Azərbaycan Kardiologiya Cəmiyyəti

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

FAIRMONT HOTEL - FLAME TOWERS, BAKI

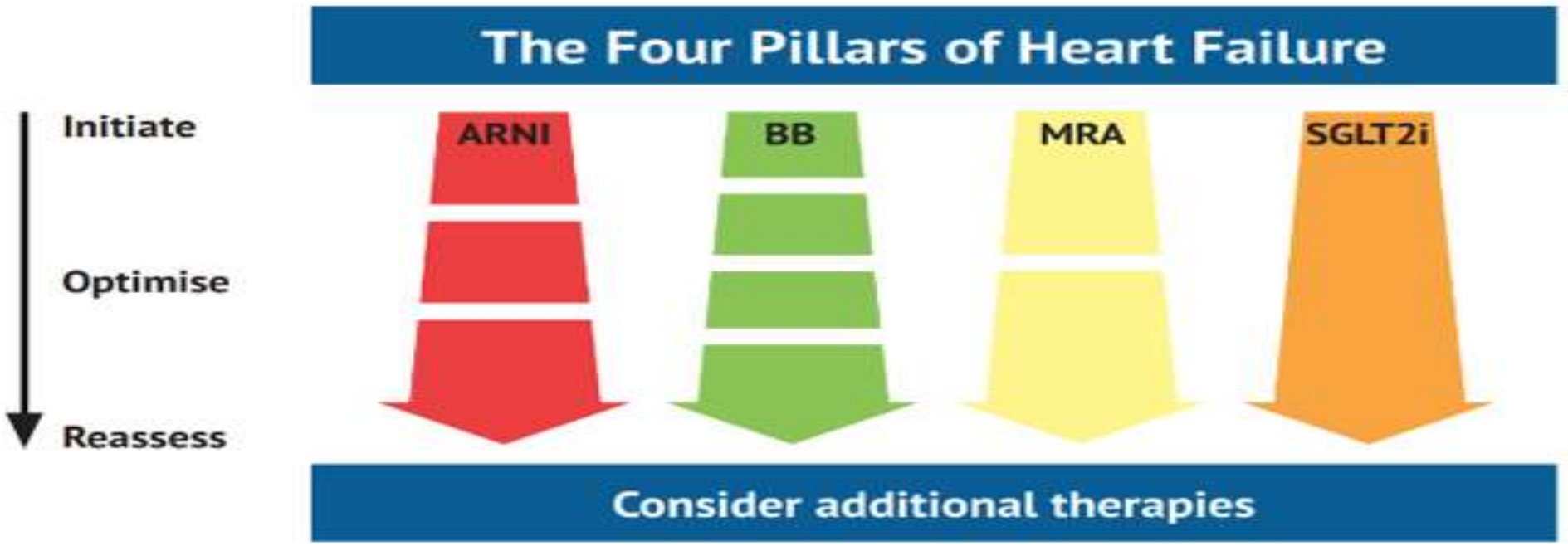
12-13 İYUN 2026

SADIQOV TOFİQ
MD.PhD.FESC

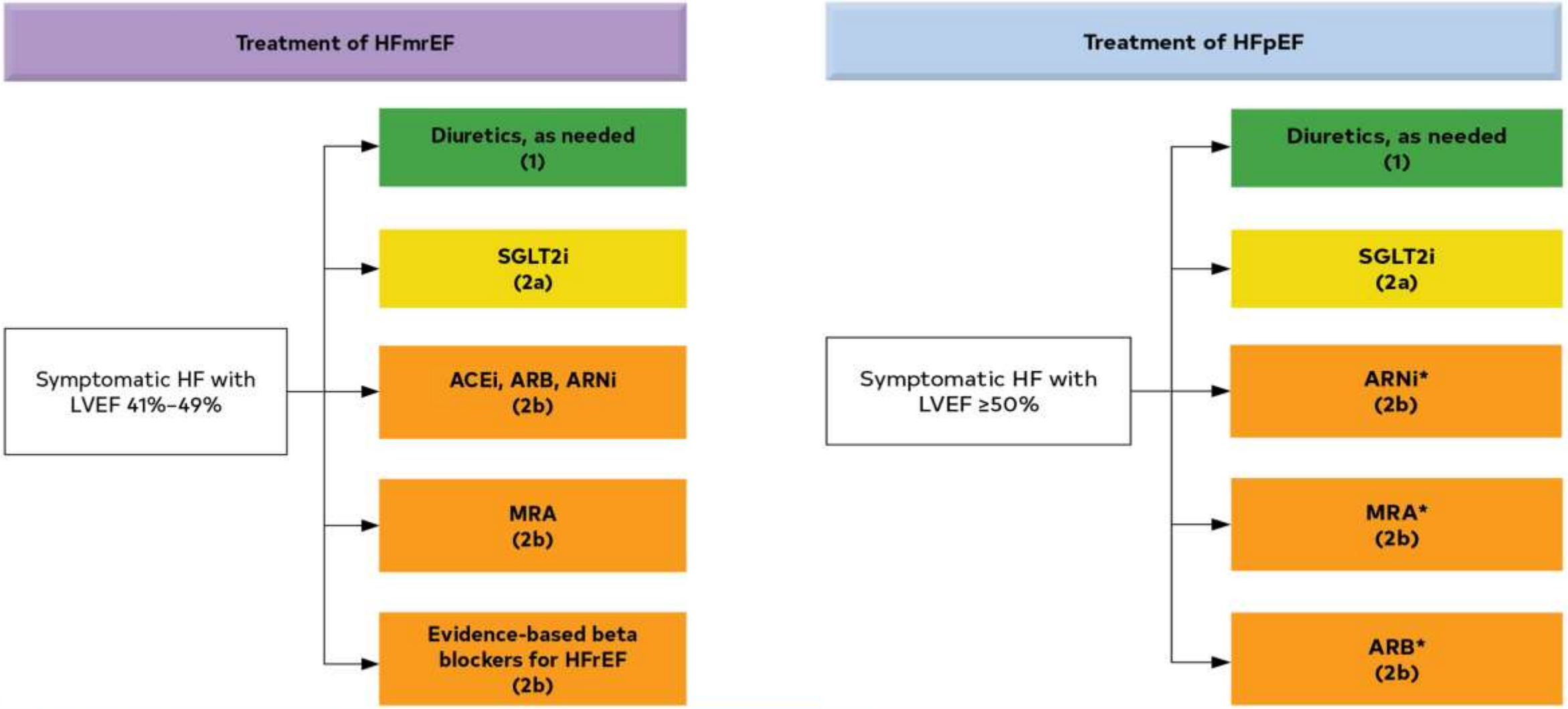
SGLT2-i düzgün istifadəsi necə olmalıdır?

We are at war with heart failure (Braunwald, 2015).

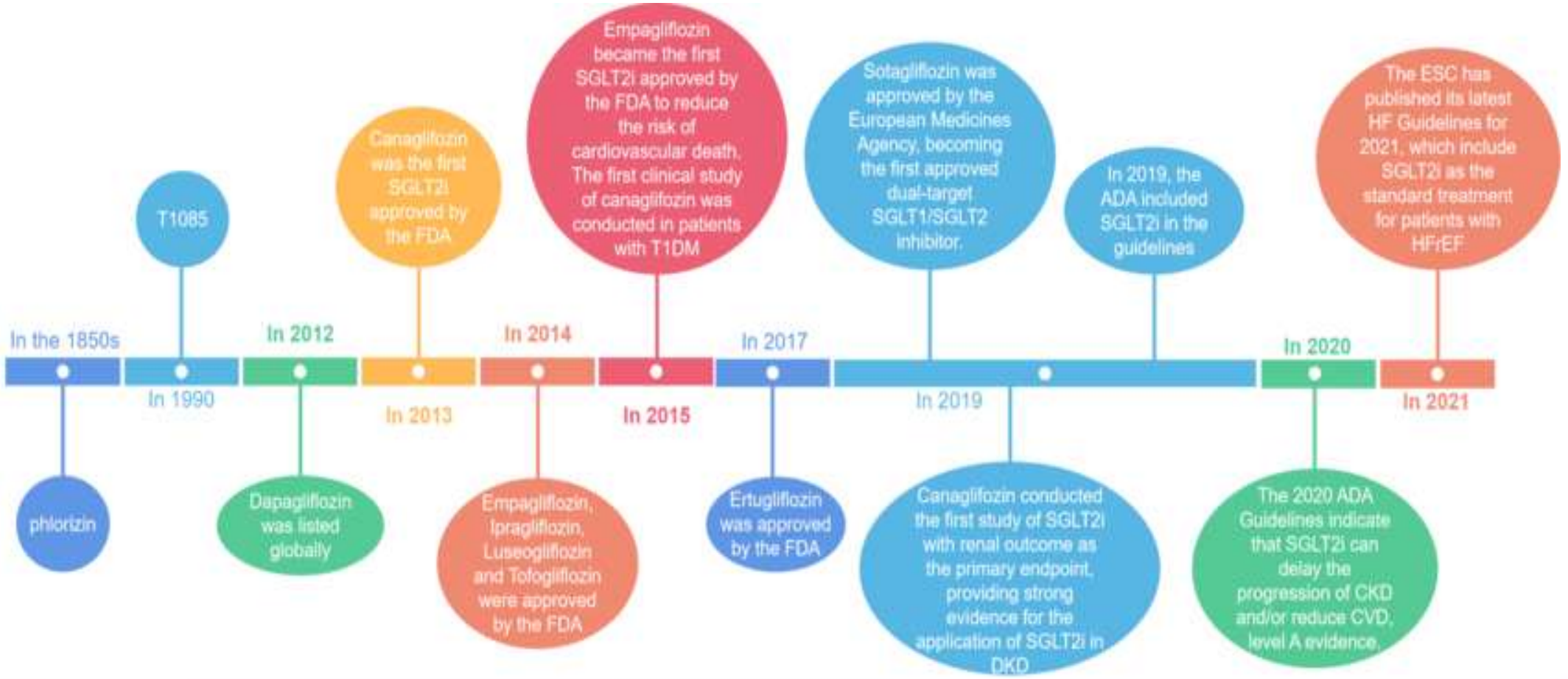
Figure 2: Proposed new models of care for heart failure



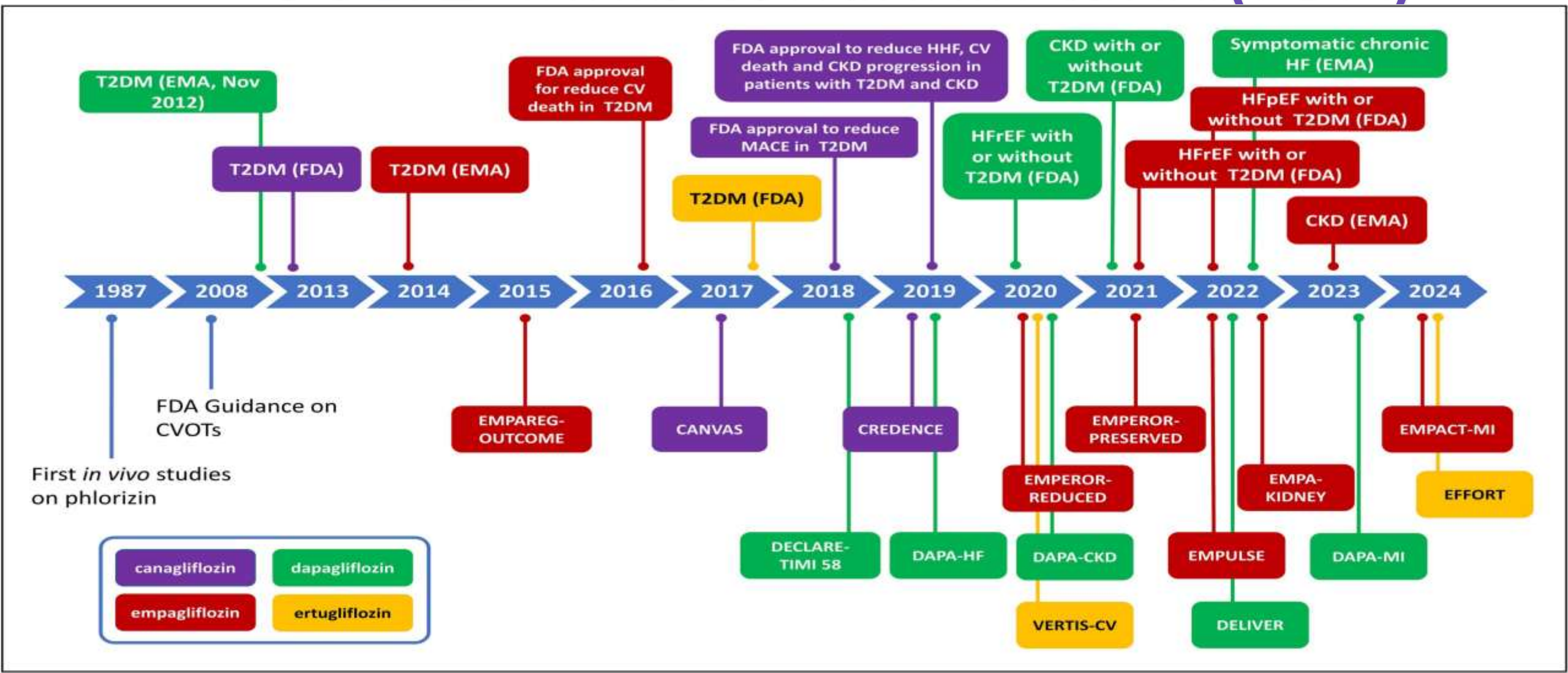
Recommendations	Class[a]	Level[b]
An ACE-I is recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.[110–113]	I	A
A beta-blocker is recommended for patients with stable HFrEF to reduce the risk of HF hospitalization and death.[114–120]	I	A
An MRA is recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.[121,122]	I	A
Dapagliflozin or empagliflozin are recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.[108,109]	I	A
Sacubitril/valsartan is recommended as a replacement for an ACE-I in patients with HFrEF to reduce the risk of HF hospitalization and death.[105]	I	B


Treatment of HFmrEF
Symptomatic HF with LVEF 41%–49%
Diuretics, as needed (1)
SGLT2i (2a)
ACEi, ARB, ARNi (2b)
MRA (2b)
Evidence-based beta blockers for HFrEF (2b)
Treatment of HFpEF
Symptomatic HF with LVEF ≥50%
Diuretics, as needed (1)
SGLT2i (2a)
ARNi* (2b)
MRA* (2b)
ARB* (2b)

SGLT2 tarixi



SGLT2 inhibitorlarının tarixi(FDA)

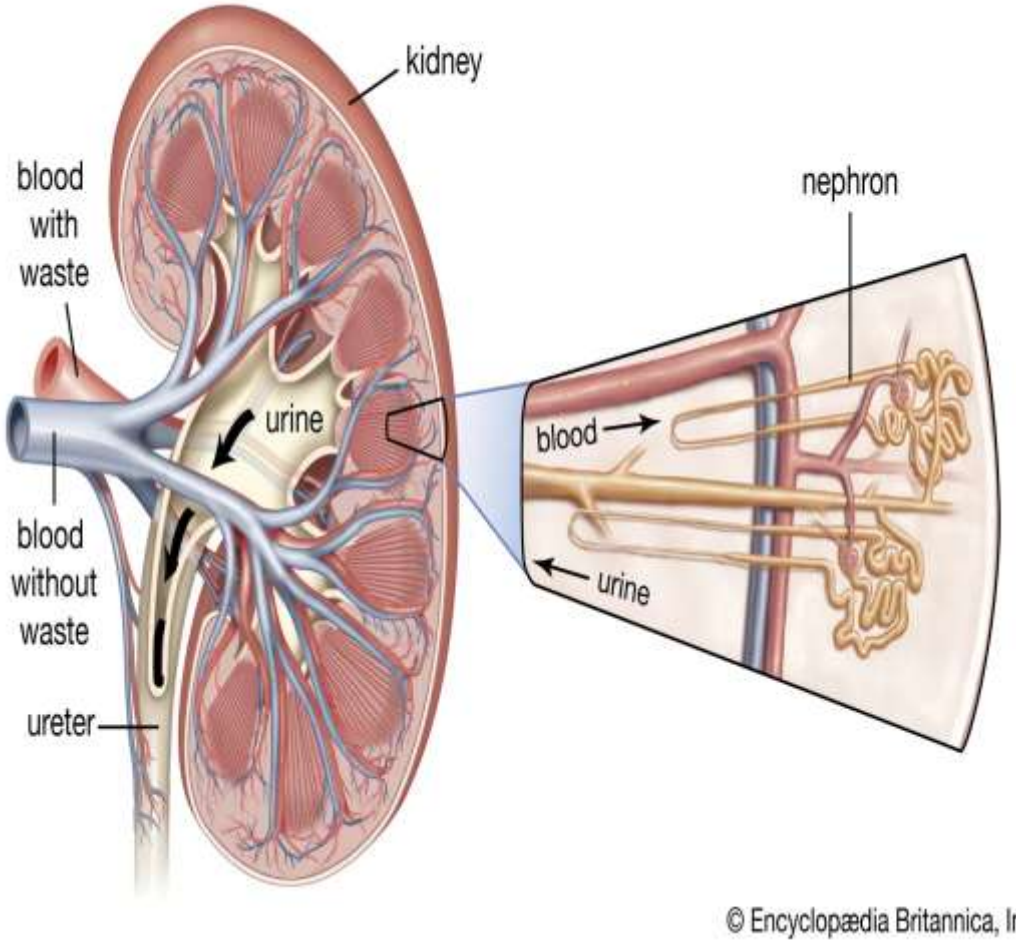


5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

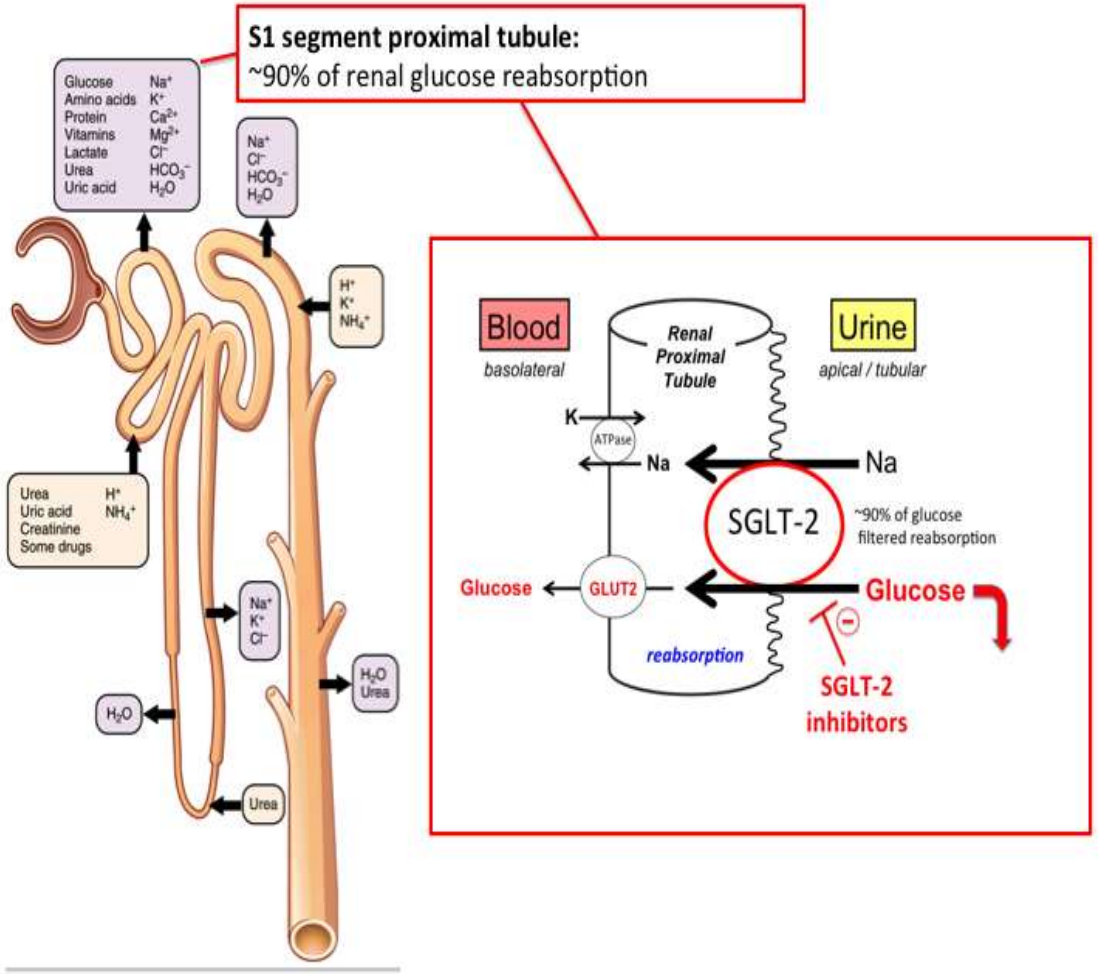
Azərbaycan Kardiologiya Cəmiyyəti

12-13 İYUN 2026

FAIRMONT HOTEL - FLAME TOWERS, BAKI

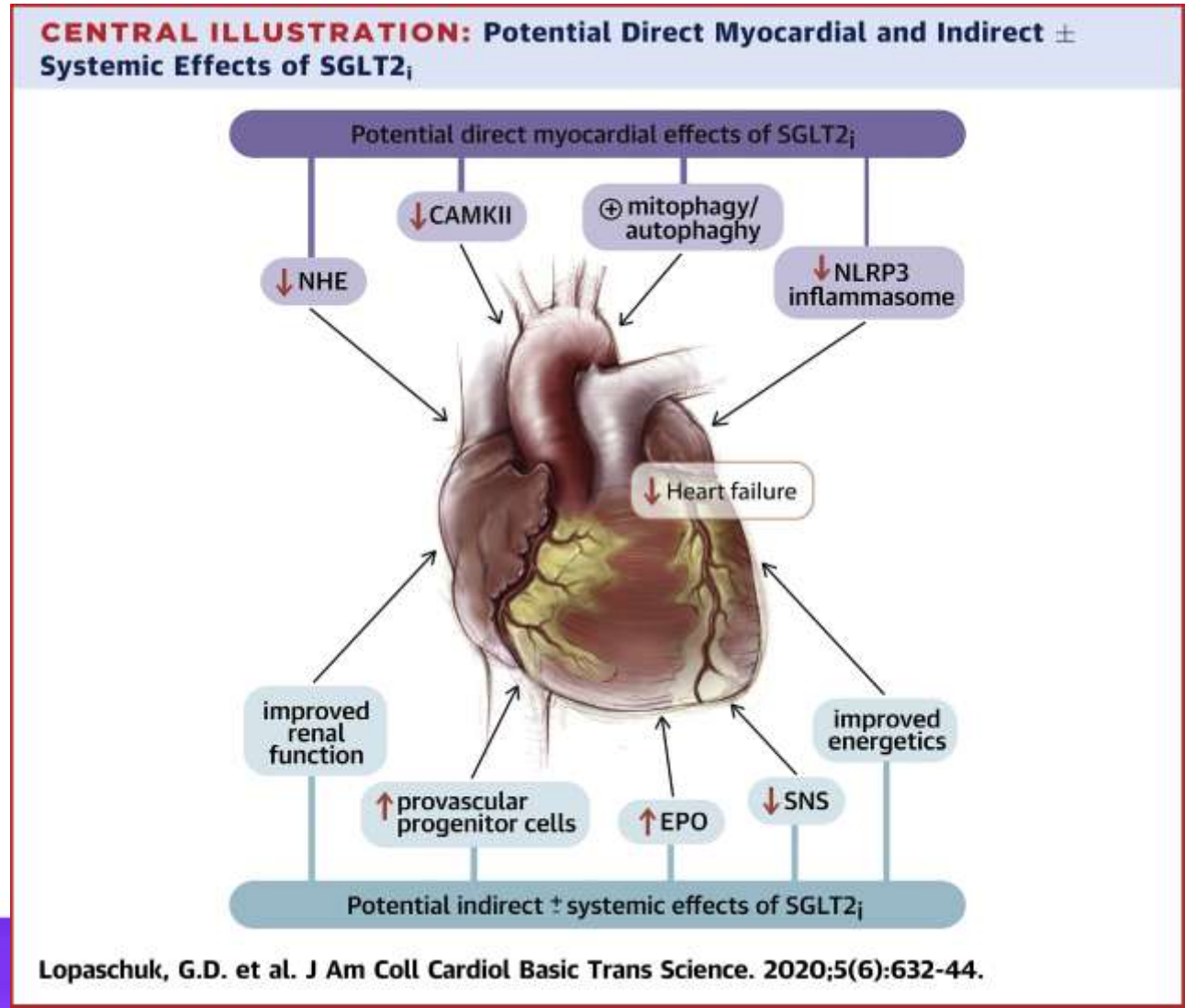


© Encyclopædia Britannica, Inc.



SGLT 2 təsir mexanizmləri

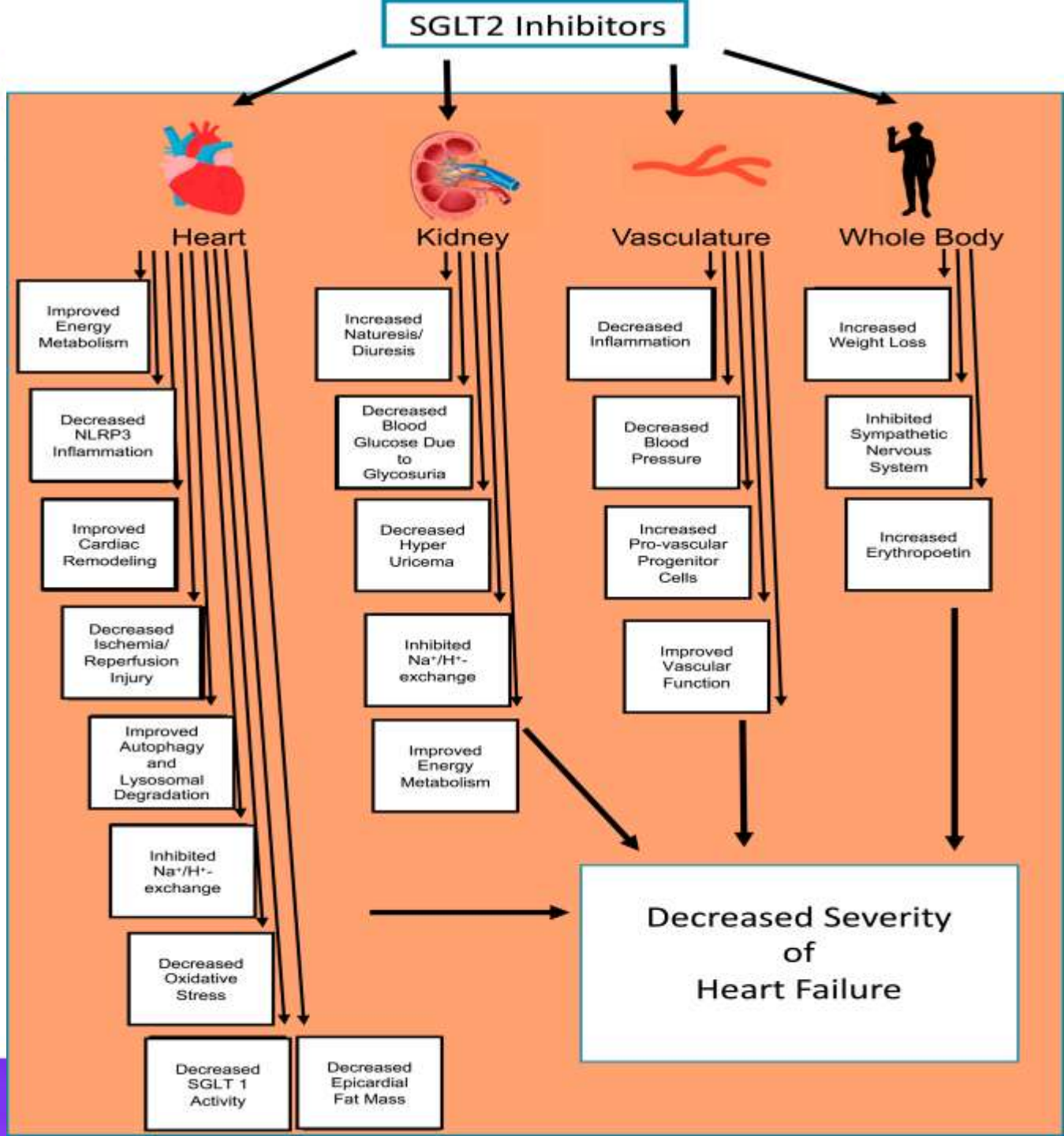
-Osmotik Diurez və natriurezin artması
-Qanda Qlükoza səviyyəsinin kontrolu
-Arterial təzyiqin azalması
-Ürəyin energetik metabolizminin yaxşılaşması
-İşemik reperfuzuyon zədələnmənin qarşısının alınması
-Ürək Na/H mübadiləsinin inhibisiyası
-Epikardial yağ kütləsinin azalması
-Oksidativ stresin azalması
-Ürək uyğunsuz remodelləşməsinin qarşısının alınması
-Endotel funksiyasının yaxşılaşdırılması:



Lopaschuk, G.D. et al. J Am Coll Cardiol Basic Trans Science. 2020;5(6):632-44.

SGLT 2 təsir mexanizmi

-Bədən çəkisinin azalması
-Simpatik sinir sisteminin inhibiyası
-Eritropoeitin səviyyəsinin artması
-Sidik turşusu səviyyəsinin azalması
-SGLT1 səviyyəsinin azalması
-Damar funksiyasının yaxşılaşdırılması
-İltihabın qarşısının alınması



Natrium-Qlükoza kotransporter 2 preparatları

SGLT2 Inhibitors: Dosing & Indications

A quick reference guide for common SGLT2 inhibitors.

DRUG	AGE GROUP	STARTING DOSE	MAX DOSE	EGFR LIMITATIONS	NOTABLE INDICATIONS
Canagliflozin	Adults & ≥10 yrs	100 mg once daily before breakfast	300 mg once daily	Not for dose increase if eGFR <60	T2DM, ASCVD, CKD with albuminuria >300 mg/day
Dapagliflozin	Adults & ≥10 yrs	5 mg once daily	10 mg once daily	Not for glycemic control if eGFR <45	T2DM, HFrEF, HFpEF, CKD
Empagliflozin	Adults & ≥10 yrs	10 mg once daily in the morning	25 mg once daily	Not for glycemic control if eGFR <30	T2DM with ASCVD, HFrEF, HFpEF, CKD
Ertugliflozin	Adults only	5 mg once daily in the morning	15 mg once daily	Not for glycemic control if eGFR <45	T2DM only
Bexagliflozin	Adults only	20 mg once daily in the morning	20 mg once daily	Not for glycemic control if eGFR <30	T2DM only

EMPA REG OUTCOME 2010-2013

EMPA-REG OUTCOME was a randomized, double-blind, placebo-controlled trial

7020pasienti əhatə edən,

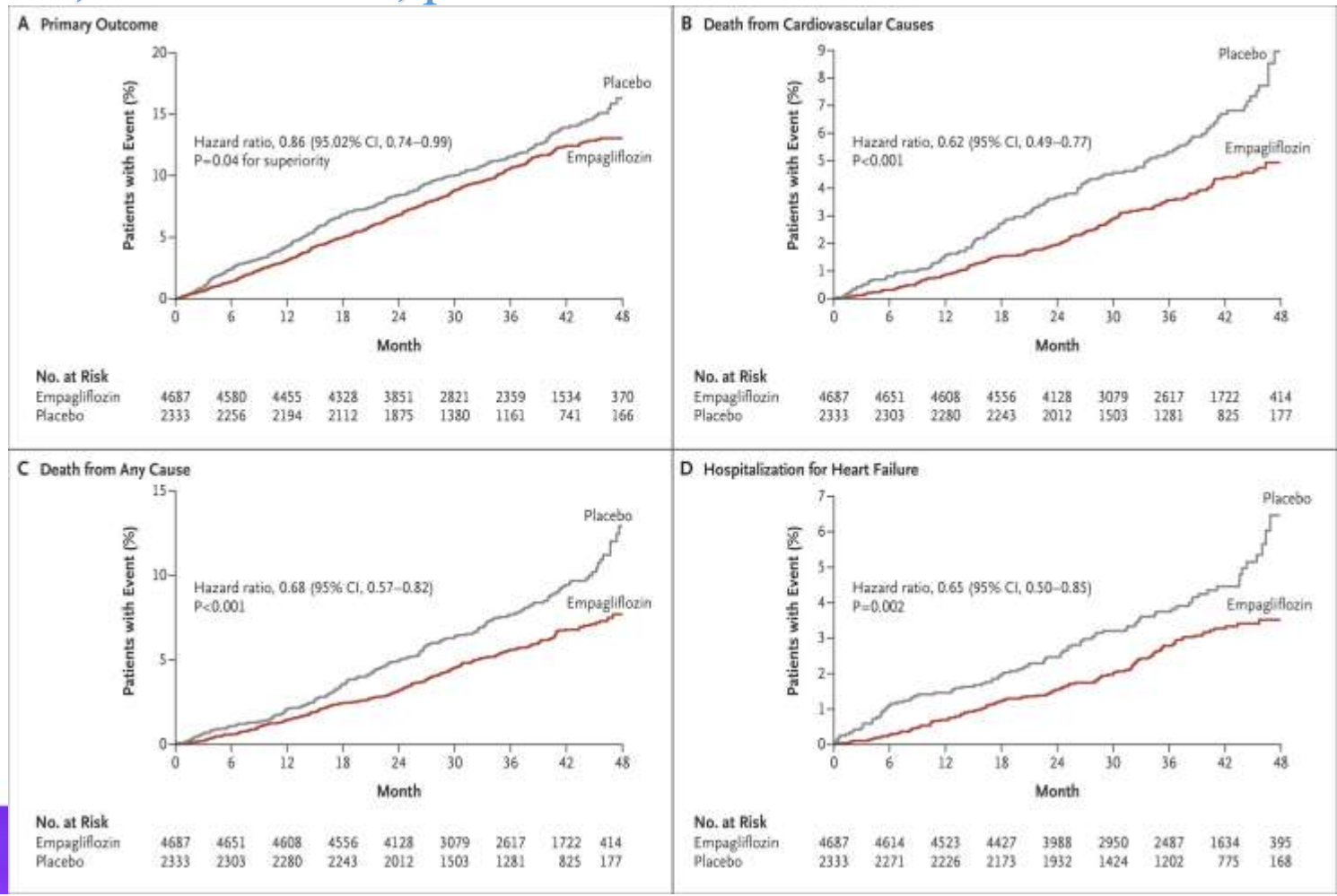
42 ölkə,590 mərkəz

2qrup;

-ürək-damar ölümü 38%

-ümumi ölüm 35%

ÜÇ hospitalizasiya 32%



EMPA REG OUTCOME 2010-2015

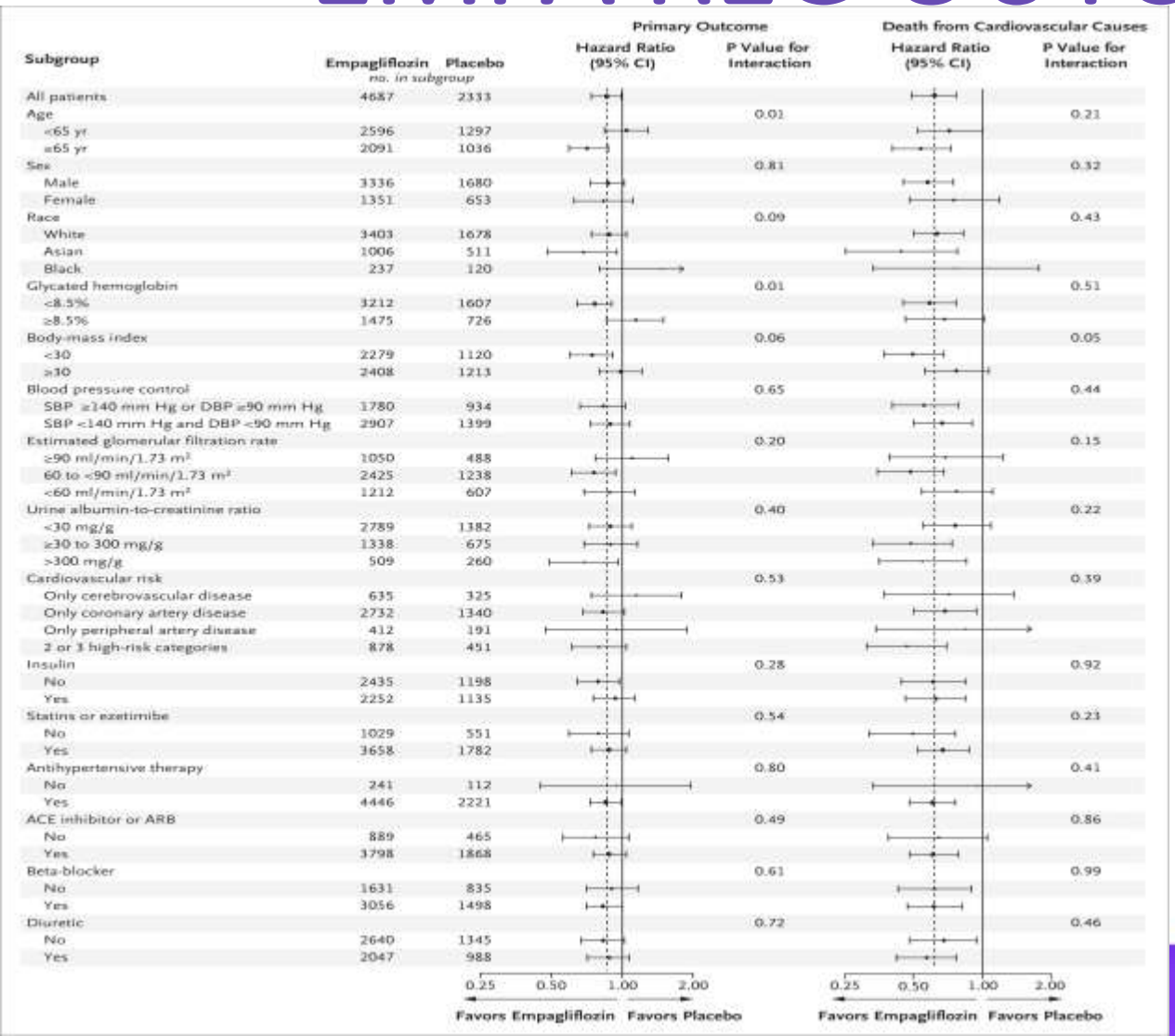


Table 1. Primary and Secondary Cardiovascular Outcomes.

Outcome	Placebo (N=2333) no. (%)	Placebo rate/1000 patient-yr	Empagliflozin (N=4687) no. (%)	Empagliflozin rate/1000 patient-yr	Hazard Ratio (95% CI)	P Value
Death from cardiovascular causes, nonfatal myocardial infarction, or nonfatal stroke: primary outcome*	282 (12.1)	43.9	490 (10.5)	37.4	0.86 (0.74–0.99)	
Noninferiority						<0.001†
Superiority						0.04†
Death from cardiovascular causes, nonfatal myocardial infarction, nonfatal stroke, or hospitalization for unstable angina: key secondary outcome*	333 (14.3)	52.5	599 (12.8)	46.4	0.89 (0.78–1.01)	
Noninferiority						<0.001†
Superiority						0.08†
Death						
From any cause	194 (8.3)	28.6	269 (5.7)	19.4	0.68 (0.57–0.82)	<0.001
From cardiovascular causes	137 (5.9)	20.2	172 (3.7)	12.4	0.62 (0.49–0.77)	<0.001
Fatal or nonfatal myocardial infarction excluding silent myocardial infarction	126 (5.4)	19.3	223 (4.8)	16.8	0.87 (0.70–1.09)	0.23
Nonfatal myocardial infarction excluding silent myocardial infarction	121 (5.2)	18.5	213 (4.5)	16.0	0.87 (0.70–1.09)	0.22
Silent myocardial infarction‡	15 (1.2)	5.4	38 (1.6)	7.0	1.28 (0.70–2.33)	0.42
Hospitalization for unstable angina	66 (2.8)	10.0	133 (2.8)	10.0	0.99 (0.74–1.34)	0.97
Coronary revascularization procedure	186 (8.0)	29.1	329 (7.0)	25.1	0.86 (0.72–1.04)	0.11
Fatal or nonfatal stroke	69 (3.0)	10.5	164 (3.5)	12.3	1.18 (0.89–1.56)	0.26
Nonfatal stroke	60 (2.6)	9.1	150 (3.2)	11.2	1.24 (0.92–1.67)	0.16
Transient ischemic attack	23 (1.0)	3.5	39 (0.8)	2.9	0.85 (0.51–1.42)	0.54
Hospitalization for heart failure	95 (4.1)	14.5	126 (2.7)	9.4	0.65 (0.50–0.85)	0.002
Hospitalization for heart failure or death from cardiovascular causes excluding fatal stroke	198 (8.5)	30.1	265 (5.7)	19.7	0.66 (0.55–0.79)	<0.001

* Data were analyzed with the use of a four-step hierarchical-testing strategy for the pooled empagliflozin group versus the placebo group in the following order: noninferiority for the primary outcome, noninferiority for the key secondary outcome, superiority for the primary outcome, and superiority for the key secondary outcome. Each successive hypothesis could be tested, provided that those preceding it met the designated level of significance. Data are based on Cox regression analyses in patients who received at least one dose of a study drug.
† One-sided P values are shown for tests of noninferiority, and two-sided P values are shown for tests of superiority.
‡ Silent myocardial infarction was analyzed in 2378 patients in the empagliflozin group and 1211 patients in the placebo group.

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

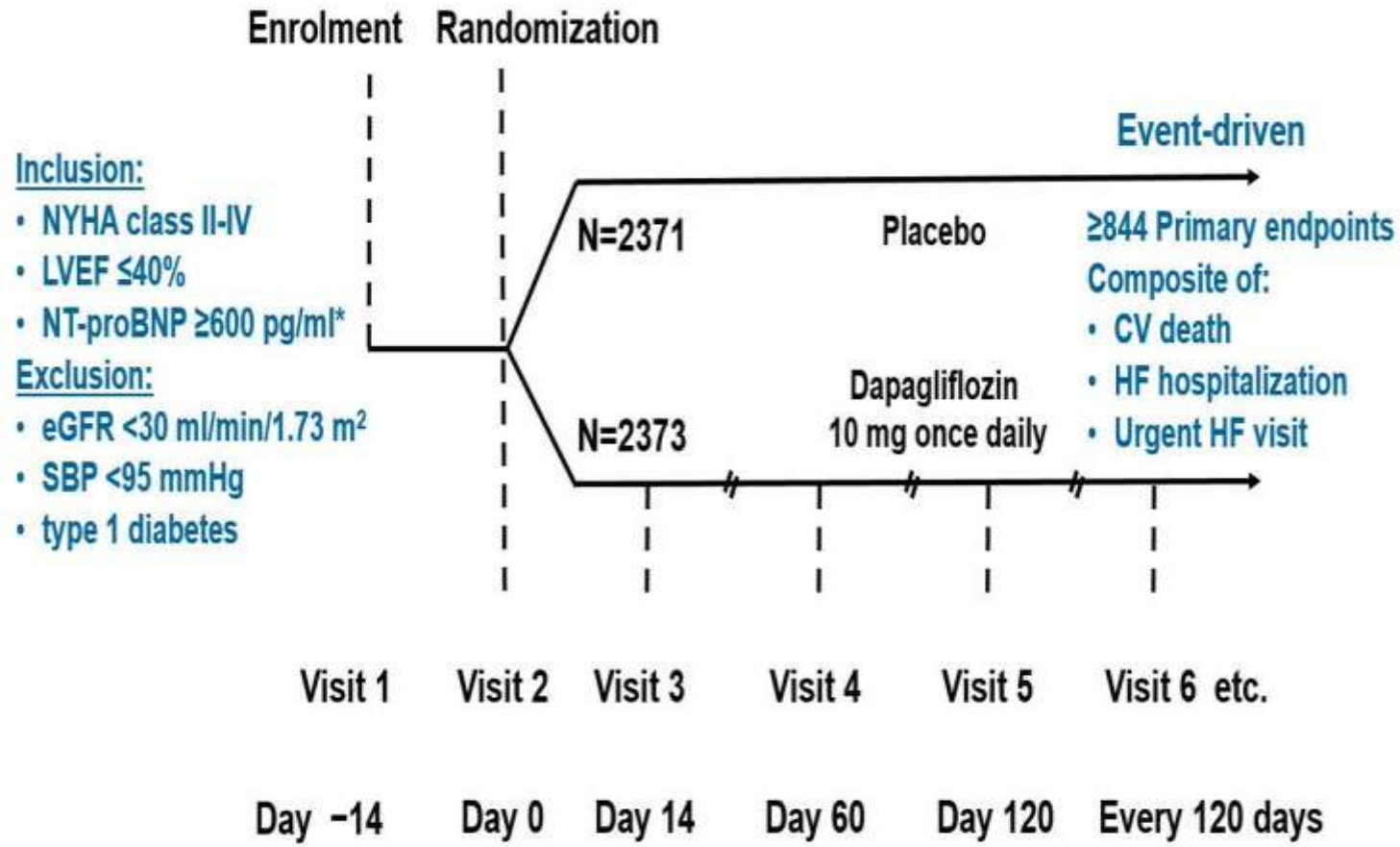
Azərbaycan Kardiologiya Cəmiyyəti

12-13 İYUN 2026

FAIRMONT HOTEL - FLAME TOWERS, BAKI

DAPA-HF Design

4,744 patients 20 countries



*≥400 pg/ml if HF hospitalization within ≤12 months; ≥900 pg/ml if atrial fibrillation/flutter

2019

DAPA-HF TRIAL

Dapagliflozin in Patients with Heart Failure and Reduced Ejection Fraction

AMERICAN COLLEGE of CARDIOLOGY

Randomized, parallel group, placebo-controlled trial

Objective: To evaluate dapagliflozin (a sodium-glucose cotransporter 2 [SGLT2] inhibitor) compared with placebo among patients with heart failure and a reduced ejection fraction (HFrEF).

4,744 patients

Inclusion criteria: patients with symptomatic HF; LVEF ≤40% NT-proBNP ≥600 pg/ml (if hospitalized for HF within last 12 months ≥400 pg/ml; if atrial fibrillation/flutter ≥900 pg/ml)

Dapagliflozin 10 mg daily (n = 2,373) VS Placebo (n = 2,371)

PRIMARY OUTCOME

16.3	Cardiovascular death, hospitalization for HF, or urgent HF visit% HR 0.74; 95% CI 0.65-0.85, P< 0.001	21.2

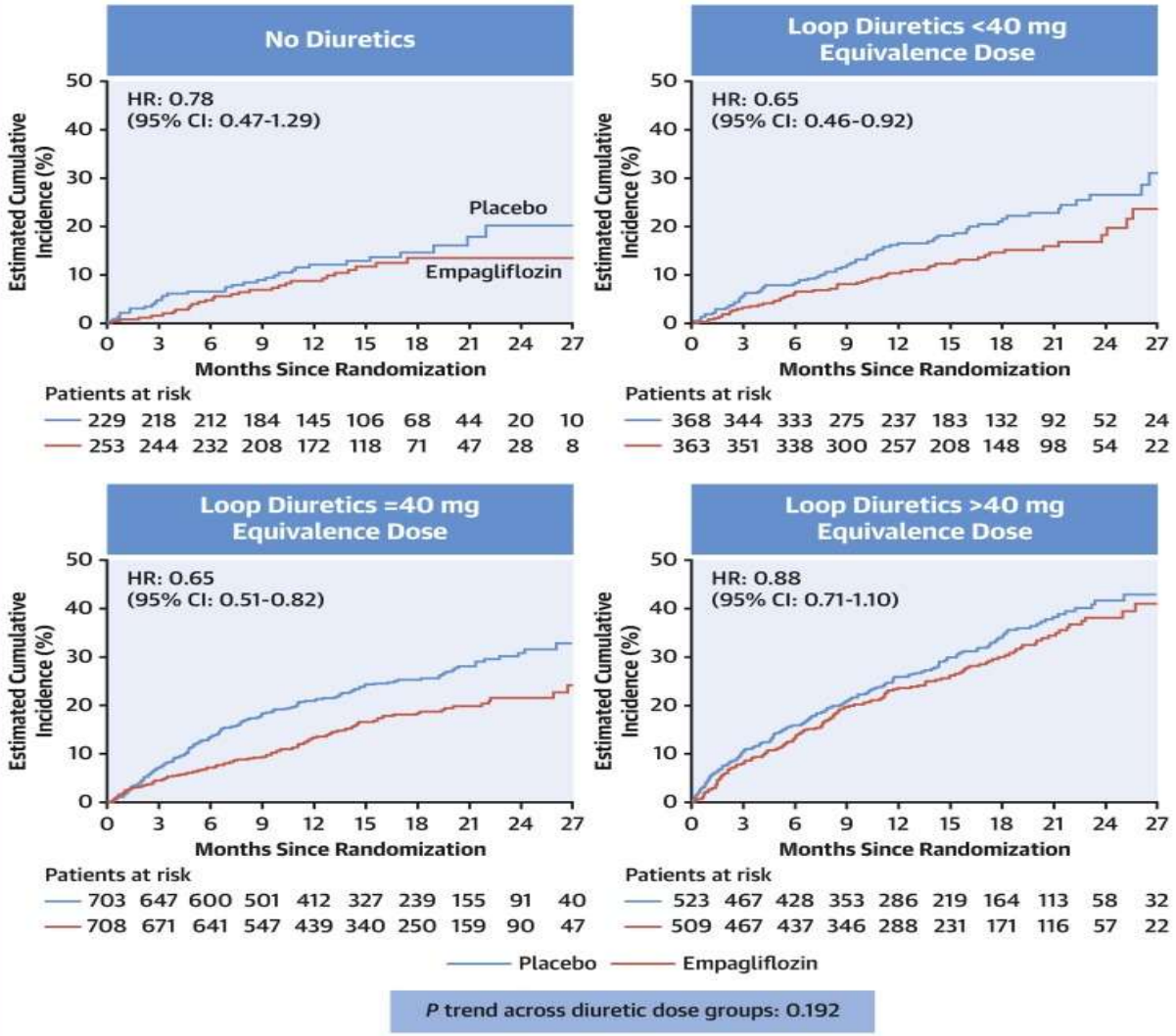
SECONDARY OUTCOME

9.6	Cardiovascular death % HR 0.82; 95% CI 0.69 to 0.98	11.5
1.2	Worsening of renal function % HR 0.71; 95% CI 0.44 to 1.16	1.6

Conclusion: Dapagliflozin vs. placebo was associated with a reduction in cardiovascular deaths and HF events

McMurray JJV, Solomon SD, Inzucchi SE, et al., for the DAPA-HF Trial Committees and Investigators. Dapagliflozin in Patients with Heart Failure and Reduced Ejection Fraction. *N Engl J Med*, 2019; [EPub Ahead of Print].

CENTRAL ILLUSTRATION: Time to Primary Outcome Measure Stratified by Baseline Diuretic Agent Doses in EMPEROR-Reduced



Dhingra NK, et al. J Am Coll Cardiol HF. 2024;12(1):35-46.

2020

EMPEROR-REDUCED

Cardiovascular and Renal Outcomes with Empagliflozin in Heart Failure

AMERICAN COLLEGE of CARDIOLOGY

Double-blind, parallel-group, placebo-controlled trial

Objective: To evaluate the use of empagliflozin in patients with chronic heart failure and a reduced ejection fraction with or without diabetes.

3730 patients

Inclusion criteria: Adults (≥18 years of age) with or without diabetes who had chronic heart failure (functional class II, III, or IV) with a left ventricular ejection fraction of 40% or less on excellent baseline GDMT.

empagliflozin (N=1863) VS placebo (N=1867)

PRIMARY OUTCOME

empagliflozin		placebo
19.4	Cardiovascular death or hospitalization for heart failure % HR 0.75; 95% CI, 0.65 to 0.86; P<0.001	24.7

SECONDARY OUTCOME

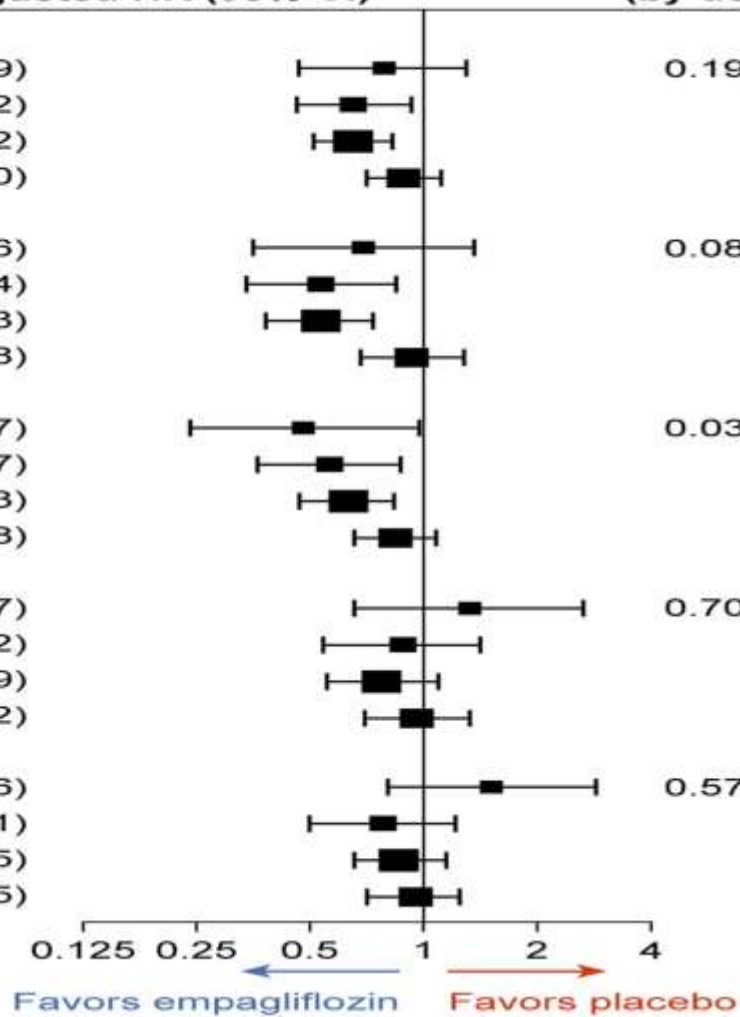
empagliflozin		placebo
388	Total no. of hospitalizations for heart failure (N) HR 0.70; 95% CI, 0.58 to 0.85; P<0.001	553
-0.55	Mean change in eGFR per year HR 1.73 ; 95% CI, 1.10 to 2.37; P<0.001	-2.28

Conclusion: Among patients receiving recommended therapy for heart failure, those in the empagliflozin group had a lower risk of cardiovascular death or hospitalization for heart failure than those in the placebo group, regardless of the presence or absence of diabetes.

Packer M, Anker SD, Butler J, et al., for the EMPEROR-Reduced Trial Investigators. Cardiovascular and Renal Outcomes with Empagliflozin in Heart Failure. *N Engl J Med* 2020;Aug 29:[Epub ahead of print].

EMPEROR-Reduced

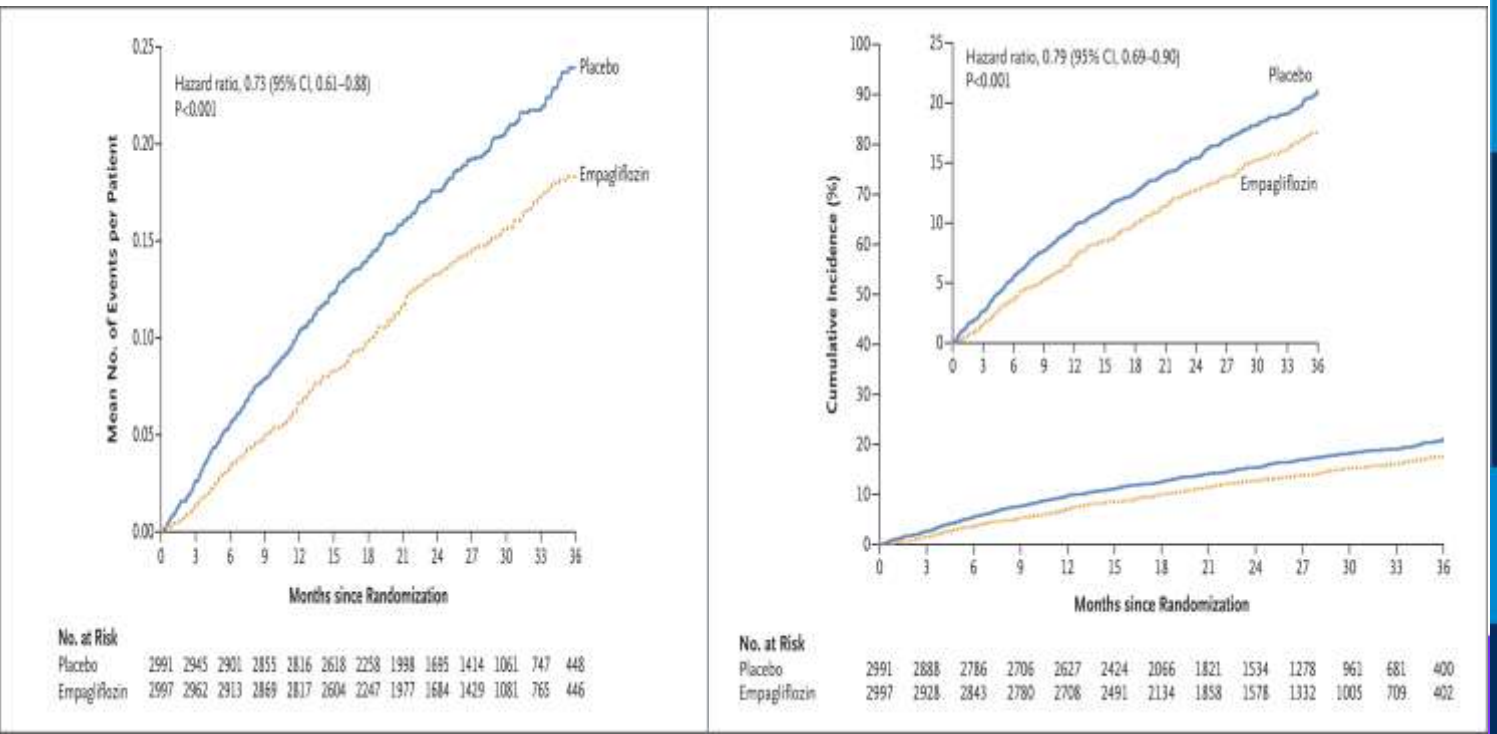
Endpoint	Placebo n/N	Placebo Events/ 100 py	Empagliflozin n/N	Empagliflozin Events/ 100 py	Adjusted HR (95% CI)	*p*-trend (by dose)
CV death or first HHF						
No diuretics	32/229	11.7	28/253	9.1	0.78 (0.47, 1.29)	0.192
<40 mg	76/368	16.6	53/363	10.9	0.65 (0.46, 0.92)	
40 mg	177/703	21.3	120/708	13.8	0.65 (0.51, 0.82)	
>40 mg	171/523	29.1	153/509	25.9	0.88 (0.71, 1.10)	
Total (first and recurrent) HHF						
No diuretics	29	–	21	–	0.69 (0.35, 1.36)	0.082
<40 mg	99	–	51	–	0.53 (0.34, 0.84)	
40 mg	208	–	104	–	0.53 (0.38, 0.73)	
>40 mg	211	–	204	–	0.93 (0.68, 1.28)	
First HHF						
No diuretics	22/229	8.0	12/253	3.9	0.48 (0.24, 0.97)	0.036
<40 mg	54/368	11.8	33/363	6.8	0.56 (0.36, 0.87)	
40 mg	125/703	15.0	81/708	9.3	0.63 (0.47, 0.83)	
>40 mg	135/523	23.0	115/509	19.5	0.84 (0.65, 1.08)	
CV death						
No diuretics	13/229	4.5	19/253	5.8	1.32 (0.65, 2.67)	0.700
<40 mg	35/368	6.9	31/363	6.1	0.88 (0.54, 1.42)	
40 mg	76/703	8.1	60/708	6.5	0.77 (0.55, 1.09)	
>40 mg	78/523	11.3	73/509	10.9	0.96 (0.70, 1.32)	
All-cause mortality						
No diuretics	15/229	5.2	26/253	8.0	1.51 (0.80, 2.86)	0.575
<40 mg	46/368	9.1	36/363	7.1	0.78 (0.50, 1.21)	
40 mg	100/703	10.7	88/708	9.5	0.86 (0.65, 1.15)	
>40 mg	101/523	14.6	95/509	14.1	0.94 (0.71, 1.25)	



5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

MeanLVEF— %	54.3±8.8	54.3±8.8
LVEF >40% to <50% — no. (%)	995 (33.2)	988 (33.0)
LVEF ≥50% to <60% — no. (%)	1028 (34.3)	1030 (34.4)
LVEF ≥60% — no. (%)	974 (32.5)	973 (32.5)



AMERICAN COLLEGE of CARDIOLOGY

EMPEROR-Preserved

Empagliflozin in Heart Failure With a Preserved Ejection Fraction

Randomized, double-blind, placebo-controlled trial

OBJECTIVE: To evaluate the effects of SGLT2 inhibition with empagliflozin on major heart failure (HF) outcomes in patients with HF and a preserved ejection fraction (EF).

5,988 PATIENTS

INCLUSION CRITERIA: Participants were 18 years of age or older with NYHA functional class II–IV chronic HF and a left ventricular EF of more than 40%.

EMPAGLIFLOZIN GROUP (N=2,997) vs. PLACEBO GROUP (N=2,991)

PRIMARY OUTCOME

COMPOSITE OF CV DEATH OR HOSPITALIZATION FOR HF OVER 26.2 MONTHS:
13.8% vs. **17.1%** **(P<0.001)**

SECONDARY OUTCOMES

HOSPITALIZATION FOR HF:
8.6% vs. **11.8%** **(P<0.001)**

DEATH FROM CV CAUSES:
7.3% vs. **8.2%** **(P=NS)**

HR 0.79 (95% CI 0.69, 0.90) P = 0.0003

CONCLUSION

Empagliflozin reduced the combined risk of CV death or hospitalization for HF in patients with HF and a preserved EF, regardless of the presence or absence of diabetes.

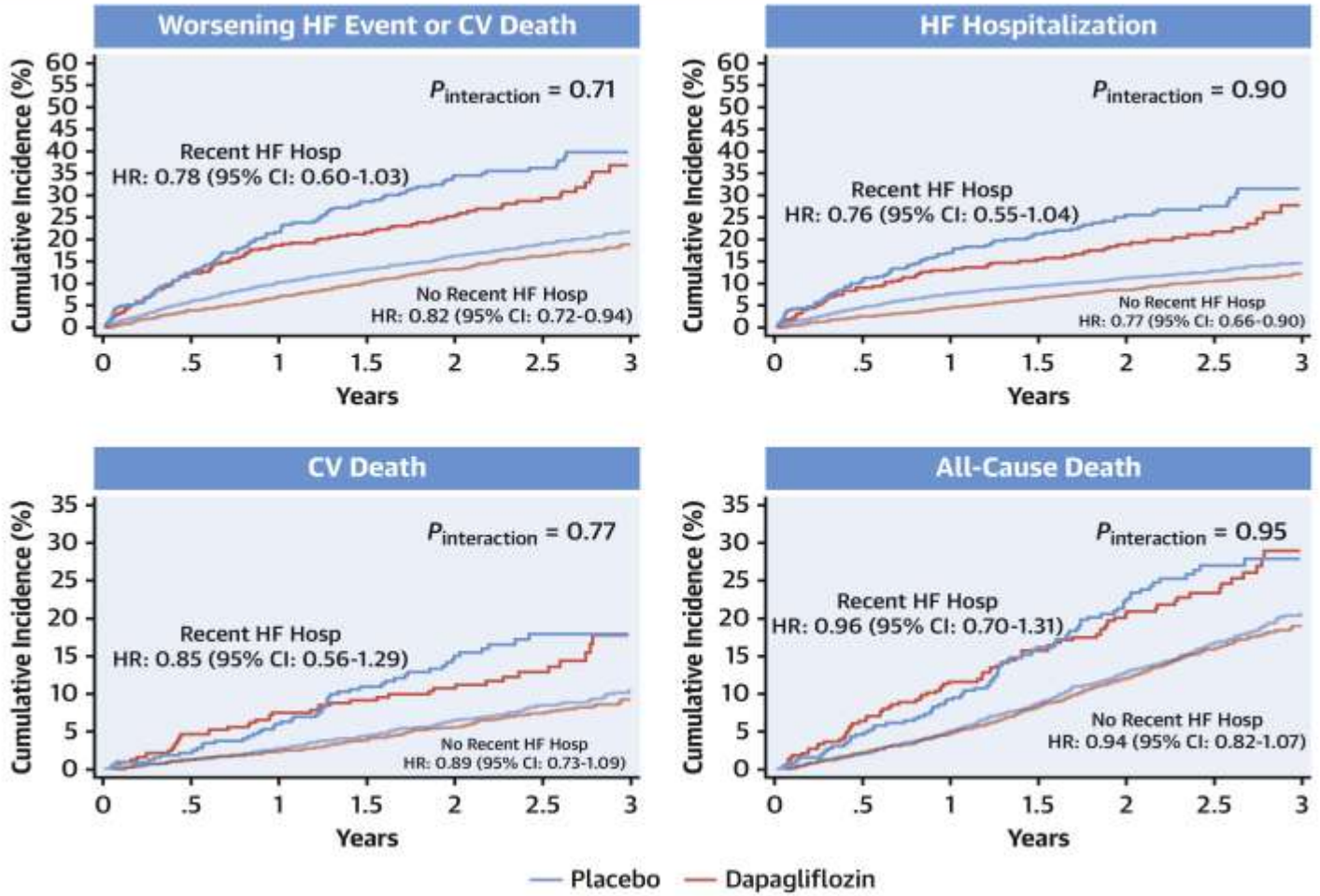
S.D. Anker, J. Butler, G. Filippatos, et al., for the EMPEROR-Preserved Trial Investigators. Empagliflozin in Heart Failure With a Preserved Ejection Fraction. *N Engl J Med* 2021; August 27 [Epub Ahead of Print].

Developed by Neil Kashvani, MD. Reviewed by Dharam J. Kumbhani, MD, SM, FACC, and Deepak L. Bhatt, MD, MPH, FACC

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

CENTRAL ILLUSTRATION: Efficacy of Dapagliflozin in Patients With and Without Recent Hospitalization



Cunningham JW, et al. J Am Coll Cardiol. 2022;80(14):1302-1310.

AMERICAN COLLEGE of CARDIOLOGY
Advancing Heart Care Worldwide

DELIVER

Dapagliflozin in Heart Failure With Mildly Reduced or Preserved Ejection Fraction

International, Multicenter, Double-Blind, Randomized Controlled Trial

OBJECTIVE: To assess the safety and efficacy of dapagliflozin, an SGLT2 inhibitor, in heart failure (HF) patients with ejection fraction >40%, irrespective of diabetes status.

6,263 PATIENTS

INCLUSION CRITERIA: Stabilized HF with or without type 2 diabetes mellitus with LVEF > 40% and elevated natriuretic peptide levels.

DAPAGLIFLOZIN (N=3,131) vs. **PLACEBO (N=3,132)**

PRIMARY ENDPOINT

Composite of hospitalization for HF, urgent visit for HF, or CV death, for dapagliflozin vs. placebo: 16.4% vs. 19.5%, p<0.001.

SECONDARY ENDPOINT

Death from any cause for dapagliflozin vs. placebo: 15.9% vs. 16.8%, not statistically significant.

CONCLUSION

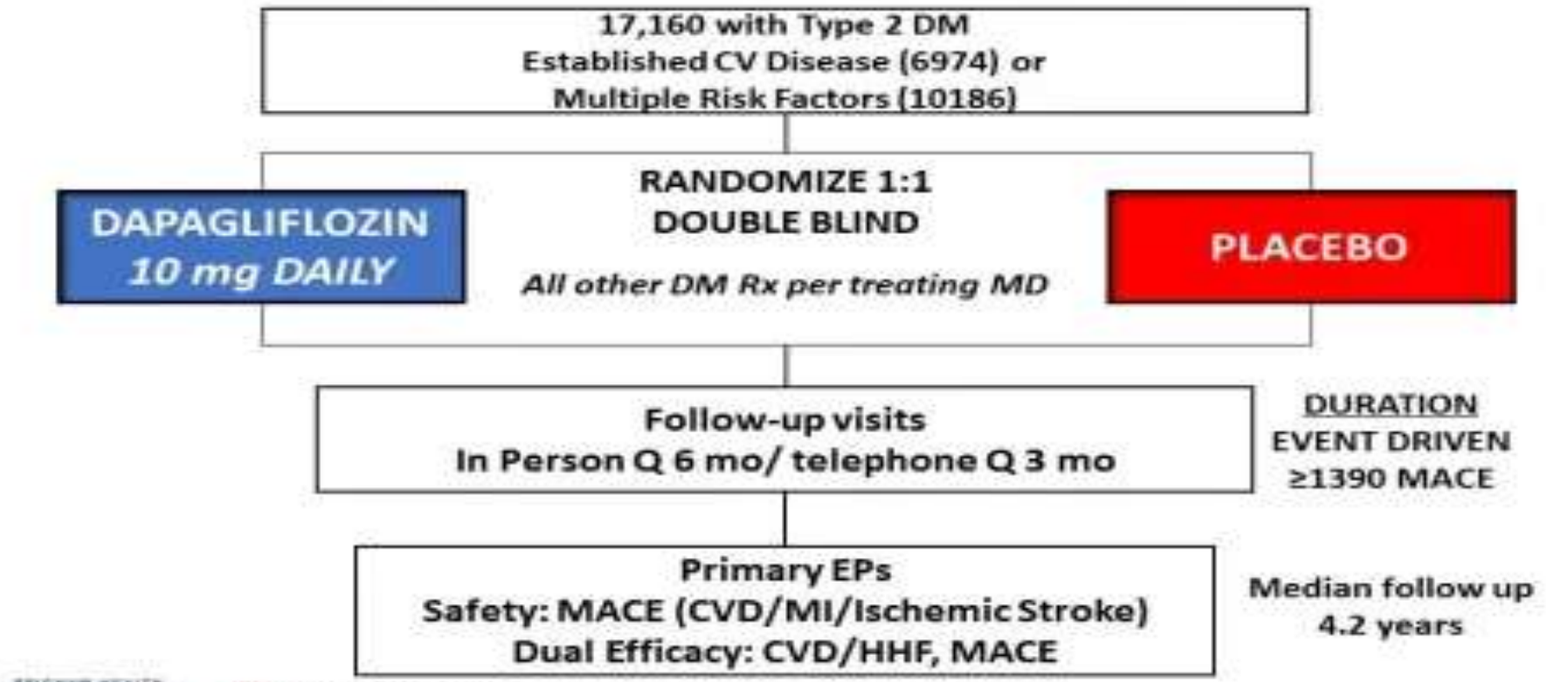
Dapagliflozin resulted in lower risk of worsening HF or CV death vs. placebo among patients with LVEF > 40%.

Solomon SD, McMurray JJV, Claggett B, et al. Dapagliflozin in Heart Failure with Mildly Reduced or Preserved Ejection Fraction. *N Engl J Med* 2022; Aug. 27:[Epub Ahead of Print].

Developed and reviewed by Neil Keshvani, MD; Dharam J. Kumbhani, MD, SM, FACC; and Deepak L. Bhatt, MD, MPH, FACC.

DECLARE–TIMI 58 trial (2013-2019)

Trial Design



Wiviott SD, Raz I...Sabatine MA, *NEJM* 2018

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

DECLARE–TIMI 58: Dapagliflozin and CV Outcomes in Type 2 Diabetes

randomized, double-blind, multinational, placebo-controlled, phase 3 trial

Objective: To assess cardiovascular safety profile of dapagliflozin, a selective inhibitor of SGLT2 in patients with type 2 diabetes

Patients with type II DM and CV disease → dapagliflozin → major adverse cardiovascular events

17,160 patients with DMII (HbA1c 6.5-12%) who had multiple risk factors for or had established atherosclerotic CV disease were randomized to:

dapagliflozin (n=8582)	placebo (n=8578)

Primary Outcome

4.9%	cardiovascular death or hospitalization for heart failure HR 0.83; 95% CI, 0.73 to 0.95; P=0.005	5.8%
8.8%	major CV adverse event (MACE) P<0.001 for noninferiority, P=0.17 for superiority	9.4%

Secondary Outcome

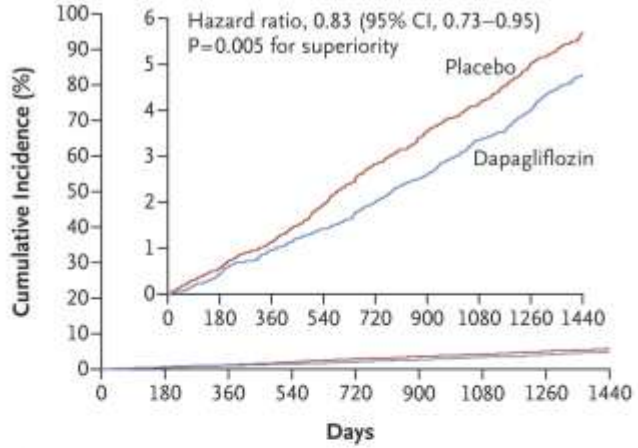
6.2%	all-cause mortality HR 0.93; 95% CI, 0.82 to 1.04	6.6%
4.3%	40% decrease eGFR, ESRD, renal or CV death HR 0.73; 95% CI, 0.61 to 0.88	5.6%

In patients with type 2 DM who had or were at risk for atherosclerotic CV disease, treatment with dapagliflozin did not result in a higher or lower rate of MACE but did result in a lower rate of CV death or hospitalization for heart failure

Stephen D. Wiviott et al. NEJM, 2019; 380:347-357

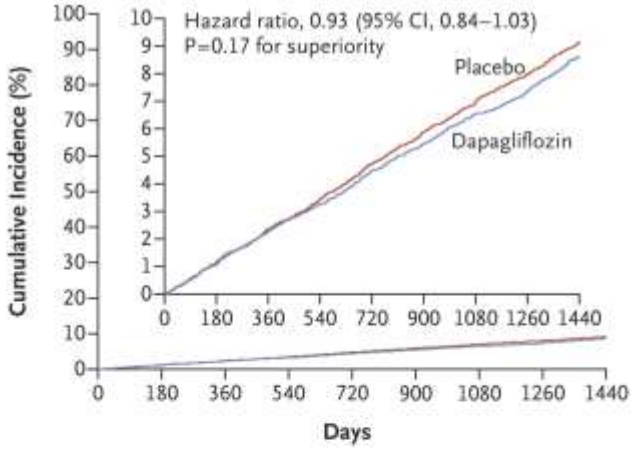
Visualmed

A Cardiovascular Death or Hospitalization for Heart Failure



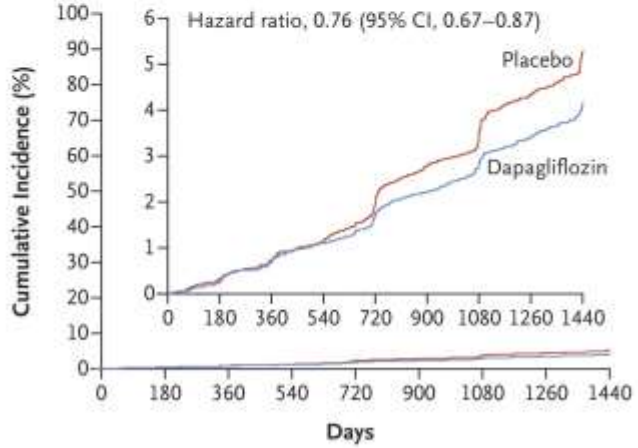
No. at Risk									
Placebo	8578	8485	8387	8259	8127	8003	7880	7367	5362
Dapagliflozin	8582	8517	8415	8322	8224	8110	7970	7497	5445

B MACE



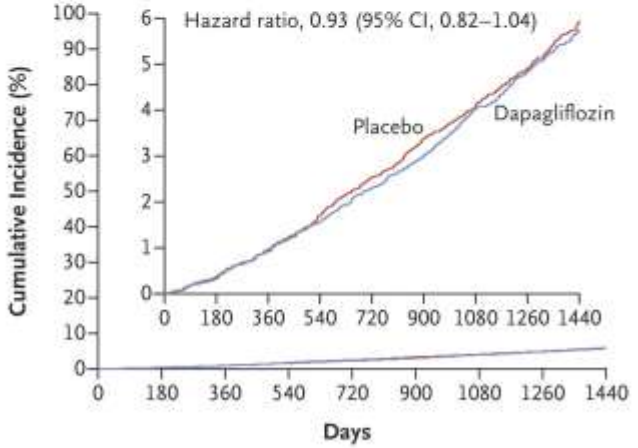
No. at Risk									
Placebo	8578	8433	8281	8129	7969	7805	7649	7137	5158
Dapagliflozin	8582	8466	8303	8166	8017	7873	7708	7237	5225

C Renal Composite



No. at Risk									
Placebo	8578	8508	8422	8326	8200	8056	7932	7409	5389
Dapagliflozin	8582	8533	8436	8347	8248	8136	8009	7534	5472

D Death from Any Cause



No. at Risk									
Placebo	8578	8542	8484	8414	8337	8258	8184	7741	5715
Dapagliflozin	8582	8554	8495	8437	8369	8305	8207	7763	5715

Kəskin ürək yetməzliyində SGLT2

Charaya et al
DAPA-RESPONSE-AHF
DICTATE-AHF 240 XƏSTƏ
EMPA-RESPONSE-AHF
EMPAG HF
EMPULSE 530 XƏSTƏ
SOLOIST-WHF 1222 XƏSTƏ

BÜTÜN SƏBƏBLƏRDƏN ÖLÜM 29%

Üç SƏBƏBİYLƏ TƏKRAR YATIŞ 27% AZALMA

Early Initiation of SGLT2 Inhibitors in Patients Hospitalized for Acute Heart Failure

- 7 RCTs included
- 2,320 patients

- RCTs assessing outcomes of SGLT2i early initiation in patients hospitalized for AHF
- Efficacy outcomes : all-cause mortality, HF rehospitalizations, CV death or HF events
- Early initiation = before of shortly after discharge (3 days)

All-cause Mortality : OR 0.71 [95% CI 0.55 – 0.92]
HF Rehospitalizations : OR 0.73 [95% CI 0.57 – 0.94]

No increased risk of AKI, hypoglycemia, hypotension, ketoacidosis and urinary tract infections

Early introduction of SGLT2i in AHF improves all-cause mortality and rehospitalization rates, and should be offered to most of AHF patients

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

BİRİNCİLİ SONLANDIRMA 90 GÜN ÜÇÜN

EMPAQLİFLOZİN QRUPUNDA 53,9%

PLASEBO QRUPUNDA 39,7%

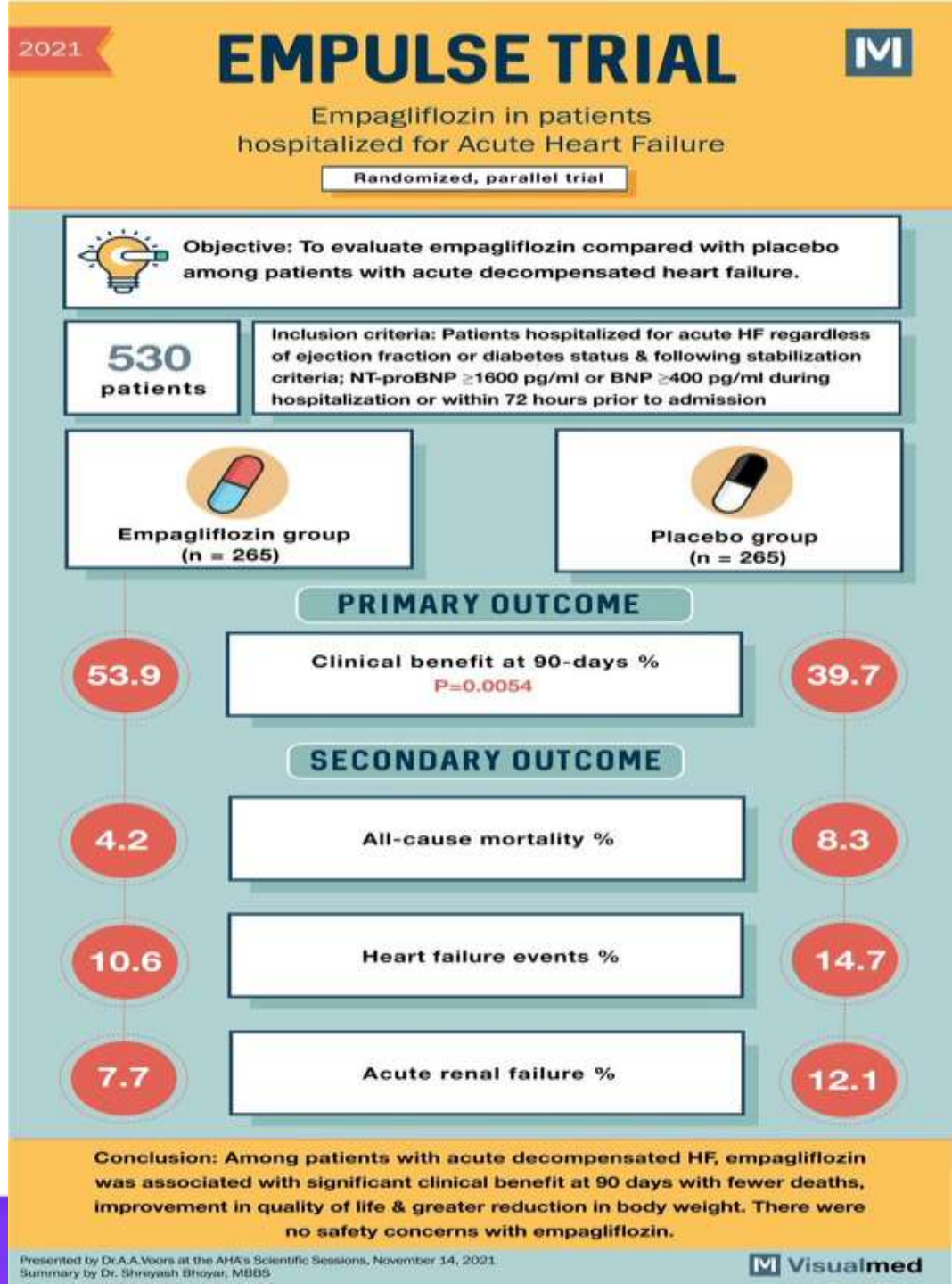
İKİNCİLİ SONLANDIRMA

BÜTÜN SƏBƏBLƏRDƏN ÖLÜM 4,2%

PLASEBO QRUPUNDA 8,3%

ÜRƏK ÇATMAZLIĞI 10,6%

PLASEBO QRUPUNDA 14,7%



SGLT 2 KƏSKİN MOİKARD İNFARKTINDA TƏYİN EDƏ BİLƏRƏMMİ?

OLAR	OLMAZ
-HEMODİNAMİK STABİL OLDUQDAN SONRA -PTKA OLUNUBSA VƏ VƏZİYYƏTİ STABİLDİRSƏ	-KARDİOGEN ŞOK -HİPOTONİYA
-EF≤40% AZDIRSA -DİABET VARDIRSA	-KƏSKİN BÖYRƏK -KETOASİDOZ RİSKİ
-XRONİK BÖYRƏK XƏSTƏLİYİ VARSA	- AĞIR DEHİDRATASİYA

Kəskin miokard infarktında rutun SGLT2 təyin olması sübüt olunmayıb!

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

12-13 İYUN 2026

FAIRMONT HOTEL - FLAME TOWERS, BAKI

AMERICAN COLLEGE of CARDIOLOGY

DAPA-MI

Dapagliflozin in Myocardial Infarction (MI) Without Diabetes (T2D) or Heart Failure (HF)

International, Registry-Based, Randomized, Double-Blind, Placebo-Controlled Trial

OBJECTIVE: To evaluate one-year outcomes of a composite of death, HF hospitalization and cardiometabolic factors in patients with acute MI randomized to dapagliflozin or placebo.

4,017 PATIENTS

INCLUSION CRITERIA: Patients ≥18 years hospitalized for an acute MI; impaired left ventricular systolic function; no known T2D or HF; no prior SGLT2i therapy

DAPAGLIFLOZIN 10 MG (N=2,019)

vs.

PLACEBO (N=1,998)

PRIMARY ENDPOINT

A HIERARCHICAL COMPOSITE OF DEATH, HF HOSPITALIZATION, NONFATAL MI, ATRIAL FIBRILLATION/FLUTTER, T2D, NYHA CLASS AND BODY WEIGHT DECREASE ≥5% AT LAST VISIT RESULTED IN 32.9% VS. 24.6% WINS FOR DAPAGLIFLOZIN VS. PLACEBO (WIN RATIO 1.34, P<0.001).

SECONDARY ENDPOINT

TIME TO CARDIOVASCULAR DEATH OR HF HOSPITALIZATION DID NOT DIFFER BETWEEN GROUPS (2.5% WITH DAPAGLIFLOZIN VS. 2.6% WITH PLACEBO).

CONCLUSION

At one year after acute MI, patients who received dapagliflozin vs. placebo attained significant improvement in cardiometabolic outcomes without an effect on a composite of cardiovascular death or HF hospitalization.

James S, Erlinge D, Storey RF, et al. Dapagliflozin in Myocardial Infarction Without Diabetes or Heart Failure. *NEJM Evidence* 2023;Nov 11;[Epublished].

Developed and reviewed by Heather Wheat, MD, and Kent Brummel, MD

2024

EMPACT-MI

Empagliflozin after Acute Myocardial Infarction

M

A double-blind, randomized, placebo-controlled trial

Objective: To assess if the use of empagliflozin in the treatment of acute myocardial infarction (AMI) affects future mortality or heart failure (HF) in at-risk patients.

6522 Patients

Inclusion criteria: Age ≥18 years, diagnosed cases of spontaneous acute MI, had been hospitalized for acute MI and were at risk for heart failure. **Exclusion criteria:** Diagnosis of CHF before index MI, systolic BP <90 mmHg at randomization, or cardiogenic shock or use of i.v. inotropes in last 24 hours before randomisation.

Empagliflozin (10 mg daily) (n = 3260)

VS.

Placebo (n = 3262)

Primary Outcome

8.2	**First hospitalization for heart failure or death from any cause in patients (%)** HR, 0.90; 95% CI, 0.76 to 1.06 (P=0.21)	9.1

Secondary Outcomes

3.6	**First hospitalization for heart failure occurred in patients (%)** HR, 0.77; 95% CI, 0.60 to 0.98	4.7
5.2	**Death from any cause (%)** HR, 0.96; 95% CI, 0.78 to 1.19	5.5

Conclusion: Among patients at increased risk for heart failure after acute myocardial infarction, treatment with empagliflozin did not lead to a significantly lower risk of a first hospitalization for heart failure or death from any cause than placebo.

Butler J et al. N Engl J Med 2024; DOI: 10.1056/NEJMoa2314051

Visualmed

SGLT-2 təyinatı

Kimlərə verilməlidir?

-Şəkərli Diabet II tip(GFR 30ml/dəq/1,73m2

-AF azalmış ÜÇ (EFrHF) <40%

-AF yüngül azalmış (HFmEF,41-49%)

-AF saxlanılmış ÜÇ(HFpEF) ≥50%

-XBY ŞD IItip

Kimlərə olmaz!

Dializ xəstələrində əks göstərişdir!

-Qaraciyərin yüngül və orta zədələnmələrində (empa)

- Hamiləlikdə əks göstərişdir

-Sepsis

- Qaraciyər sirrozu

SGLT 2 yan təsirləri

-Genital mikotik infeksiya
-Sidik yolları infeksiyasının artması
-Euqlikemik ketoasidoz
-Hipotoniya
-Böyrək funksiyasının pisləməsi
-Furnye qanqrenası(nadirən)
-Orqanizmin susuzlaşması
-Sümük qırılması
-Amputasiya riski
-

Təyinatdan öncə neynəməliyik

-Qanda kreatinin yoxlamalı

-eGFR yoxlamalı

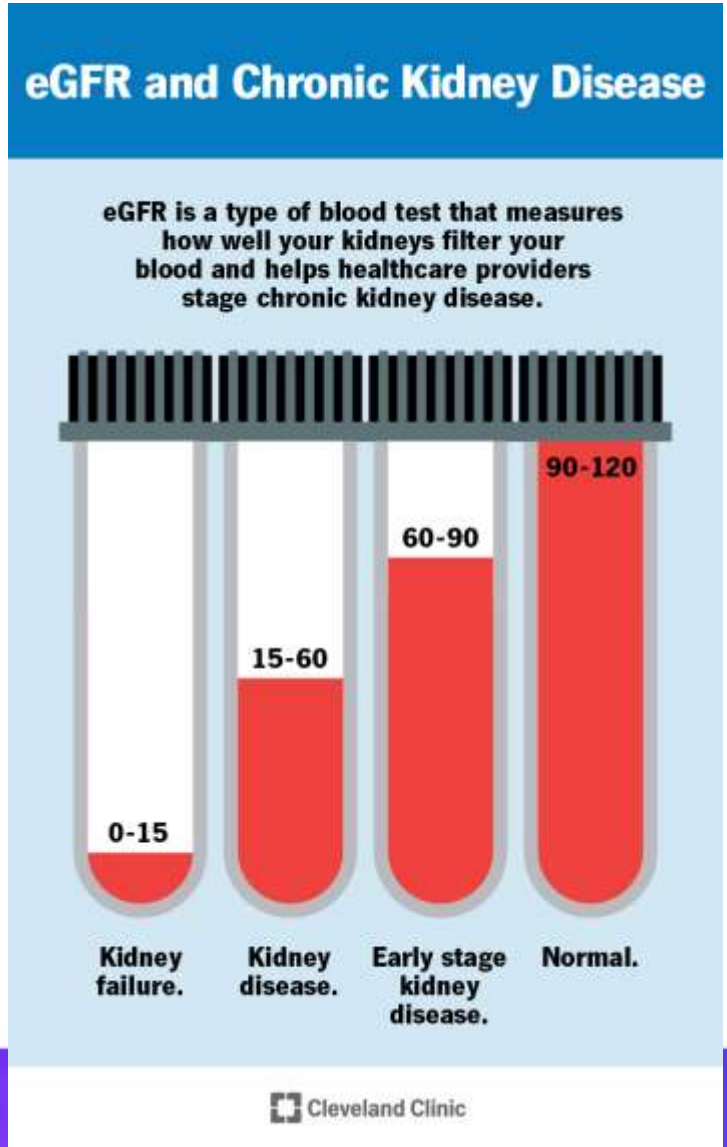
-Hipotenziya varmı?

-Diuretik alırmı? Susuzlaşama varmı

-Kalium və elektrolitləri yoxlamalı(K,Na)

-HqA1c səviyyəsi

-Sidik cinsiyyət yolları infelksiyası varmı?



Müalicə sırasında nələrə fikir verməli?

-Ciddi susuzluq

-Ciddi zəiflik ,başgicələnmə

-Qasıqda qaşınma , ifrazat,qızartı,sidik yandırması

-Coxlu qusma ,ishal

-İlk həftə sidik ifrazı arta bilər

-Çəki azala bilər

-Təzyiq düşə bilər

SGLT 2 təyinində buraxılan səhvlər...

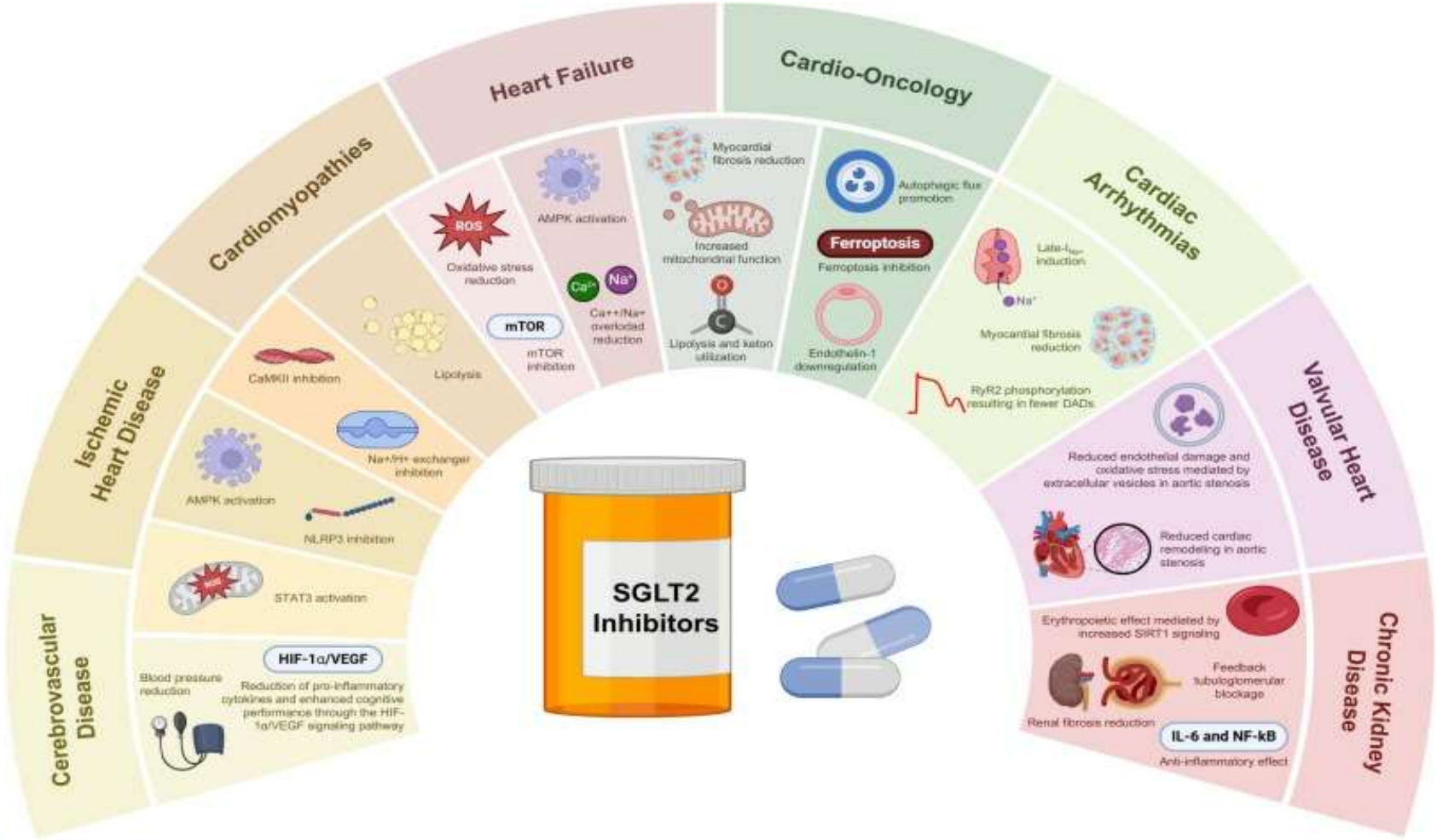
-Hipovolemiyanı qiymətləndirməmək(xəstə yüksək doza diuretik alırsa hipotoniya və kreatinin keçiçi artış ola bilər.
-Kreatinin ilkin artışından qorxmaq(eGFR ilk həftə azalacaq)
-Kəskin xəstəlik zamanı davam etmək(qusma,ishal,sepsis,əməliyyat vaxtı müvəqqəti kəsilməlidir.
-Genital infeksiya barədə məlumat verməmək
-Ketasidoz riskini unutmaq
-Elektrolit və böyrək funksiyasına nəzarəti unutmaq(1-2həftə kreatinin , eGFR elektrolitlər baxılmalı)

5-ci ÜRƏK ÇATIŞMAZLIĞINDA YENİLİKLƏR KONQRESİ

Azərbaycan Kardiologiya Cəmiyyəti

12-13 İYUN 2026

FAIRMONT HOTEL - FLAME TOWERS, BAKI



SGLT2 yekunlaşan və davam edən çalışmalar...

-**EMPA-REPAIR,** HKM

-**EMPOAF** , İzolə AKŞ olunmuş xəstələrdə AF tezliyinin azalması

-**DAPA-AF** AF ŞD xəsətələrində AF tezliyi

-**DECIST** Kəskin insult xəstələrində koqnitiv funksiya

-**EMPATHY** Dekompensə ÜÇ xəstələrində Ürək ölümü və ya hospitalizasiya vaxtı

-**DAPAPROTECTOR** KMİ xəstələrində kardiac remodelləşməsinə təsiri

-**DAPA-MYOCANCER** döş xərçəngi olub, antraçiklin müalicəsi alan xəstələrdə AF təsiri

-**SONATA-HCM** HKMP lərdə simptomlara təsiri

-P**REVENTS-AKI** Reanimasiya xəstələrində kəskin böyrək zədələnməsinin azalması

-**PROTECTAA** döş xərçəngi olub, antraçiklin müalicəsi alan xəstələrdə LV disfunksiyası

-**STENOTYPE** AKŞ olunacaq KKS xəstələrdə AF tezliyi

5-ci ÜRƏK ÇATIŞMAZLIĞINDA
YENİLİKLƏR KONQRESİ

Azərbaycan
Kardiologiya
Cəmiyyəti

12-13 İYUN 2026

FAIRMONT HOTEL - FLAME TOWERS, BAKI