Srdeční selhání update guidelines 2023

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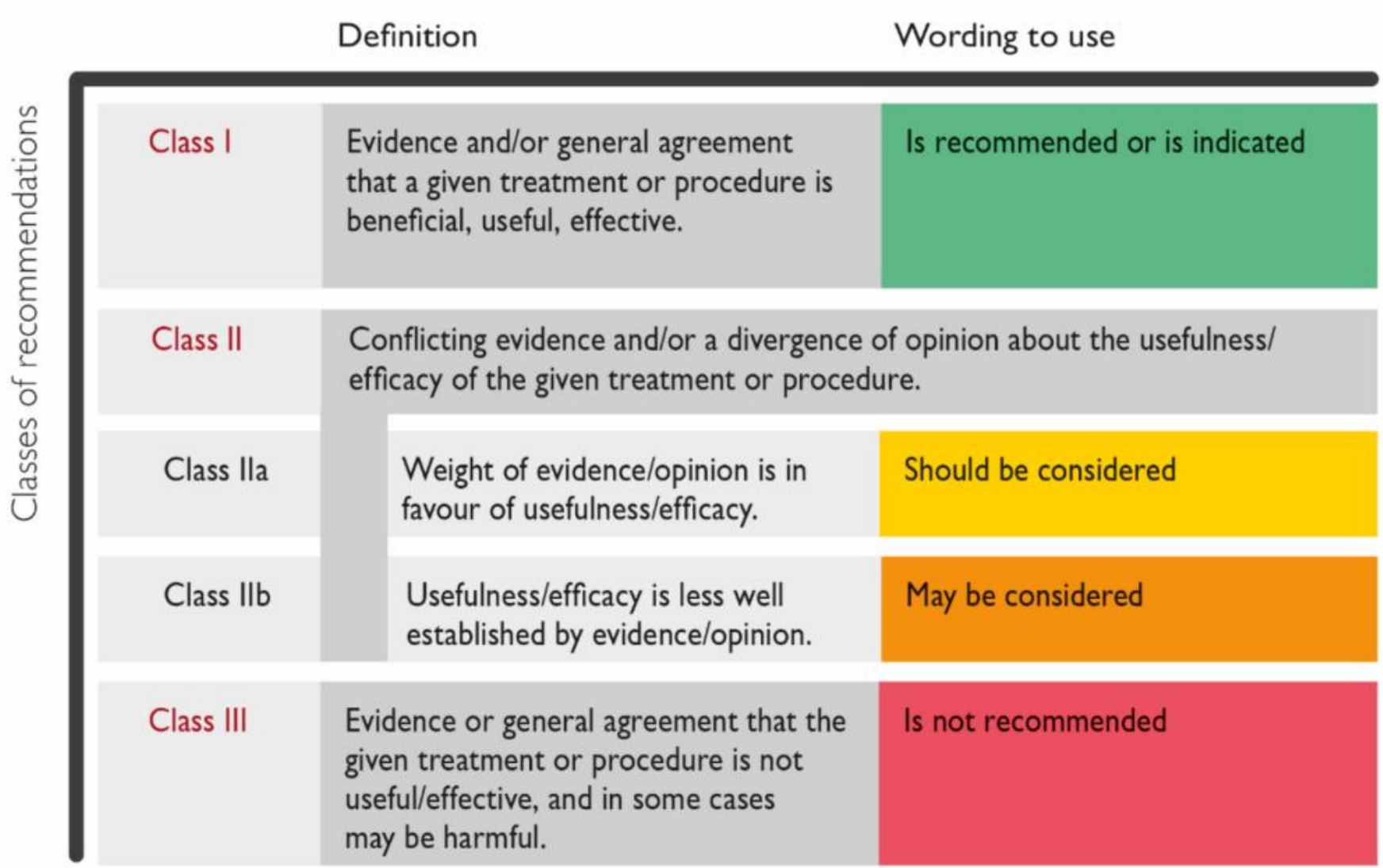
Hlavní novinky

- **Rozšíření indikací léků specificky pro HFmrEF**

- **Dekongesce !**
- **Časné kontroly po dimisi pro akutní HF**
- **Zásah do etiopatogeneze HF**
- **Železo**

ESC Classes of recommendations



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(European Heart Journal; 2023 – doi:10.1093/eurheartj/ehad195)

ESC Levels of evidence

Level of evidence A	Data derived from multiple randomized clinical trials or meta-analyses.
Level of evidence B	Data derived from a single randomized clinical trial or large non-randomized studies.
Level of evidence C	Consensus of opinion of the experts and/or small studies, retrospective studies, registries.

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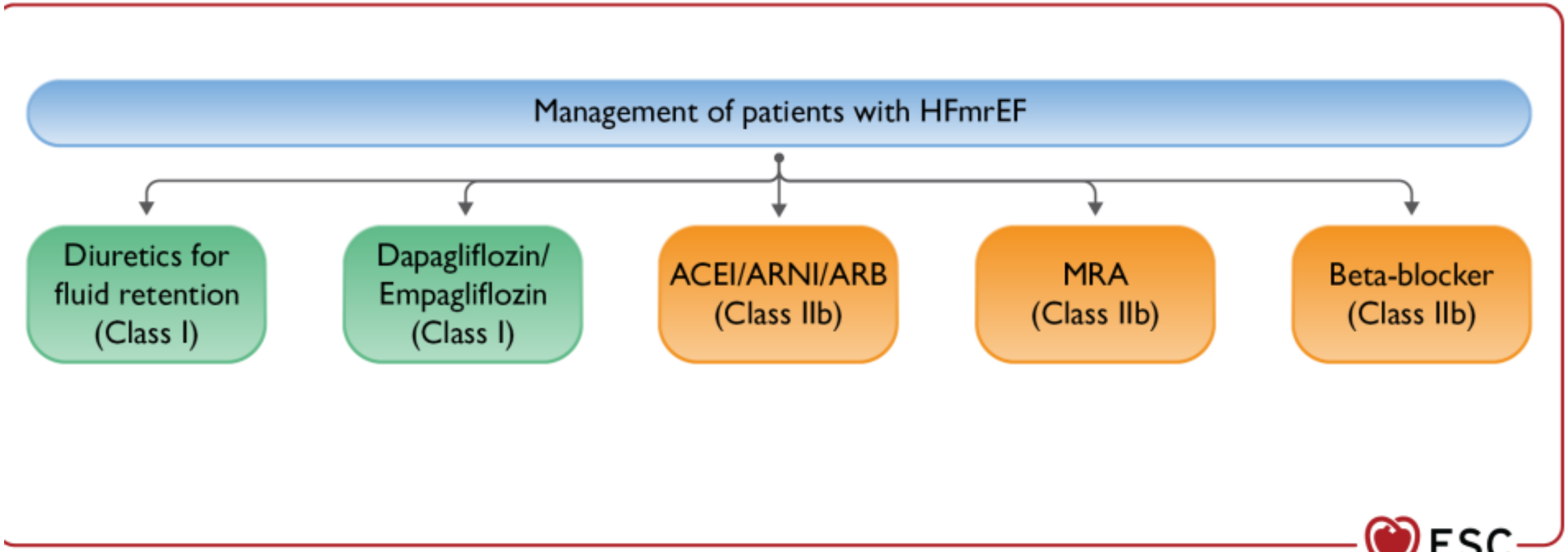
Rozšíření indikací dle fenotypu srdečního selhání

Léky u HFmrEF



HFpEF

- **IA: diuretika při retenci tekutin**
- **IA: empagliflozin/dapagliflozin**
- **IA: léčba etiologie**

Prevence HF u CKD+DM 2.typu

- **SGLT2i: EMPA-CKD, DAPA-KIDNEY**
- **IA indikovány u diabetiků 2.typu s rizikem KC příhod k redukci hospitalizací pro HF, major CV events, ESKD a CV úmrtí**
- **IA: HFrEF+T2DM**

Prevence HF in CKD+T2DM

- **Finerenon studie FIDELIO-DKD, FIGARO-DKD (kompozitní CV outcome)**

- **IA pro T2DM+CKD – ke snížení rizika hospitalizací pro srdeční selhání**

Akutní srdeční selhání

- **Studie zmíněné, ale bez doporučení:**
- **ADVOR: i.v. acetazolamid k furosemidu k rychlejší dekongesci, neutrální efekt na rehospitalizace/úmrtí**
- **CLOROTIC: HCTZ 25-100 mg denně k furosemidu: rychlejší dekongesce, vyšší s-krea**
- **EMPULSE: časné podání empagliflozinu - "klinický benefit"**
- **Dictate-AHF: časné podání dapagliflozinu**

Akutní srdeční selhání
Dekongesce!

Recommendations for management of patients after HF hospitalization	
It is recommended that patients hospitalized for HF be carefully evaluated to exclude persistent signs of congestion before discharge and to optimize oral treatment.	I
It is recommended that evidence-based oral medical treatment be administered before discharge.	I
An early follow-up visit is recommended at 1–2 weeks after discharge to assess signs of congestion, drug tolerance, and start and/or uptitrate evidence-based therapy.	I

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McDonagh TA, Metra M et al, Eur Heart J and Eur J Heart Failure 2021

Studie STRONG-HF

Akutní srdeční selhání
Dekongesce

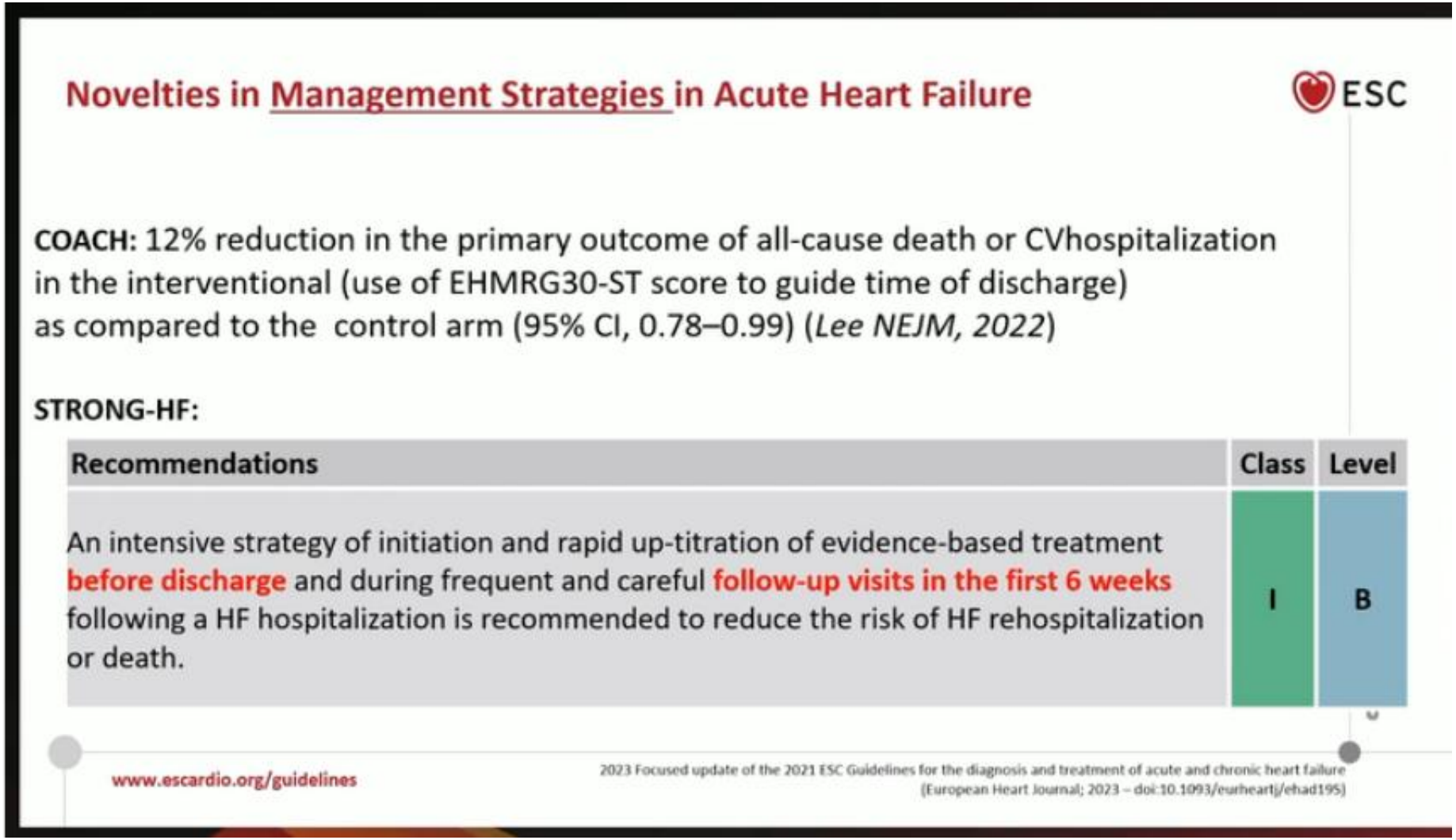
Čistá ultrafiltrace k urychlení dekongesce u

rezistence na furosemid

Lze i ambulantně

Srivbastava M. et al. Cochrane Databse Syst Rev. 2022

Akutní srdeční selhání
Časné kontroly po dimisi



Novelties in Management Strategies in Acute Heart Failure

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COACH: 12% reduction in the primary outcome of all-cause death or CVhospitalization in the interventional (use of EHMRG30-ST score to guide time of discharge) as compared to the control arm (95% CI, 0.78–0.99) (*Lee NEJM, 2022*)

STRONG-HF:

Recommendations	Class	Level
An intensive strategy of initiation and rapid up-titration of evidence-based treatment **before discharge** and during frequent and careful **follow-up visits in the first 6 weeks** following a HF hospitalization is recommended to reduce the risk of HF rehospitalization or death.	I	B

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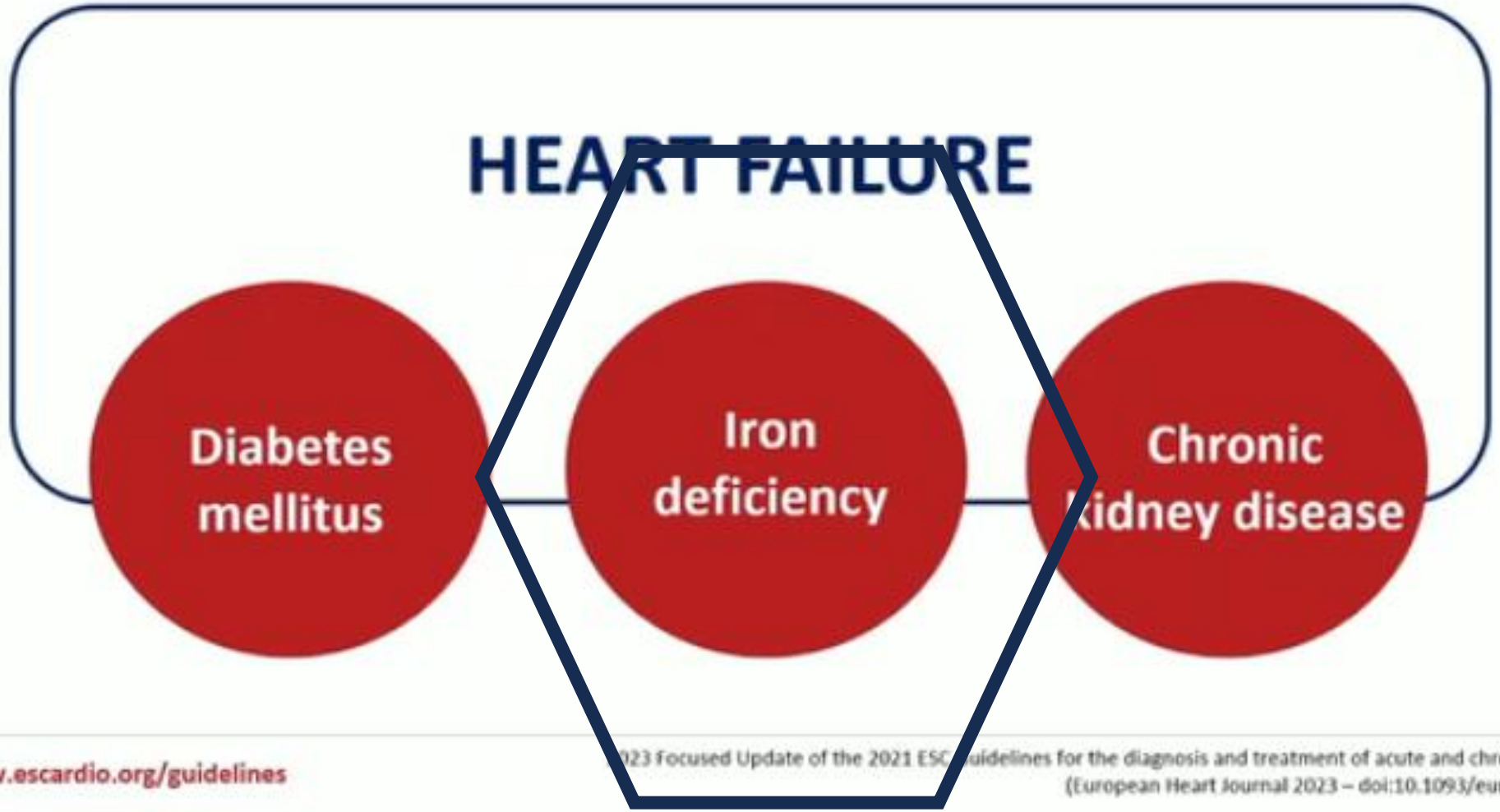
Multidimensional multidirectional pathophysiological interactions between HF and metabolic comorbidities



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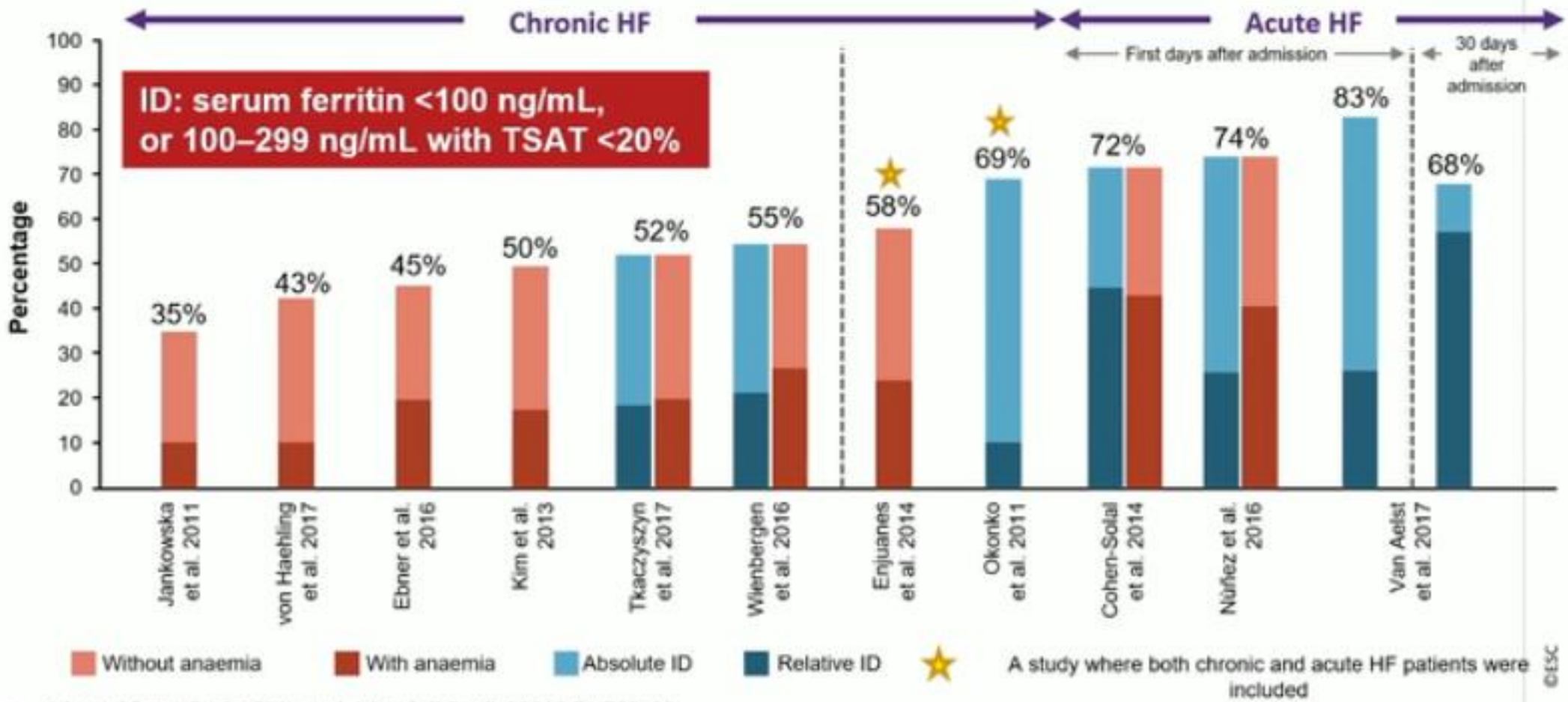
Iron deficiency (ID) is common in HF, especially in acute HF



Adapted from: Rocha BML et al. J Am Coll Cardiol 2018;71:782–93.

ID-induced mitochondrial dysfunction may contribute to HF symptoms and HF progression

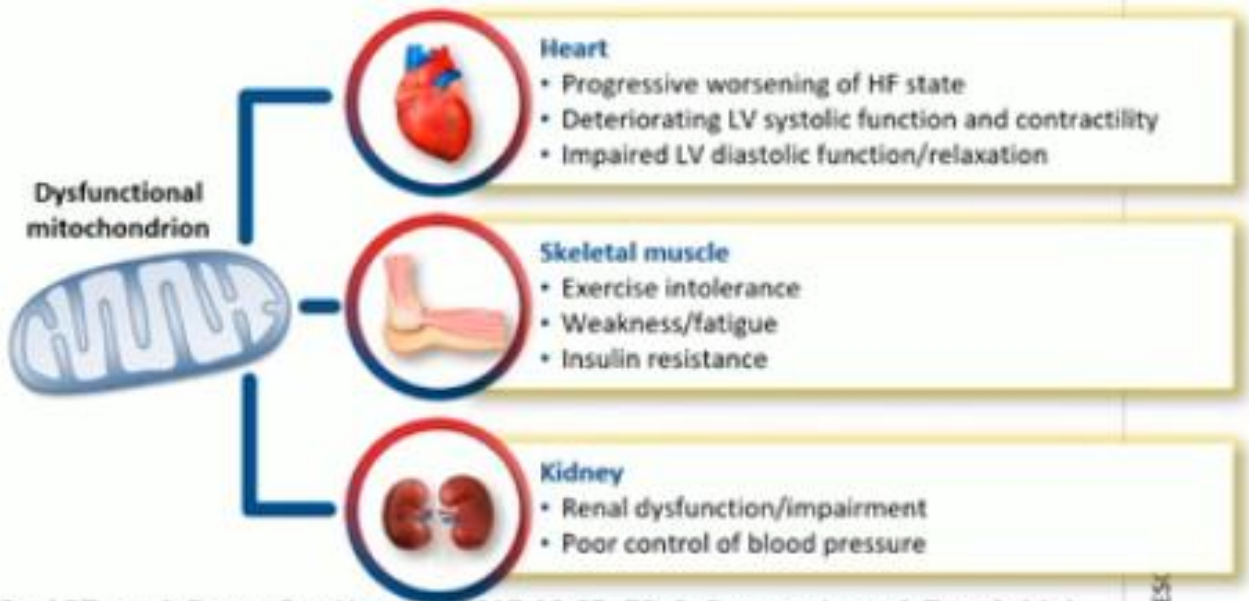
Mitochondria are major sites of iron utilisation and accumulation

Daily human energy consumption[2]

kcal/kg/day[1]	Organ/Tissue
>400	Kidney Heart
>200	Brain
>150	Liver
<50	Skeletal muscle Residual mass Adipose tissue

Metabolic rate

Dysfunctional mitochondrial energy production may account for many common HF symptoms[3]



1. Paul BT, et al. Expert Rev Hematol 2017;10:65–79; 2. Boyman L, et al. Trends Mol Med 2020;26:21–39; 3. Brown D, et al. Nat Rev Cardiol 2017;14:238–50

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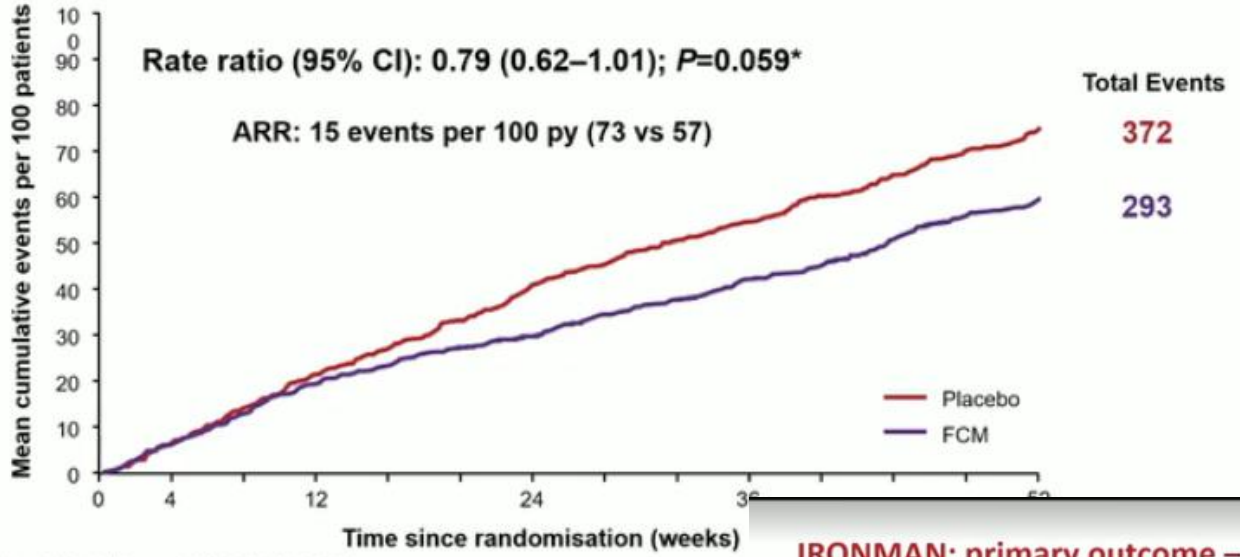
AFFIRM-AHF: primary endpoint - total HF hospitalisations and CV death



Ponikowski P et al. Lancet 2020;396:1895–904

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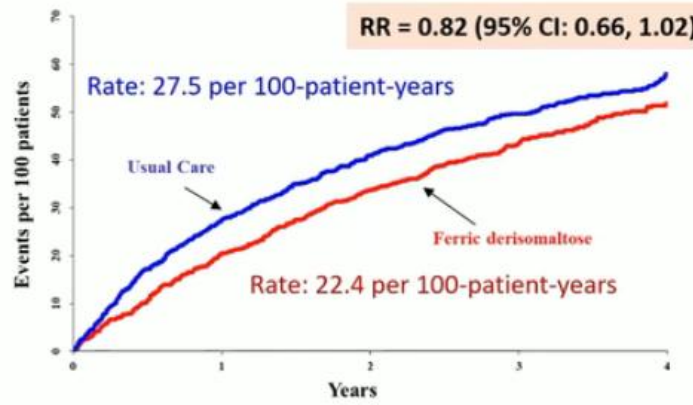
IRONMAN: primary outcome – recurrent HF hospitalisations and CV death



Number at risk					
Ferric derisomaltose	569	485	405	237	86
Usual Care	568	483	406	227	87

Kalra PR et al. Lancet 2022 Nov 4;S0140-6736(22)02083-9.

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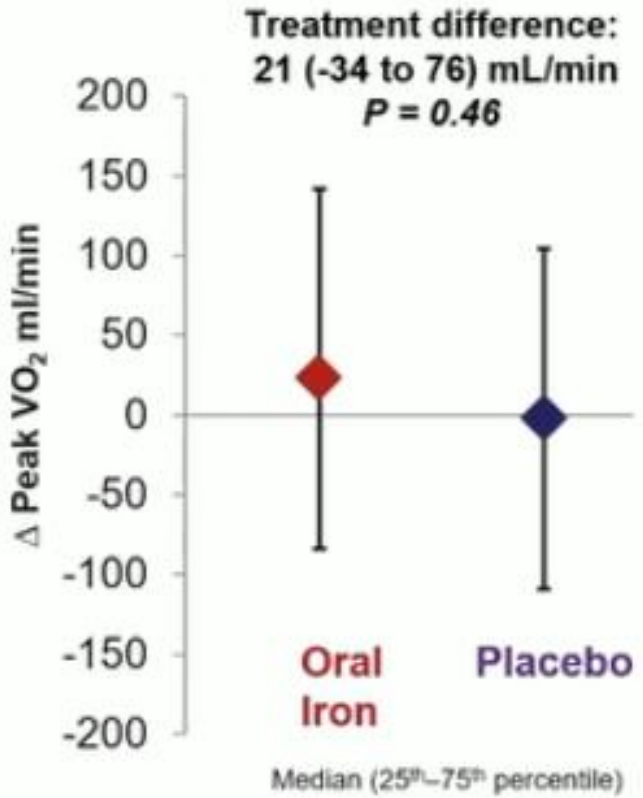
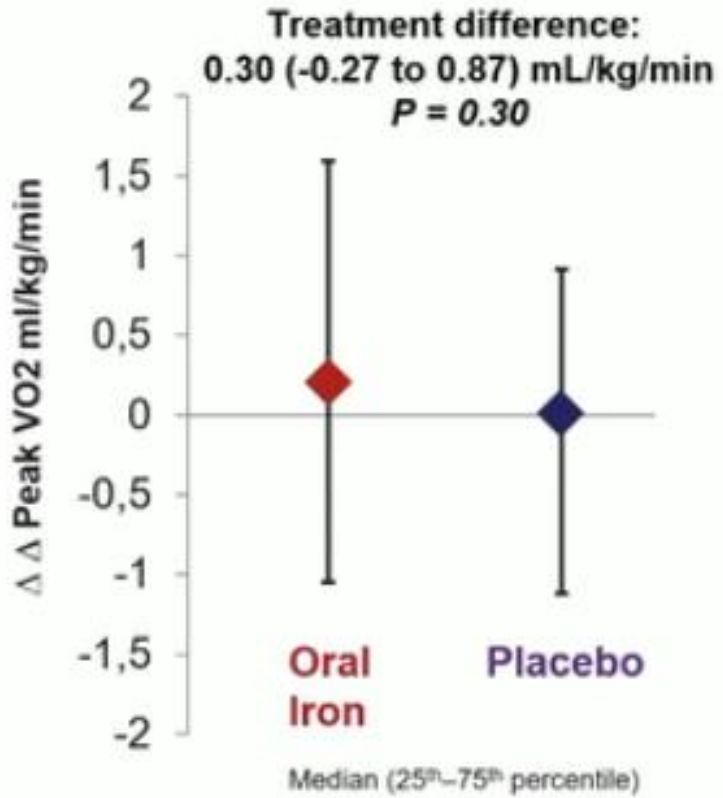
IRON-OUT: oral iron (iron polysaccharide) does not improve exercise capacity in patients with HFrEF + ID





Lewis GD, et al. JAMA 2017;317:1958–66

Recommendations for the management of iron deficiency in patients with heart failure

Recommendations	Class	Level
Intravenous iron supplementation is recommended in symptomatic patients with HFrEF and HFmrEF and iron deficiency, to alleviate HF symptoms and improve quality of life.	I	A
Intravenous iron supplementation with ferric carboxymaltose or ferric derisomaltose should be considered in symptomatic patients with HFrEF and HFmrEF and iron deficiency to reduce the risk of HF hospitalization.	IIa	A

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