Jeudi d'Unisanté

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Prise en charge ambulatoire de l'HFpEF

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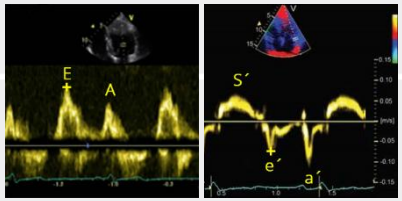
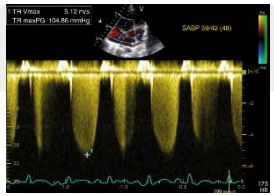
CHUV

HFpEF: définition et critères diagnostiques

- Signes et symptômes d'insuffisance cardiaque
- **FEVG ≥ 50%**
- Preuve d'anomalies **structurelles** ou **fonctionnelles** en faveur d'une élévation des pressions de remplissage gauche (mesures échocardiographiques, invasives, biologiques : BNP)

Parameter[a]	Threshold	Comments
LV mass index **Relative wall thickness**	≥**95** g/m^2 (Female), ≥**115** g/m^2 (Male) >**0.42**	Although the presence of concentric LV remodelling or hypertrophy is supportive, the absence of LV hypertrophy does not exclude the diagnosis of HFpEF
LA volume index[a]	>**34** mL/m^2 (SR) 	In the absence of AF or valve disease, LA enlargement reflects chronically elevated LV filling pressure (in the presence of AF, the threshold is >40 mL/m^2)
E/e' ratio at rest[a]	>**9**	Sensitivity 78%, specificity 59% for the presence of HFpEF by invasive exercise testing, although reported accuracy has varied. A higher cut-off of 13 had lower sensitivity (46%) but higher specificity (86%).[71,259,274]
NT-proBNP **BNP**	>**125** (SR) or >**365** (AF) pg/mL >**35** (SR) or >**105** (AF) pg/mL	Up to 20% of patients with invasively proven HFpEF have NPs below diagnostic thresholds, particularly in the presence of obesity
PA systolic pressure **TR velocity at rest**[a]	>**35** mmHg >**2.8** m/s 	Sensitivity 54%, specificity 85% for the presence of HFpEF by invasive exercise testing[259,261]

Excellence valeur prédictive négative !

ESC guidelines heart failure 2021

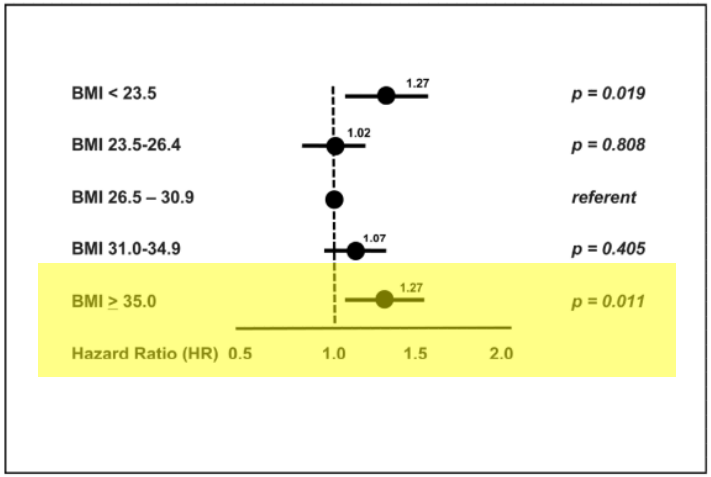
HFpEF: facteurs de risque

Table 2 | Epidemiological cohort studies reporting the incidence of HFpEF

Cohort study	Mean age at entry (years)	12-year cumulative incidence of HF (%)	Proportion with HFpEF (%)
Cardiovascular Health Study[113]	73	13.7	53.3
Framingham Heart Study[114,115]	58	6.7	46.5
PREVEND[116]	49	4.2	36.9

Risk factor for incident HFpEF	Subdistribution HR (95% CI)	*P* value
HFpEF		
Age (per 10 years)	1.90 (1.74–2.07)	<0.0001
Male sex	0.93 (0.78–1.11)	0.43
Systolic blood pressure (per 20 mmHg)	1.14 (1.05–1.24)	0.003
Body mass index (per 4 kg/m²)	1.28 (1.21–1.37)	<0.0001
Antihypertensive treatment	1.42 (1.18–1.71)	0.0002
Previous myocardial infarction	1.48 (1.12–1.96)	0.006

Dunlay et al. Nat Rev Cardiol. 2017



Haass et al. Circ Heart Fail. 2011

HFpEF: facteurs de risque – probabilité

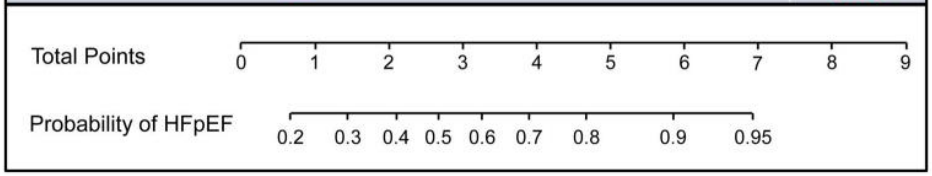
Table 1 Risk factors and findings consistent with heart failure with preserved ejection fraction in a symptomatic patient

- Advanced age (age ≥ 70 in men or ≥ 75 in women)
- Overweight/obesity
- Metabolic syndrome/diabetes mellitus
- Physical inactivity/deconditioning
- Arterial hypertension
- Atrial fibrillation
- ECG abnormalities (beyond atrial fibrillation)
- Elevated natriuretic peptide levels (if available, BNP ≥ 35 pg/mL or NT-proBNP ≥ 125 pg/mL)

BNP, brain natriuretic peptide; NT-proBNP, N-terminal pro-brain natriuretic peptide.

ESC guidelines heart failure 2021

	Clinical Variable	Values	Points
H_2	**H**eavy	Body mass index > 30 kg/m^2	2
	Hypertensive	2 or more antihypertensive medicines	1
F	Atrial **F**ibrillation	Paroxysmal or Persistent	3
P	**P**ulmonary Hypertension	Doppler Echocardiographic estimated Pulmonary Artery Systolic Pressure > 35 mmHg	1
E	**E**lder	Age > 60 years	1
F	**F**illing Pressure	Doppler Echocardiographic E/e' > 9	1
H_2FPEF score			Sum (0-9)



Reddy et al. Circulation. 2018 Aug 28;138(9):861-870.

Diagnostic de l'HFpEF : un challenge – aussi pour le spécialiste

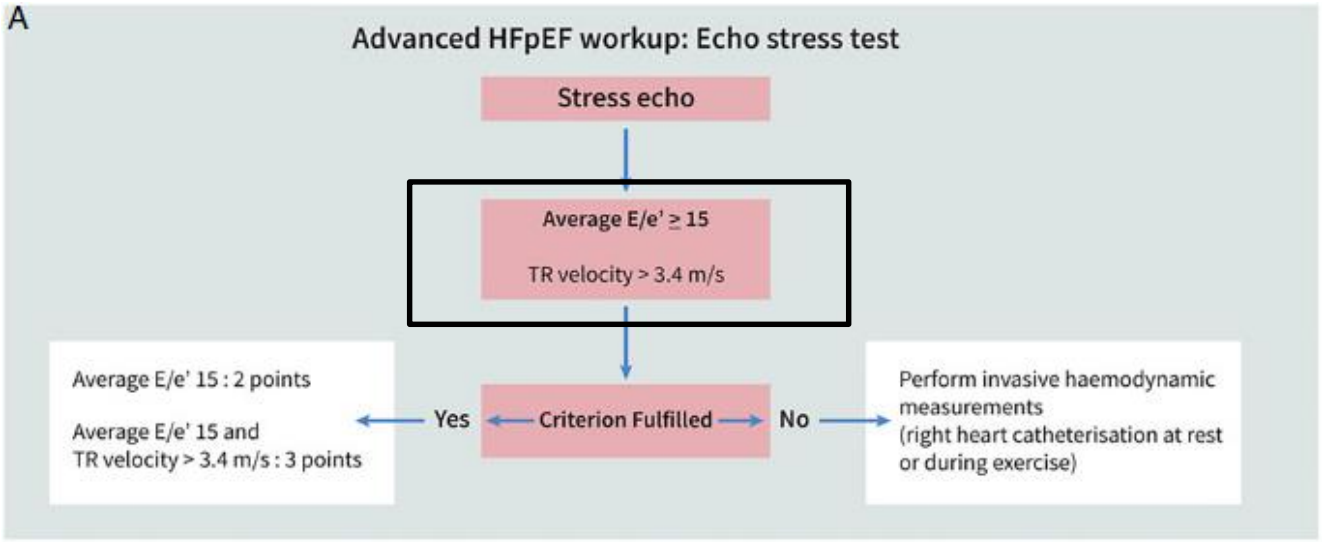
HFA-PEFF score

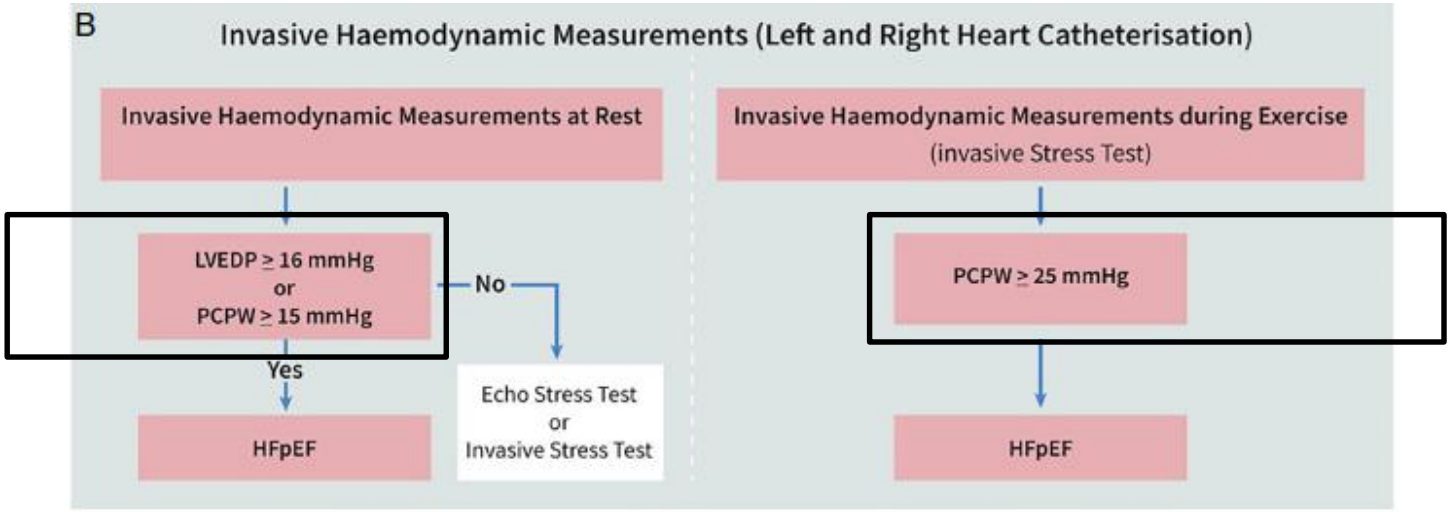
	Functional	Morphological	Biomarker (SR)	Biomarker (AF)
Major	septal e' < 7 cm/s or lateral e' < 10 cm/s or Average E/e' ≥ 15 or TR velocity > 2.8 m/s (PASP > 35 mmHg)	LAVI > 34 ml/m² or LVMI ≥ 149/122 g/m² (m/w) and RWT > 0,42 #	NT-proBNP > 220 pg/ml or BNP > 80 pg/ml	NT-proBNP > 660 pg/ml or BNP > 240 pg/ml
Minor	Average E/e' 9 -14 or GLS < 16 %	LAVI 29-34 ml/m² or LVMI > 115/95 g/m² (m/w) or RWT > 0,42 or LV wall thickness ≥ 12 mm	NT-proBNP 125-220 pg/ml or BNP 35-80 pg/ml	NT-proBNP 365-660 pg/ml or BNP 105-240 pg/ml

Major Criteria: 2 points	≥ 5 points: HFpEF
Minor Criteria: 1 point	2-4 points: Diastolic Stress Test or Invasive Haemodynamic Measurements

Pieske et al. Eur Heart J. 2019 Oct 21;40(40):3297-3317.

Diagnostic de l'HFpEF : examens avancés ?



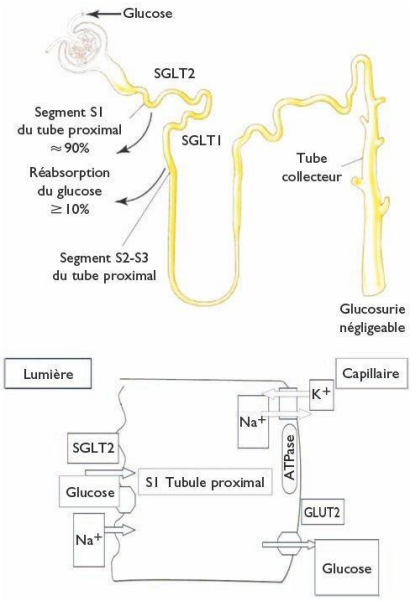


Suspicion d'HFpEF : bilan général

- **ECG 12 pistes** (FA ? HVG ? Ondes Q …)
- **Bilan biologique :**
  - FSS (Hb !)
  - Bilan martial (fer, ferritine, transferrine, coef. sat. transferrine)
  - Fonction rénale, électrolytes, tests hépatiques
  - (NT-pro)-BNP
  - TSH
- **Rx Thorax**
- **HTA – MAPA ?**
- **+/- Fonctions pulmonaires** (particulièrement si tabagisme chronique)

Anémie ? Carence martiale ? Pneumopathie ?
HTA ? Bien contrôlée ?

Traitement de l'HFpEF: Empagliflozine (EMPEROR-PRESERVED)



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 OCTOBER 14, 2021 VOL. 385 NO. 16

Empagliflozin in Heart Failure with a Preserved Ejection Fraction

S.D. Anker, J. Butler, G. Filippatos, J.P. Ferreira, E. Bocchi, M. Böhm, H.-P. Brunner–La Rocca, D.-J. Choi, V. Chopra, E. Chuquiure-Valenzuela, N. Giannetti, J.E. Gomez-Mesa, S. Janssens, J.L. Januzzi, J.R. Gonzalez-Juanatey, B. Merkely, S.J. Nicholls, S.V. Perrone, I.L. Piña, P. Ponikowski, M. Senni, D. Sim, J. Spinar, I. Squire, S. Taddei, H. Tsutsui, S. Verma, D. Vinereanu, J. Zhang, P. Carson, C.S.P. Lam, N. Marx, C. Zeller, N. Sattar, W. Jamal, S. Schnaidt, J.M. Schnee, M. Brueckmann, S.J. Pocock, F. Zannad, and M. Packer, for the EMPEROR-Preserved Trial Investigators*

Empagliflozine 10 mg/j vs placebo chez n=5988 patients :

- IC symptomatique et chronique (min. 3 mois)
- FEVG > 40% (env. 1/3 avec FEVG < 50%)
- NT-proBNP > 300 pg/ml ou > 900 pg/ml si FA
- Anomalies structurelles ou s/p hospitalisation pour IC
- env. 50% de diabétiques

Exclus : eGFR < 20 ml/min, TAs < 100 mmHg

Issue primaire : mortalité CV ou hospitalisation pour IC
Suivi moyen = 26 mois

Traitement de l'HFpEF: Empagliflozine (EMPEROR-PRESERVED)

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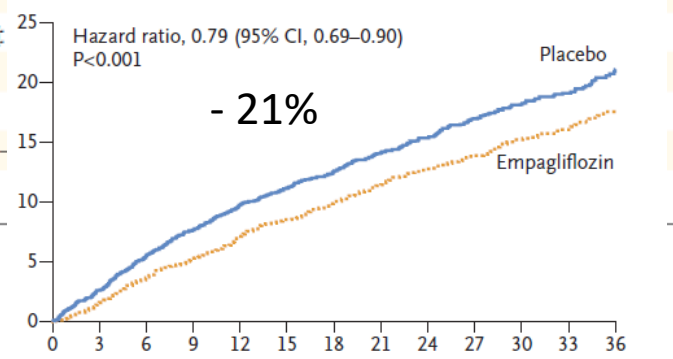
Table 2. Primary and Secondary Cardiovascular Outcomes.*

Variable	Empagliflozin (N=2997)	events per 100 patient-yr	Placebo (N=2991)	events per 100 patient-yr	Hazard Ratio or Difference (95% CI)	P Value
Primary composite outcome — no. (%)	415 (13.8)	6.9	511 (17.1)	8.7	0.79 (0.69–0.90)	<0.001
Hospitalization for heart failure	259 (8.6)	4.3	352 (11.8)	6.0	0.71 (0.60–0.83)	
Cardiovascular death	219 (7.3)	3.4	244 (8.2)	3.8	0.91 (0.76–1.09)	
Secondary outcomes specified in hierarchical testing procedure						
Total no. of hospitalizations for heart failure	407	—	541	—	0.73 (0.61–0.88)	<0.001
eGFR (CKD-EPI) mean slope change per year — ml/min/1.73 m²†	−1.25±0.11	—	−2.62±0.11	—	1.36 (1.06–1.66)	<0.001
Other prespecified analyses						
Change in KCCQ clinical summary score at 52 wk‡				—	1.32 (0.45–2.19)	
Total no. of hospitalizations for any cause				—	0.93 (0.85–1.01)	
Composite renal outcome — no. (%)				2.2	0.95 (0.73–1.24)	
Onset of new diabetes in patients with prediabetes –				7.4	0.84 (0.65–1.07)	
Death from any cause — no. (%)				6.7	1.00 (0.87–1.15)	



Traitement de l'HFpEF: Empagliflozine (EMPEROR-PRESERVED)

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Subgroup	Empagliflozin	Placebo	Hazard Ratio (95% CI)
	no. of patients with events/total no.		
Overall	415/2997	511/2991	0.79 (0.69–0.90)
Diabetes at baseline			
Yes	239/1466	291/1472	0.79 (0.67–0.94)
No	176/1531	220/1519	0.78 (0.64–0.95)
LVEF at baseline			
<50%	145/995	193/988	0.71 (0.57–0.88)
≥50% to <60%	138/1028	173/1030	0.80 (0.64–0.99)
≥60%	132/974	145/973	0.87 (0.69–1.10)
Age			
<70 yr	134/1066	152/1084	0.88 (0.70–1.11)
≥70 yr	281/1931	359/1907	0.75 (0.64–0.87)
Sex			
Male	253/1659	297/1653	0.81 (0.69–0.96)
Female	162/1338	214/1338	0.75 (0.61–0.92)

Traitement de l'HFpEF: Empagliflozine (EMPEROR-PRESERVED

TABLE S6. SELECTED ADVERSE EVENTS OF INTEREST

	Empagliflozin (n=2996) N (%)	Placebo (n=2989) N (%)
Patients with any adverse event	2574 (85.9)	2585 (86.5)
Patients with any serious adverse event	1436 (47.9)	1543 (51.6)
Selected adverse events of interest		
Hypotension	311 (10.4)	257 (8.6)
Symptomatic hypotension[a]	197 (6.6)	156 (5.2)
Acute renal failure	363 (12.1)	384 (12.8)
Ketoacidosis[b]	4 (0.1)	5 (0.2)
Hepatic injury	115 (3.8)	155 (5.2)
Hypoglycemic events[c]	73 (2.4)	78 (2.6)
In patients with diabetes mellitus	63 (4.3)	66 (4.5)
In patients without diabetes mellitus	10 (0.7)	12 (0.8)
Urinary tract infections	297 (9.9)	243 (8.1)
Complicated urinary tract infections	57 (1.9)	45 (1.5)
Genital infections	67 (2.2)	22 (0.7)
Complicated genital infections	8 (0.3)	8 (0.3)

Systolic blood pressure (mm Hg) – mean (SE) – 1.8 ± 0.3 – 0.6 ± 0.3 – 1.2 (–2.1 to -0.3)

Traitement de l'HFpEF: Dapagliflozine (DELIVER-HF)

ORIGINAL ARTICLE

Dapagliflozin in Heart Failure with Mildly Reduced or Preserved Ejection Fraction

S.D. Solomon, J.J.V. McMurray, B. Claggett, R.A. de Boer, D. DeMets, A.F. Hernandez, S.E. Inzucchi, M.N. Kosiborod, C.S.P. Lam, F. Martinez, S.J. Shah, A.S. Desai, P.S. Jhund, J. Belohlavek, C.-E. Chiang, C.J.W. Borleffs, J. Comin-Colet, D. Dobreanu, J. Drozdz, J.C. Fang, M.A. Alcocer-Gamba, W. Al Habeeb, Y. Han, J.W. Cabrera Honorio, S.P. Janssens, T. Katova, M. Kitakaze, B. Merkely, E. O'Meara, J.F.K. Saraiva, S.N. Tereshchenko, J. Thierer, M. Vaduganathan, O. Vardeny, S. Verma, V.N. Pham, U. Wilderäng, N. Zaozerska, E. Bachus, D. Lindholm, M. Petersson, and A.M. Langkilde, for the DELIVER Trial Committees and Investigators*

Dapagliflozine 10 mg/j vs placebo chez n=6263 patients :

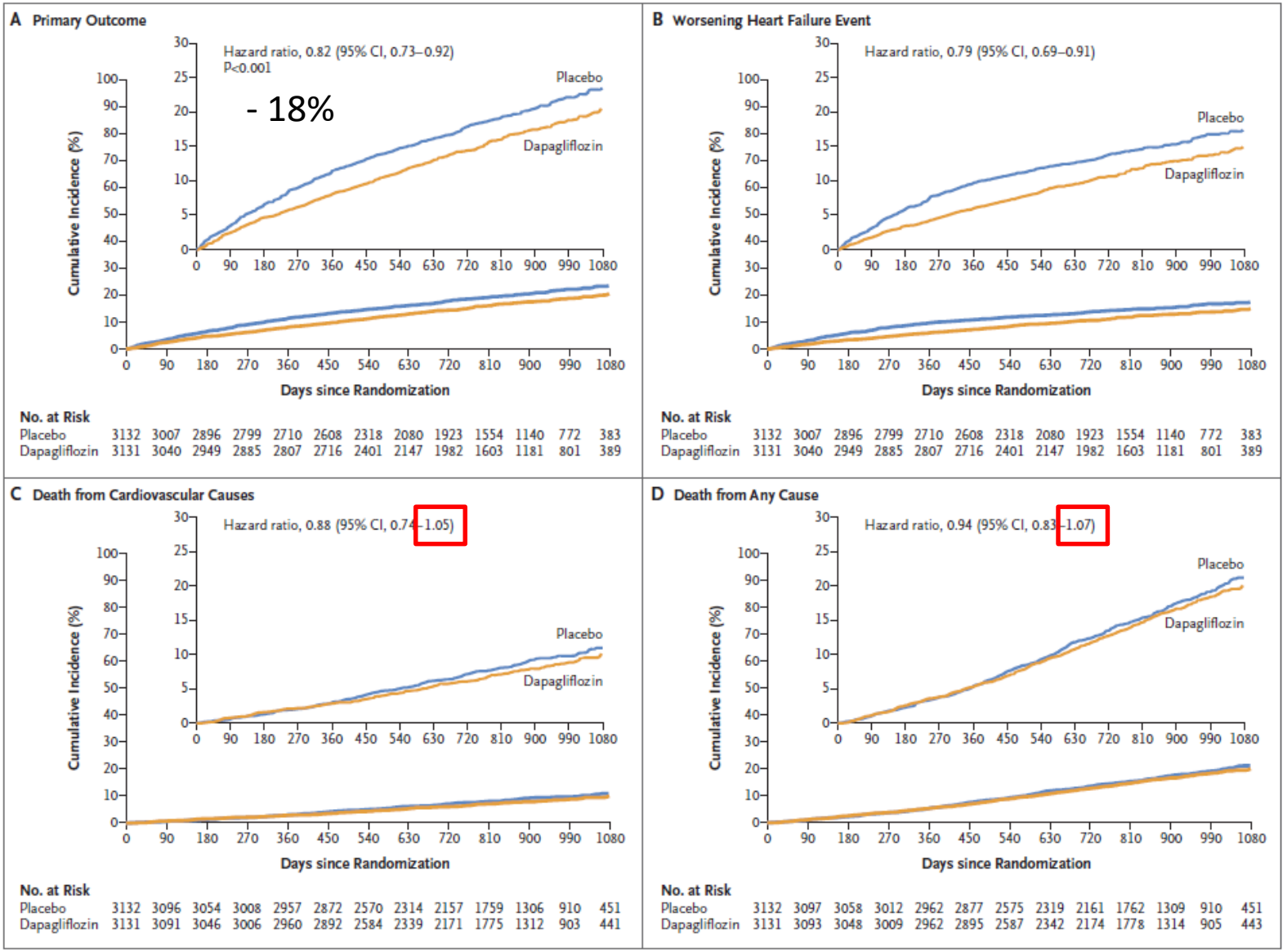
- IC chronique symptomatique (min. 3 mois)
- FEVG > 40% (env. 1/3 avec FEVG < 50%)
  - 18% avec FE préalablement < 40% («HFimpEF»)
- NT-proBNP > 300 pg/ml ou > 600 pg/ml si FA
- Anomalies structurelles (OG, VG)
- Env. 50% de diabétiques

Exclus : eGFR <25 ml/min, TAs <95 mmHg

Issue primaire : mortalité CV ou hospit. pour IC ou visite urgente

Suivi moyen = 2.3 ans

Traitement de l'HFpEF: Dapagliflozine (DELIVER-HF)



Traitement de l'HFpEF: Dapagliflozine (DELIVER-HF)

ORIGINAL ARTICLE

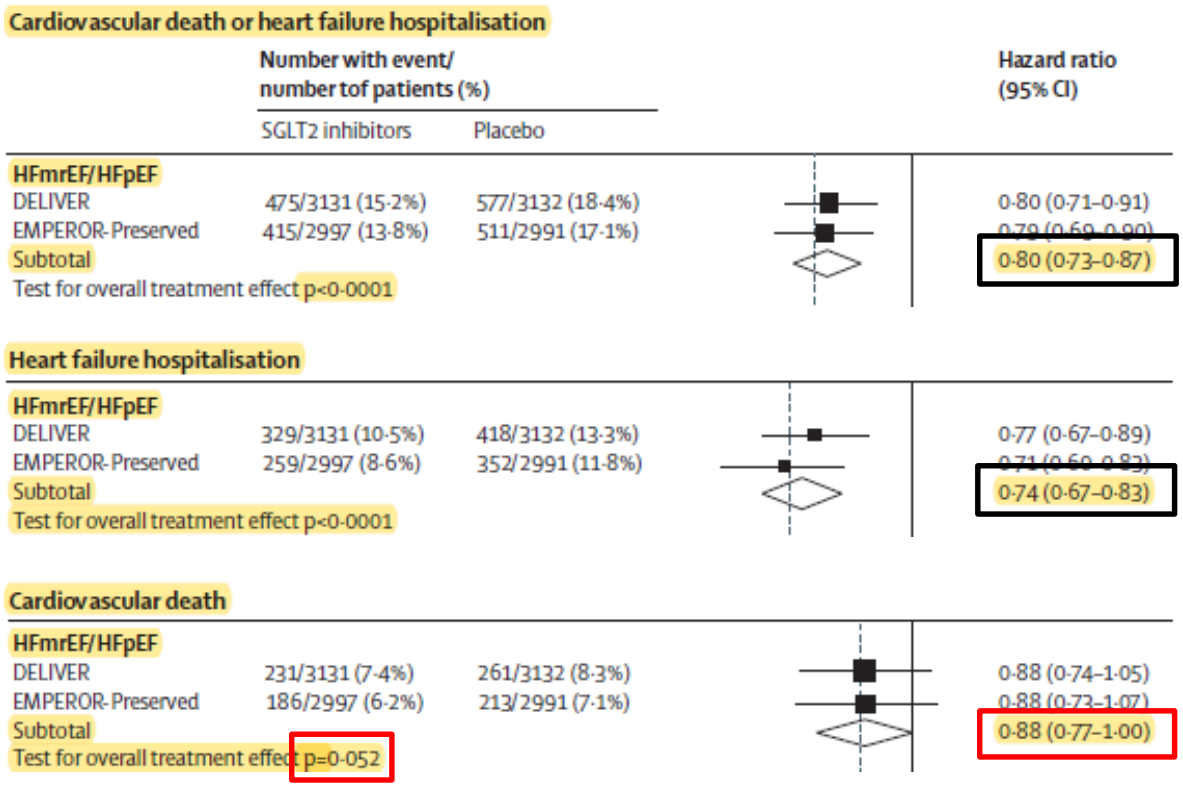
Dapagliflozin in Heart Failure with Mildly Reduced or Preserved Ejection Fraction

Subgroup	Dapagliflozin	Placebo	Hazard Ratio (95% CI)
	no. of patients with events/total no.		
All patients	512/3131	610/3132	0.82 (0.73–0.92)
Age			
≤72 yr	247/1545	306/1604	0.82 (0.69–0.97)
>72 yr	265/1586	304/1528	0.81 (0.69–0.96)
Sex			
Female	195/1364	243/1383	0.81 (0.67–0.97)
Male	317/1767	367/1749	0.82 (0.71–0.96)
Race			
Asian	97/630	106/644	0.91 (0.69–1.21)
Black	21/81	19/78	1.08 (0.58–2.01)
White	372/2214	461/2225	0.79 (0.69–0.90)
Other	22/206	24/185	0.83 (0.46–1.48)
Geographic region			
Europe or Saudi Arabia	261/1494	309/1511	0.83 (0.70–0.98)
Asia	92/607	103/619	0.89 (0.67–1.18)
Latin America	70/602	87/579	0.78 (0.57–1.07)
North America	89/428	111/423	0.75 (0.57–1.00)
NYHA class at enrollment			
II	331/2314	411/2399	0.81 (0.70–0.94)
III or IV	181/817	198/732	0.80 (0.65–0.98)
LVEF at enrollment			
≤49%	207/1067	229/1049	0.87 (0.72–1.04)
50–59%	174/1133	211/1123	0.79 (0.65–0.97)
≥60%	131/931	170/960	0.78 (0.62–0.98)

Traitement de l'HFpEF: meta-analyse EMPEROR-P + DELIVER

SGLT-2 inhibitors in patients with heart failure: a comprehensive meta-analysis of five randomised controlled trials

Muthiah Vaduganathan, Kieran F Docherty*, Brian L Claggett, Pardeep S Jhund, Rudolf A de Boer, Adrian F Hernandez, Silvio E Inzucchi, Mikhail N Kosiborod, Carolyn S P Lam, Felipe Martinez, Sanjiv J Shah, Akshay S Desai, John J V McMurray†, Scott D Solomon†*



Vaduganathan et al. Lancet. 2022 Sep 3;400(10354):757-767.

Traitement de l'HFpEF: sacubitril-valsartan (PARAGON-HF) ?

The NEW ENGLAND JOURNAL of MEDICINE

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Angiotensin–Neprilysin Inhibition in Heart Failure with Preserved Ejection Fraction

S.D. Solomon, J.J.V. McMurray, I.S. Anand, J. Ge, C.S.P. Lam, A.P. Maggioni, F. Martinez, M. Packer, M.A. Pfeffer, B. Pieske, M.M. Redfield, J.L. Rouleau, D.J. van Veldhuisen, F. Zannad, M.R. Zile, A.S. Desai, B. Claggett, P.S. Jhund, S.A. Boytsov, J. Comin-Colet, J. Cleland, H.-D. Düngen, E. Goncalvesova, T. Katova, J.F. Kerr Saraiva, M. Lelonek, B. Merkely, M. Senni, S.J. Shah, J. Zhou, A.R. Rizkala, J. Gong, V.C. Shi, and M.P. Lefkowitz, for the PARAGON-HF Investigators and Committees*

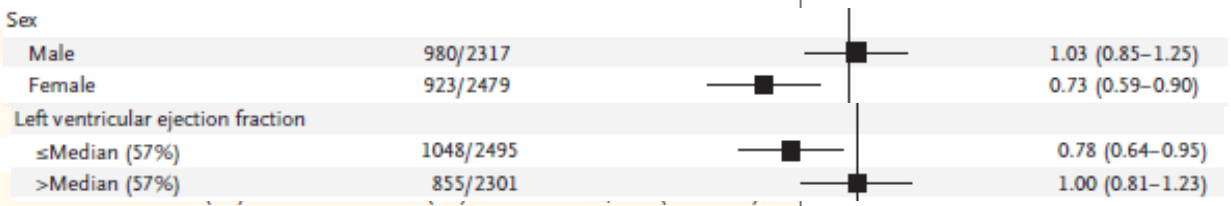
Sac-val 200 mg 2x/j vs valsartan 160 mg 2x/j
n=4822
- LVEF ≥ 45% + dilatation OG ou HVG
- NT-proBNP > 300 ng/l (>900 si FA)
  et> 200 ng/l (>600 si FA) si hosp derniers 9 mois

Excl: eGFR < 30 ml/min; K+ >= 5.2 mM
Issue primaire : mortalité CV + hospit. pour IC
Suivi moyen : 3.

Table 2. Primary and Secondary Outcomes.*

Outcome	Sacubitril–Valsartan (N=2407)	Valsartan (N=2389)	Ratio or Difference (95% CI)
Primary composite outcome and components			
Total hospitalizations for heart failure and death from cardiovascular causes†			RR, 0.87 (0.75–1.01)
Total no. of events	894	1009	
Rate per 100 patient-yr	12.8	14.6	
Total no. of hospitalizations for heart failure	690	797	RR, 0.85 (0.72–1.00)
Death from cardiovascular causes — no. (%)	204 (8.5)	212 (8.9)	HR, 0.95 (0.79–1.16)
Secondary outcomes			
Change in NYHA class from baseline to 8 mo — no./total no. (%)			OR, 1.45 (1.13–1.86)
Improved			
Unchanged			
Worsened			
Change in KCCQ clinical summary score at 8 mo‡			
Renal composite outcome — no. (%)§			
Death from any cause — no. (%)	342 (14.2)	349 (14.6)	HR, 0.97 (0.84–1.13)

p=0.056



Traitement de l'HFpEF: spironolactone (TOPCAT) ?

Spironolactone 12.5-50 mg vs placebo chez n=3445

- LVEF ≥ 45%
- NT-proBNP > 360 ng ou hosp. 60 jours avant randomisation (env. 70%!)

Excl: eGFR < 30 ml/min; K+ >= 5 mM

Issue primaire : mortalité CV + hospit. Pour IC + mort subite avortée

Suivi moyen : 3.5 ans

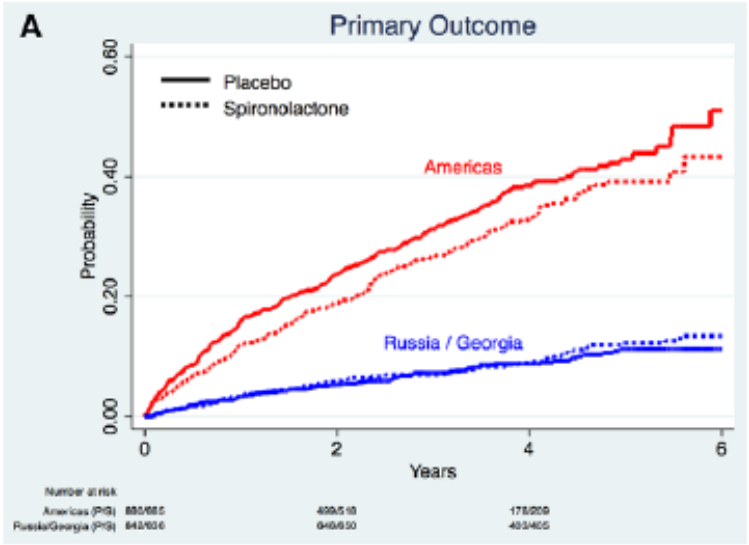
Table 2. Incidence Rates of the Primary Composite Outcome, Its Components, and Additional Secondary Outcomes.*

Outcome	Spironolactone (N=1722)		Placebo (N=1723)		Hazard Ratio with Spironolactone (95% CI)†	P Value
	Participants with Event	Incidence Rate	Participants with Event	Incidence Rate		
	no. (%)	*no./100 person-yr*	*no. (%)*	*no./100 person-yr*		
Primary outcome	320 (18.6)	5.9	351 (20.4)	6.6	0.89 (0.77–1.04)	0.14
Components of the primary outcome						
Death from cardiovascular causes	160 (9.3)	2.8	176 (10.2)	3.1	0.90 (0.73–1.12)	0.35
Aborted cardiac arrest	3 (0.2)	0.05	5 (0.3)	0.09	0.60 (0.14–2.50)	0.48
Hospitalization for heart failure	206 (12.0)	3.8	245 (14.2)	4.6	0.83 (0.69–0.99)	0.04
Additional secondary outcomes						
Death from any cause	252 (14.6)	4.2	274 (15.9)	4.6	0.91 (0.77–1.08)	0.29
Hospitalization for any reason	766 (44.5)	18.8	792 (46.0)	20.0	0.94 (0.85–1.04)	0.25
Myocardial infarction	65 (3.8)	1.2	64 (3.7)	1.1	1.00 (0.71–1.42)	0.98
Stroke	57 (3.3)	1.0	60 (3.5)	1.1	0.94 (0.65–1.35)	0.73

Pitt et al. N Engl J Med. 2014 Apr 10;370(15):1383-92.

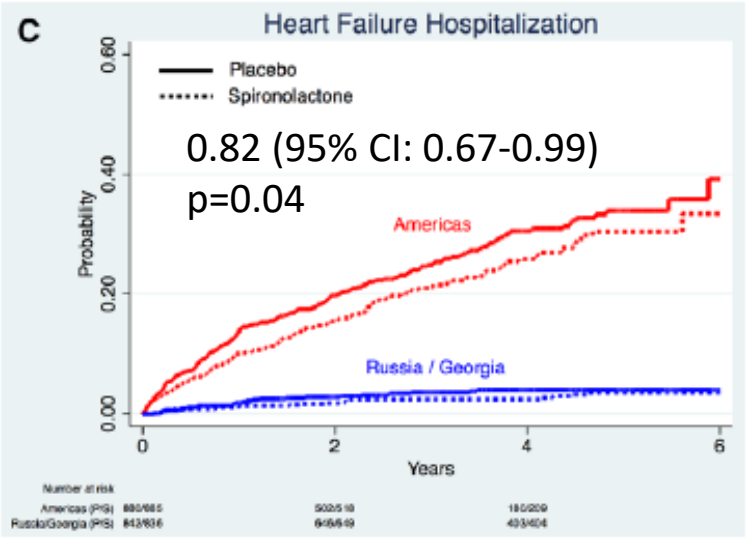
Traitement de l'HFpEF: spironolactone (TOPCAT)

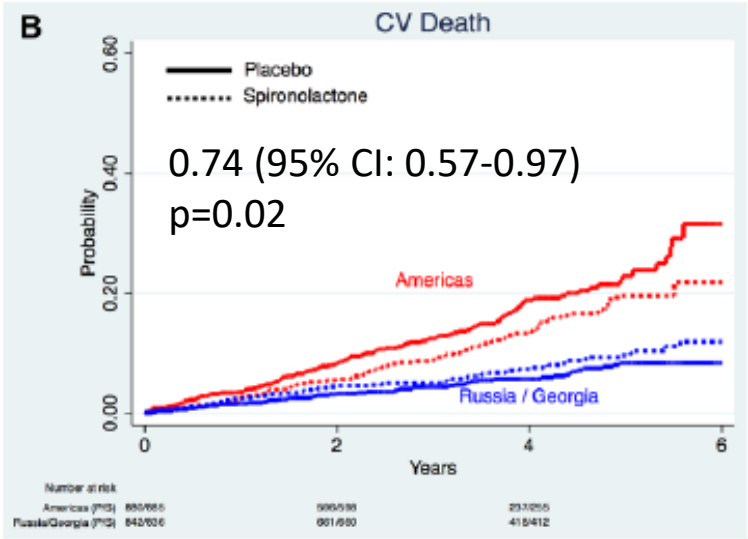
Analyse post-hoc
USA vs Russie/Georgie



0.82 (95% CI: 0.69-0.98)
p=0.02

N.B.: Efficacité plus importante pour les FEVG sur le versant bas.
Solomon et al. Eur Heart J. 2016 Feb 1;37(5):455-62.





Pfeffer et al. Circulation. 2015 Jan 6;131(1):34-42.

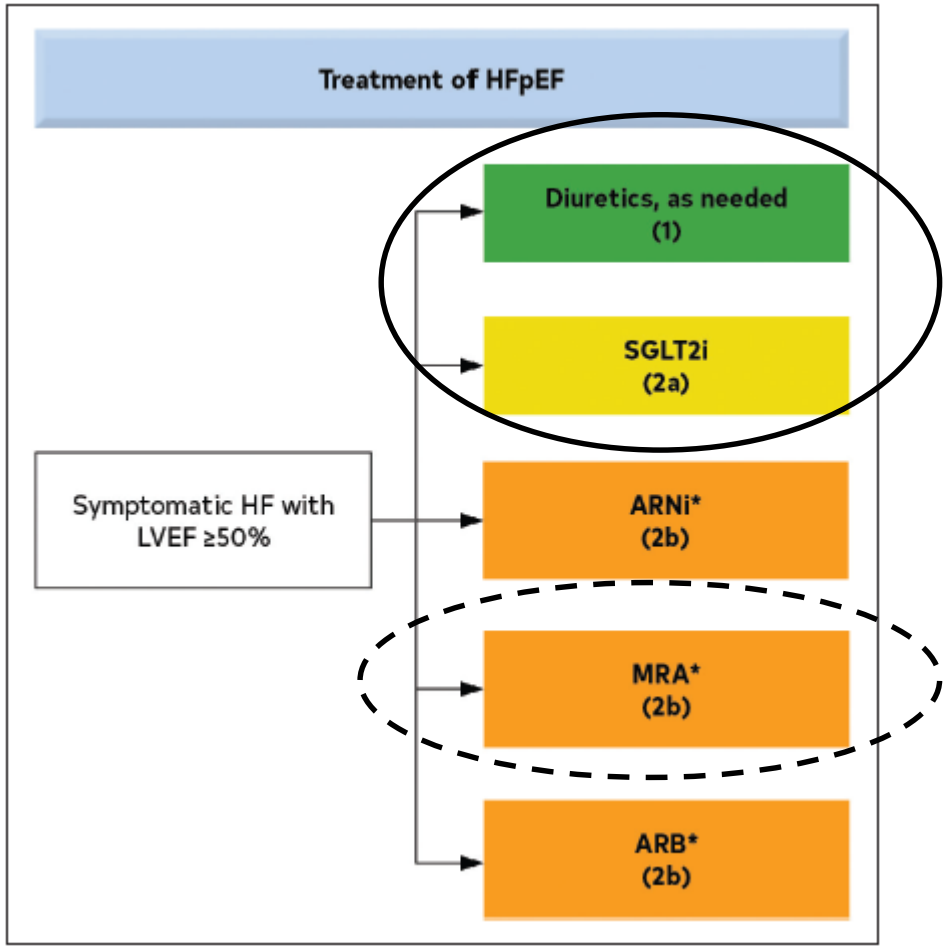
Traitement pharmacologique de l'HFpEF: CH: 2022: résumé

HFpEF (FEVG ≥ 50%)	Hospitalisations + mortalité CV	Hospitalisations seules	Mortalité CV seule	Remboursement CH
Torasemide (Torem®)	-	√	-	√
Empagliflozine (Jardiance®)	-21%	-29%	ns*	√
Dapagliflozine (Forxiga®)	-18%	-21%	ns*	**! Uniquement si diabétique !**
Spironolactone (Aldactone®)	ns/(-18% USA)	-17%/(-18% USA)	ns/(-26% USA)	√
Sacubitril-valsartan (Entresto®)	ns	ns°	ns	**X**

*Tendance à une réduction de mortalité CV dans méta-analyse: 0.88 (95% CI: 0.77-**1.00**; p= 0.052)
°Tendance à une réduction des hospitalisations (p= 0.056) : remboursé par la FDA aux USA !

JR 11/2022

Traitement pharmacologique de l'HFpEF: USA 2022



! Non-remboursé en Suisse pour l'HFpEF !
Si accord préalable de l'assurance, discutable pour réduire les hospitalisations pour les *FEVG versant bas, femmes* ou si *HTA sévère*...

A considérer pour réduire les hospitalisations. En particulier en cas d'HTA «résistante».
CAVE: IRC et hyperkaliémie !

Faible réduction des hospitalisations sous candesartan dans CHARM-Preserved (FEVG > 40%): HR 0.84; 95% CI, 0.70–1.00; p=0.047

AHA/ACC/HFSA guidelines 2022 (USA)

SGLT2-i: fiche pratique

Jardiance® 10 mg ou combiné **Jardiance met®** (5/500, 5/750, 5/1000 mg)
Forxiga® 10 mg/j ou combiné **Xigduo XR®** (5/500, 5/1000 mg)

Posologie unitaire dans l'indication insuffisance cardiaque : 10 mg/j.

Contre-indications principales :

- **Diabète de type I ou diabète «insulinopénique»** : risque d'acido-cétose diabétique euglycémique.
- Jeûn prolongé (p.ex. péri-opératoire, alcoolisme, malnutrition)
- eGFR < 20 ml/min (absence de données…)

Précautions à l'introduction :

- Risque de mycose génitale >> infection urinaire : informer le patient et l'encourager à une bonne hygiène intime.
- Effet diurétique synergique :
  - Suivi rapproché +/- adaptation des diurétiques (CAVE: IRC sévère)
- Avis diabétologique si doute quant à l'origine du diabète (insulinopénie ?)
- Faible effet hypotenseur…majoré en cas d'hypovolémie

Spironolactone : fiche pratique

Aldactone® 25 ou 50 mg

Posologie dans l'IC : 12.5-50 mg/j

Contre-indications principales :

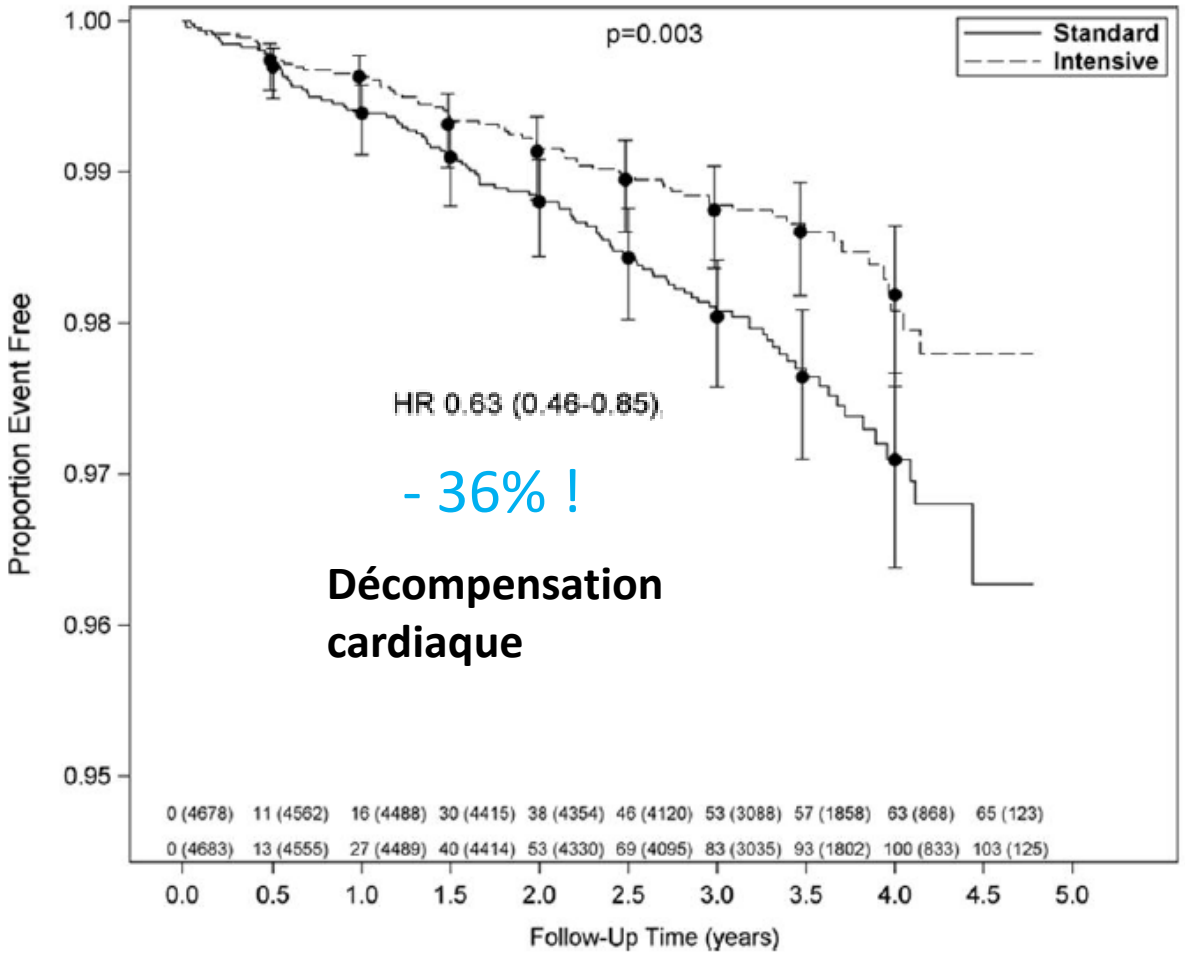
- K+ de base ≥ 5.0 mM
- **Prudence si eGFR < 30 ml/min** : nécessite un suivi biologique régulier et év. mise en suspens en situation favorisant l'hypovolémie (canicule, fièvre, diarrhées, vomissements, patient âgé sans réflexe de soif, etc…)
- Antécédent de gynécomastie

Précautions :

- Contrôle du K+ à 10-15 jours de l'introduction :
  - Si K+ 5.0-5.0 : pas d'adaptation, suivi régulier.
  - Si K+ > 5.5 mM : réduction de posologie (12.5 mg/j ou 1 jour sur 2)
  - Si K+ > 6.0 mM : stop et traitement spécifique

HFpEF : importance du contrôle de l'hypertension

SPRINT
N=9361
CVD or
High CV risk



< 140 mmHg

< 120 mmHg

Excluded: *symptomatic HF or LVEF <35%, history of stroke or diabetes.*

Upadhya et al. Circ Heart Fail. 2017

HFpEF : cible de pression artérielle

Recommendation for Prevention

COR	LOE	Recommendations	Comment/Rationale
I	B-R	**In patients at increased risk, stage A HF, the optimal blood pressure in those with hypertension should be less than 130/80 mm Hg.**[189–193]	**NEW:** Recommendation reflects new RCT data.
See Online Data Supplements E and F.			

A large RCT demonstrated that in those with increased cardiovascular risk (defined as age >75 years, established vascular disease, chronic renal disease, or a Framingham Risk Score >15%), control of blood pressure to a goal systolic pressure of <120 mm Hg, as determined by blood pressure assessment as per research protocol, was associated with a significant reduction in the incidence of HF[191] and an overall decrease in cardiovascular death. Blood pressure measurements as generally taken in the office setting are typically 5 to 10 mm Hg higher than research measurements; thus, the goal of <130/80 mm Hg is an approximation of the target blood pressure in conventional practice. *Targeting a significant reduction in systolic blood pressure in those at increased risk for cardiovascular disease is a novel strategy to prevent HF.*

Recommendation for Hypertension in Stage C HF*p*EF

COR	LOE	Recommendation	Comment/Rationale
I	C-LD	**Patients with HF*p*EF and persistent hypertension after management of volume overload should be prescribed GDMT titrated to attain systolic blood pressure less than 130 mm Hg.**[9,167,169,170,195–199]	**NEW:** New target goal blood pressure based on updated interpretation of recent clinical trial data.
See Online Data Supplements E and F.			

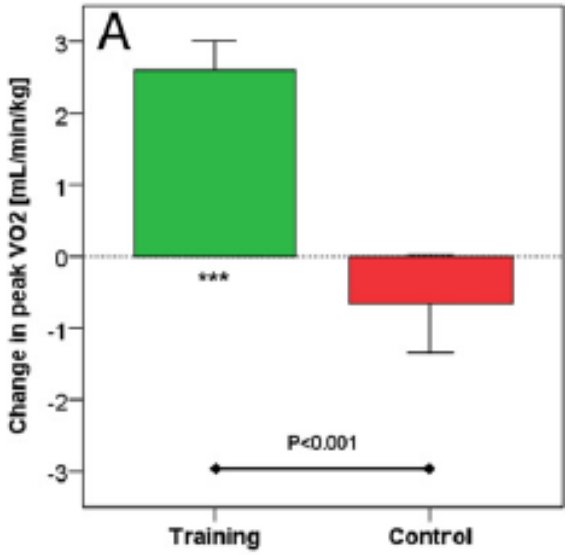
The use of nitrates in the setting of HF*p*EF is associated with a signal of harm and, in most situations, should be avoided. For many common antihypertensive agents, including alpha blockers, beta blockers, and calcium channel blockers, there are limited data to guide the choice of antihypertensive therapy in the setting of HF*p*EF.[172] Nevertheless, RAAS inhibition with ACE inhibitor, ARB (especially mineralocorticoid receptor antagonists), and possibly ARNI would represent the preferred choice. A shared decision-making discussion with the patient influenced by physician judgment should drive the ultimate choice of antihypertensive agents.

Yancy et al. J Card Fail. 2017

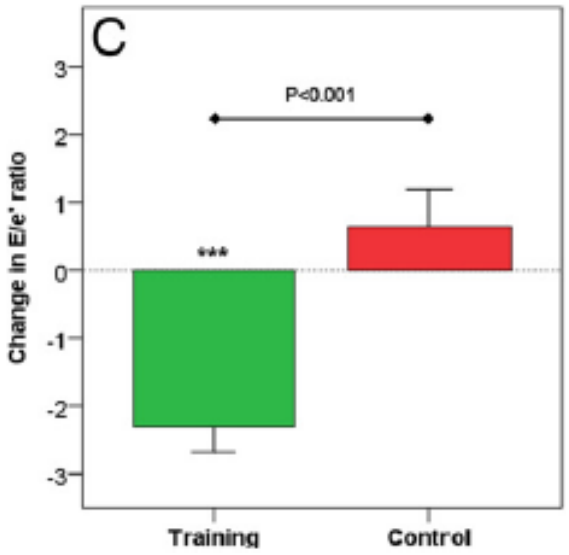
HFpEF : bénéfice de l'exercice physique

Ex-DHF
Prospectif; N=**64**

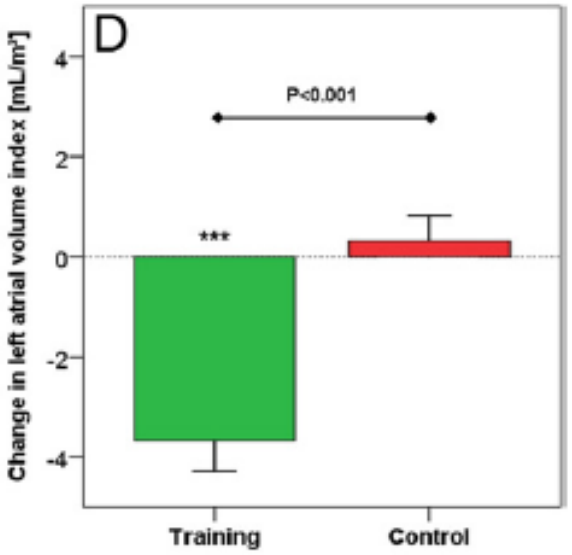
Endurance + resistance training (32 séances; 4 semaines)



Amélioration de la pVO2



Amélioration E/E'



Réduction volume OG

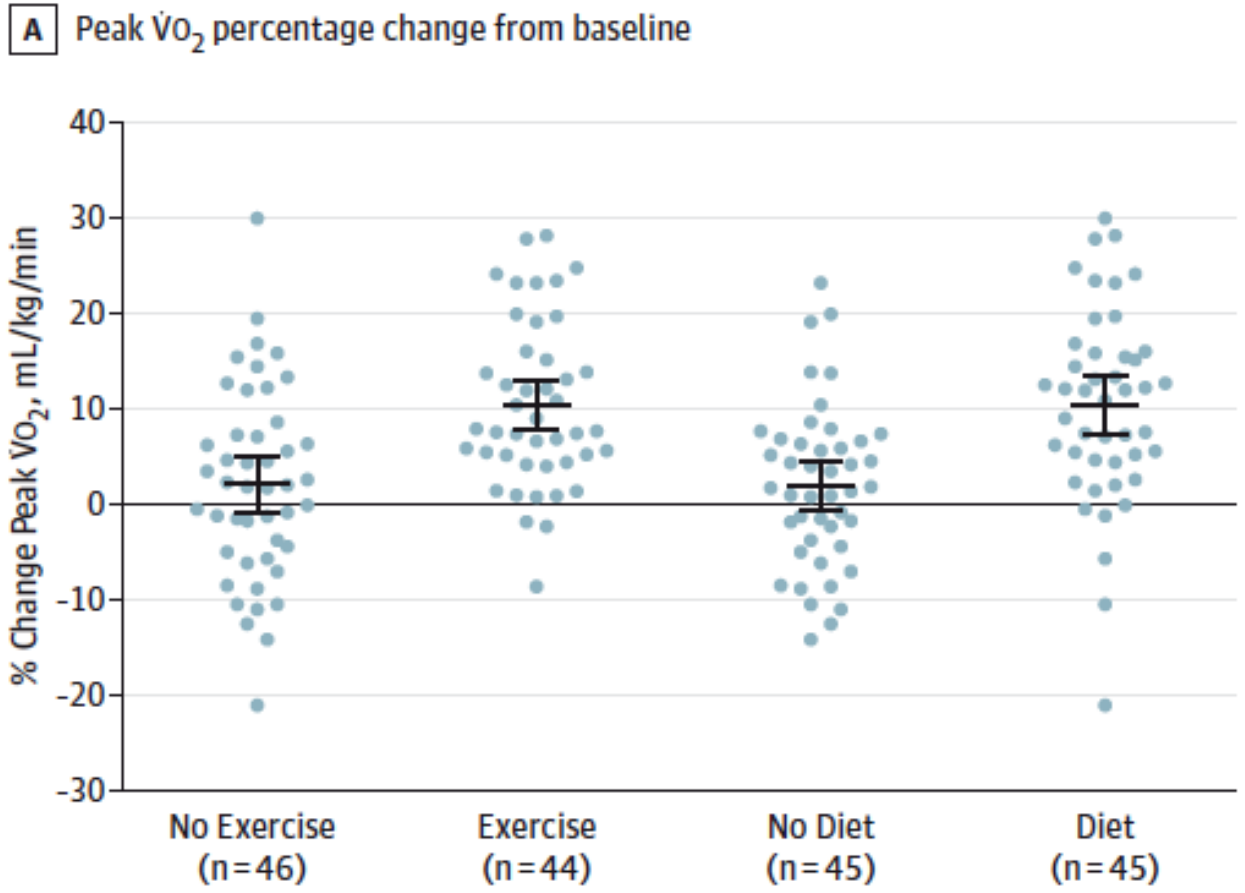
Edelmann et al. J Am Coll Cardiol. 2011

HFpEF : bénéfice de l'exercice physique + régime hypocalorique

Prospectif
N=100

BMI médian : 39.3

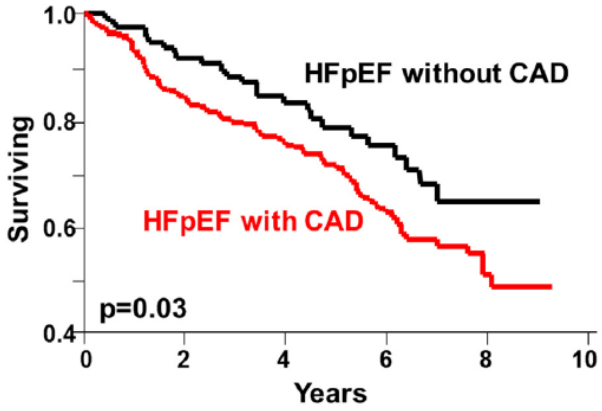
20 semaines de régime ou exercie ou les 2

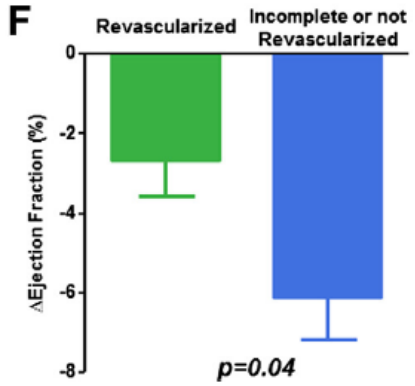


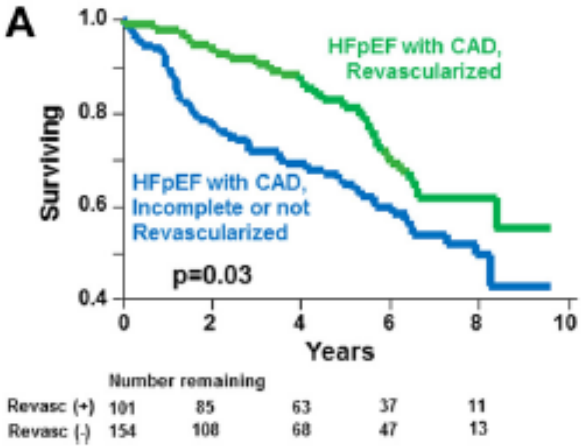
Kitzman et al. JAMA. 2016

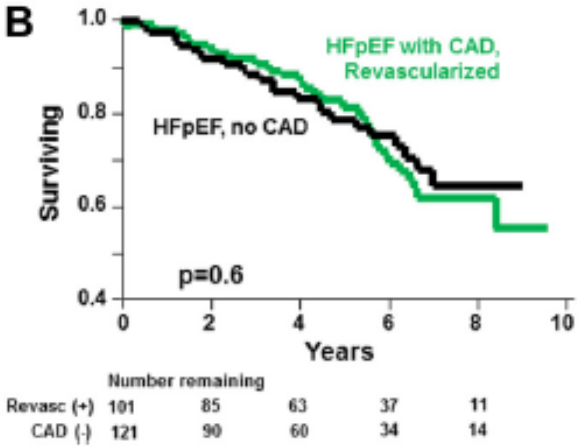
HFpEF : maladie coronarienne

n=376
HFpEF
(68% avec CAD)









Hwang et al. J Am Coll Cardiol. 2014

Merci de votre attention !

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