AD and a Shifting Paradigm: A New Approach to Care for Type 2 Diabetes

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Relevant Disclosures

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- Speaker has no conflict of interests





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Who We Are

Illinois Academic Detailing Visits And New Evidence CEnter

Illinois Public Act 101-0278







• 30+ clinical pharmacists





Which of the following is an important consideration when determining an appropriate agent to initiate in patients with Type 2 diabetes?

A1C (blood test measuring the average blood glucose level over the past 3 months)

Comorbid ASCVD (atherosclerotic cardiovascular disease)/ High-risk for ASCVD

Comorbid heart failure

Comorbid CKD (chronic kidney disease) /DKD (diabetic kidney disease)

All of the above

A Standing Ovation









ARIS, France (UPDATED)—Dapagliflozin, when given on top of standard therapy, markedly reduces the risk of worsening heart failure events and cardiovascular death and improves symptoms among heart failure patients with reduced ejection fraction (HFrEF), full results from the DAPA-HF trial show.

Importantly, the relative and absolute risk reductions in death and hospitalizations were consistent across subgroups, which included patients both with and without diabetes, presenter John McMurray, MD (University of Glasgow, Scotland), said here at the European Society of Cardiology Congress 2019, prompting hoots of surprise and scattered applause from the audience. McMurray's concluding remarks were met with sustained applause and at least one man gave the results a standing ovation.





This is What Academic Detailing Was Made For





Diabetes Evidence Changing Rapidly

EMPA-REG OUTCOME (2015)

(2016)

SUSTAIN-6 (2016)

CANVAS (2017)

REWIND (2019)

DECLARE-TIMI 58 (2019)

CREDENE (2019)

DAPA-HF (2019)

DAPA-CKD (2020)

EMPEROR-REDUCED (2020)





Guidelines Changing Rapidly

- A1C level
- Established ASCVD

2019

- Metformin at diagnosis
- A1C level
- Predominant ASCVD or CKD
- Metformin at diagnosis
- High-risk or established ASVD or CKD/HF
- A1C level

2021

- Metformin at diagnosis
- High-risk or established ASVD, CKD or HF
- A1C level

2018

2020





The Campaign



January 2021



43 visits and counting...



Studies, studies and more studies



Benefits of SGLT2i and GLP-1 RAs





The Topics

Care Evolution

Background information

Atherosclerotic Cardiovascular Disease (ASCVD)

33% of patients with T2DM

Chronic Kidney Disease (CKD)

20-40% of patients with T2DM

Heart Failure (HF)

2x higher risk of developing HF in patients with T2DM





The Brochure

Treatment algorithm

- Results of meta-analyses
- Forest plot
 - Includes 5 agents that are FDA-labeled



ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

Patients With High Risk For or Established ASCVD 3,6,7,9-13



*Liragiutide, semaglutide, dulagiutide, empagliflozin, canagliflozin †See package inserts for renal dosing recommendations Clinical guidelines emphasize comprehensive management of both glycemic goals and CV risk factors.

Many glucagon-like peptide-1 receptor agonist(s) (GLP-1 RA) and sodium-glucose co-transporter 2 inhibitor(s) (SGLT2i) have demonstrated statistically significant reductions in risk of major adverse cardiovascular events (MACE) independent of glucose control.

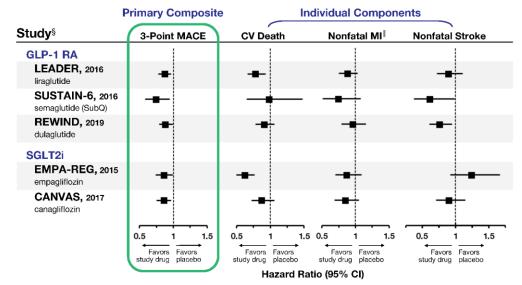
Overall, meta-analyses of CVOT showed:

- GLP-1 RA reduce the risk of MACE by 13% versus placebo (HR 0.87; 95% CI 0.80-0.96)[‡]
- SGLT2i reduce the risk of MACE by 12% versus placebo (HR 0.88; 95% CI 0.82-0.94)

‡HR hazard ratio, CI confidence interval

GLP-1 RA and SGLT2i That Have Shown CV Benefit 3,9,11,14-18

The medications in the following trials reduce CV risk to a similar degree in patients with T2DM and ASCVD.



§Study designs and patient populations differ. EMPA-REG refers to the EMPA-REG OUTCOME trial. See supplemental table for details regarding individual studies.

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The Brochure

Treatment algorithm

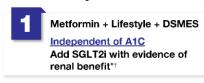
- Results of individual studies
 - CREDENCE
 - Patients with T2DM
 - DAPA-CKD
 - Patients with and without T2DM



CHRONIC KIDNEY DISEASE

Patients With Renal Disease 6,7

Diabetic Kidney Disease + Albuminuria

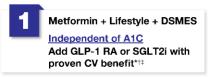




CV benefit†‡



CKD with eGFR < 60 ml/min/1.73 m²







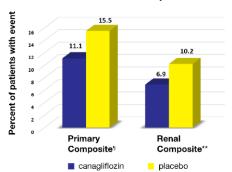


A1C above goal

Renal Benefits of SGLT2i 11,21,22

In a 2019 meta-analysis, SGLT2i showed a relative risk reduction in kidney disease progression of 38%, compared to 18% with GLP-1 RA. Later studies incorporated renal outcomes as a primary endpoint.

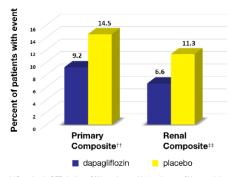
CREDENCE Endpoints



¶End-stage kidney disease, doubling serum creatinine, CV or renal death **End-stage kidney disease, doubling serum creatinine, or renal death

Canagliflozin reduced the risk of CKD progression in patients with T2DM.

DAPA-CKD Endpoints



††Sustained eGFR decline ≥50%, end-stage kidney disease, CV or renal death ‡\$ustained eGFR decline ≥50%, end-stage kidney disease, or renal death

Dapagliflozin reduced the risk of CKD progression in patients with or without T2DM.

[&]quot;Canagifflozin or dapagifflozin have primary renal outcome evidence, consider first. Empagliflozin, canagifflozin, and dapagliflozin have shown cardiorenal benefit †See package inserts for renal dosing recommendations ±

The Brochure

Supplementary document

Additional information on individual studies





SELECT GLP-1 RA AND SGLT2i TRIALS

Trial Design, Median Duration	Population	Relevant Background Therapies	Intervention	Primary Endpoints HR (95% Cl); <i>P</i> value	Other Select Endpoints HR (95% Cl); <i>P</i> value
ASCVD Outcome Trials—GLP-1 RA					
LEADER¹ (2016) R, DB, PC, MC, ITT 3.8 years	N = 9,340 T2DM (100%) eCVD (72.4%)	Antithrombotic (~67.8%) Statin (~72.2%) ACEI/ARB (~82.9%) Beta-blocker (~55.5%) Metformin (~76.5%)	Liraglutide 1.8 mg (or maximum tolerated dose)	3-Point MACE * 0.87 (0.78-0.97); <i>P</i> <0.001 for NI and <i>P</i> =0.01 for S	CV death 0.78 (0.66-0.93); P=0.007 Nonfatal stroke 0.89 (0.72-1.11); P=0.30 Nephropathy 0.78 (0.67-0.92); P=0.003
SUSTAIN-62 (2016) R, DB, PC, PG, MC, ITT 2.1 years	N = 3,297 T2DM (100%) eCVD (58.8%)	Antithrombotic (76.3%) Statin (72.8%) ACEi/ARB (83.5%) Beta-blocker (57.4%) Metformin (73.2%)	Semaglutide 0.5 mg,1 mg	3-Point MACE * 0.74 (0.58-0.95); <i>P</i> <0.001 for NI and <i>P</i> =0.02 for S	CV death 0.98 (0.65-1.48), P=0.92 Nonfatal stroke 0.61 (0.38-0.99); P=0.04 New or worsening nephropathy 0.64 (0.46-0.88); P=0.005
REWIND ³ (2019) R, DB, PC, MC, ITT 5.4 years	N = 9,901 T2DM (100%) eCVD (31.5%)	Antiplatelet (~54%) Statin (~66.1%) ACEi/ARB (~81.5%) Beta-blocker (~45.6%) Metformin (~81.2%)	Dulaglutide 1.5 mg	3-Point MACE * 0.88 (0.79-0.99); <i>P</i> =0.026	Renal composite [†] 0.85 (0.77-0.93); <i>P</i> =0.0004 Nonfatal stroke 0.76 (0.61-0.95); <i>P</i> =0.017 CV death 0.91 (0.78-1.06), <i>P</i> =0.21
ASCVD Outcome Trials—SGLT2i					
EMPA-REG OUTCOME ⁴ (2015) R, DB, PC, MC, mITT 3.1 years	N = 7,028 T2DM (100%) eCVD (>99%) HF (~10.2%)	Anticoagulant (~89.2%) Statin (~76.7%) ACEi/ARB (~80.6%) Beta-blocker (~64.7%) Diuretic (~43.2%) Metformin (~74.1%)	Empagliflozin 10 mg, 25 mg	3-Point MACE* 0.86 (0.74-0.99); <i>P</i> <0.001 for NI and <i>P</i> =0.04 for S	4-Point MACE [‡] 0.89 (0.78-1.01); P<0.001 for NI and P=0.08 for S CV death 0.62 (0.49-0.77); P<0.001 All-cause mortality 0.68 (0.57-0.82); P<0.001 HHF 0.65 (0.50-0.85); P=0.002
CANVAS Program ⁵ (2017) R, DB, PC, MC, ITT 126.1 weeks (~2.4 years)	N = 10,142 T2DM (100%) eCVD (65.6%) HF (14.4%)	Antithrombotic (73.6%) Statin (74.9%) RAAS inhibitor (80%) Beta-blocker (53.5%) Diuretic (44.3%) Metformin (77.2%)	Canagliflozin 100 mg, 300 mg	3-Point MACE* 0.86 (0.75-0.97); <i>P</i> <0.001 for NI and <i>P</i> = 0.0158 for S	All-cause mortality 0.87 (0.74-1.01); <i>P</i> =0.24 CV death 0.87 (0.72-1.06); NA HHF 0.67 (0.52-0.87); NA Progression of albuminuria 0.73 (0.67-0.79); NA
DECLARE-TIMI 586 (2019) R, DB, PC, MC, ITT 4.2 years	N = 17,160 T2DM (100%) eASCVD (~40.6%) HF (~10%)	Antiplatelet (~61.1%) Statin or ezetimibe (~75%) ACEi/ARB (~81.3%) Beta-blocker (~52.6%) Diuretic (~40.6%) Metformin (~82%)	Dapagliflozin 10 mg	3-Point MACE * 0.93 (0.84-1.03); <i>P</i> =0.17 Composite (CV death or HHF) 0.83 (0.73-0.95); <i>P</i> =0.005	CV death 0.98 (0.82-1.17); NA HHF 0.73 (0.61-0.88); NA All-cause mortality 0.93 (0.82-1.04); NA Renal composite [§] 0.53 (0.43-0.66); NA



What We've Learned

Insurance

• Coverage of medications is a major hurdle

A1C

Primary driver of care

Medications

- Managing side effects
- Understanding nuance between medications

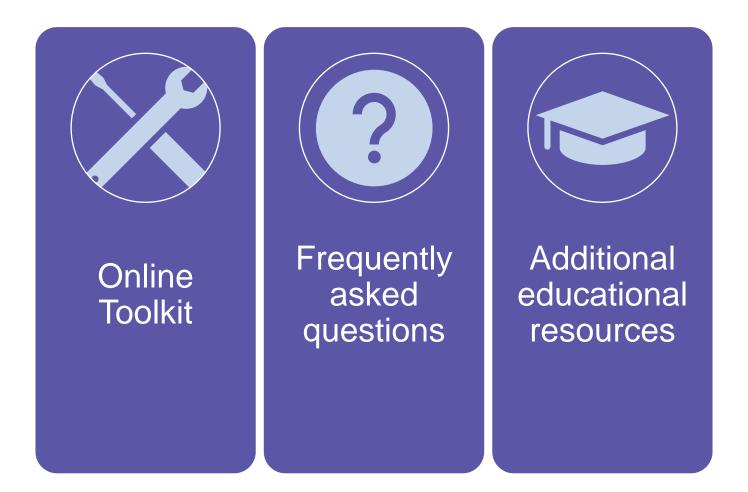
Patient factors

- Communicating value of cardiorenal benefits
- Resistance to change





Looking to the Future







How To Connect with Us?





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Collaborating with prescribers to ADVANCE evidence-based healthcare