

**Supplementary Material Table 1: Trials design and key inclusion criteria**

Trial	Drug and class	Key Inclusion Criteria
<b>TD2</b>		
EMPA-REG OUTCOME <sup>3</sup>	Empagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• T2D and ≥18 years old</li> <li>• HbA1c <math>\geq 7.0\%</math> and <math>\leq 10\%</math> and <math>\geq 12</math> weeks anti-diabetic background therapy or HbA1c <math>\geq 7.0\%</math> and <math>\leq 9.0\%</math> for drug-naïve patients</li> <li>• Established ASCVD: prior MI, CAD, stroke, UA or occlusive PAD</li> <li>• BMI <math>\leq 45</math> kg/m<sup>2</sup></li> </ul>
CANVAS <sup>4</sup>	Canagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• T2D</li> <li>• HbA1c <math>\geq 7\%</math> and <math>\leq 10.5\%</math> who are drug-naïve or pre-treated with any background therapy</li> <li>• <math>\geq 30</math> years old with established ASCVD: prior MI, CAD, stroke, UA or occlusive PAD <b>or</b></li> <li>• <math>\geq 50</math> years old without established ASCVD and <math>\geq 2</math> of the following risk factors: duration of T2D <math>\geq 0</math> years, SBP <math>&gt; 140</math> mmHg on <math>\geq 1</math> anti-hypertensive drug, current cigarette smoker, micro- or macro-albuminuria, HDL-C <math>&lt; 39</math> mg/dl</li> <li>• Postmenopausal women</li> </ul>
DECLARE-TIMI 58 <sup>5</sup>	Dapagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• T2D</li> <li>• <math>\geq 40</math> years old with established ASCVD: prior MI, CAD, stroke, UA or occlusive PAD <b>or</b></li> <li>• Men <math>&gt; 55</math> years old and women <math>&gt; 60</math> years old without established ASCVD and <math>\geq 1</math> of the following risk factors: dyslipidemia (LDL-C <math>&gt; 130</math> mg/dl within last year or on LLT), hypertension (BP <math>&gt; 140/90</math> mmHg or on anti-hypertensive therapy), current cigarette smokers (<math>\geq 1</math> year)</li> </ul>
SCORED* <sup>9</sup>	Sotagliflozin SGLT2i and SGLT1i	<ul style="list-style-type: none"> <li>• T2D and HbA1c <math>\geq 7\%</math> (53 mmol/mol)</li> <li>• CKD defined by eGFR <math>\geq 25</math> and <math>\leq 60</math> ml/min/1.73 m<sup>2</sup> (MDRD)</li> <li>• <math>\geq 18</math> years old with <math>\geq 1</math> of the major CV risk factors: HHF during previous 2 years, LVEF <math>\leq 40\%</math>, LVH, coronary artery calcium score <math>\geq 300</math> Agatston Units, NT-pro-BNP <math>\geq 400</math> pg/ml, TnT-hs <math>&gt; 15.0</math> pg/ml in men and <math>&gt; 10.0</math> pg/ml in women, CRP-hs <math>&gt; 3</math> mg/l, UACR <math>\geq 300</math> mg/g <b>or</b></li> <li>• <math>\geq 55</math> years old with no major but with <math>\geq 2</math> minor CV risk factors: BMI <math>\geq 35</math> kg/m<sup>2</sup>, dyslipidemia (LDL-C <math>&gt; 130</math> mg/dl or HDL-C <math>&lt; 40</math> mg/dl in men or <math>&lt; 50</math> mg/dl in women on LLT), currently smoking tobacco, coronary artery calcium score <math>&gt; 100 &lt; 300</math> Agatston Units, UACR <math>\geq 30</math> mg/g <math>&lt; 300</math> mg/g, resistant hypertension (BP <math>&gt; 140/90</math> mmHg on anti-hypertensive therapy), family history of premature CAD</li> </ul>
LEADER <sup>12</sup>	Liraglutide GLP1-RA	<ul style="list-style-type: none"> <li>• T2D and HbA1c <math>\geq 7\%</math> drug-naïve or pre-treated with any background antidiabetic therapy</li> <li>• <math>\geq 50</math> years old with previous CAD, or cerebrovascular disease, or PAD, or CKD stage 3 or greater, or chronic HF (NYHA II–III) <b>or</b></li> <li>• <math>\geq 60</math> years old with <math>\geq 1</math> CV risk factor: microalbuminuria or proteinuria, hypertension and LVH, left ventricular systolic or diastolic dysfunction, or ankle-brachial index <math>&lt; 0.9</math></li> </ul>
REWIND <sup>14</sup>	Dulaglutide GLP1-RA	<ul style="list-style-type: none"> <li>• T2D and HbA1c <math>\geq 6.5\%</math> and <math>\leq 9.5\%</math> drug-naïve or pre-treated with any background anti-diabetic therapy</li> <li>• <math>\geq 50</math> years old with established ASCVD: prior MI, CAD, stroke, UA or occlusive PAD <b>or</b></li> <li>• <math>\geq 55</math> years old and <math>\geq 1</math> of the following: history of MI, <math>&gt; 50\%</math> vascular stenosis, ankle-brachial index <math>&lt; 0.9</math>, eGFR <math>&lt; 60</math> ml/minute/1.73m<sup>2</sup>, hypertension and LVH, microalbuminuria or macroalbuminuria <b>or</b></li> </ul>

		<ul style="list-style-type: none"> <li>• ≥60 years old and ≥2 CV risk factors as follows: current tobacco use, LDL-C ≥130 mg/dl, HDL-C &lt;40 mg/dl in men and &lt;50 mg/dl in women or triglycerides ≥200 mg/dl, hypertension on ≥1 anti-hypertensive drug or untreated BP ≥140/95 mmHg, waist-to-hip ratio &gt;1.0 for men and &gt;0.8 for women</li> <li>• BMI ≥23 kg/m<sup>2</sup></li> </ul>
SUSTAIN-6 <sup>15</sup>	Semaglutide GLP1-RA	<ul style="list-style-type: none"> <li>• T2D and HbA1c ≥7% drug-naïve or pre-treated with any background antidiabetic therapy</li> <li>• ≥50 years old with previous CV disease, or cerebrovascular disease, or PAD, or CKD stage 3 or greater, or chronic HF (NYHA II-III) <b>or</b></li> <li>• ≥60 years old with ≥1 CV risk factor: microalbuminuria or proteinuria, hypertension and LVH, left ventricular systolic or diastolic dysfunction, or ankle-brachial index &lt;0.9</li> </ul>
<b>PREVENTION</b>		
FOURIER <sup>18</sup>	Evolocumab PCSK9i	<ul style="list-style-type: none"> <li>• ≥40 ≤85 years old</li> <li>• History of ASCVD: prior MI, non-haemorrhagic stroke, PAD</li> <li>• ≥1 major risk factor as follows: type 1 or 2 diabetes, ≥65 years old, MI or stroke within 6 months, ≥1 previous MI or stroke excluding qualifying event, current daily cigarette smoking, symptomatic PAD if eligible by MI or stroke <b>or</b></li> <li>• ≥2 minor risk factors as follows: non-MI-related coronary revascularisation, residual CAD (stenosis ≥40% in ≥2 large arteries), HDL-C &lt;40 mg/dl in men and &lt;50 mg/dl in women, CRP-hs &gt;2.0 mg/l, LDL-C ≥ 130 mg/dl or non-HDL-C ≥ 160 mg/dl, metabolic syndrome</li> <li>• LDL-C ≥70 mg/dl or non-HDL-C ≥100 mg/dl after ≥2 weeks of stable maximum-tolerated LLT</li> <li>• Triglycerides ≤400 mg/dl</li> <li>• eGFR ≥30 ml/min/1.73 m<sup>2</sup></li> </ul>
ODYSSEY-OUTCOME <sup>19</sup>	Alirocumab PCSK9i	<ul style="list-style-type: none"> <li>• ≥40 years old</li> <li>• Hospitalisation for ACS within 16 weeks</li> <li>• LDL-C ≥70 mg/dl, or non-HDL-C ≥100 mg/l or apolipoprotein B ≥80 mg/dl after ≥2 weeks stable maximum tolerated LLT</li> <li>• Triglyceride ≤400 mg/dl</li> </ul>
ORION 10 and 11 <sup>22</sup>	Inclisiran	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• History ASCVD or ASCVD-risk equivalents (symptomatic atherosclerosis, T2D, familial hypercholesterolaemia, 10-year risk of a CV event by Framingham Risk Score or equivalent with target LDL-C &lt;100 mg/dl)</li> <li>• LDL-C ≥70 mg/dl and ASCVD or ≥100 mg/dl for ASCVD-risk equivalent group after ≥30 days of stable maximum-tolerated LLT</li> <li>• Triglycerides &lt;400 mg/dl</li> <li>• eGFR ≥30 ml/min/1.73 m<sup>2</sup></li> </ul>
REDUCE-IT <sup>23</sup>	Icosapent ethyl	<ul style="list-style-type: none"> <li>• ≥45 years old and established ASCVD: prior MI, CAD, stroke, hospitalised for NSTEMI or PAD or carotid artery disease <b>or</b></li> <li>• ≥50 years old with diabetes and ≥1 of the following: men ≥55 years old and women ≥65 years old, current cigarette smoker (or previous smoking within 3 months), resistant hypertension on anti-hypertensive medication, HDL-C ≤40 mg/dl for men or ≤50 mg/dl for women, CRP-hs &gt;3.0 mg/l, CKD&gt;30 and &lt;60 ml/min, retinopathy, micro- or macroalbuminuria, ankle-brachial index &lt;0.9.</li> <li>• Triglycerides ≥150 ≤499 mg/Dl and LDL-C &gt;40 ≤100 mg/dl after ≥ 4 weeks of stable maximum-tolerated LLT</li> </ul>

CLEAR HARMONY <sup>26</sup>	Bempedoic acid	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• Established ASCD: prior MI, CAD, stroke, UA or occlusive PAD <b>and/or</b></li> <li>• Heterozygous familial hypercholesterolaemia</li> <li>• LDL-C ≥70 mg/dl therapies after ≥4 weeks of stable maximum-tolerated LLT</li> </ul>
<b>CHRONIC HFrEF</b>		
PARADIGM-HF <sup>37</sup>	Sacubitril/ Valsartan ARNI	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• With or without T2D</li> <li>• NYHA II–IV for 6 months</li> <li>• LVEF ≤35% (≤40% in the original protocol) within last 6 months</li> <li>• BNP ≥150 or NT-pro-BNP ≥600 pg/ml or ≥100 or ≥400 pg/ml if HHF within the last 12 months</li> <li>• Optimized and stable (≥4 weeks) background SoC HFrEF treatment</li> </ul>
DAPA-HF <sup>38</sup>	Dapagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• With or without T2D</li> <li>• NYHA II-IV for ≥ 2 months</li> <li>• LVEF ≤40% within last 12 months</li> <li>• NT-pro-BNP ≥ 600 pg/ml in sinus rhythm (or ≥ 400 pg/ml if HHF within 12 months or ≥ 900 pg/ml if AF)</li> <li>• eGFR ≥30 ml/min/1.73 m<sup>2</sup></li> <li>• Optimised and stable (≥4 weeks) background SoC HFrEF treatment</li> </ul>
EMPEROR- REDUCED <sup>41</sup>	Empagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• With or without T2D</li> <li>• NYHA II–IV for ≥ 3 months</li> <li>• LVEF ≤40% within last 12 months</li> <li>• NT-pro-BNP 3 different thresholds for 3 cut-offs of LVEF (higher in AF) without HHF, ≥600 pg/ml if HHF (≥1,200 pg/ml if also AF).</li> <li>• eGFR ≥20 ml/min/1.73 m<sup>2</sup></li> <li>• Optimised and stable (≥4 weeks) background SoC HFrEF treatment</li> </ul>
VICTORIA <sup>70</sup>	Vericiguat	<ul style="list-style-type: none"> <li>• ≥18 years old</li> <li>• With or without T2D</li> <li>• Chronic HF, NYHA II–IV before HF decompensation</li> <li>• LVEF &lt;45% within last 12 months</li> <li>• BNP ≥300 pg/ml or NT-pro-BNP ≥1.000 pg/ml in sinus rhythm (BNP ≥500 pg/ml or NT-pro-BNP ≥1,600 pg/ml if AF)</li> <li>• Prior and recent HHF within 6 months or outpatient IV diuretic therapy for HF within 3 months before randomisation</li> <li>• Clinically stable (SBP ≥100 mmHg and no IV diuretics for 24h, no nitrates, no inotropes)</li> <li>• eGFR &gt;15 ml/min/1.73m<sup>2</sup></li> </ul>

		<ul style="list-style-type: none"> <li>• OMT and stable (<math>\geq 4</math> weeks) background SoC HFrEF treatment</li> </ul>
GALACTIC-HF <sup>76</sup>	Omecamtiv Mecarbil	<ul style="list-style-type: none"> <li>• <math>\geq 18</math> years <math>\leq 85</math> years old</li> <li>• With or without T2D</li> <li>• Chronic HF, NYHA II–IV for <math>\geq 4</math> weeks</li> <li>• A previous HHF or access to ED for HF within 12 months, or AHF (currently hospitalised for HF)</li> <li>• LVEF <math>&lt; 35\%</math> within last 12 months</li> <li>• Clinically stable (no mechanical support or inotropes or IV drugs in the previous 12h, no mechanical ventilation)</li> <li>• BNP <math>\geq 125</math> pg/ml or NT-pro-BNP <math>\geq 400</math> pg/ml in sinus rhythm (<math>\geq 375</math> pg/ml or <math>\geq 1200</math> pg/ml respectively if AF)</li> <li>• eGFR <math>\geq 20</math> ml/min/1.73m<sup>2</sup></li> <li>• Optimised and stable (<math>\geq 4</math> weeks) background SoC HFrEF treatment</li> </ul>
<b>CHRONIC HFmrEF and HFpEF</b>		
PARAGON-HF <sup>63</sup>	Sacubitril/ Valsartan ARNI	<ul style="list-style-type: none"> <li>• <math>\geq 50</math> years old</li> <li>• LVEF <math>\geq 45\%</math> by echocardiography within 6 months</li> <li>• Current NYHA II–IV and need of diuretics for <math>\geq 30</math> days</li> <li>• Structural heart disease evidenced <math>\geq 1</math> of the following at echocardiography: left atrium enlargement, LVH</li> <li>• HHF within 9 months <b>and/or</b></li> <li>• NT-pro-BNP <math>&gt; 300</math> pg/ml in sinus rhythm (<math>&gt; 900</math> pg/ml if AF)</li> <li>• eGFR <math>\geq 30</math> ml/min/1.73 m<sup>2</sup></li> </ul>
EMPEROR-PRESERVED <sup>50</sup>	Empagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• <math>\geq 18</math> years old</li> <li>• With or without T2D</li> <li>• NYHA II–IV for <math>\geq 3</math> months</li> <li>• LVEF <math>&gt; 40\%</math> before enrolment (no prior LVEF <math>\leq 40\%</math>)</li> <li>• NT-pro-BNP <math>&gt; 300</math> pg/ml in sinus rhythm (<math>&gt; 900</math> pg/ml if AF)</li> <li>• Structural heart disease within 6 months (increase in left atrial size or left ventricular mass) on echocardiography or previous HHF within 12 months</li> <li>• eGFR <math>\geq 20</math> ml/min/1.73 m<sup>2</sup></li> <li>• On stable dose of oral diuretics for 1week prior to randomisation</li> </ul>
<b>ACUTE HF</b>		
SOLOIST-WHF <sup>44</sup>	Sotagliflozin SGLT2i and SGLT1i	<ul style="list-style-type: none"> <li>• Currently hospitalised for AHF or urgent HF visit to ED, HF unit, or infusion center for WHF associated with intravascular volume overload</li> <li>• On treatment with intravenous diuretics</li> <li>• T2D</li> </ul>

		<ul style="list-style-type: none"> <li>• HF for <math>\geq 3</math> months before screening</li> <li>• Hemodynamically stable (SBP <math>\geq 100</math> mmHg, not receiving IV inotropes or vasodilators – except for nitrates – 48 h before randomisation, not on mechanical ventilation or O<sub>2</sub>-therapy 24 h before randomization)</li> <li>• BNP <math>\geq 150</math> pg/ml or NT-pro-BNP <math>\geq 600</math> pg/ml in sinus rhythm (or <math>\geq 1800</math> pg/ml if AF)</li> <li>• eGFR <math>\geq 30</math> ml/min/1.73 m<sup>2</sup></li> <li>• No LVEF cut-off (HF<sub>r</sub>EF patients should be on ACEi/ARB/ARNI, BB, MRA as per local guidelines)</li> </ul>
<b>CHRONIC KIDNEY DISEASE</b>		
CREDESCENCE <sup>51</sup>	Canagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• <math>\geq 30</math> years old</li> <li>• CKD defined by eGFR <math>\geq 30</math> and <math>&lt; 90</math> ml/min/1.73 m<sup>2</sup> (CKD-EPI)</li> <li>• T2D</li> <li>• HbA1c <math>\geq 6.5\%</math> and <math>\leq 12.0\%</math></li> <li>• UACR <math>&gt; 300</math> and <math>&lt; 5,000</math> mg/g</li> <li>• Optimised and stable (<math>\geq 4</math> weeks) background SoC CKD treatment (ACEi/ARB)</li> </ul>
DAPA-CKD <sup>52</sup>	Dapagliflozin SGLT2i	<ul style="list-style-type: none"> <li>• <math>\geq 18</math> years old</li> <li>• CKD defined by eGFR <math>\geq 25</math> and <math>\leq 75</math> ml/min/1.73 m<sup>2</sup> (CKD-EPI)</li> <li>• With and without T2D</li> <li>• UACR <math>\geq 200</math> and <math>\leq 5,000</math> mg/g</li> <li>• Optimised and stable (<math>\geq 4</math> weeks) background SoC CKD treatment (ACEi/ARB)</li> </ul>

\*Despite SCORED systematically studied a population with T2DM and CKD (as CREDESCENCE), we listed it among the trial dedicated to T2DM and not to CKD because the main endpoints were the same as the other trials dedicated to prevention, differently from CREDESCENCE and DAPA-CKD.

ACS = acute coronary syndrome; ARNI = angiotensin receptor neprilysin inhibitor; ASCVD = atherosclerotic cardiovascular disease; BNP = brain natriuretic peptide; BP = blood pressure; CAD = coronary artery disease; CRP-hs = high-sensitivity C-reactive protein; CKD = chronic kidney disease; CKD-EPI = Chronic Kidney Disease Epidemiology Collaboration; CV = cardiovascular; ED = emergency department; GLP-1 RA = glucagon-like peptide-1 receptor agonists; HbA1c = glycated haemoglobin; HDL-C = high-density lipoprotein cholesterol; HF = heart failure; HF<sub>m</sub>rEF = heart failure with mid-range ejection fraction; HF<sub>p</sub>EF = heart failure with preserved ejection fraction; HF<sub>r</sub>EF = heart failure with reduced ejection fraction; HHF = hospitalisation for heart failure; LDL-C: low-density lipoprotein cholesterol; LLT = lipid lowering treatment; LVH = left ventricular hypertrophy; MDRD = modification of diet in renal disease; NYHA = New York Heart Association; NT-pro-BNP = N-terminal pro-BNP; PAD = peripheral artery disease; PCSK9i = proprotein convertase subtilisin/kexin type 9 inhibitors; SBP = systolic blood pressure; SGLT2i = sodium-glucose co-transporter type 2 inhibitors; SoC = standard of care; TnT-hs = high-sensitivity troponin T; T2D: type 2 diabetes; UA = unstable angina; UACR = urinary albumin-to-creatinine ratio