

Hjertebank, svimmelhet, synkope og brystmerter

**gode indikasjoner for videre utredning av
hjertesviktpasienten?**

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Kaspar Broch

Disposisjon

- **Årsaker til hjertebank, synkope og brystmerter**
- **Dødelighet ved hjertesvikt**
- **Utredning**

Hjertebank

- **Sinustakykardi**
- **Ekstrasystoli**
- **Takyarytmi**
 - **Atrieflimmer**
 - **SVT**
 - **VT!**



~~Hjertebank er vanlig og forårsakes sjelden av en alvorlig sykdom.~~

Svimmelhet/synkope

- Ortostatisk/hypotensivt betinget
- Arytmogen: Bradyarytmi eller (Ventrikulær) takyarytmi

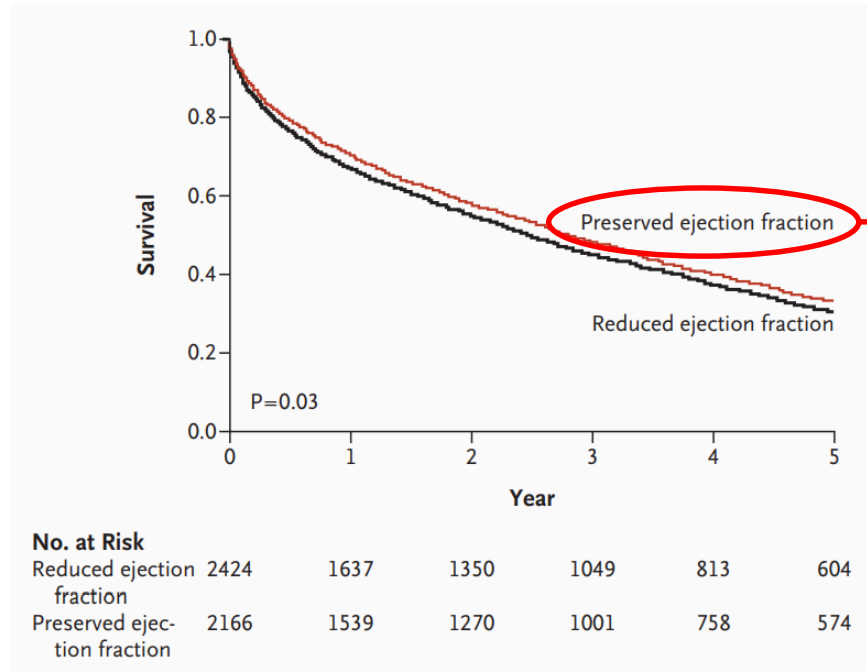


Brystsmerter

Årsaker til brystsmarter kan være:

- akutt koronarsyndrom (STEMI, NSTEMI, UAP)
- aortadisseksjon
- lungeemboli
- perikarditt
- plevritt
- pneumothorax
- øsofagitt
- myalgi
- angst eller psykogene smerter
- akutt abdomen

Overlevelse ved bevart versus redusert ejeksjonsfraksjon



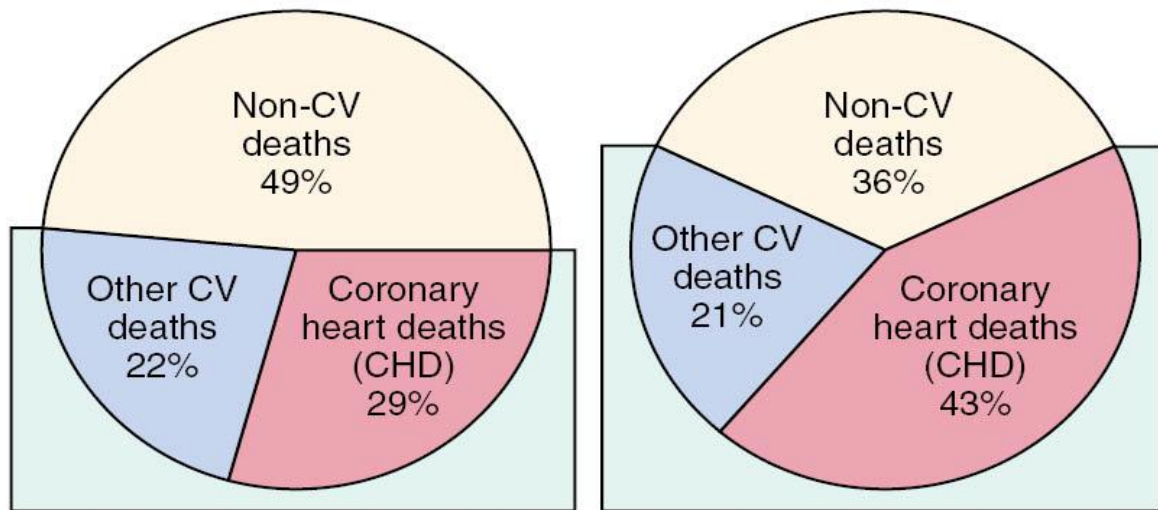
2,7 år eldre

Owan TE, et al. Trends in prevalence and outcome of heart failure with preserved ejection fraction. N Engl J Med. 2006 Jul 20;355(3):251-9

Dødsårsak etter type hjertesvikt

Preserved ejection fraction

Reduced ejection fraction

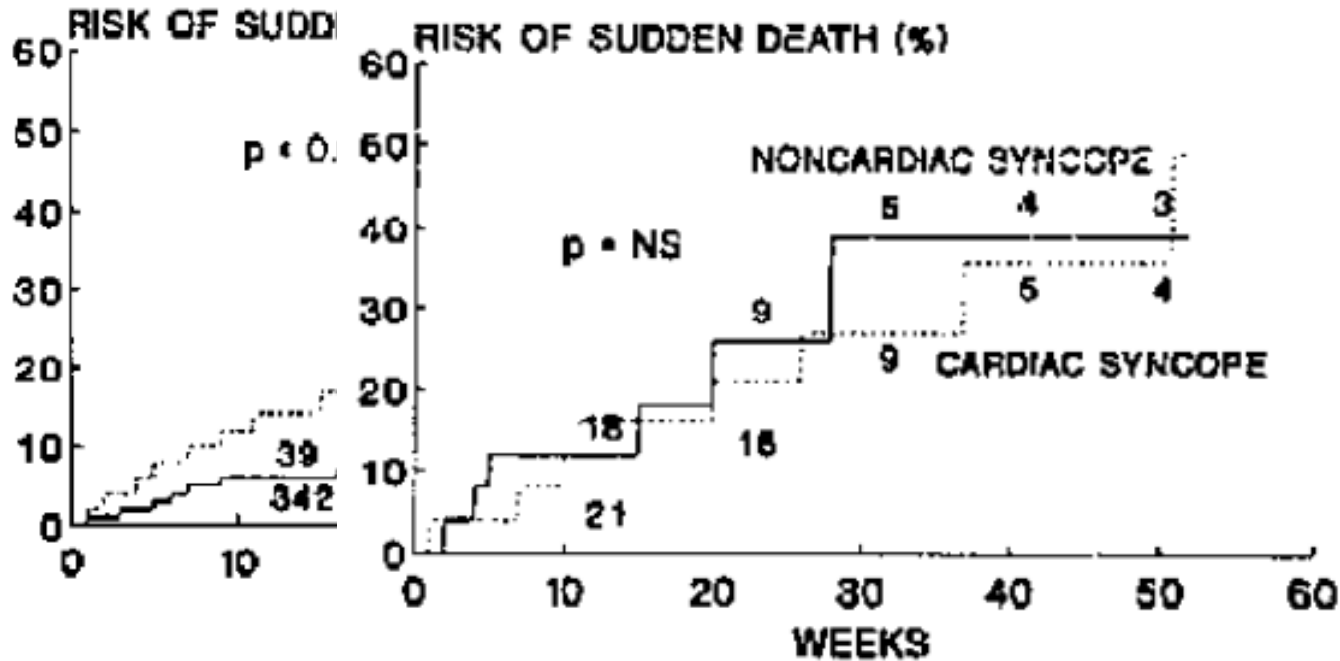


B

Cardiovascular deaths

Henkel DM..Readfield M Circ Heart Fail 2008;1:9

(From Henkel DM, Redfield MM, Weston SA, et al: Death in heart failure: A community perspective. Circ Heart Fail 1:91, 2008.)



C 1993

pasienter

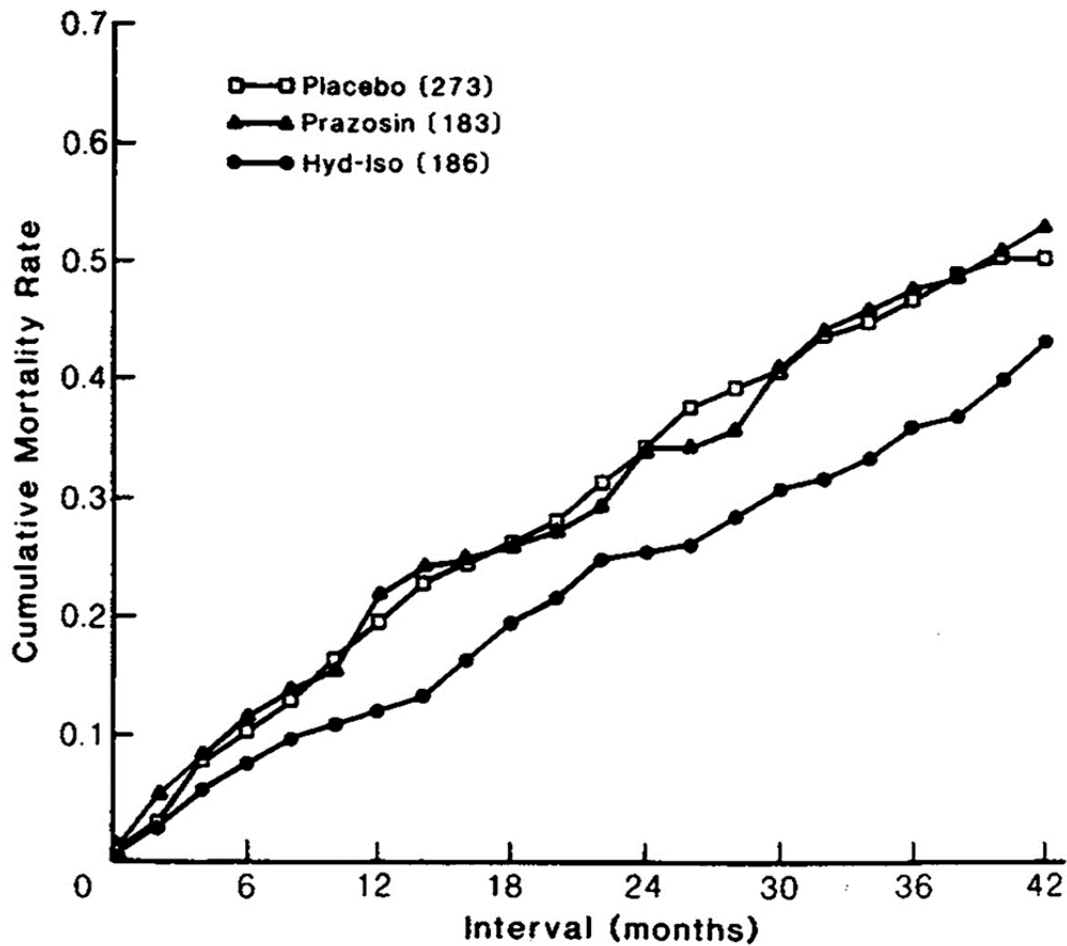
60 hadde

synkope.

I-IV, LVEF i

snitt 20 %

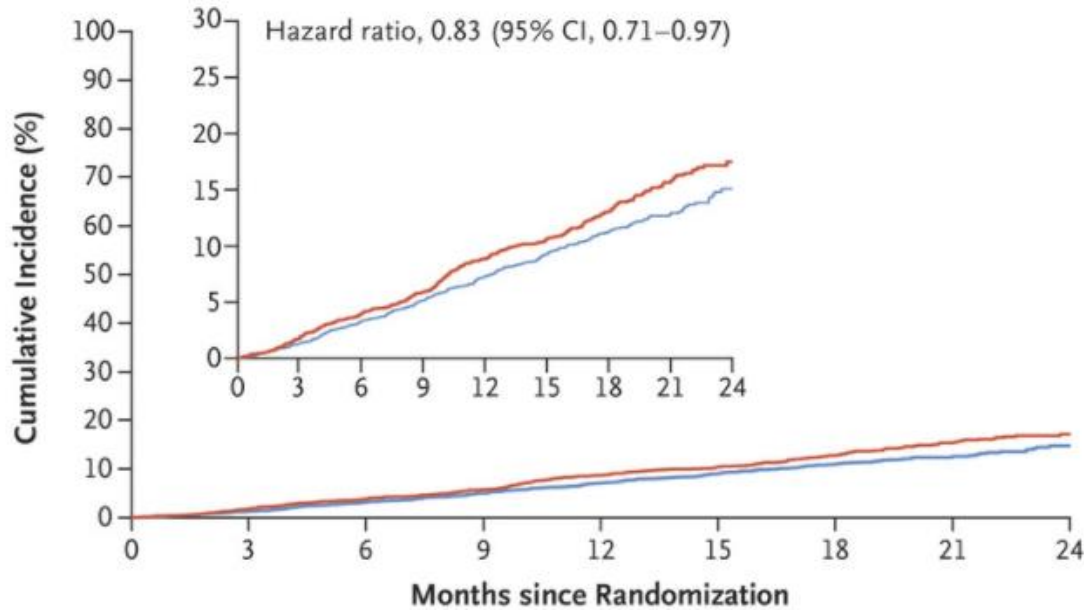
Middlekauff HR, Stevenson WG, Stevenson LW, Saxon LA. Syncope in advanced heart failure: high risk of sudden death regardless of origin of syncope. J Am Coll Cardiol. 1993 Jan;21(1):110-6.



V-HEFT
N Eng
N Engl J Med 1986;
314:1547-1552

Gjennomsnittsalder
58 år, LVEF 30 %

D Death from Any Cause

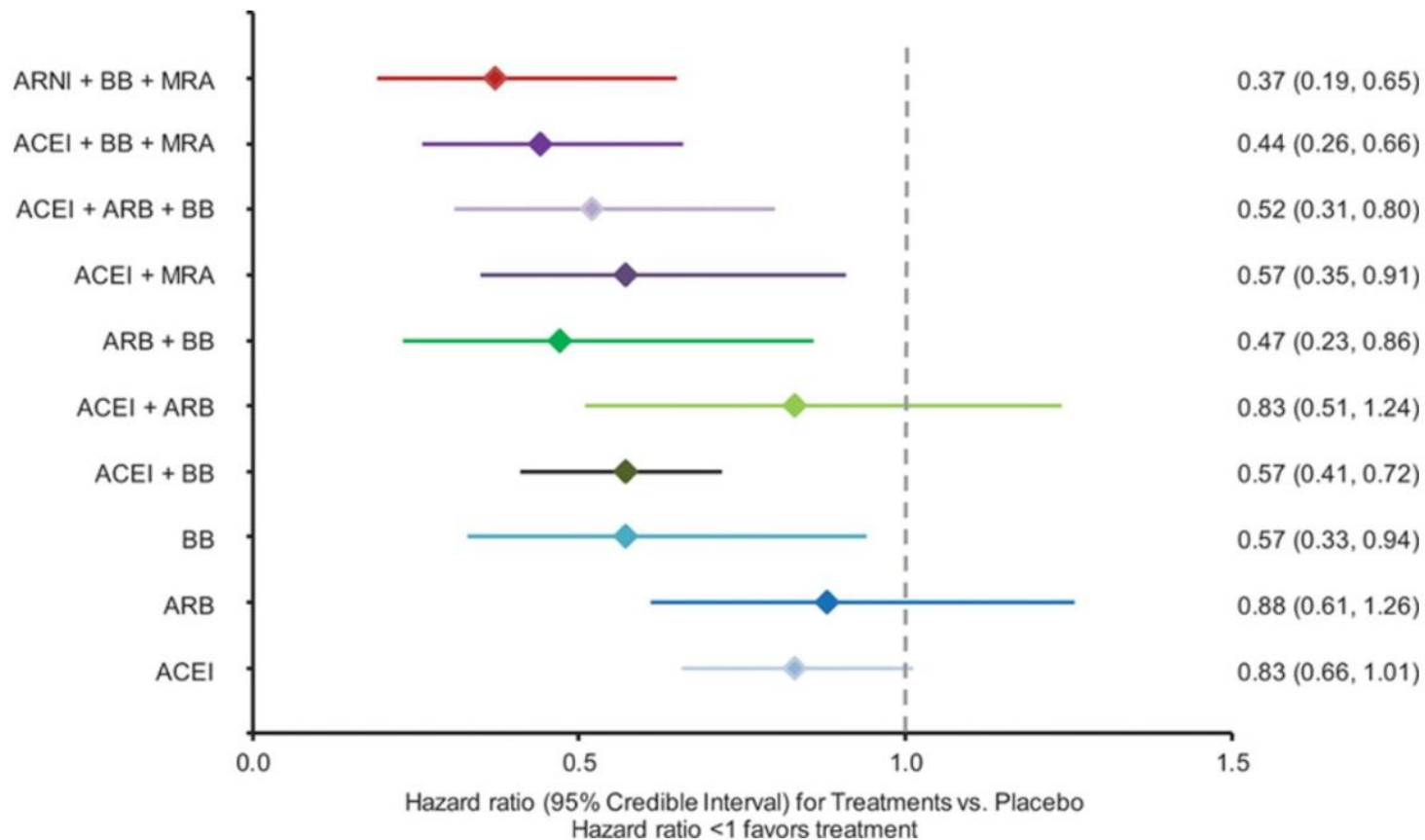


No. at Risk

| | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|-----|-----|---|
| Placebo | 2371 | 2330 | 2279 | 2231 | 2092 | 1638 | 1221 | 665 | 231 | + |
| Dapagliflozin | 2373 | 2342 | 2296 | 2251 | 2130 | 1666 | 1243 | 672 | 231 | - |

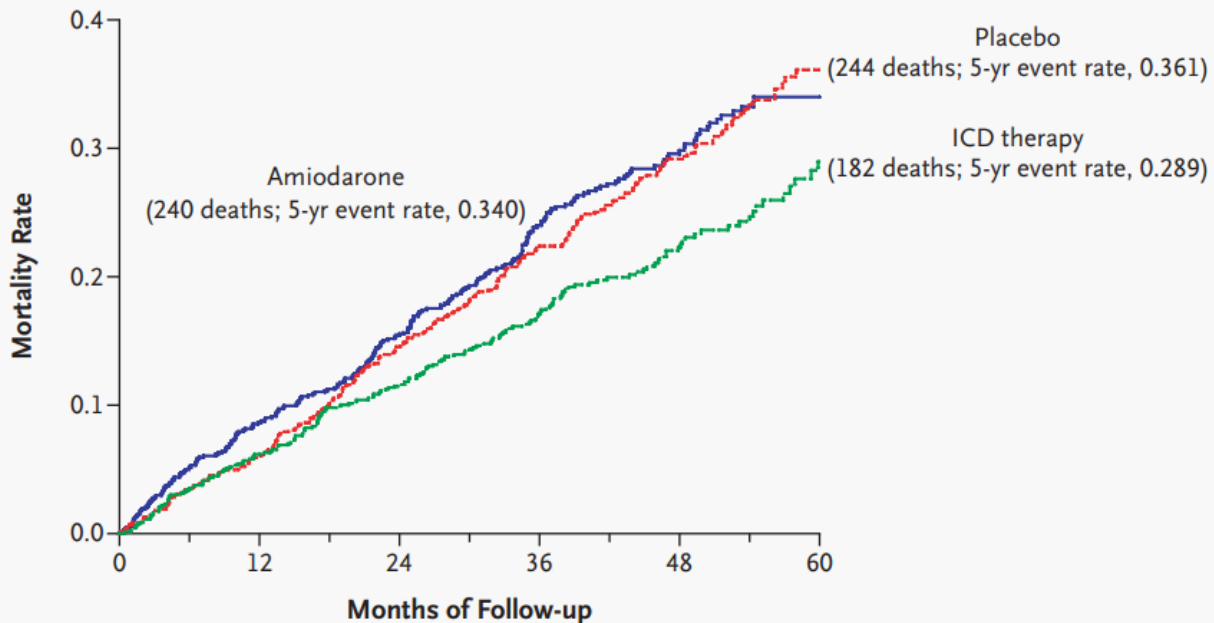
DAPA-HF
N Engl J Med
2019; 381:1995-
2008

Gjennomsnittsalder
66 år, LVEF 31 %



Burnett H, et al. Thirty Years of Evidence on the Efficacy of Drug Treatments for Chronic Heart Failure With Reduced Ejection Fraction: A Network Meta-Analysis. *Circ Heart Fail.* 2017 Jan;10(1):e003529.

| | Hazard Ratio (97.5% CI) | P Value |
|-------------------------|-------------------------|---------|
| Amiodarone vs. placebo | 1.06 (0.86–1.30) | 0.53 |
| ICD therapy vs. placebo | 0.77 (0.62–0.96) | 0.007 |

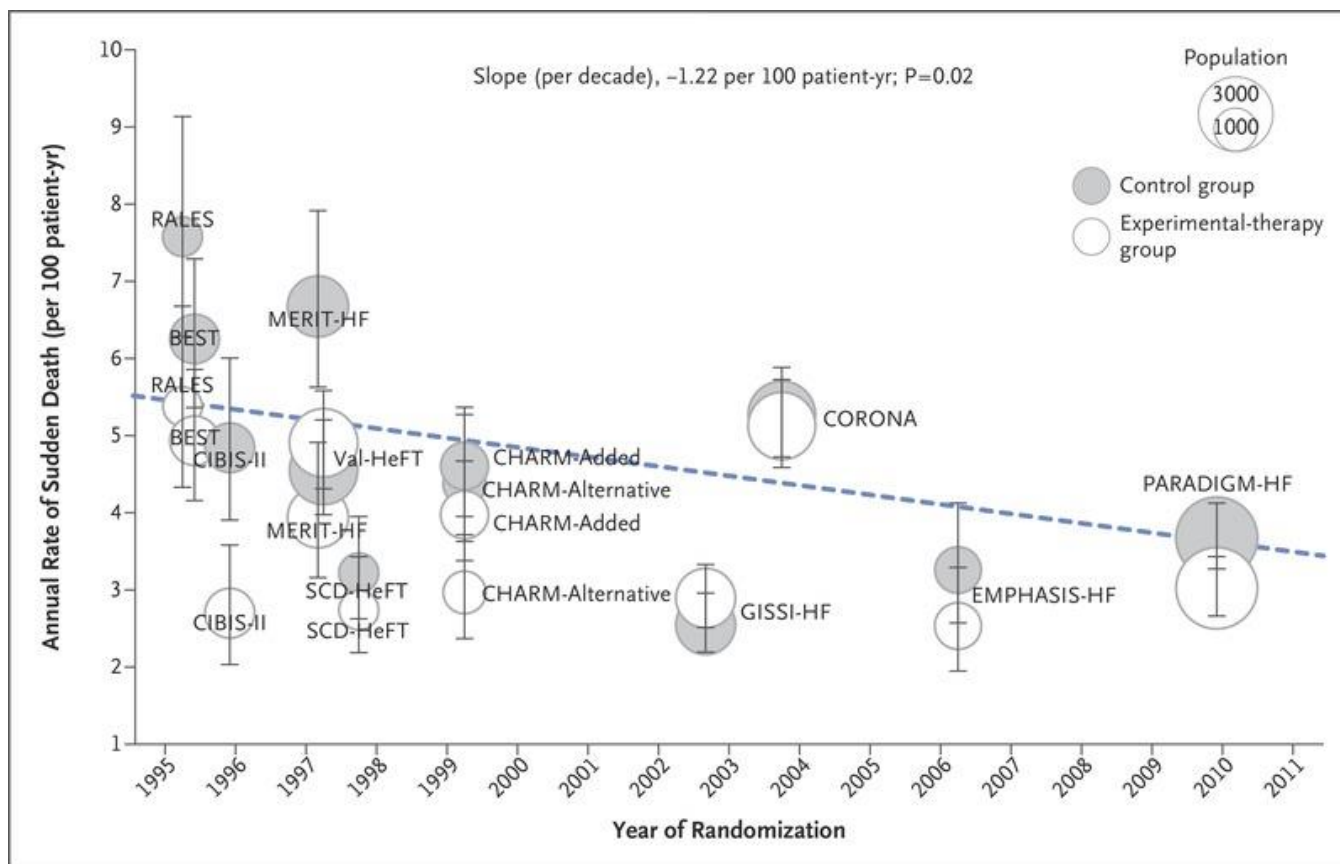


No. at Risk

| | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|
| Amiodarone | 845 | 772 | 715 | 484 | 280 | 97 |
| Placebo | 847 | 797 | 724 | 505 | 304 | 89 |
| ICD therapy | 829 | 778 | 733 | 501 | 304 | 103 |

SCD-HeFT
N Engl J Med
2005;352:225-37

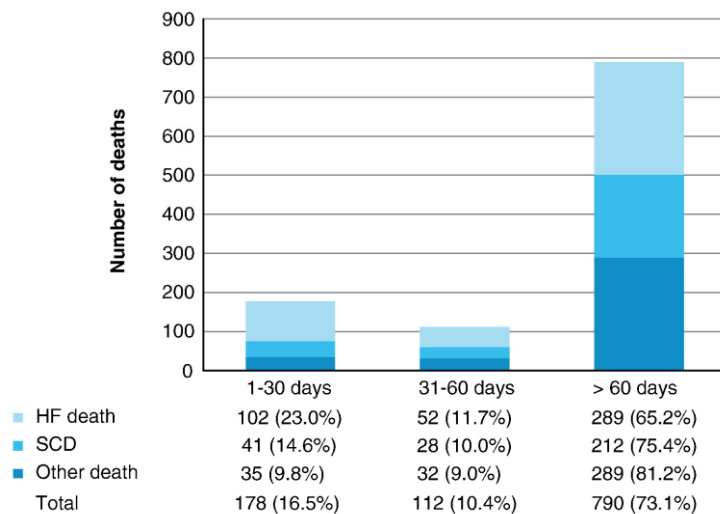
Gjennomsnittsalder
60 år, LVEF 25 %



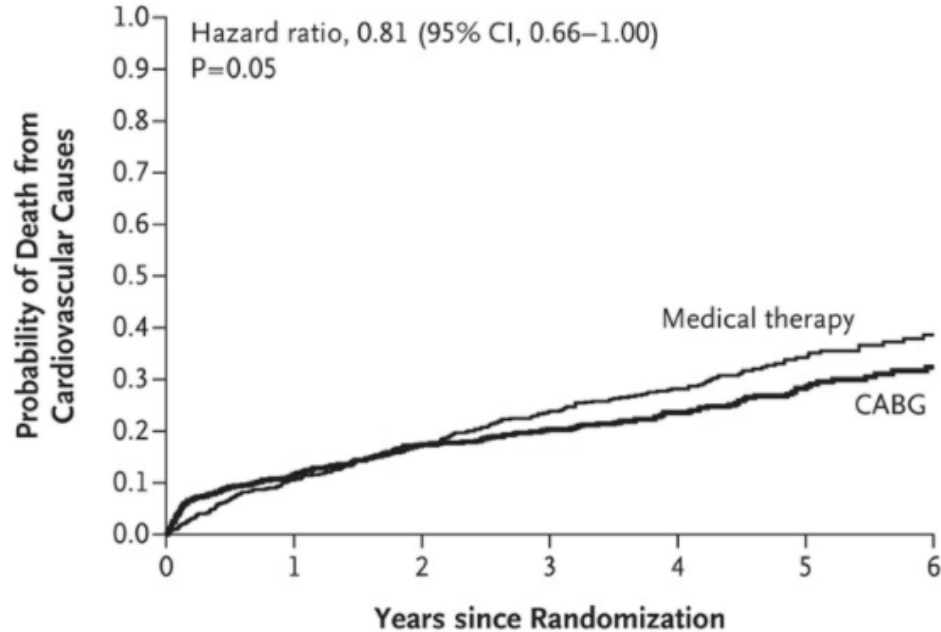
Shen L, et al. Declining Risk of Sudden Death in Heart Failure. N Engl J Med. 2017 Jul 6;377(1):41-51.

Dødsårsaker i EVEREST-studien

Type dødsfall over tid



CM O'Connor Am Heart J 2010; 159:841

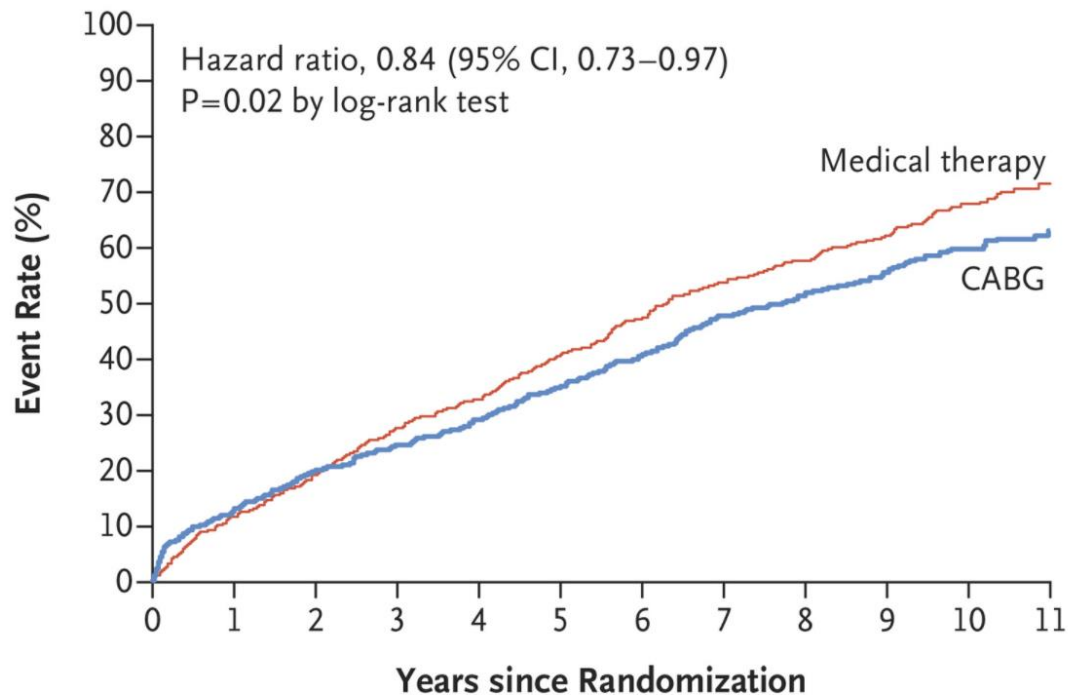
A**No. at Risk**

| | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|----|
| Medical therapy | 602 | 532 | 487 | 435 | 312 | 154 | 80 |
| CABG | 610 | 532 | 486 | 459 | 340 | 174 | 91 |

STICH
N Engl J Med
2011; 364:1607-
1616

Gjennomsnittsalder
60 år, LVEF 28 %

A Death from Any Cause (Primary Outcome)

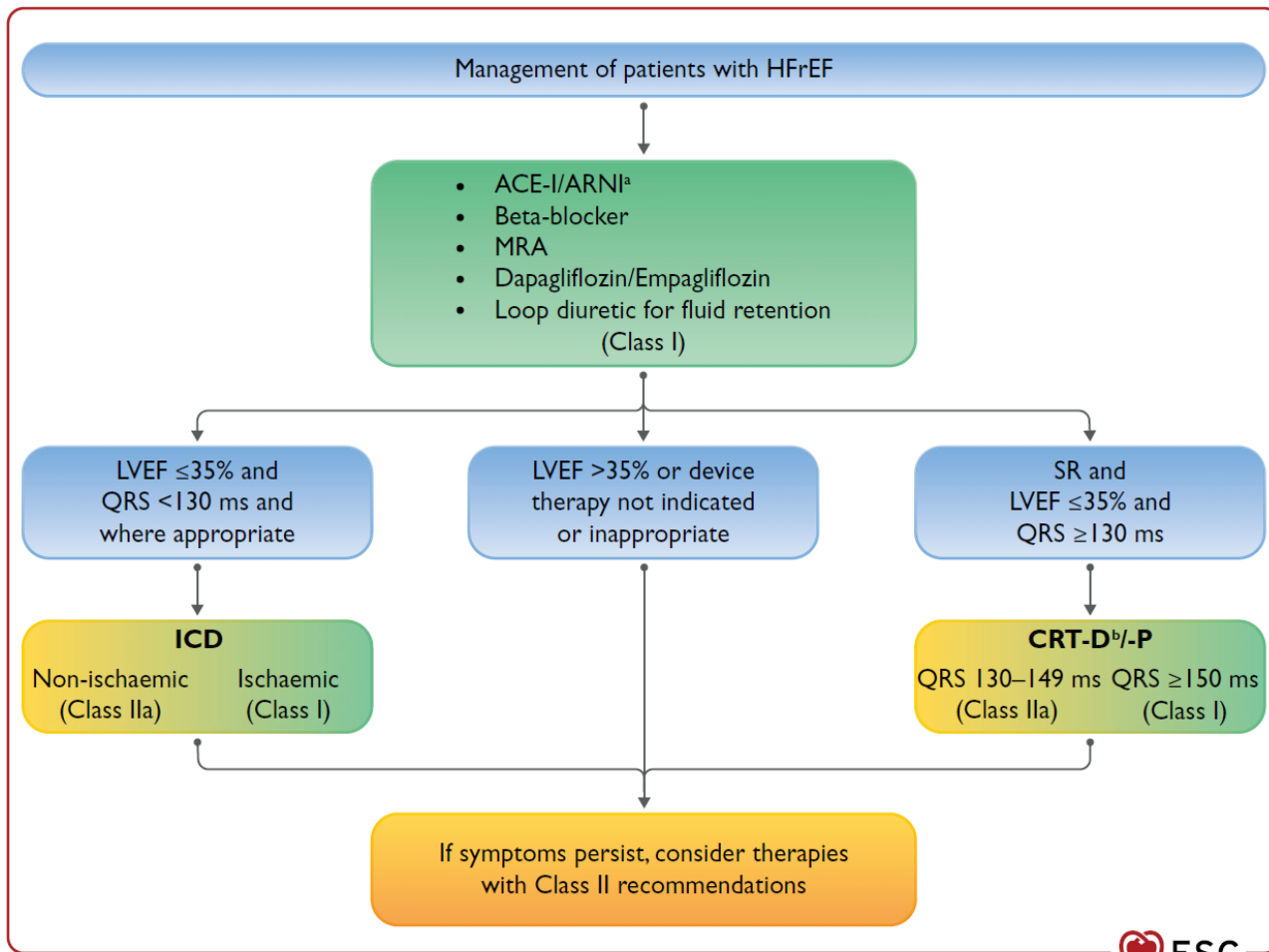


No. at Risk

| | | | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Medical therapy | 602 | 532 | 487 | 435 | 404 | 357 | 315 | 274 | 248 | 164 | 82 | 37 |
| CABG | 610 | 532 | 487 | 460 | 432 | 392 | 356 | 312 | 286 | 205 | 103 | 42 |

STICH 10 years
N Engl J Med
2016; 374:1511-
1520

Gjennomsnittsalder
60 år, LVEF 28 %



Utredning ved hjertesvikt

Heart failure confirmed
Define heart failure phenotype
based on LVEF measurement

CTCA should be considered in patients with a low to intermediate pre-test probability of CAD or those with equivocal non-invasive stress tests

IIa

C

2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes. *Eur Heart J* 2020;**41**:407–477.

Myocardial revascularization is recommended when angina persists despite treatment with antianginal drugs.^{348,357,397}

I

A

with OMT, PCI was associated with no significant improvement in mortality (risk ratio [RR], 0.85; 95% CI, 0.71–1.01), cardiac death (RR, 0.71; 95% CI, 0.47–1.06), nonfatal myocardial infarction (RR, 0.93; 95% CI, 0.70–1.24), or repeat revascularization (RR, 0.93; 95% CI, 0.76–1.14), with consistent results over all follow-up time points. Sensitivity analysis restricted to studies in which there was >50% stent use showed attenuation in the effect size for all-cause mortality (RR, 0.93; 95% CI, 0.78–1.11) with PCI. However, for freedom from angina, there was a significant improved outcome with PCI, as compared with the OMT group (RR, 1.20; 95% CI, 1.06–1.37), evident at all of the follow-up time points.

Determine aetiology and commence treatment

patients with angina despite pharmacological therapy or symptomatic ventricular arrhythmias.⁵

I

B

Percutaneous coronary intervention in stable angina (ORBITA): a double-blind, randomised controlled trial

[Rasha Al-Lamee, MRCP](#) • [David Thompson, MRCPI](#) • [Hakim-Moulay Dehbi, PhD](#) • [Sayan Sen, MRCP](#) • [Kare Tang, FRCP](#) •

[John Davies, MRCP](#) • et al. [Show all authors](#) • [Show footnotes](#)

Published: November 02, 2017 • DOI: [https://doi.org/10.1016/S0140-6736\(17\)32714-9](https://doi.org/10.1016/S0140-6736(17)32714-9) •



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placebo group (dataset for all randomised patients and reasons for missing data are shown in the [appendix](#)). For the primary endpoint, there was no significant difference between groups in terms of increment in exercise time ([table 3](#)). Secondary endpoint analysis showed no significant difference between the groups in the change in the time to 1 mm ST depression ($p=0.164$) or change in peak oxygen uptake (-12.9 mL/min, 95% CI -90.2 to 64.3 , $p=0.741$). The results of cardiopulmonary testing are shown in [table 3](#). Symptoms were assessed with the Seattle Angina Questionnaire and EQ-5D-5L questionnaire ([table 3](#)). During the randomised blinded period there were no significant differences between groups in the change from pre-randomisation to follow-up in Seattle physical limitation score (2.4 , 95% CI -3.5 to 8.3 , $p=0.420$), Seattle angina frequency (3.5 , -2.6 to 9.6 , $p=0.260$), and Seattle angina stability score (0.9 , -8.4 to 10.2 , $p=0.851$). There was also no significant difference between the groups in the change in EQ-5D-5L



Utredning ved hjertebank

- **God anamnese!**
- **EKG**
- **Langtids-EKG – hvor lenge avhenger av hyppighet**
- **Loop-recorder?**
- **A-EKG?**



Utredning ved svimmelhet

- **God anamnese!**
- **Blodtrykksmåling**
- **Ortostatisk blodtrykksmåling**
 - **Liggende**
 - **Sittende**
 - **Stående**
- **24-timers EKG?**
- **Vurdere ikke-kardiale årsaker – ØNH? Nevrolog?**

Utredning ved synkope

- **Ved Adam-Stokes-anfall: Innleggelse!**
- **EKG**
- **Ekko**
- **Rytmeovervåking**
- **A-EKG**

Oppsummering

- **Hjertebank, svimmelhet og særlig synkope kan skyldes alvorlig arytmi, som er assosiert med høy dødelighet**
- **Bør utredes**
- **Ved brystsmerter hos sviktpasienter må man tenke koronarsykdom**
- **Bør kanskje behandles?**

Hjertebank, svimmelhet, synkope og brystmerter

**gode indikasjoner for videre utredning av
hjertesviktpasienten?**

- **Sannsynligvis, men evidensgrunnlaget er tynt**
- **Det viktigste er å gi optimal behandling ihht guidelines!**