titration as needed

Insulin-experienced
individuals with T2D



Icodec **with**
a 50% one-time
additional dose*

Daily basal dose $\times$ 7
+ 50% one-time
additional dose

7 $\times$ daily
basal dose

7 $\times$ daily
basal dose + titration
as needed

Expert
opinions^b



Insulin-sensitive individuals:
70 U may be adjusted to 30-70 U

Individuals who tend to miss daily insulin doses:
consider omitting the one-time additional dose

Icodec starting
doses may
also need to be
adjusted for certain
clinical situations^c



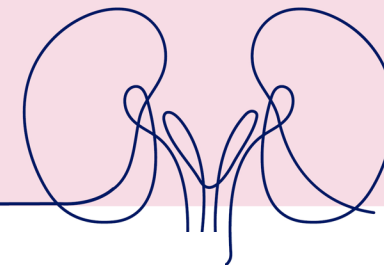
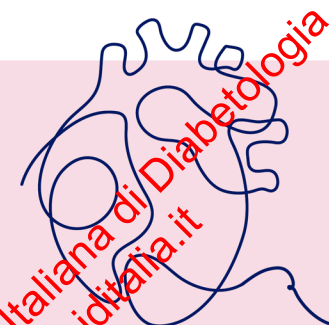
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Diagnosi precoce e
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della patologia

**CARDIONEFRO
METABOLICA**



Icodec: Come Titolare



Guidance based on the
icodec label
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Insulin-naïve
individuals with T2D



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additional dose

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(week 1)

70 U

Second injection
(week 2)

70 U +
titration as needed

Third injection
(week 3)

Ongoing
titration as needed

Insulin-experienced
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Daily basal dose × 7

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as needed

Ongoing
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Daily basal dose × 7
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70 U may be adjusted to 30-70 U

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Icodec starting
doses may
also need to be
adjusted for certain
clinical situations^c



Step 2: icodec titration



Prebreakfast SMBG

Icodec weekly dose adjustment

Up-titration

Mean SMBG values
> 7.2 mmol/L
(> 130 mg/dL)

+20 U

Target

Mean SMBG values
4.4–7.2 mmol/L
(80–130 mg/dL)

0 U

Down-titration

Lowest SMBG values
< 4.4 mmol/L
(< 80 mg/dL)

–20 U

Individuals at a greater hypoglycemia risk:
Icodec weekly dose adjustment^d

+10 U

0 U

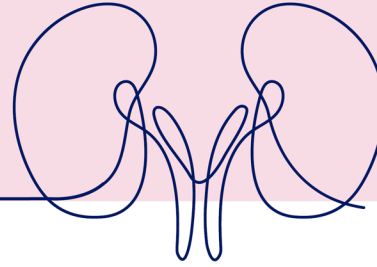
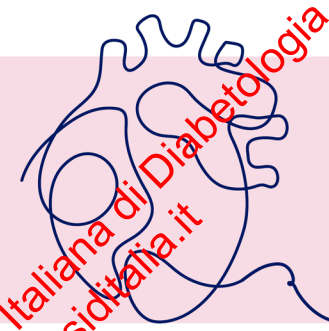
–10 U

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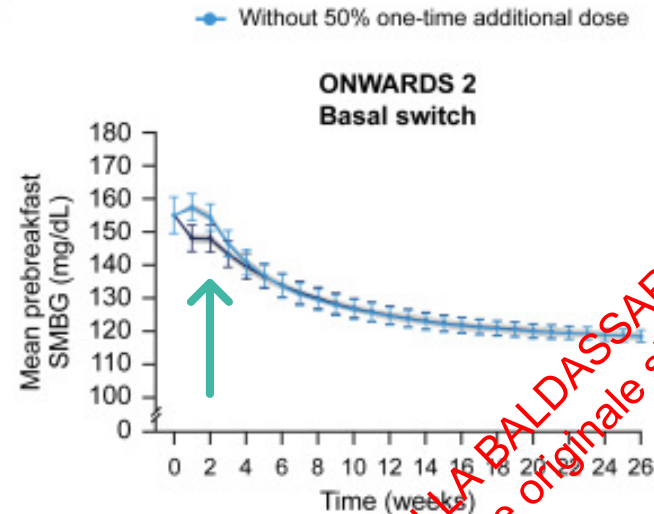
**CARDIONEFRO
METABOLICA**



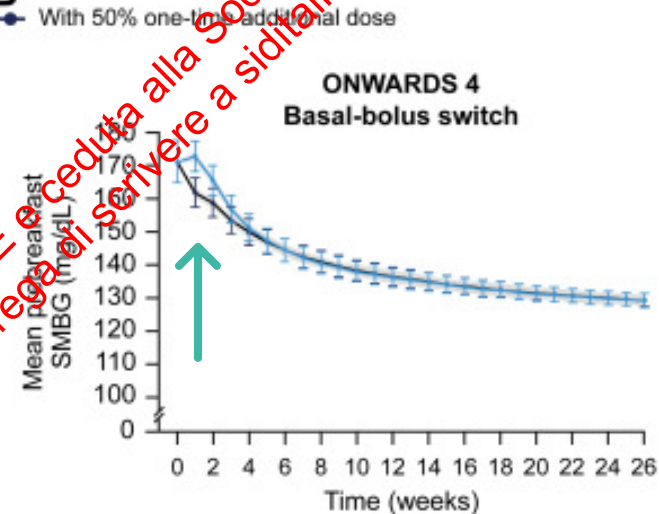
One-Time Additional Dose: Why Not?



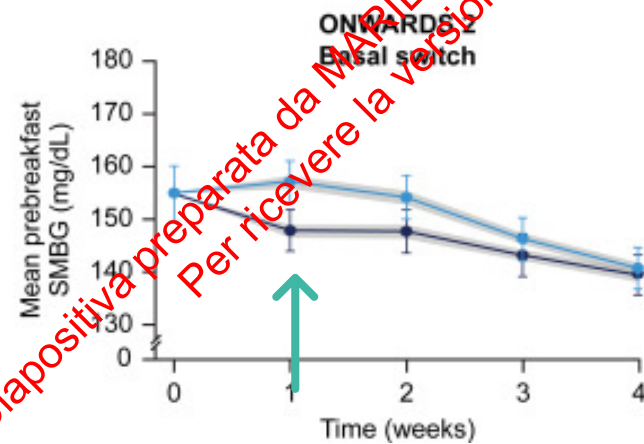
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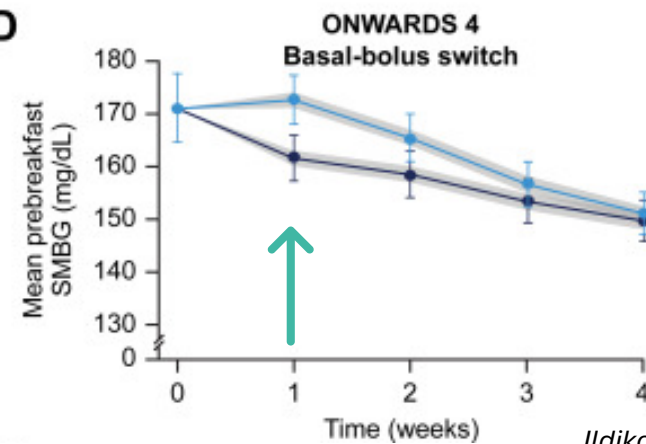
B



C

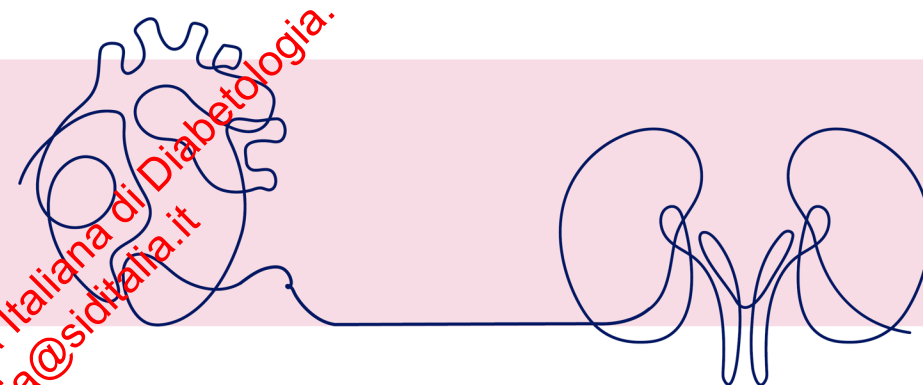


D



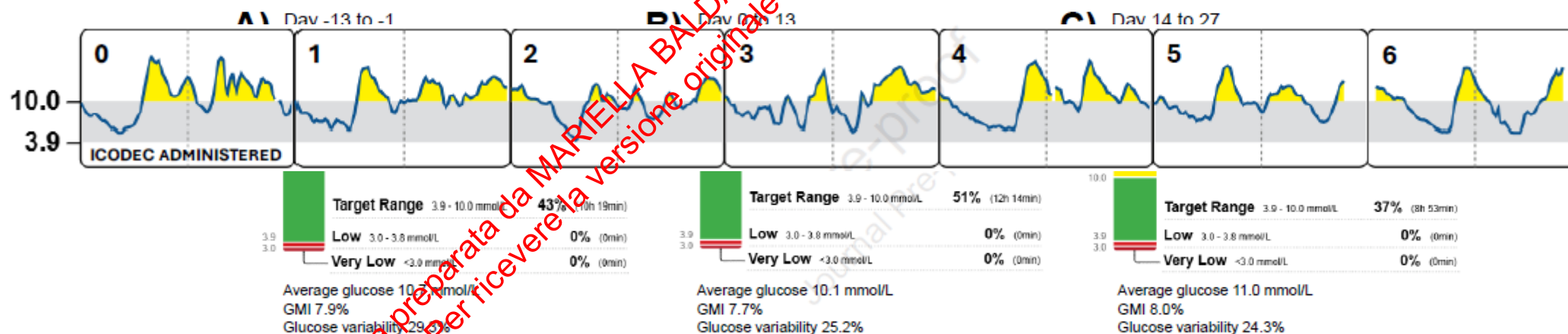
Diagnosi precoce e
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**CARDIONEFRO
METABOLICA**



- Uomo 68 anni con T2DM non controllato (HbA1c 8,3%) in terapia con metformina, gliclazide MR 120mg e semaglutide 1mg
- Buona funzionalità renale, BMI 27,6 kg/m²; altre comorbidità (dislipidemia, IPB)
- Acido acetilsalicilico 81 mg/die, ezetimibe 10 mg/die, tamsulosina 0,4 mg/die, mirtazapina 15 mg

Interpreta erroneamente la concentrazione riportata sulla confezione come se fosse la dose da assumere e ha somministrato **700 unità di icodec** verso le ore **18:00**.

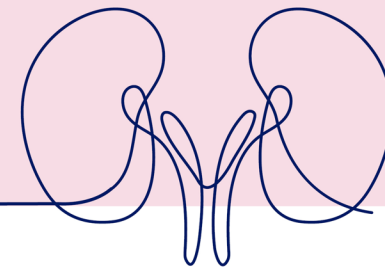
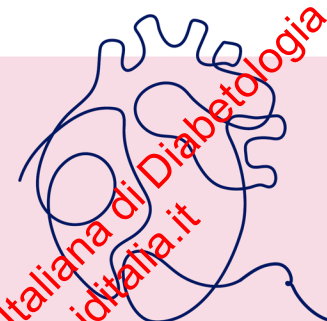


Diagnosi precoce e
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**CARDIONEFRO
METABOLICA**



Icodec: Indicazioni



Indicazioni Insulina Basale Settimanale: le stesse di qualsiasi altra terapia insulinica basale

- **Persone con T2DM non controllato** con metformina, SGLT2i e/o GLP-1 RA, secondo linee guida, o in caso di fabbisogno di terapia insulinica basale.
- **Pazienti già in terapia basale quotidiana** che:
 - hanno difficoltà con le iniezioni frequenti,
 - percepiscono il regime come complesso o gravoso.
- **Pazienti in regime basal-bolus**, in cui Icodec può favorire una **riduzione del fabbisogno di insulina prandiale** grazie a una copertura basale più stabile e uniforme nelle 24 ore.
- **Anziani che necessitano di assistenza**, per i quali la somministrazione settimanale può **semplificare la gestione** sia per il paziente sia per il caregiver.

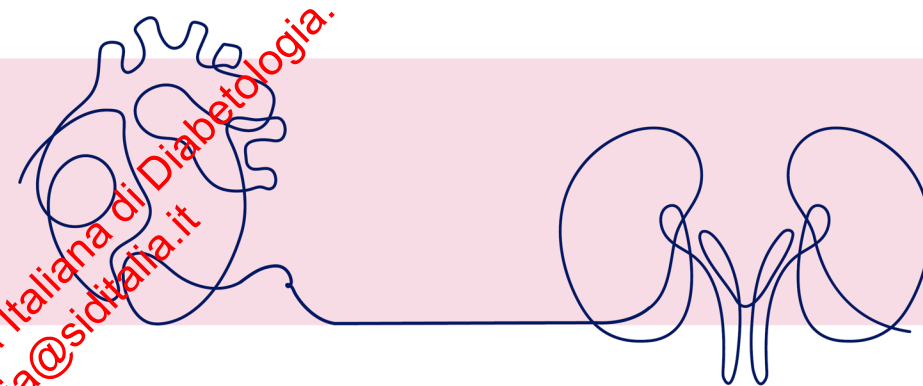
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Diagnosi precoce e
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**CARDIONEFRO
METABOLICA**



Icodec: Controindicazioni



- Ipersensibilità al principio attivo o ad uno qualsiasi degli eccipienti elencati al paragrafo 6.1 della RCP Icodec
- Interrompere in caso di gravidanza

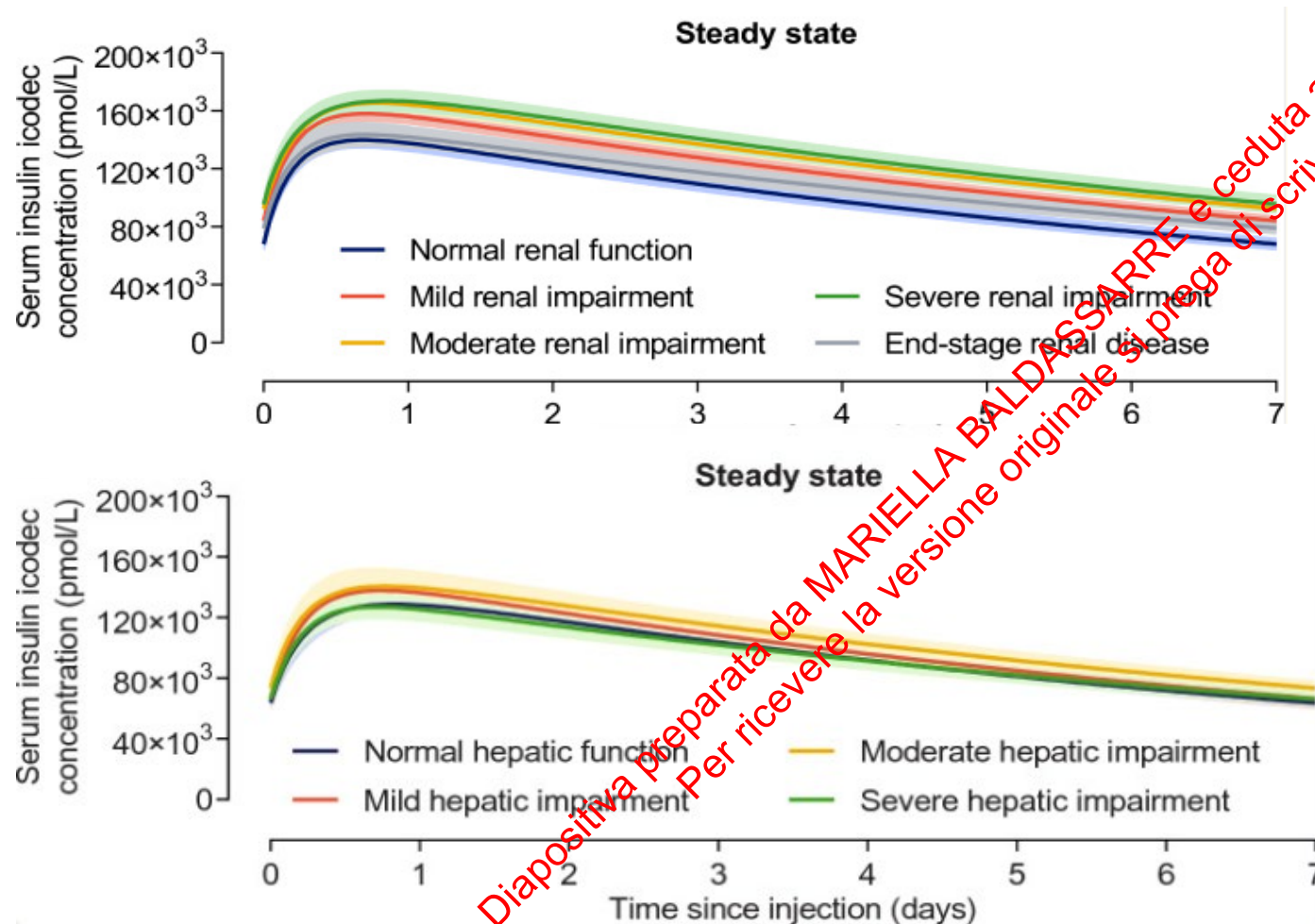
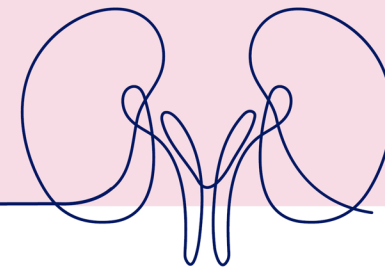
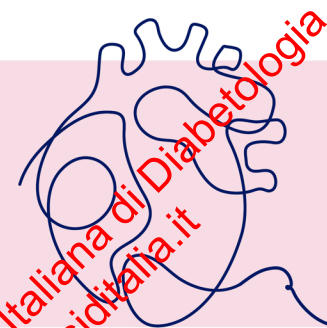
Cautela (pazienti esclusi dai trial ONWARDS):

- eventi cardiovascolari recenti (ultimi 180 giorni)
- scompenso cardiaco grave
- ipoglicemia anawareness, ipoglicemie severe ricorrenti

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Diagnosi precoce e
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**CARDIONEFRRO
METABOLICA**



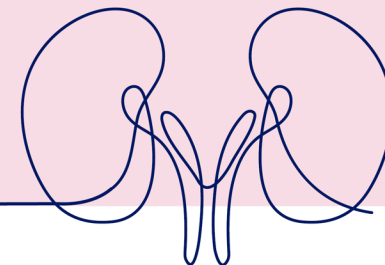
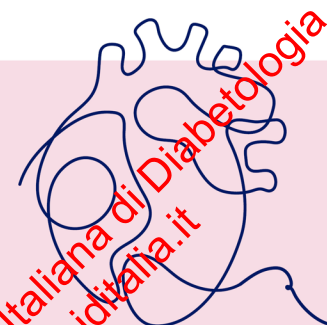
Persone con compromissione renale o epatica

RCP: Non è richiesto alcun aggiustamento della dose
nei pazienti con compromissione renale/epatica.

Nei pazienti
con compromissione renale/epatica, si raccomanda
un monitoraggio glicemico più frequente

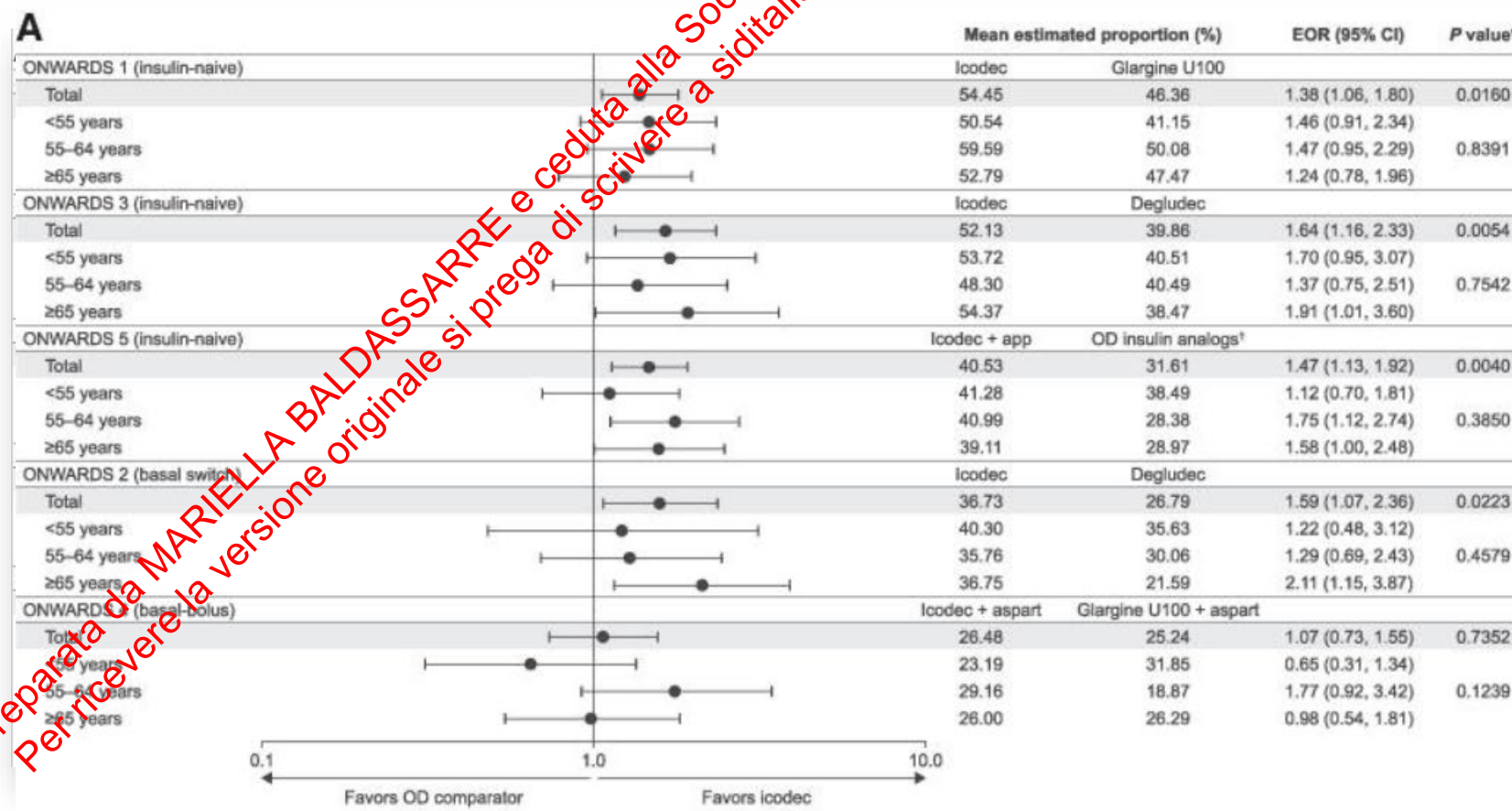
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Persone «anziane»

- Riduzione glicata
- Raggiungimento target senza ipoglicemie

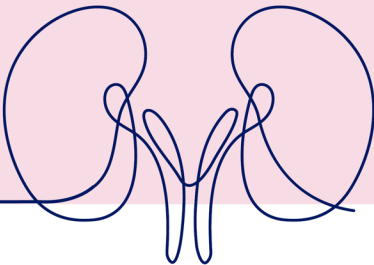
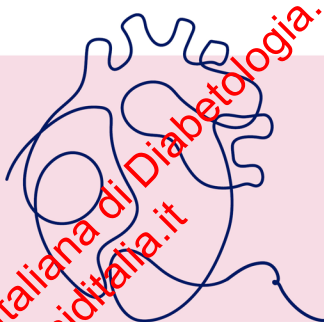
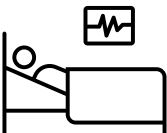


Diapositiva preparata da MARIELLA BALDASSARRE e ceduta alla Società Italiana di Diabetologia.
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RCP: Non è richiesto alcun aggiustamento della dose per i pazienti anziani

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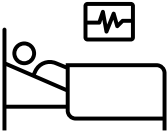
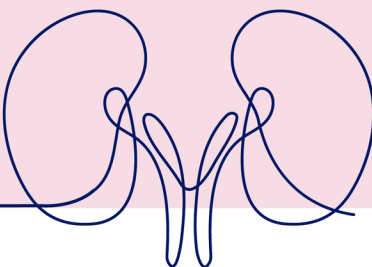
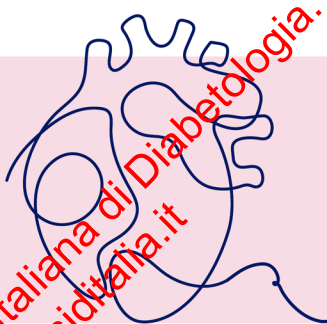
Parameter	Once-weekly icodec	Once-daily comparators ^a
Participants randomised to treatment in ONWARDS 1–6, <i>n</i>		
Total	2172	2175
T2D (ONWARDS 1–5)	1882	1883
T1D (ONWARDS 6)	290	292
Participants who were hospitalised, <i>n</i> (%) ^b		
Total	152 (7.0)	156 (7.2)
T2D	135 (7.3)	141 (7.5)
T1D	15 (5.2)	15 (5.1)
Baseline characteristics of participants who were hospitalised		
Sex, male, <i>n</i> (%)	98 (64.5)	94 (60.3)
Age, years	61.86 (10.82)	60.39 (10.75)

Ipoglicemie con Icodec 6 casi (1 T2D, 5 T1D);
ipoglicemie con comparator 3 casi (1 T2D, 2 T1D)

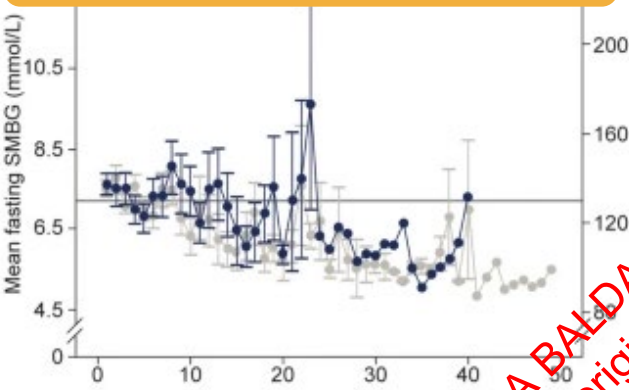
HbA _{1c} , %	8.44 (1.10)	8.28 (1.11)
HbA _{1c} , mmol/mol	68.72 (12.65)	70.29 (12.10)
Overview of hospitalisations, <i>n</i>		
Total	180	174
T2D	165	159
Medical diagnoses	131	126
Surgical diagnoses	34	33

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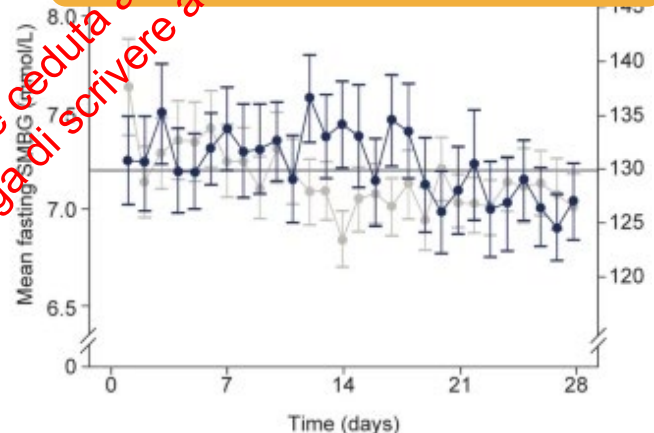
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During hospitalisation

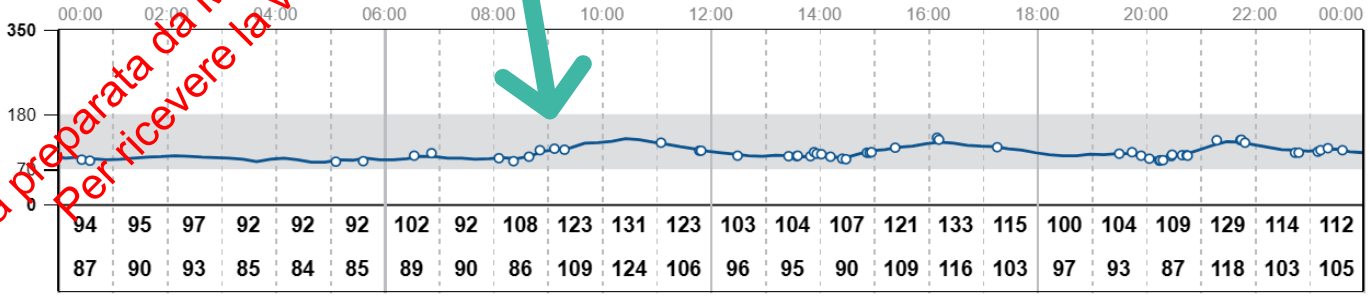


4 weeks after discharge



MAR 25 feb

Glucosio mg/dL
Max
min



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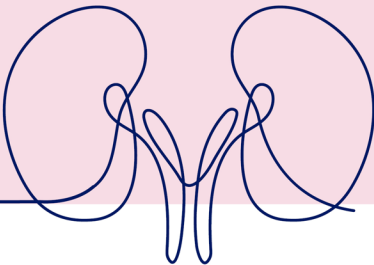
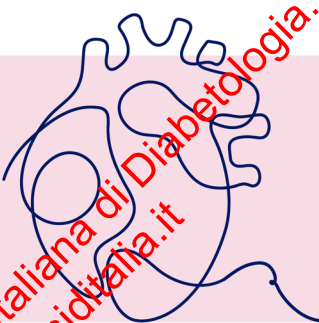
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Icodec: Soddisfazione

DTSQs, Diabetes Treatment Satisfaction Questionnaire-status



ONWARDS 2 at 26 weeks (switch)

ONWARDS 5 at 56 weeks (naïve)

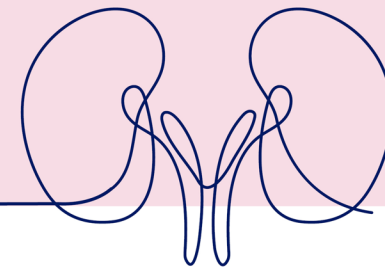


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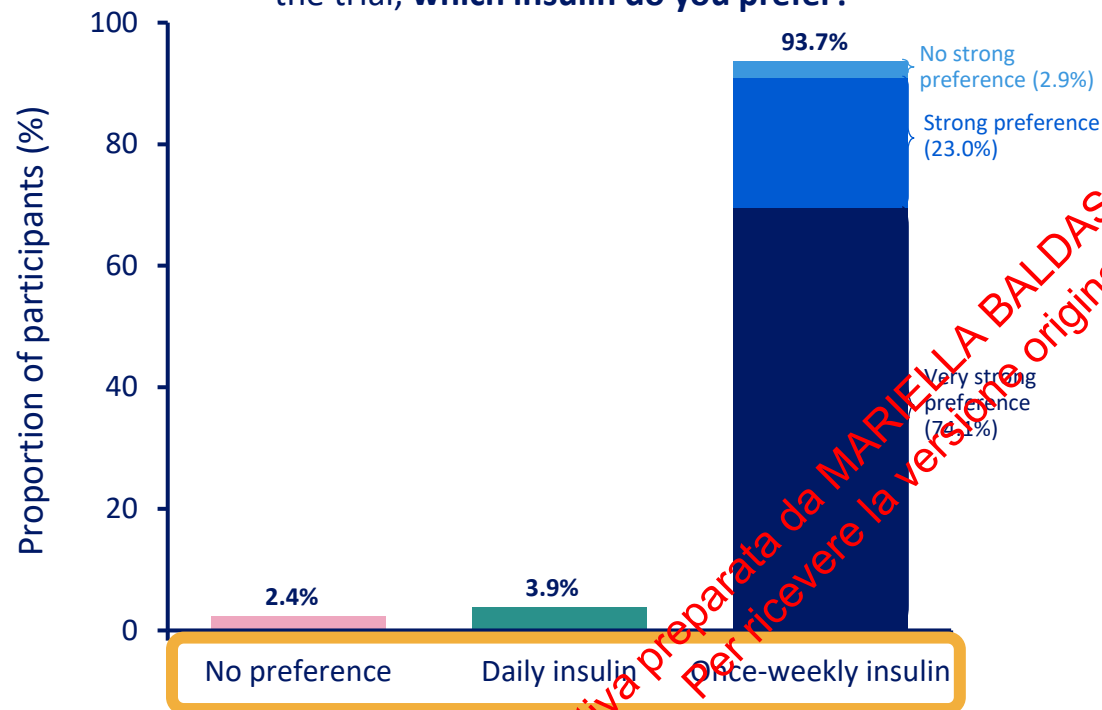
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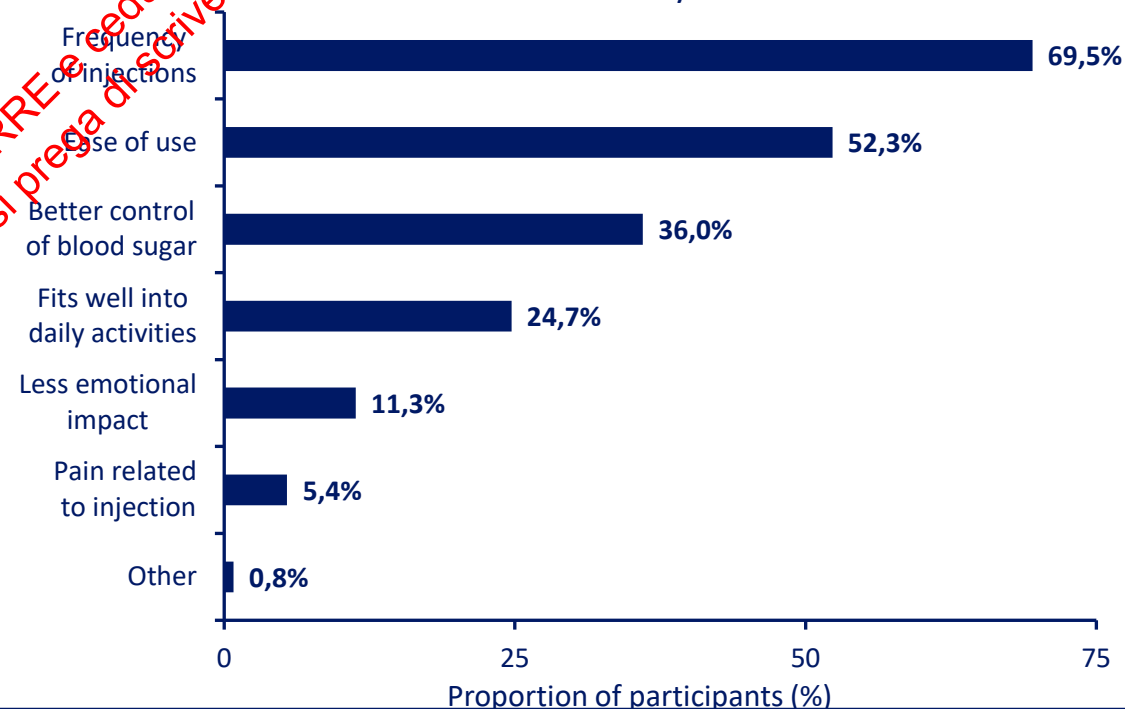
Icodec: Soddisfazione



Based on your experience before and during
the trial, **which insulin do you prefer?**



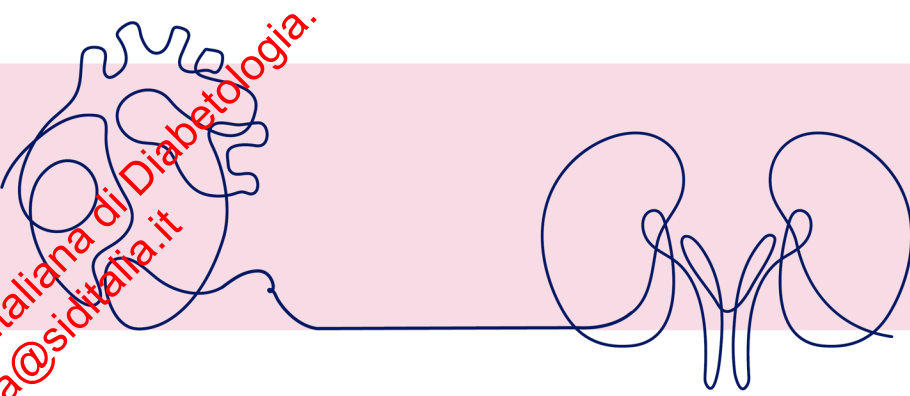
What are the two **main reasons** for the preference for
once-weekly insulin?



La maggior parte dei partecipanti trattati con icodec ha mostrato una forte preferenza per l'insulina settimanale rispetto alla precedente insulina basale somministrata quotidianamente.

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ClinicoEconomics and Outcomes Research

Dovepress

Open Access Full Text Article

ORIGINAL RESEARCH

Economic Evaluation of Once-Weekly Insulin Icodec from Italian NHS Perspective

Enrico Torre¹, Sergio Di Matteo², Giacomo Matteo Bruno³, Chiara Martinotti²,
Luigi Carlo Bottaro⁴, Giorgio Lorenzo Colombo³

Differential Annual Cost per Patient: Icodec vs Degludec

Treatments	Drug cost	Needles cost	Adherence cost	Total
Icodec	€505.63	€0.0	- €54.85	€450.77
Degludec	€404.50	€51.10	-	€455.60
Differential cost	€101.13	- €51.10	- €54.85	- €4.83

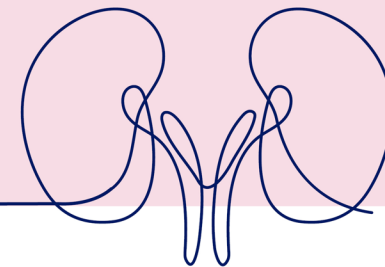
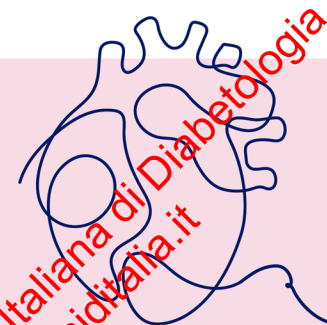
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CONCLUSIONI



EFFICACE QUANTO (O PIÙ DELLE) INSULINE BASALI QUOTIDIANE

Riduzione HbA1c nei trial ONWARDS

Maggiore proporzione di pazienti a target senza ipoglicemie clinicamente significative

PROFILO DI SICUREZZA FAVOREVOLE

Rischio ipoglicemico simile alle insuline basali giornaliere

Gestibile anche durante ricoveri e/o in presenza di comorbidità

SEMPLIFICA RADICALMENTE LA TERAPIA

Una sola iniezione a settimana e migliore aderenza

Minore rischio di dose mancata e riduzione del burden terapeutico

ELEVATA SODDISFAZIONE DEL PAZIENTE

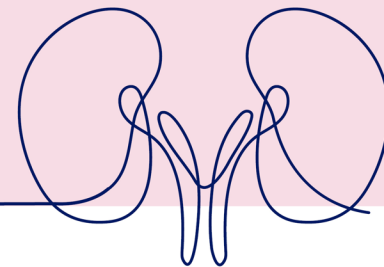
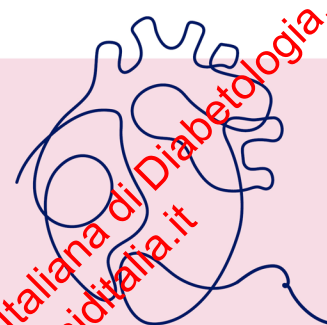
Forte preferenza verso il regime settimanale

Percepita come più semplice (non solo dal paziente)

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Grazie