PLACE 2026

PLATFORM OF LABORATORIES FOR ADVANCES IN CARDIAC EXPERIENCE

CONGRESSO

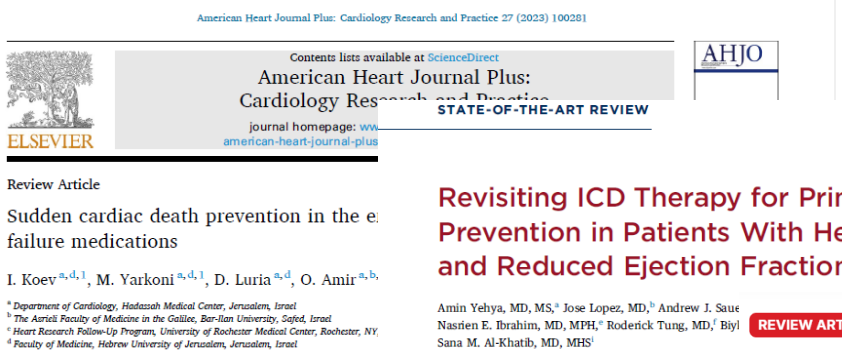
ROMA, 25 - 27 Giugno 2026

HFrEF di nuova diagnosi: quando è davvero il momento giusto dell'ICD?

C.Colaiaco
Roma

Prevenzione <u>primaria</u> della morte cardiaca improvvisa nello HFrEF.

Se la domanda non fosse più «***quando***» ma «**se**» **dobbiamo <u>ancora</u>** impiantare il defibrillatore?


American Heart Journal Plus: Cardiology Research and Practice 27 (2023) 100281

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ELSEVIER

AHJO

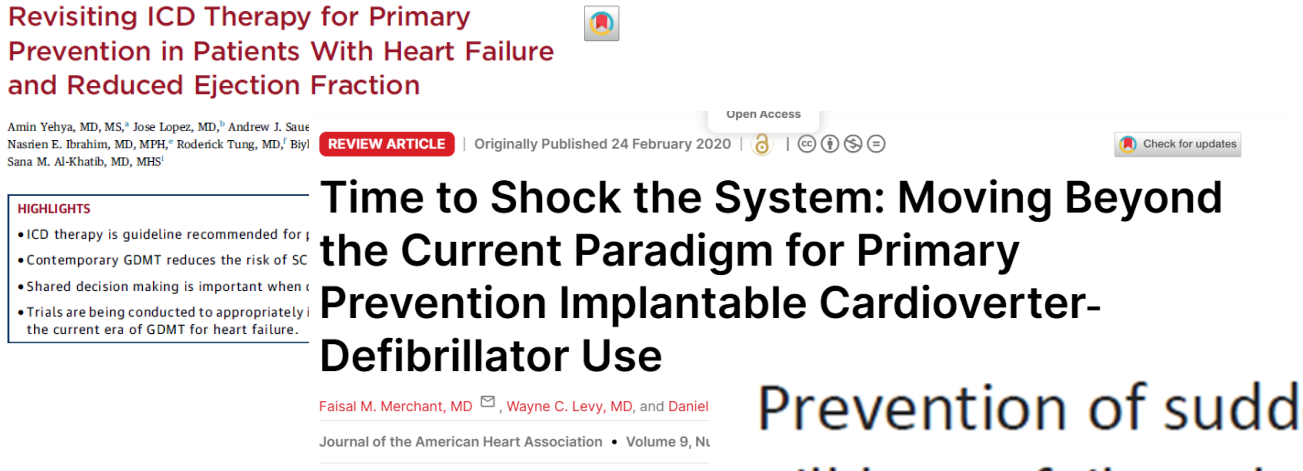
STATE-OF-THE-ART REVIEW

Review Article

Sudden cardiac death prevention in the e
failure medications

I. Koev[a,d,1], M. Yarkoni[a,d,1], D. Luria[a,d], O. Amir[a,b],

[a] Department of Cardiology, Hadassah Medical Center, Jerusalem, Israel
[b] The Azrieli Faculty of Medicine in the Galilee, Bar-Ilan University, Safed, Israel
[c] Heart Research Follow-Up Program, University of Rochester Medical Center, Rochester, NY,
[d] Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem, Israel


Revisiting ICD Therapy for Primary Prevention in Patients With Heart Failure and Reduced Ejection Fraction

Amin Yehya, MD, MS,[a] Jose Lopez, MD,[b] Andrew J. Saue
Nasrien E. Ibrahim, MD, MPH,[c] Roderick Tung, MD,[f] Biyl
Sana M. Al-Khatib, MD, MHS[i]

HIGHLIGHTS

- ICD therapy is guideline recommended for
- Contemporary GDMT reduces the risk of SC
- Shared decision making is important when
- Trials are being conducted to appropriately
  the current era of GDMT for heart failure.

Open Access

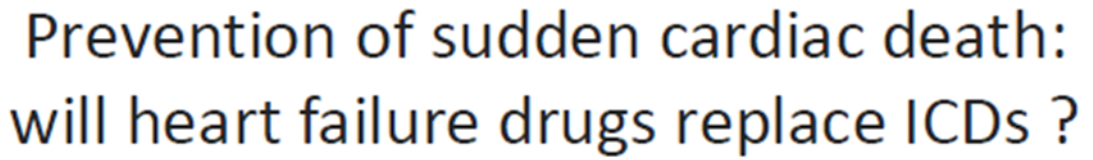
REVIEW ARTICLE | Originally Published 24 February 2020 |

Check for updates

Time to Shock the System: Moving Beyond the Current Paradigm for Primary Prevention Implantable Cardioverter-Defibrillator Use

Faisal M. Merchant, MD, Wayne C. Levy, MD, and Daniel

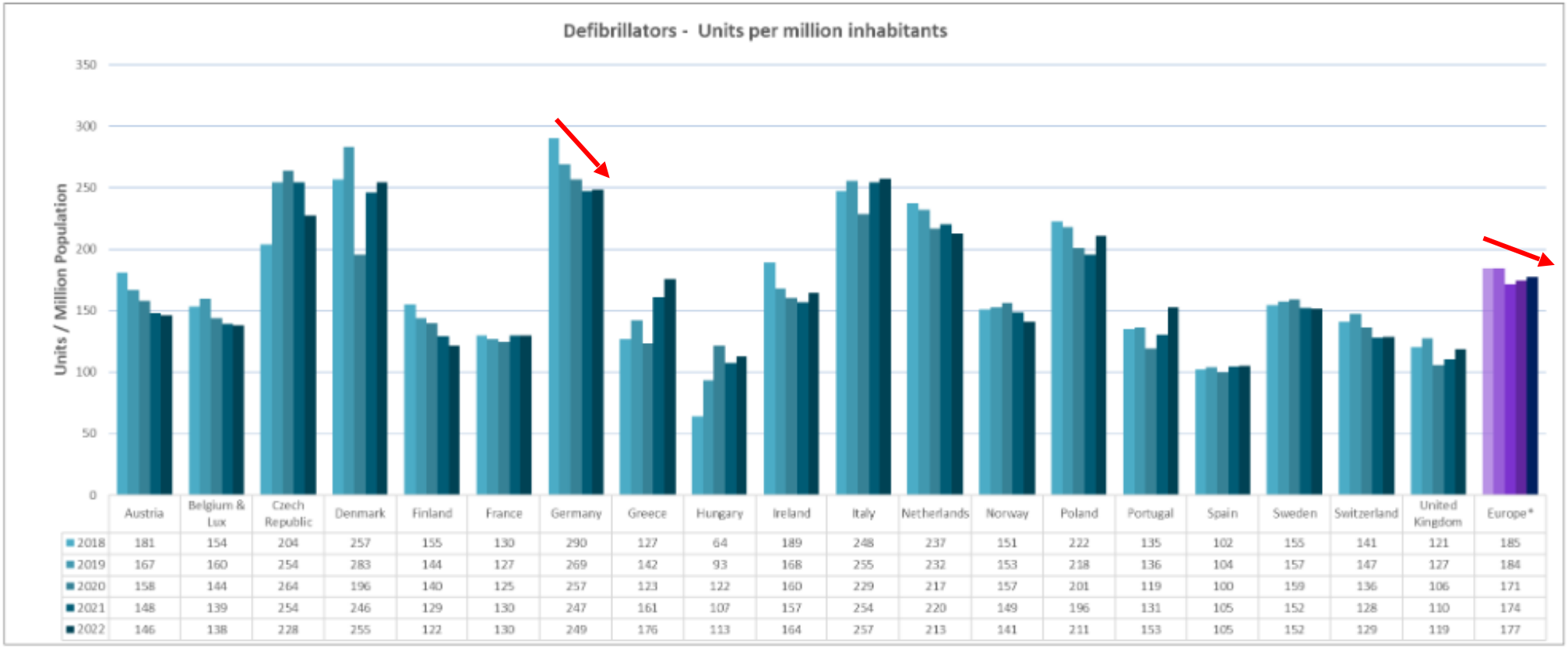
Journal of the American Heart Association • Volume 9, Nu


Prevention of sudden cardiac death:
will heart failure drugs replace ICDs ?

*"..in many patients, the **reversal of cardiac remodeling** produced by broad-spectrum **neurohormonal antagonists** may be sufficiently great to **fully obviate the need for an ICD…**"*

MedTech Europe
from diagnosis to cure

2018 - 2022

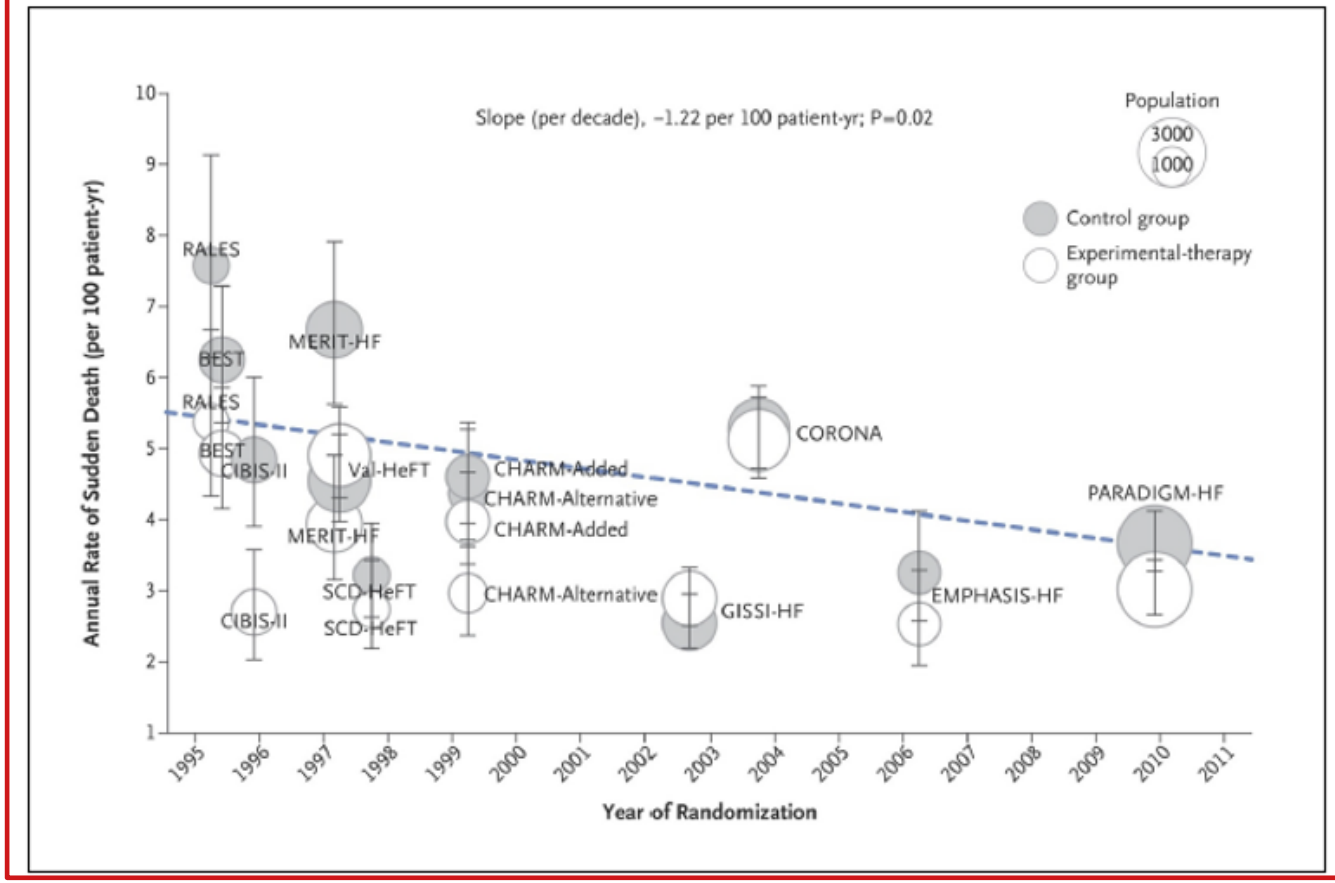


	Austria	Belgium & Lux	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Netherlands	Norway	Poland	Portugal	Spain	Sweden	Switzerland	United Kingdom	Europe*
2018	181	154	204	257	155	130	290	127	64	189	248	237	151	222	135	102	155	141	121	185
2019	167	160	254	283	144	127	269	142	93	168	255	232	153	218	136	104	157	147	127	184
2020	158	144	264	196	140	125	257	123	122	160	229	217	157	201	119	100	159	136	106	171
2021	148	139	254	246	129	130	247	161	107	157	254	220	149	196	131	105	152	128	110	174
2022	146	138	228	255	122	130	249	176	113	164	257	213	141	211	153	105	152	129	119	177

Source population data: Eurostat
Units: MedTech Europe, based on reports from major manufacturers
*Europe represents total of listed countries

www.medtecheurope.org

Declining Risk of Sudden Death in Heart Failure



'... the rate of sudden death ... has fallen over the past two decades,

a finding that is consistent with a cumulative benefit of evidence-based medications on sudden death.'

Dapa-HF

Danish

Shen Li, et al. N Engl J Med 2017; 377:41-51

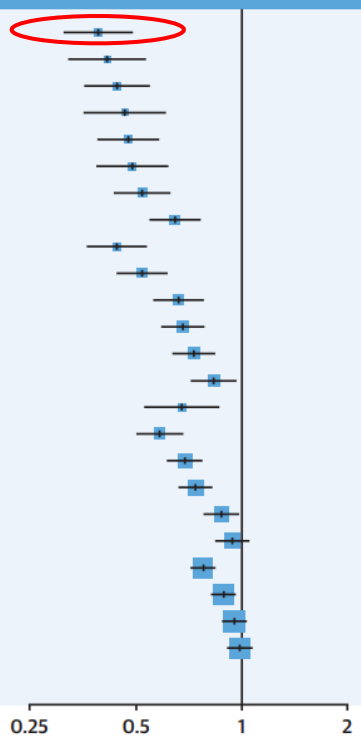
- **40.195** pazienti con HF provenienti da **12 RCT** condotti **tra il 1995 ed il 2014**.

I "Fantastici 4"

CENTRAL ILLUSTRATION Relative Risk Reduction of Different Pharmacological Treatment Combinations for Heart Failure

A

Treatment	All-Cause Mortality	HR (95% CI)
ARNI + BB + MRA + SGLT2		0.39 (0.31-0.49)
ARNI + BB + MRA + Vericiguat		0.41 (0.32-0.53)
ARNI + BB + MRA + Omecamtiv		0.44 (0.36-0.55)
ACEI + BB + Dig + H-ISDN		0.46 (0.35-0.61)
ACEI + BB + MRA + IVA		0.48 (0.39-0.58)
ACEI + BB + MRA + Vericiguat		0.49 (0.39-0.62)
ACEI + BB + MRA + Omecamtiv		0.52 (0.43-0.63)
ARNI + ARB + BB + Dig		0.65 (0.55-0.76)
ARNI + BB + MRA		0.44 (0.37-0.54)
ACEI + BB + MRA		0.52 (0.44-0.61)
ACEI + MRA + Dig		0.66 (0.56-0.78)
ACEI + BB + Dig		0.68 (0.59-0.78)
ARB + BB + Dig		0.73 (0.64-0.83)
ACEI + ARB + Dig		0.83 (0.72-0.96)
Dig + H-ISDN		0.67 (0.53-0.86)
ARNI + BB		0.58 (0.50-0.68)
ACEI + BB		0.69 (0.61-0.77)
ARB + BB		0.74 (0.66-0.82)
ACEI + Dig		0.87 (0.78-0.98)
ARB + Dig		0.94 (0.84-1.05)
BB		0.78 (0.72-0.84)
ACEI		0.89 (0.82-0.96)
ARB		0.95 (0.88-1.02)
Dig		0.99 (0.91-1.07)
PLBO		1.00



Tromp, J. et al. J Am Coll Cardiol HF. 2022;10(2):73-84.

Combination of treatment effect on all-cause mortality **(A)**, cardiovascular (CV) death or heart failure (HF) hospitalization **(B)**, or CV mortality **(C)**. ACEI = angiotensin-converting enzyme inhibitor; ARB = angiotensin receptor blocker; BB = beta-blocker; Dig = digoxin; H-ISDN = hydralazine-isosorbide dinitrate; HF = heart failure; IVA = ivabradine; MRA = mineralocorticoid receptor antagonist; PLBO = placebo; SGLT2 = sodium glucose cotransporter-2 inhibitors.

omp et al. JACC Heart Fail. 2022 Feb;10(2):73-84

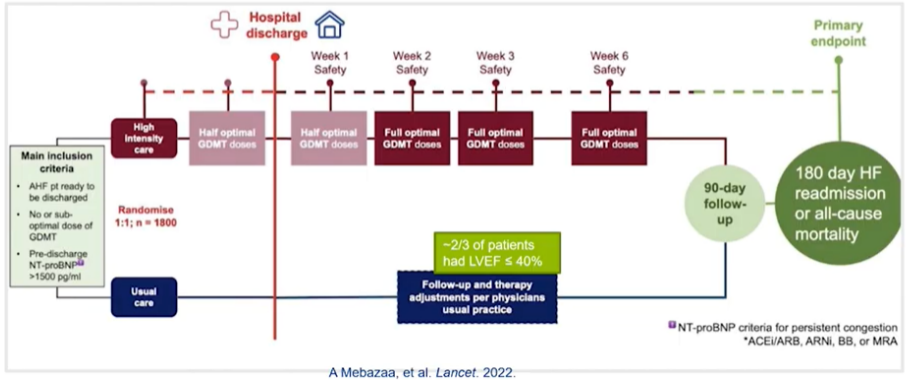
A Systematic Review and Network Meta-Analysis of Pharmacological Treatment of Heart Failure With Reduced Ejection Fraction

Jasper Tromp, MD, PhD,[a,b,c,*] Wouter Ouwerkerk, PhD,[b,d,*] Dirk J. van Veldhuisen, MD, PhD,[a] Hans L. Hillege, MD, PhD,[a] A. Mark Richards, MBChB, PhD,[e,f,g] Peter van der Meer, MD, PhD,[a] Inder S. Anand, MD,[h] Carolyn S.P. Lam, MBBS, PhD,[a,b,c] Adriaan A. Voors, MD, PhD[a]

Il maggior beneficio totale stimato per la **combinazione** di ARNI, BB, MRA e SGLT2i

Maggior beneficio se la titolazione avviene **velocemente**

Safety, tolerability and efficacy of up-titration or GDMT for acute HF (STRONG-HF): a multinational, open-label, randomized trial

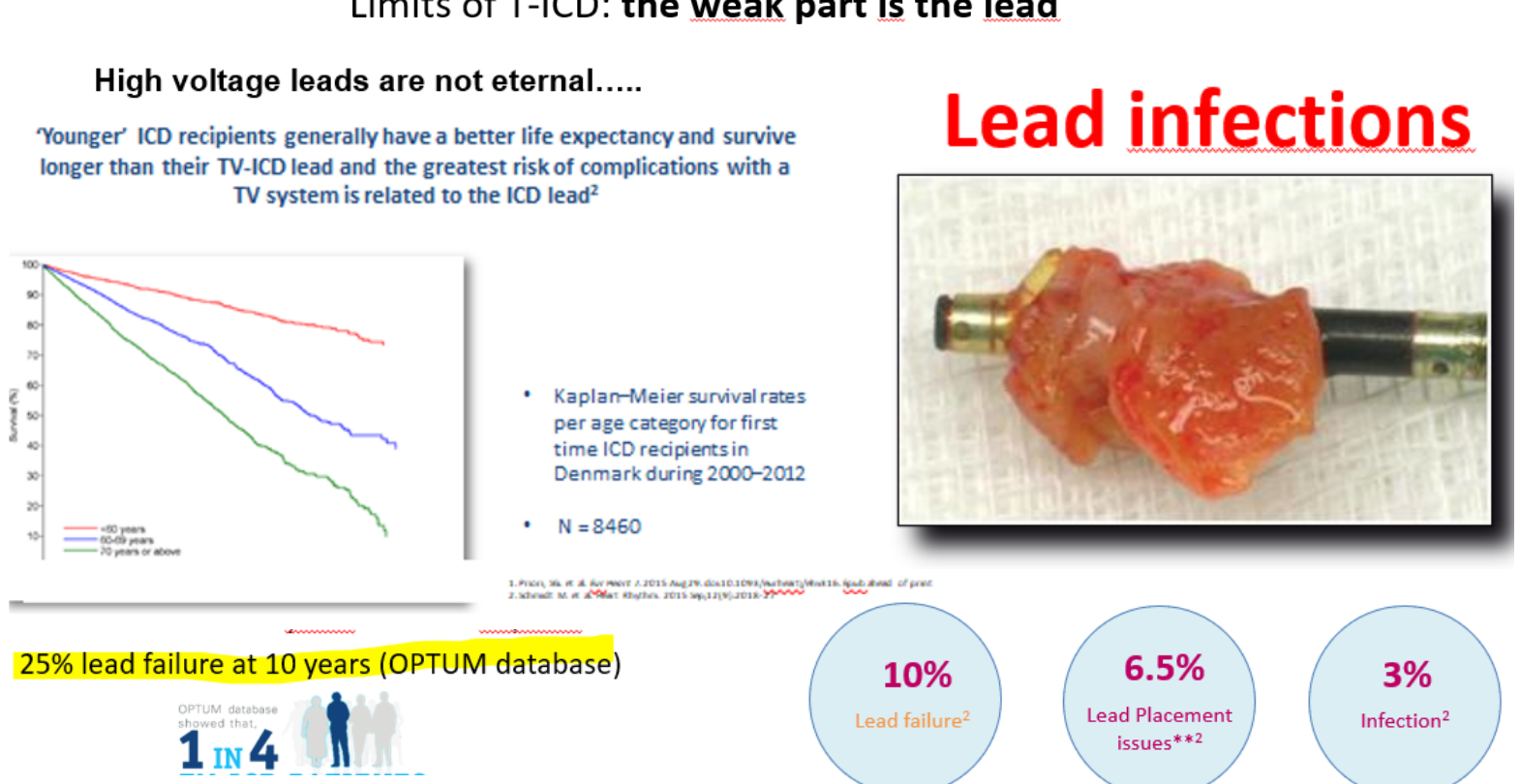


A Mebazaa, et al. *Lancet*. 2022.

«Un approccio più riflessivo….»

Le ragioni per cui stiamo assistendo ad una sorta di revisionismo…

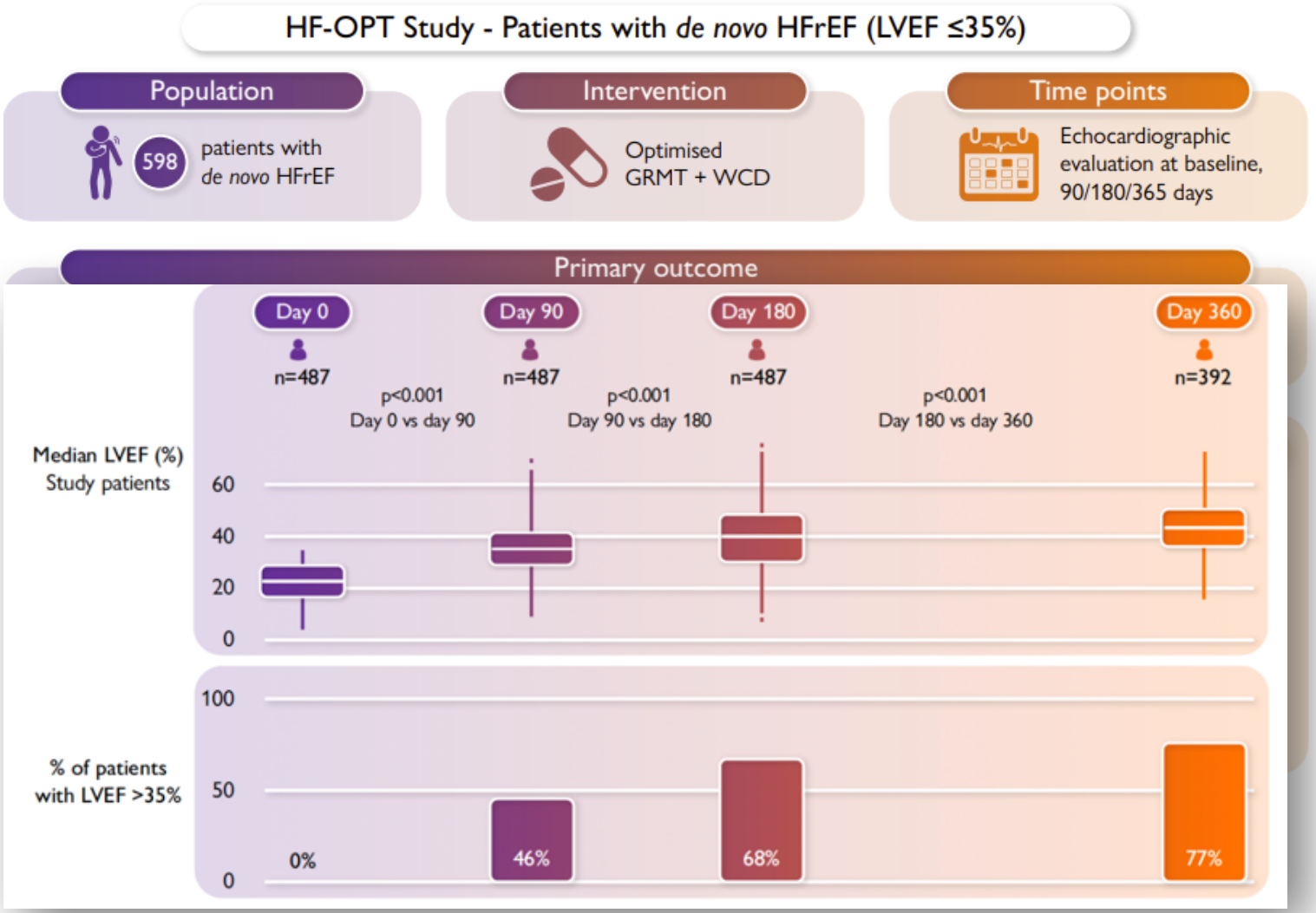
Chiara CONSAPEVOLEZZA dei benefici dell'ICD, ma maggiore attenzione anche alle possibili complicanze.



Vale la pena aspettare?

Therapy duration and improvement of ventricular function in *de novo* heart failure: the Heart Failure Optimization study

Christian Veltmann [1,2*†], David Duncker [1†], Michael Doering [3], Siva Gummadi[4], Michael Robertson[5], Thomas Wittlinger[6], Byron J. Colley[7], Christian Perings[8], Orvar Jonsson[9], Johann Bauersachs [1], Robert Sanchez[10], and Lars S. Maier [11]; for the Heart Failure Optimization Study (HF-OPT) Investigators



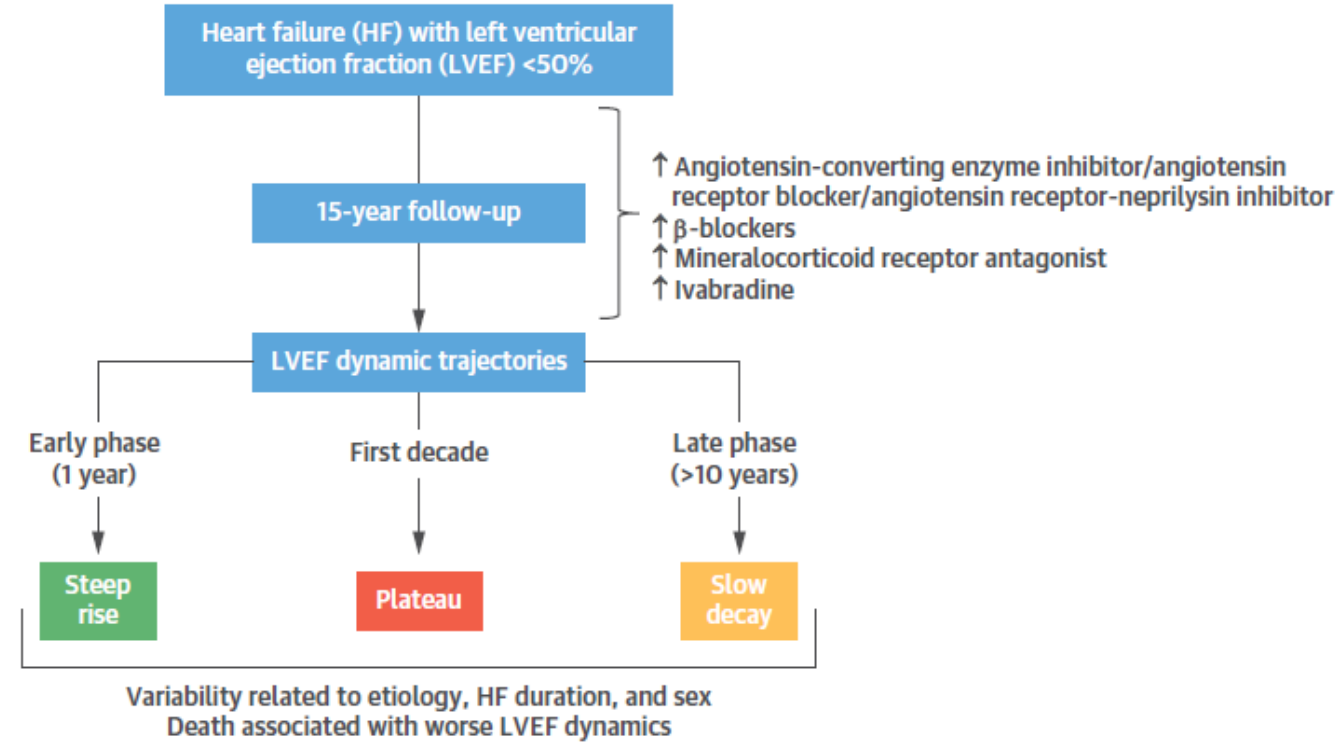
- **46%** dei pazienti ha mostrato un recupero della FE > 35% a 3 mesi
- **68%** dei pazienti ha mostrato un recupero della FE > 35% a 6 mesi

89% dei pazienti ha mostrato un recupero della FE > 35% quando BB, ARNI e MRA erano alla **dose massima** a 6 mesi

- SGLT2 inhibitors were not included within the study.

Veltmann C. et al. Eur Heart J, 2024: 00, 36, 1–11
Borovac A. Eur Heart J, 2024:) 00, 1–3

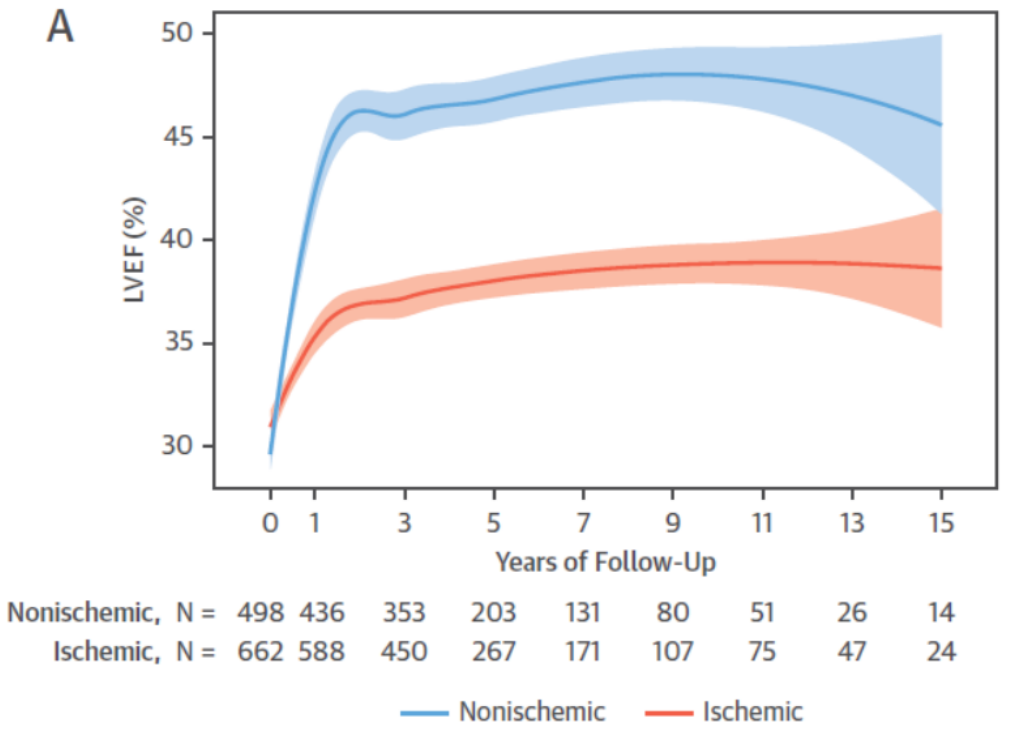
EF trajectory - Is it worth waiting?



Lupón, J. et al. J Am Coll Cardiol. 2018;72(6):591-601.

Dynamic Trajectories of Left Ventricular Ejection Fraction in Heart Failure

Josep Lupón, MD, PhD,[a,b,c,d] Giovana Gavidia-Bovadilla, MSc,[e,f] Elena Ferrer, MD,[b] Marta de Antonio, MD, PhD,[a,b] Alexandre Perera-Lluna, PhD,[f,g,h] Jorge López-Ayerbe, MD,[b] Mar Domingo, MD, PhD,[a] Julio Núñez, MD, PhD,[d,i,j] Elisabet Zamora, MD, PhD,[a,b,c,d] Pedro Moliner, MD,[a,b] Patricia Díaz-Ruata, MSc,[f,g] Javier Santesmases, MD,[a] Antoni Bayés-Genís, MD, PhD[a,b,c,d]



.J Lupon et al. Dynamic Trajectories of Left Ventricular Ejection Fraction in Heart FailureJACC 2018; 72:591-601

ESC European Society of Cardiology
European Heart Journal (2025) 00, 1–10
https://doi.org/10.1093/eurheartj/ehaf668

Sudden cardiac death in newly diagnosed non-ischaemic or ischaemic cardiomyopathy assessed with a wearable cardioverter-defibrillator: the German nationwide SCD-PROTECT study

- **Elevata incidenza di VT/VF** fin dalla dimissione (6 vs 8,4 eventi/100 anni-paziente nei pazienti non ischemici e ischemici), **2–3 volte superiore** rispetto all'HFrEF cronico con ICD.
- **Massima vulnerabilità precoce:** circa **1/3 degli eventi** si verifica entro i **primi 10 giorni**; il rischio è concentrato nei **primi 30–90 giorni**.
- **Recupero della funzione ventricolare: 53%** dei pazienti raggiunge **LVEF >35%**.
- **Solo il 36%** richiede successivamente un **ICD definitivo**.
- **Il WCD** colma il periodo ad alto rischio fino all'effetto della GDMT.

SCD-PROTECT: Sudden cardiac arrest in patients with newly diagnosed non-ischaemic cardiomyopathy or coronary artery disease

Challenge

Newly diagnosed reduced LVEF due to NICM or MI/CAD

GRMT uptitration phase

WCD protection from SCD

Evaluate the risk of SCD in the early phase by data recorded by the WCD

Methods

- Epidemiological study
- Non-interventional
- Observational
- Multicenter
- Consecutive enrollment

19 598 patients receiving WCD in Germany between December 2021 and May 2023

NICM 11 449 patients

MI/CAD 8149 patients

Results - Exploratory endpoints

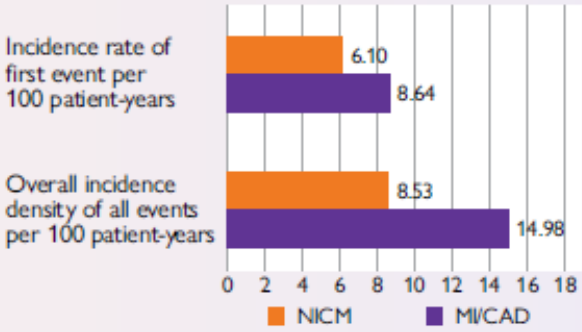
Average LVEF

NICM: 26.9% at discharge → 38.9% WCD end of use

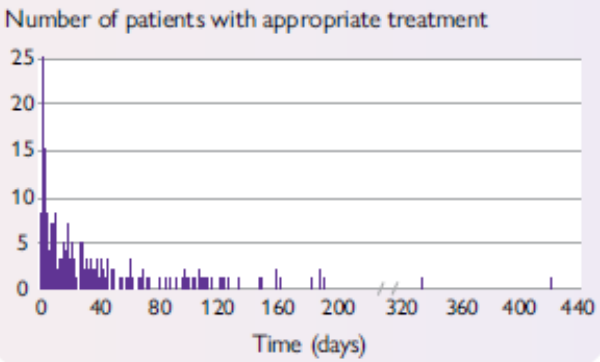
MI/CAD: 28.4% at discharge → 38.3% WCD end of use

Results - Primary endpoint

Incidence of appropriate treatments per 100 patient-years



Time to first appropriate WCD treatment



GRMT, guideline-recommended medical therapy; LVEF, left ventricular ejection fraction; MI/CAD, myocardial infarction/coronary artery disease; NICM, non-ischaemic cardiomyopathy; SCA/SCD, sudden cardiac arrest/death; WCD, wearable cardioverter defibrillator

Duncker, D, *et al. European Heart Journal.*

ESC European Society of Cardiology
European Heart Journal (2025) **00**, 1–10
https://doi.org/10.1093/eurheartj/ehaf668

SCD-PROTECT: Sudden cardiac arrest in patients with newly diagnosed non-ischaemic cardiomyopathy or coronary artery disease

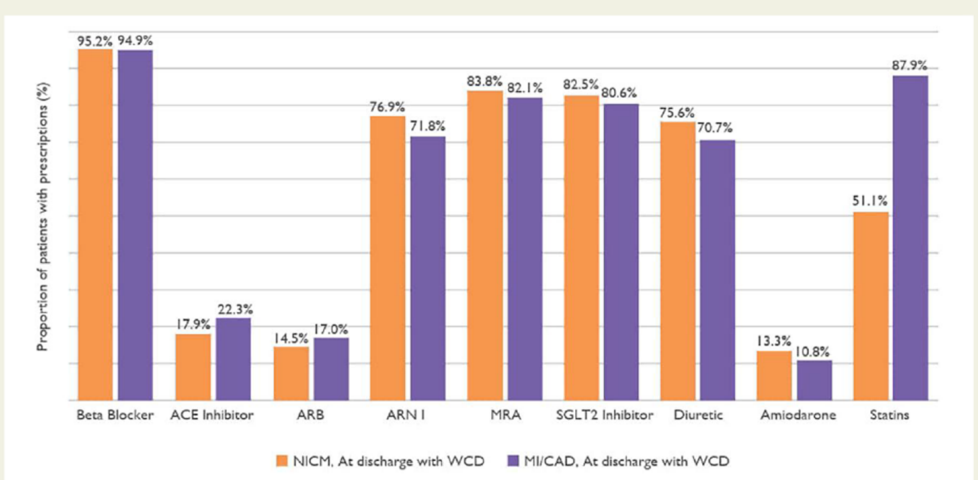


Figure 1 Medication at hospital discharge with wearable cardioverter-defibrillator. ACE, angiotensin converting enzyme; ARB, angiotensin receptor blocker; ARNI, angiotensin receptor–neprilysin inhibitor; CAD, coronary artery disease; MI, myocardial infarction; MRA, mineralocorticoid receptor antagonist; NICM, non-ischaemic cardiomyopathy; SGLT, sodium–glucose-co-transporter

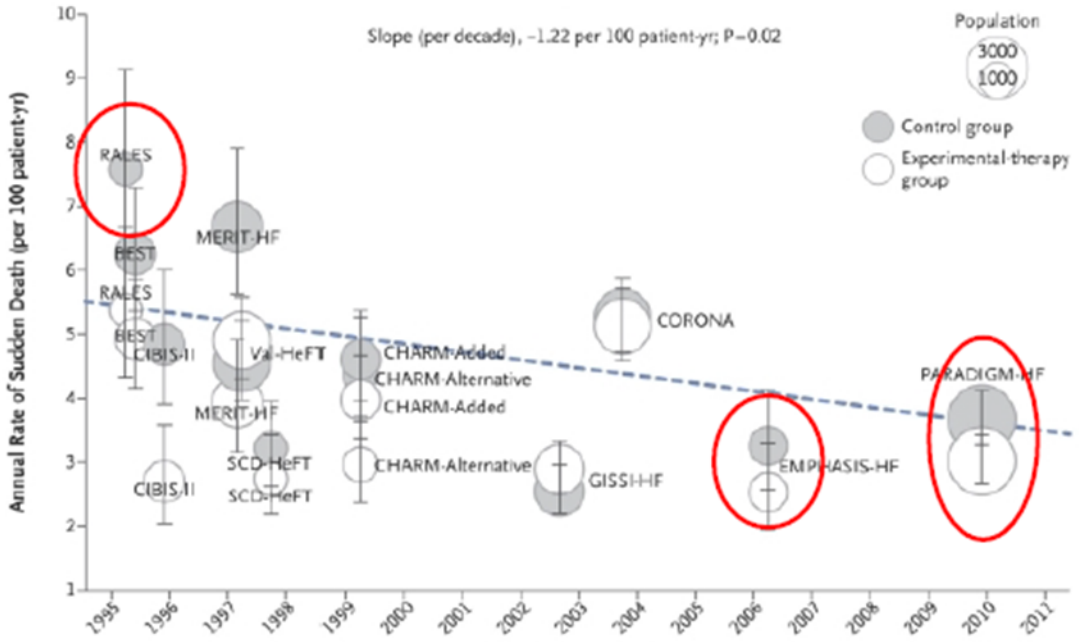
GDMT al momento della dimissione >80% per tutti e quattro i pilastri

I pazienti hanno indossato il dispositivo per un periodo di due mesi con >22h/die di wearing time

European Heart Journal (2025) **00**, 1–10
https://doi.org/10.1093/eurheartj/ehaf668

I tassi di SCD stanno davvero diminuendo nei trial clinici?

Declining Risk of Sudden Death in Heart Failure



Shen Li, et al. N Engl J Med 2017; 377:41-51

	RALES	EMPHASIS-HF	PARADIGM-HF
NYHA III/IV (%)	99.6	0	25.5
LVEF (%)	25.2	26.1	29.4

In control groups

L'inclusione del livello basale di **NT-ProBNP** nell'**analisi multivariata NON** ha fatto emergere differenze significative nei tassi di SCD tra lo studio **Val-HeFT** (condotto nel 1995) il recente **PARADIGM-HF** cardiaca improvvisa (SCD)

1. Esclusione dei pazienti con ICD
2. Marcata eterogenità dei RCTs
3. Esclusione di 30 RCTs per mancanza dati

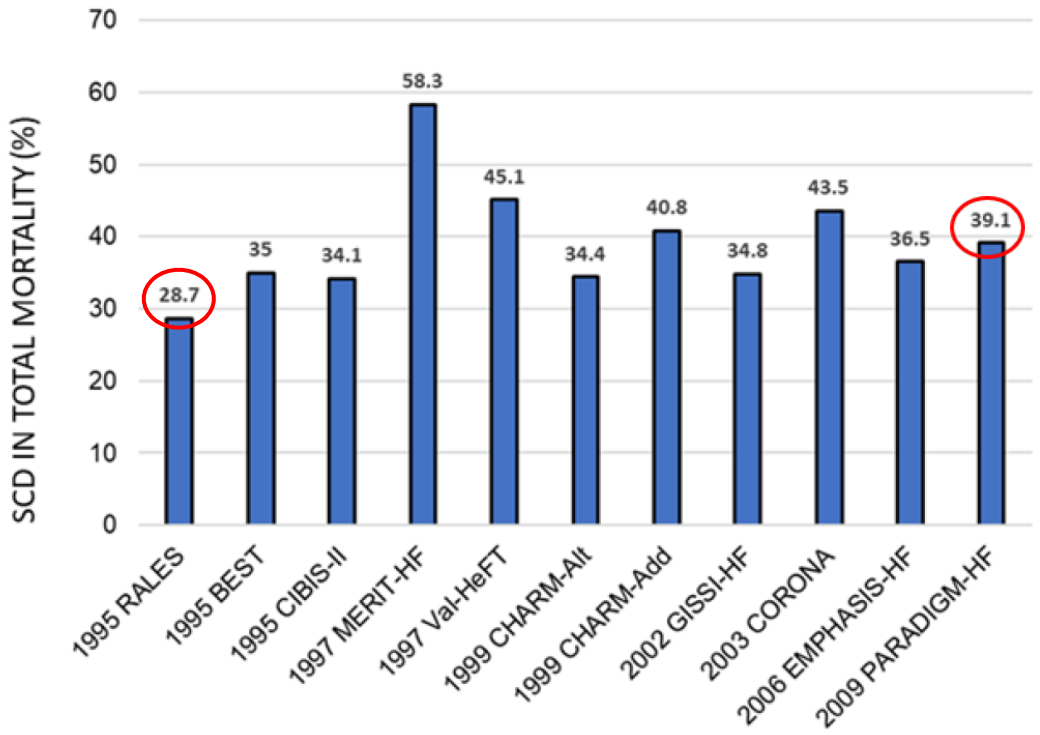
-->GRAVITA' dei pazienti arruolati

Circulation

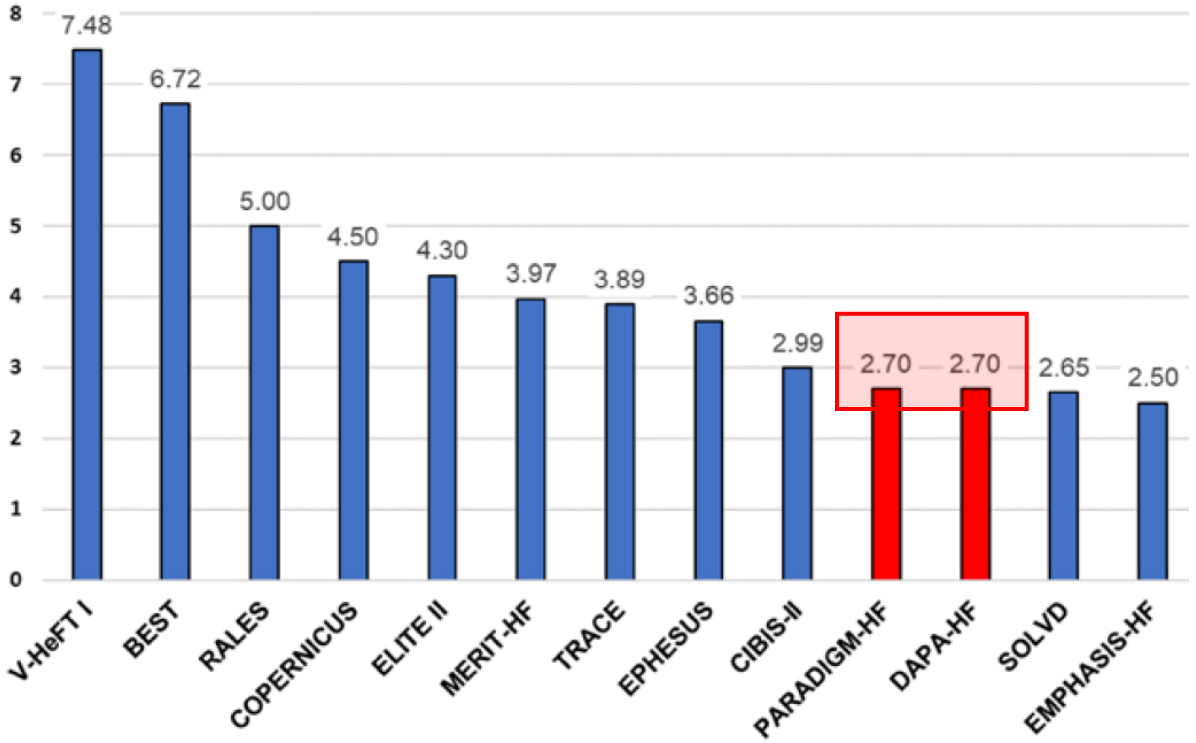
PRIMER

Declining Risk of Sudden Cardiac Death in Heart Failure: Fact or Myth?

Francisco Leyva, MD; Carsten W. Israel, PhD; Jagmeet Singh, MD, PhD



SCD rate as a percentage of total mortality in HF trials



Residual risk of SCD in HF trials.
The graph shows SCDs (%) per 100 patient years in the intervention arm in HF trials.

Qual è il “rischio accettabile” di morte cardiaca improvvisa?

PARADIGM-HF: Sacubitril / Valsartan and SCD

N = 8399

Median follow-up: 27 months (2.25 yrs)

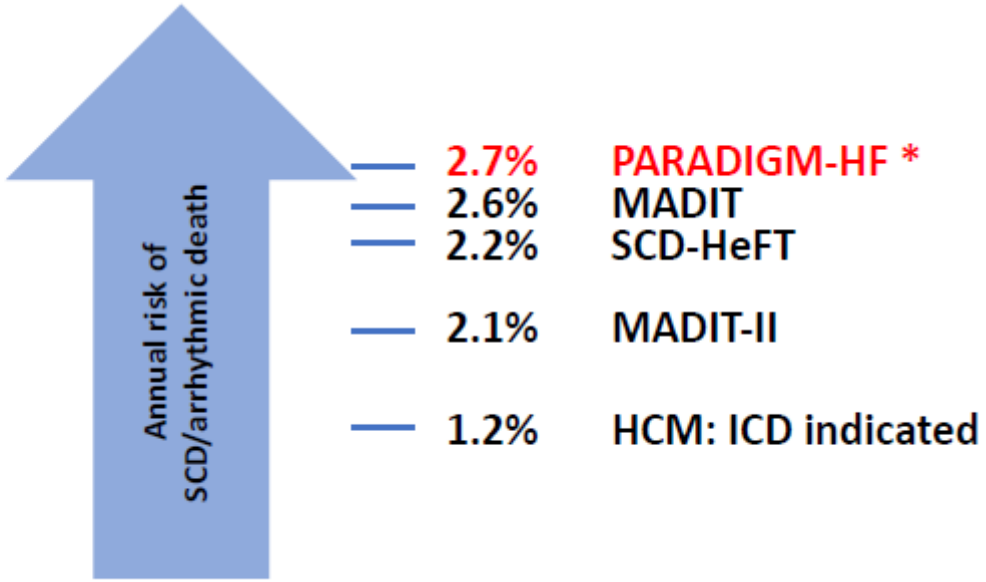
	LCZ	
	N	% of patients
Total deaths	711	17.0
Cardiovascular death	558	13.3
Sudden death	250	6.0
Last contact <1 h	167	4.0
1–24 h	83	2.0

In treatment arm:

SD annual event rate: 2.7%

5-year event rate: 13.5%

Desai AS, et al. Eur Heart J 2015:1990–1997

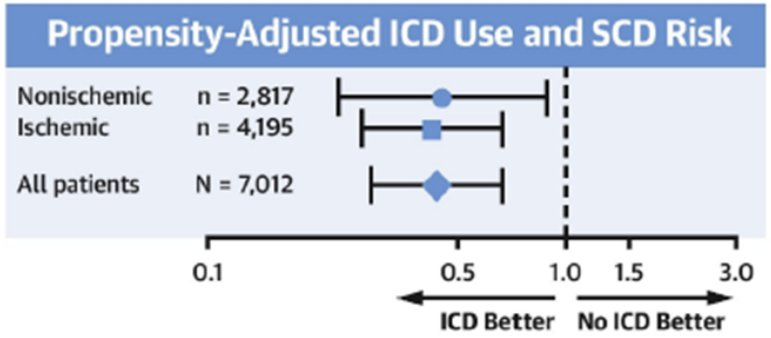


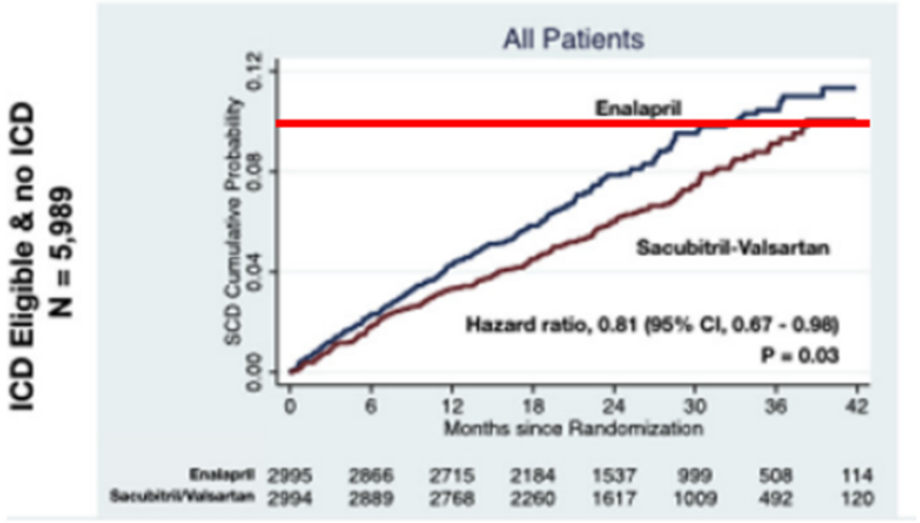
* Rohde LE, et al. JACC Heart Fail. 2020;8:844-855

Sacubitril/Valsartan and Sudden Cardiac Death According to Implantable Cardioverter-Defibrillator Use and Heart Failure Cause

A PARADIGM-HF Analysis

- **15%** had ICDs
- **85%** (7,145) were eligible for ICDs *





SCD: 1/3 of total mortality

•**DAPA-HF**: 26.2% received an ICD despite LVEF <40%.
•**EMPEROR-Reduced**: 31.4% with ICD, though 73% had LVEF ≤30%.

Analisi aggiustata per propensity score: **ICD riduzione del 56% rischio SCD** (HR 0,44; P<0,01)

Is this relevant to current practice?

Rohde LE, et al. JACC Heart Fail. 2020;8:844-855

Effect on SCD risk: ACEi

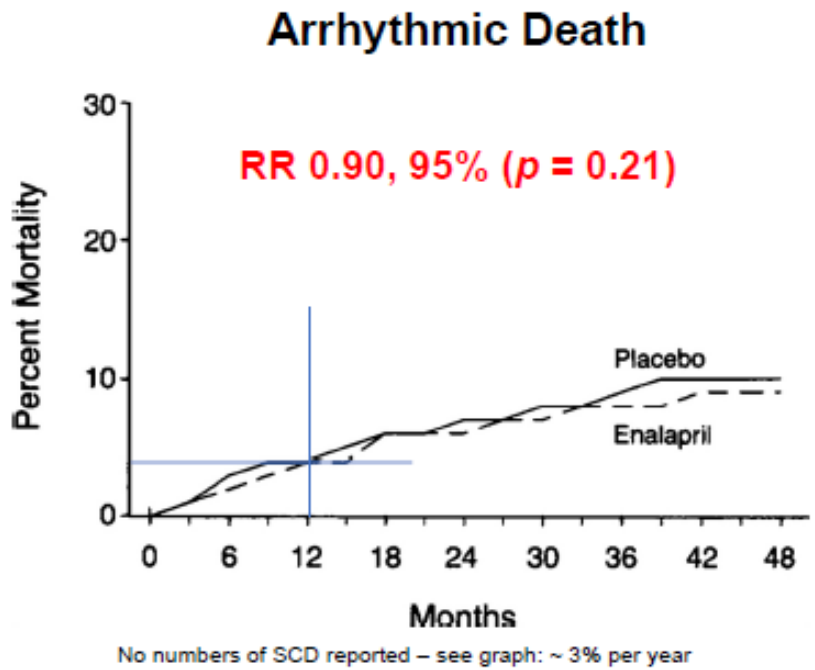
Captopril (SAVE)

Cause of Death	Placebo	Captopril	Risk Reduction (95% CI)	P Value
	no. of deaths		*percent*	
Cardiovascular	234	188	21 (5–35)	0.014
Atherosclerotic heart disease	222	174	23 (6–37)	0.009
Progressive heart failure†	58	38	36 (4–58)	0.032
Sudden, with preceding symptoms	50	43	—	NS
Sudden, unexpected	75	62	—	NS
Acute myocardial infarction	25	24	—	NS
Cardiac procedure	9	5	—	NS
Other cardiac	5	2	—	NS
Vascular	12	14	—	NS
Noncardiovascular	41	40	—	NS
Cancer	20	14	—	NS
Infection or gastrointestinal bleeding	18	16	—	NS
Traumatic or unknown	3	10	—	NS
All	275	228	19 (3–32)	0.019

56% of deaths were SCD

Pfeffer MA, et al. N Eng J Med;1992;327:669-677.

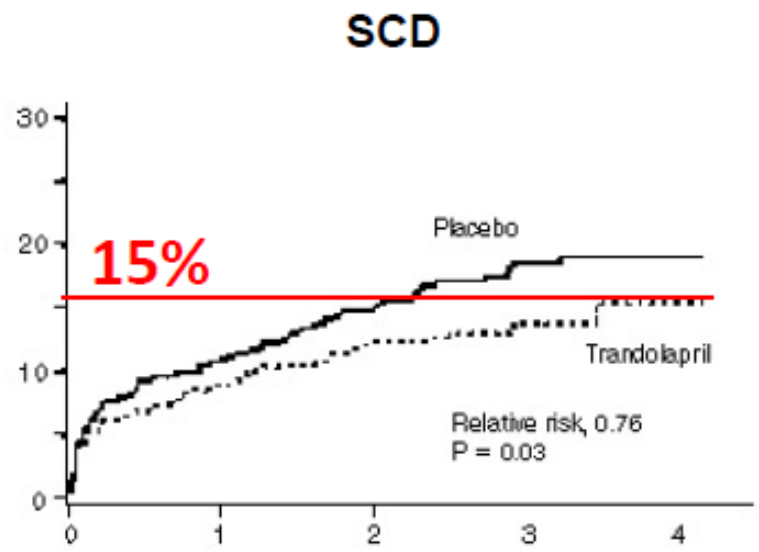
Enalapril (SOLVD)



No numbers of SCD reported – see graph: ~ 3% per year

The SOLVD investigators. N Engl J Med 1991; 325:293-302

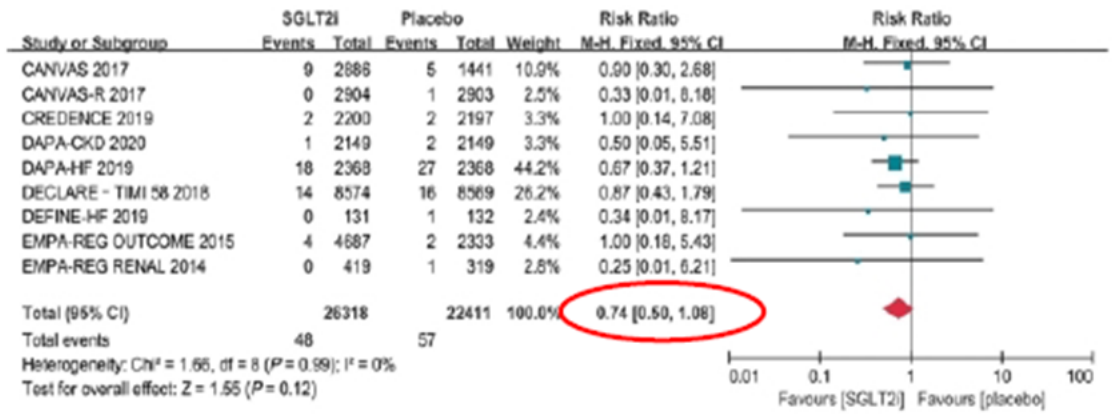
Trandolapril (TRACE)



Kober L, et al. TRACE study. N Eng J Med 1995; 333:1670-1

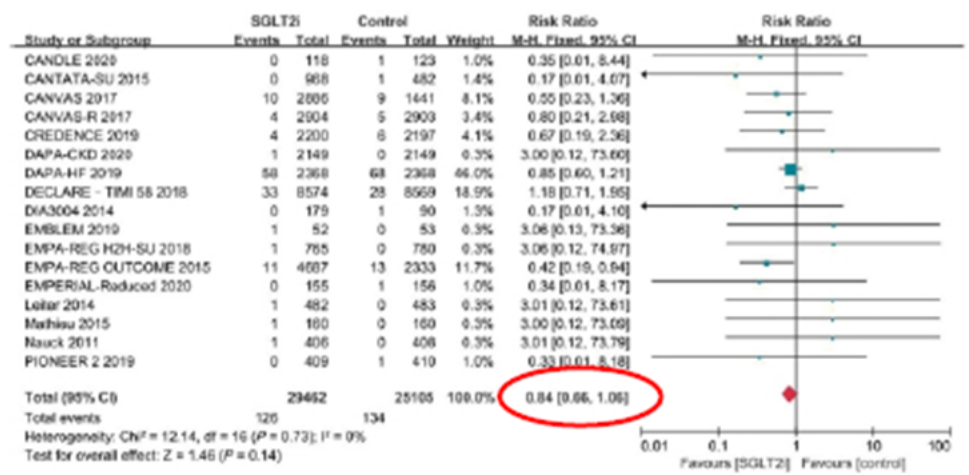
SGLT-2i and SCD / ventricular arrhythmias

SCD



NO EFFECT

VENTRICULAR ARRHYTHMIAS



NO EFFECT

'… there is no plausible explanation as to why low-dosage SGLT2i therapy might decrease the incidence of VAs'

Sfairopoulos D, et al. Europace 2021; https://doi.org/10.1093/europace/euab177

Effect on SCD risk: beta-blockers

PERSPECTIVE

Compelling First-Line Drug and Device Therapies for the Prevention of Sudden Death in Patients With Chronic Heart Failure and a Reduced Ejection Fraction Who Are Candidates for an Implantable Cardioverter-Defibrillator

Packer M. Circ Arrhythm Electrophysiol. 2019;12:e007430

'β-Adrenergic Receptor Blockers

β-Blockers have decreased the risk of SCD by 35% to 45% of patients with chronic HFrEF in large-scale trials,[2] in whom ICDs were rarely used.'

COPERNICUS (carvedilol)

Sudden death	69 (6.1)	45 (3.9)	0.016
Ventricular tachycardia	26 (2.3)	12 (1.0)	0.019
Ventricular fibrillation	23 (2.0)	12 (1.0)	0.053

SCD:	**4.5%** per yr 22.5% per 5 yrs.
SCD/VA:	**6.81%** per yr 34.1% per 5 yrs

Adapted from: Packer M, et al. COPERNICUS. **Circulation**. 2002; 106:2194–2199.

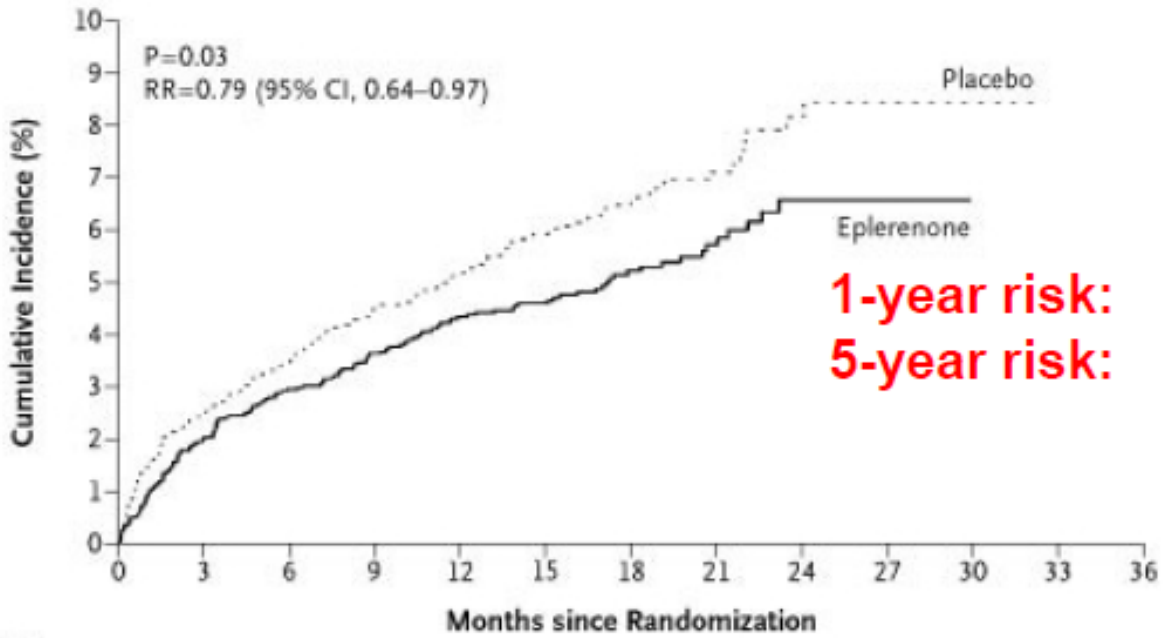
Effect on SCD: MRAs

"In large-scale trials, spironolactone and eplerenone have been shown to reduce the risk of SCD by ≈20% in patients with chronic HF, who generally did not have an ICD."

Packer M. Circ Arrhythm Electrophysiol. 2019;12:e007430

EPHESUS TRIAL: EPLERENONE

Sudden Cardiac Death



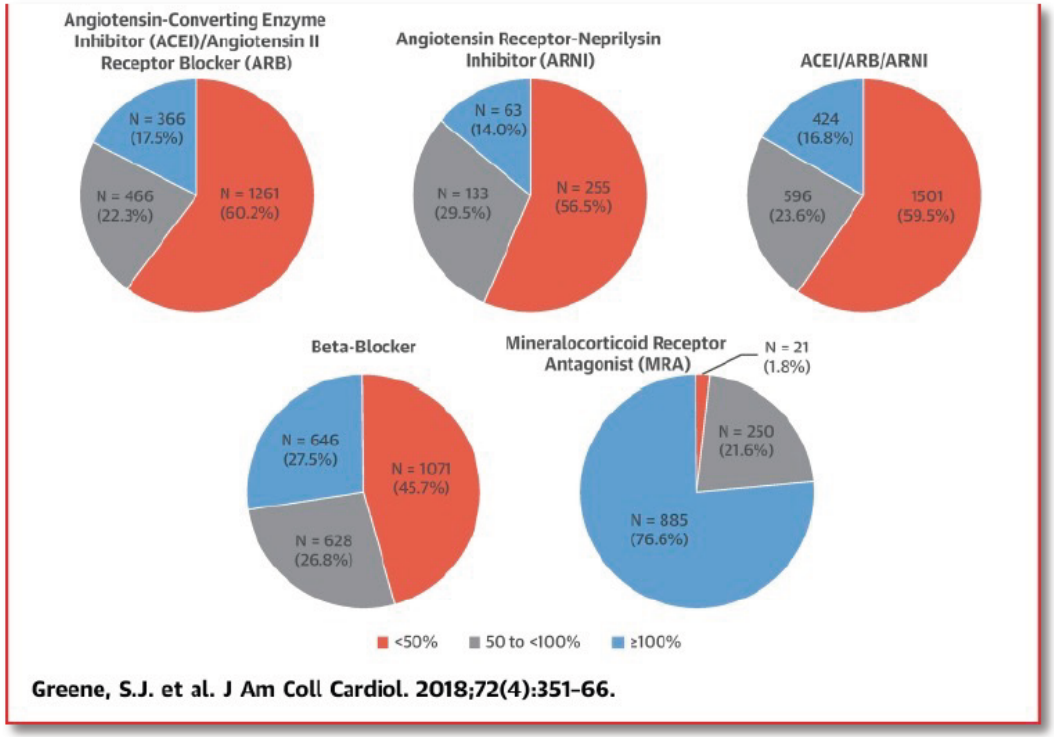
1-year risk: 3.66%
5-year risk: 18.3% *

*, 162 SCDs/3319= 4.88% over mean follow-up of 16 months; = 3.66% per year = 18.3% 5-year risk

Pitt B, et al. EPHESUS. N Engl J Med 2003; 348:1309-1321

I tassi di SCD stanno davvero diminuendo nella “real life”?

Ottimizzazione della terapia medica nella “real life”



Greene, S.J. et al. J Am Coll Cardiol. 2018;72(4):351-66.

“Significant gaps in guideline directed use and dosing of evidence-based medications”

→ **Heart failure medication is most commonly underdosed.**

CENTRAL ILLUSTRATION: Use and Dosing of Guideline-Directed Medical Therapy Among Patients With Chronic HFrEF in Contemporary U.S. Outpatient Practice

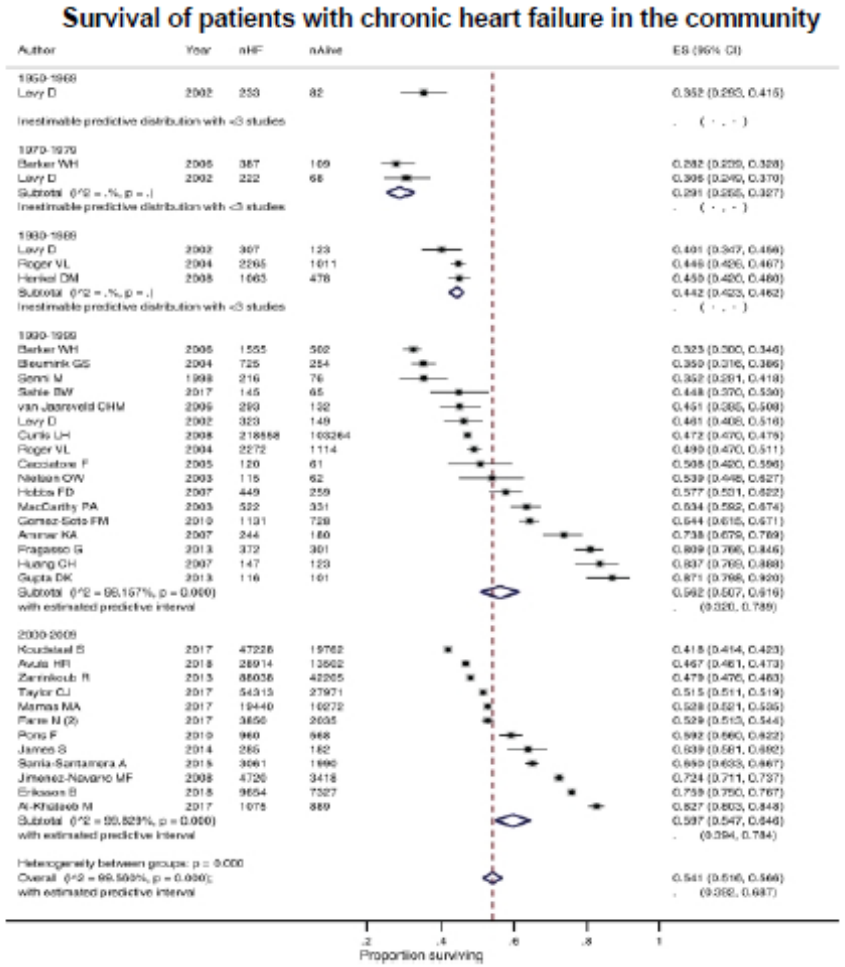
A

	ACEI/ARB	ARNI	ACEI/ARB/ARNI	Beta-Blocker	MRA
Without Contraindication and Not Treated	1374	3029	920	1159	2317
Treated	2107	452	2536	2351	1163
With Contraindication	37	37	62	8	38

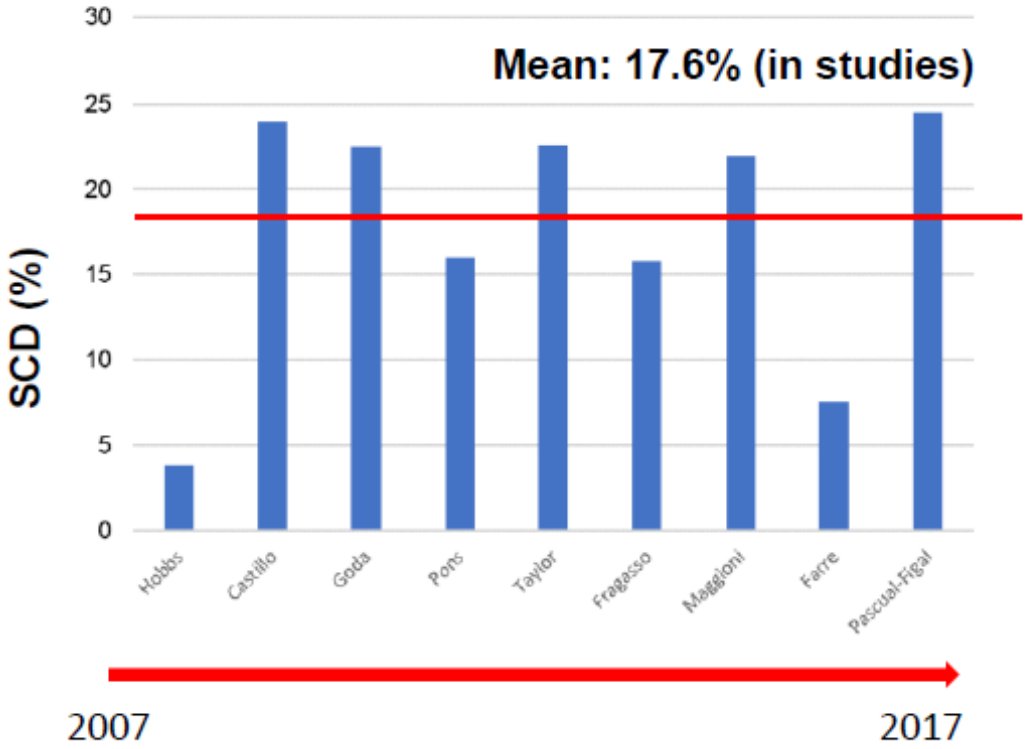
B

Greene S et al JACC (2018) Volume 72, Issue 4;

Survival of patients with chronic heart failure in the community: a systematic review and meta-analysis



60 studies, n = 1.5 million



Jones, NR et al. Eur J Heart Fail 2019;21:1306-1325

Miglioramento della FE a valori ≥ 35%=non c'è più bisogno dell'ICD?

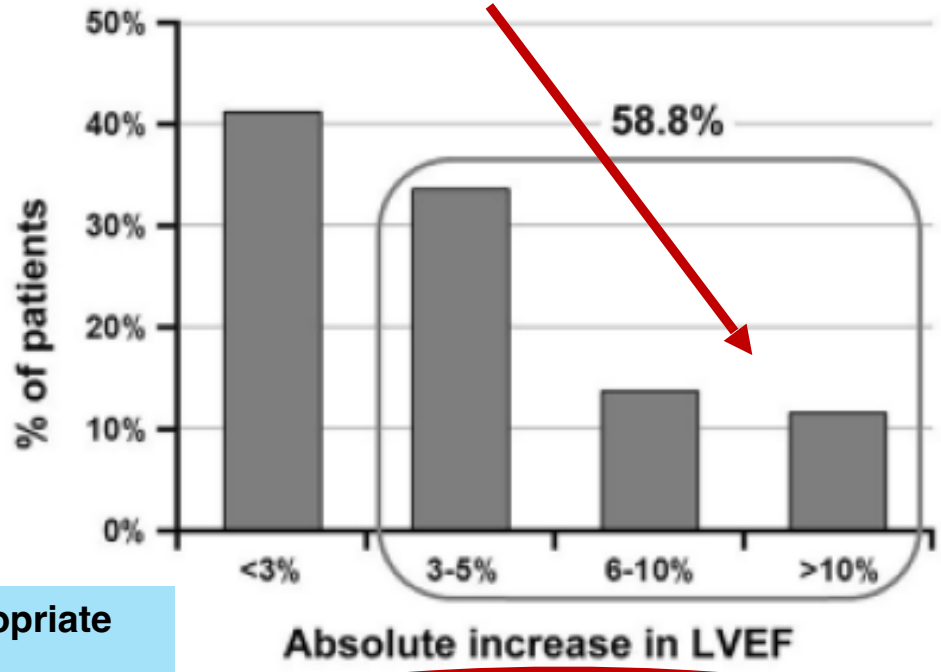
Effect of SAcubitril/Valsartan on left vEntricular ejection fraction and on the potential indication for Implantable Cardioverter Defibrillator in primary prevention: the SAVE-ICD study

Multicentre, observational, prospective study
N=230
HFrEF (LVEF≤35%)
Primary prevention ICDs
6 month treatment with sacubitril/valsartan

PRIMARY ENDPOINT

Number of patients no longer meeting LVEF criteria for a primary prevention ICD

Circa il 25% potrebbe non necessitare più di un ICD



Analisi retrospettiva su pazienti con ICD: terapie appropriate comunque, anche nei pazienti con dosaggio massimo

Non-responder rate to ARNI: 41%
(< 3% increase in LVEF)

5.3% of patients had an arrhythmic event in the first 6 months

Guerra F, et al. Eur J Clin Pharmacol 2021. doi: 10.1007/s00228-021-03189-8

ICD shocks in recovered LVEF

N=26, 355 patients undergoing replacement
17.4% had partially recovered EF (>35% and ≤50%)
7.3% had recovered EF (>50%).

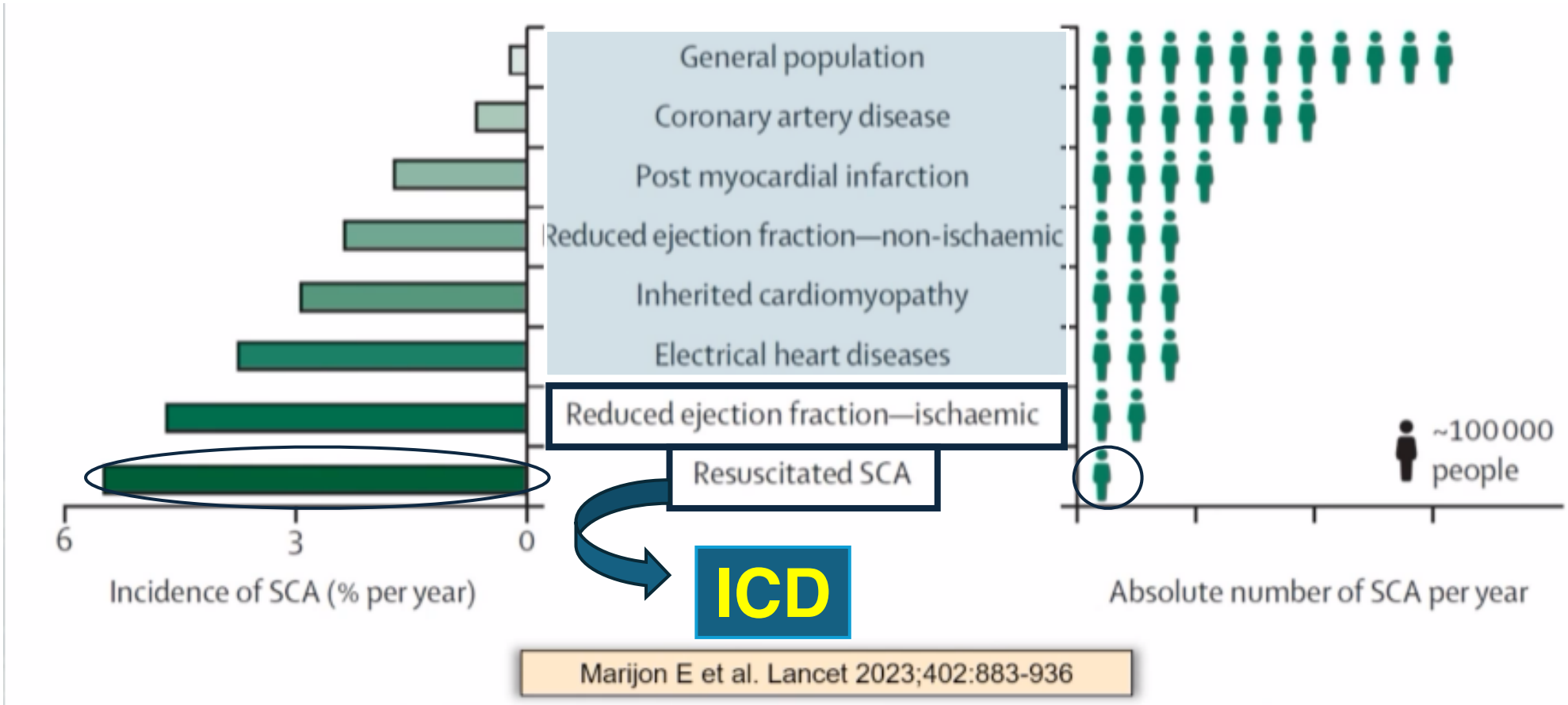
Coorte a lungo termine, **fino al 20% dei pazienti con LVEF >35%** ha ricevuto **terapie ICD appropriate** durante il follow-up

Appropriate ICD shocks after generator change (LVEF>35%)

Source	Year	Generator exchange, *n*	ICD shocks following generator exchange and recovered LVEF, *n* (%)	Years to follow-up
Naksuk *et al.*[6]	2016	25	5 (20)	6.2 ± 2.2
[a]Madhavan *et al.*[7]	2014	71	24 (14)	3
Kini *et al.*[31]	2016	59	5 (8.5)	3.5 ± 2.0
[b]Schliamser *et al.*[33]	2017	70	4 (5.7)	2

Devgun JK, et al. RSCH heart Failur 2021: DOI: 10.1002/ehf2.13729

Paradosso epidemiologico nella SCD: rischio vs numero assoluto di eventi



Oltre alla FE, "*the magic number*", sappiamo davvero stratificare il rischio?

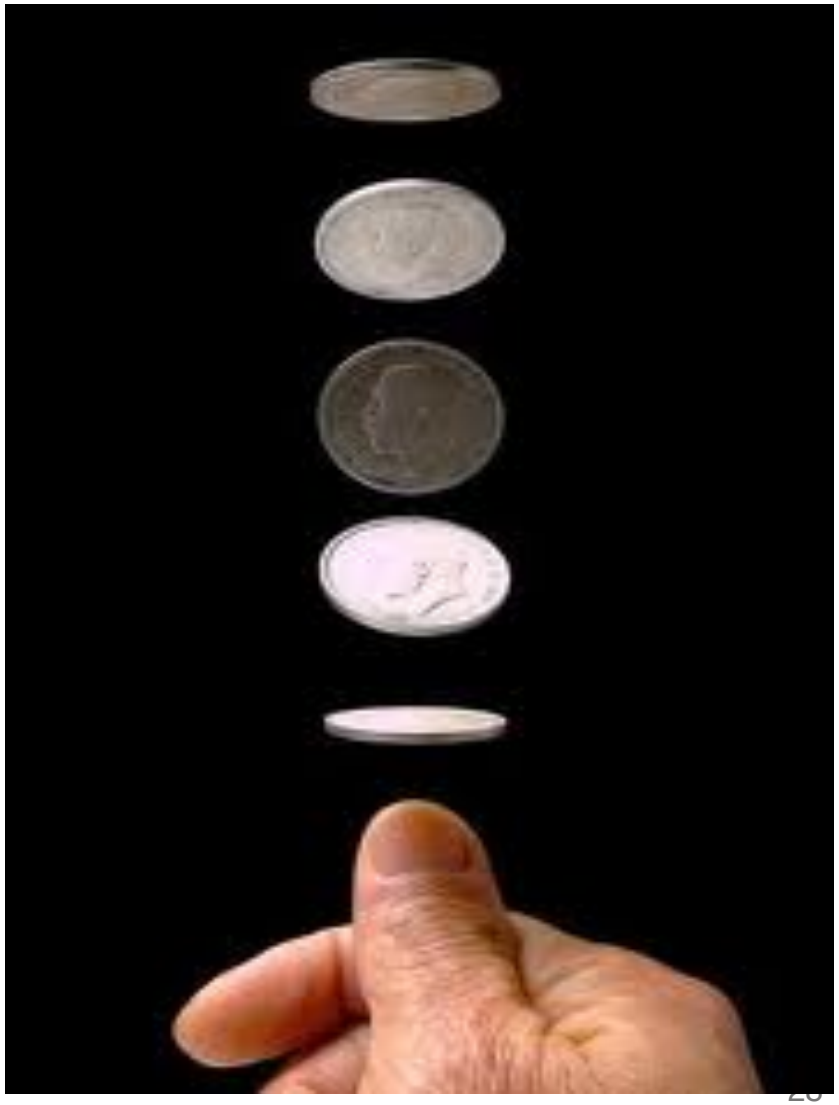
PROFID TRIAL

19 datasets from Europe, US and Israel - 224,898 patients

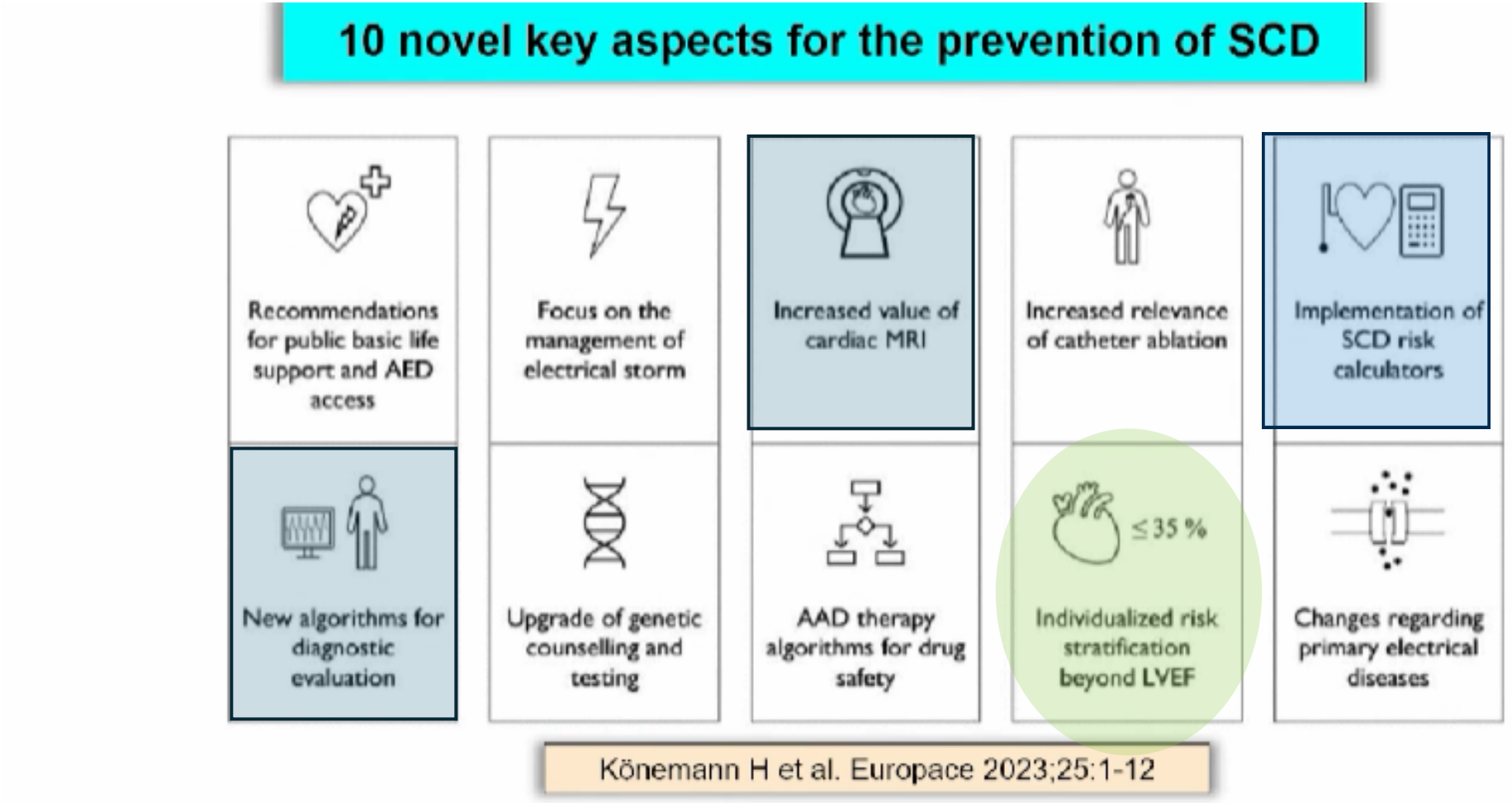
Phase 1, clinical variables.
Prediction of SCD. ICD patients, LVEF ≤35%.

	Method	AUC at 12 months (95% CI)	O:E ratio at 12 months (95% CI)
	LVEF alone	0.523 (0.480, 0.565)	0.941 (0.209, 4.241)
statistical modelling	Weibull model	0.521 (0.470, 0.572)	0.262 (0.049, 1.401)
	Flexible parametric model	0.521 (0.469, 0.572)	0.249 (0.047, 1.322)
machine learning	Random forest	0.525 (0.486, 0.563)	1.025 (0.221, 4.746)
	Deep neural network	0.517 (0.419, 0.615)	2.114 (0.337, 13.248)

Prevention of Sudden Cardiac Death in Heart Failure Patients



Spotlight on the 2022 ESC Guidelines



ESC European Society of Cardiology
European Heart Journal (2023) 44, 3503–3626
https://doi.org/10.1093/eurheartj/ehad194

2023 ESC Guidelines for the management of cardiomyopathies

Developed by the task force on the management of cardiomyopathies of the European Society of Cardiology (ESC)

1. **Sincope**.
2. **LGE** alla risonanza magnetica
3. **Genotipo ad alto rischio**
   - LMNA (%SCD anno 5-10%)
   - FLNC var. tron. (5-10%)
   - TMEM43 (5-10%)
   - PLN (3-5%)
   - DSP e RBM20 (3-5%)
4. **FE<45%**.
5. **TVNS**
6. **Elevato burden di BEV**
7. **Sesso maschile**

Primary prevention DCM		
An ICD should be considered to reduce the risk of sudden death and all-cause mortality in patients with DCM, symptomatic heart failure, and LVEF ≤35% despite >3 months of OMT.[861,885]	IIa	A
The patient's genotype should be considered in the estimation of SCD risk in DCM.[185,186,869,886]	IIa	B
An ICD should be considered in patients with DCM with a genotype associated with high SCD risk and LVEF >35% in the presence of additional risk factors (see *Table 21*).[541,542,867,869,873,878,881,886]	IIa	C
An ICD may be considered in selected patients with DCM with a genotype associated with high SCD risk and LVEF >35% without additional risk factors (see *Table 21*).[869,873,881,886]	IIb	C
An ICD may be considered in patients with DCM without a genotype associated with high SCD risk and LVEF >35% in the presence of additional risk factors.[c,138,873,874]	IIb	C

2023 guidelines on CM

LVEF ≤ 35% (large RCTs)

use genotype

LVEF > 35% + high risk genotype + risk factors

LVEF > 35% + high risk genotype (w/o risk factors)

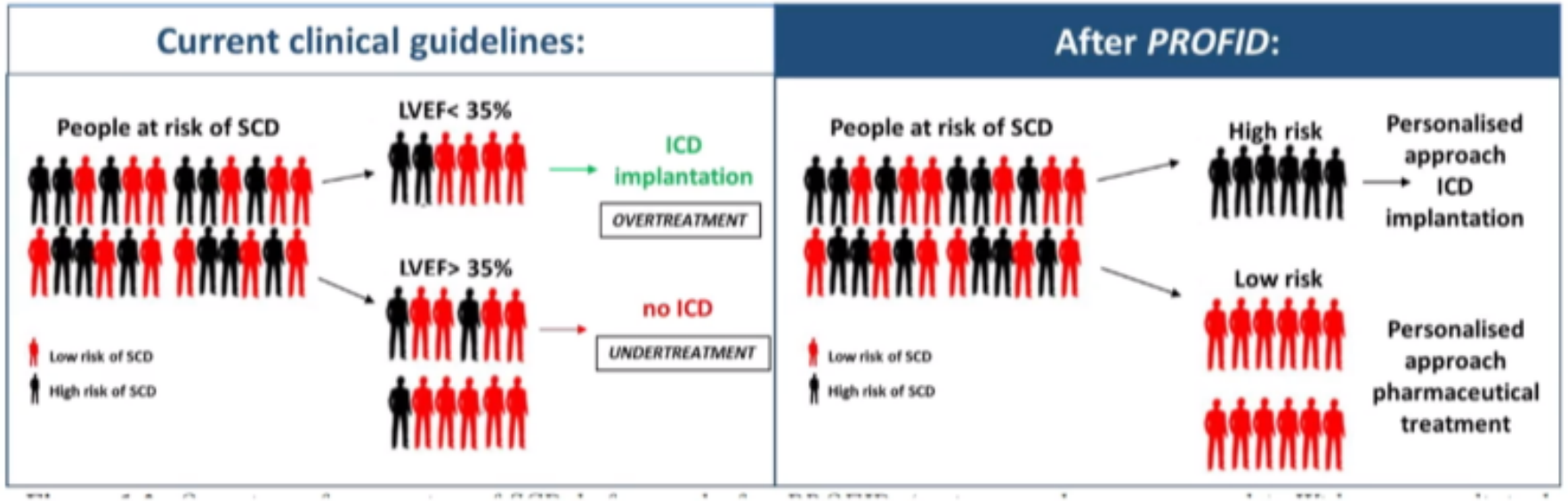
LVEF > 35%, no genotype but +risk factors

Conclusioni…

So where are we with SCD prevention?

This is were we are:

This is our ambition

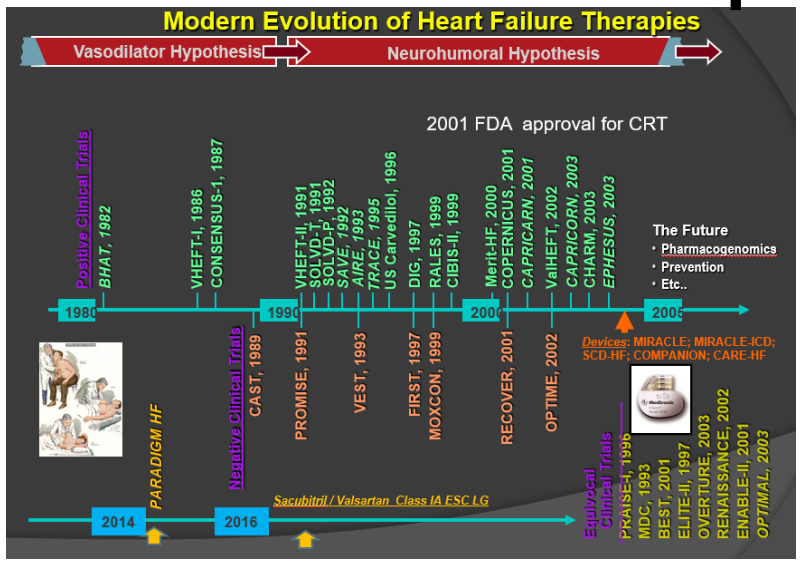


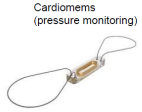
Hindricks et al

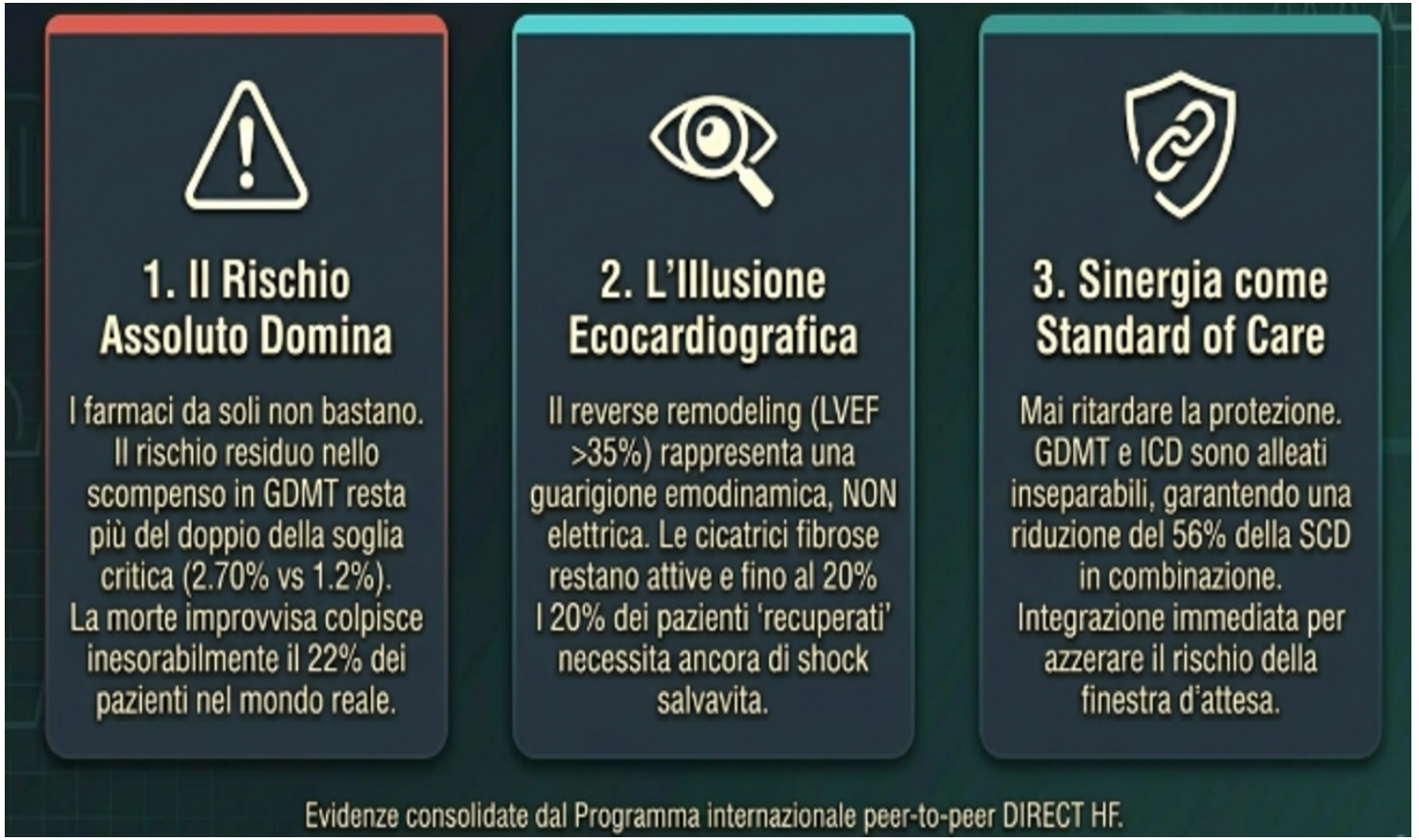

Il Futuro della Stratificazione del Rischio
Il passaggio dal fenotipo geometrico (LVEF) alla stratificazione tissutale e biologica.
Est. 2027
PROFID EHRA
Test definitivo ICD vs. GDMT in 3.595 pazienti ischemici (LVEF <= 35%).
Est. 2027
CMR-ICD
Uso della Risonanza Magnetica Cardiaca per rilevare la fibrosi nei pazienti non ischemici.
Est. 2031
CONTEMP-ICD
Validazione del punteggio MADIT-ICD in pazienti non ischemici.
Est. 2036
BRITISH
Impianto mirato guidato esclusivamente dalla cicatrice miocardica.
L'obiettivo: Risolvere il paradosso clinico, eliminando l'overtreatment nei pazienti a basso rischio e l'undertreatment fatale nei veri pazienti ad alto rischio.

Conclusioni per la pratica clinica

PLACE 2026
PLATFORM OF LABORATORIES FOR ADVANCES IN CARDIAC EXPERIENCE
CONGRESSO
ROMA, 25 - 27 Giugno 2026








GRAZIE PER L'ATTENZIONE
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