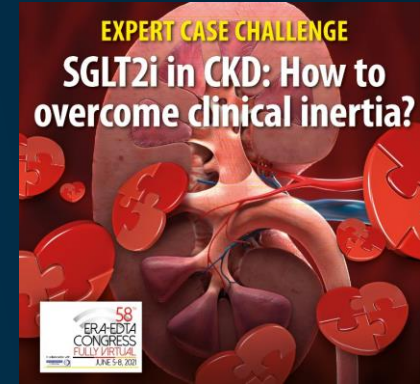


Initiating therapy – What are the practical challenges with SGLT2i therapy?

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Faculty/Presenter Disclosure

- **Faculty:** Dr. Alice Cheng
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 - **Clinical Trial Participation:** Boehringer Ingelheim, Sanofi, Applied Therapeutics, Eli Lilly

Who to start?

- Chronic kidney disease (+/- T2D)
- HFrEF (+/- T2D)
- ASCVD + T2D
- Multiple risk factors + T2D
- T2D not at glycemic target

Note: Indications for specific SGLT2 inhibitors may differ by country

If Starting SGLT2i

TOP TIPS!



- Explain mechanism of action
- Drink water – stay hydrated
- Proper genital hygiene



If Starting SGLT2i

TOP TIPS!



- Explain mechanism of action
- Drink water – stay hydrated
- Proper genital hygiene
- Stop in acute illness / preoperative
- SADMANS



Sick Day Medication List

Instructions for Healthcare Professionals:

- If patient becomes ill and are unable to maintain adequate fluid intake, or have an acute decline in renal function (e.g. due to gastrointestinal upset or dehydration), they should be instructed to hold medications which will:

A) Increase risk for a decline in kidney function:

- Angiotensin – converting enzyme inhibitor
- Angiotensin receptor blockers
- Direct renin inhibitors
- Non-steroidal anti-inflammatory drugs
- Diuretics
- SGLT2 inhibitors

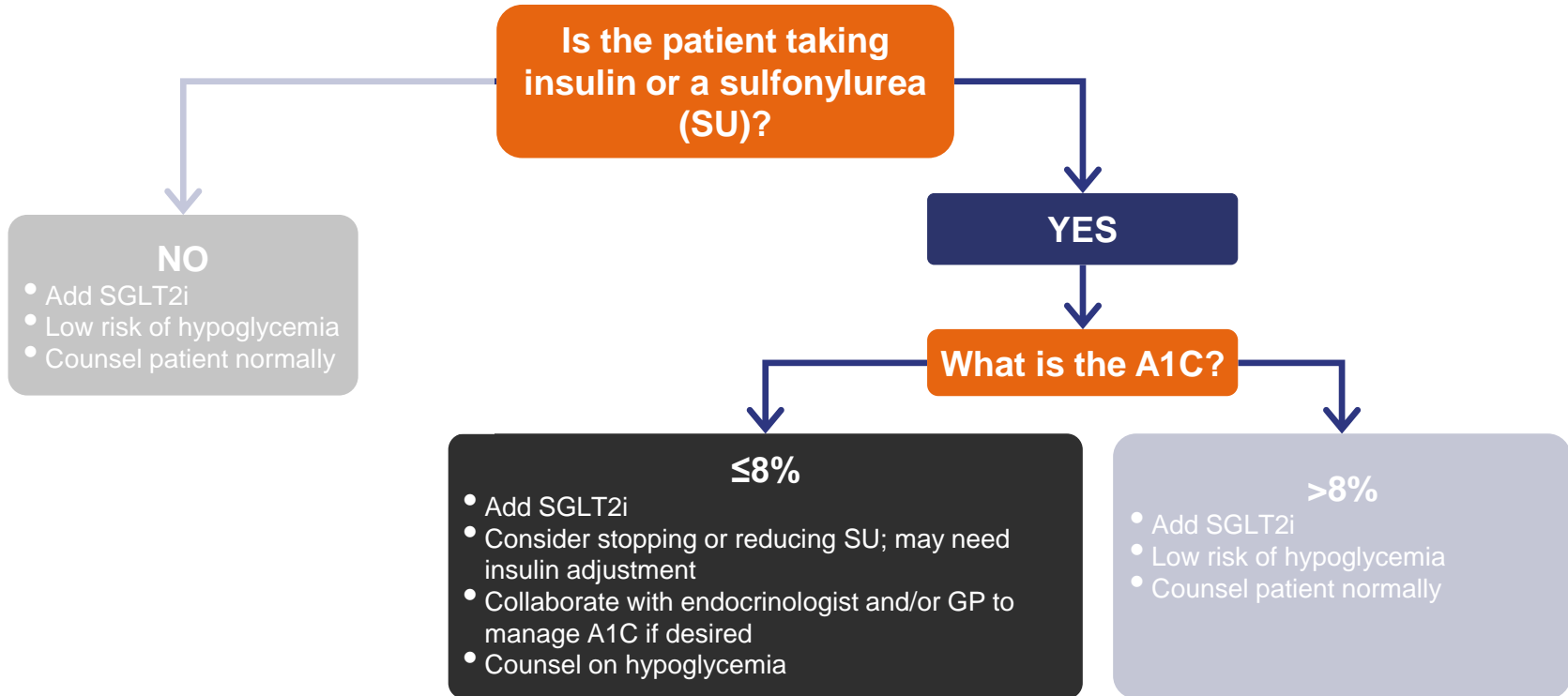
B) Have reduced clearance and increase risk for adverse effects:

- Metformin
- Sulfonylureas (gliclazide, glimepiride, glyburide)

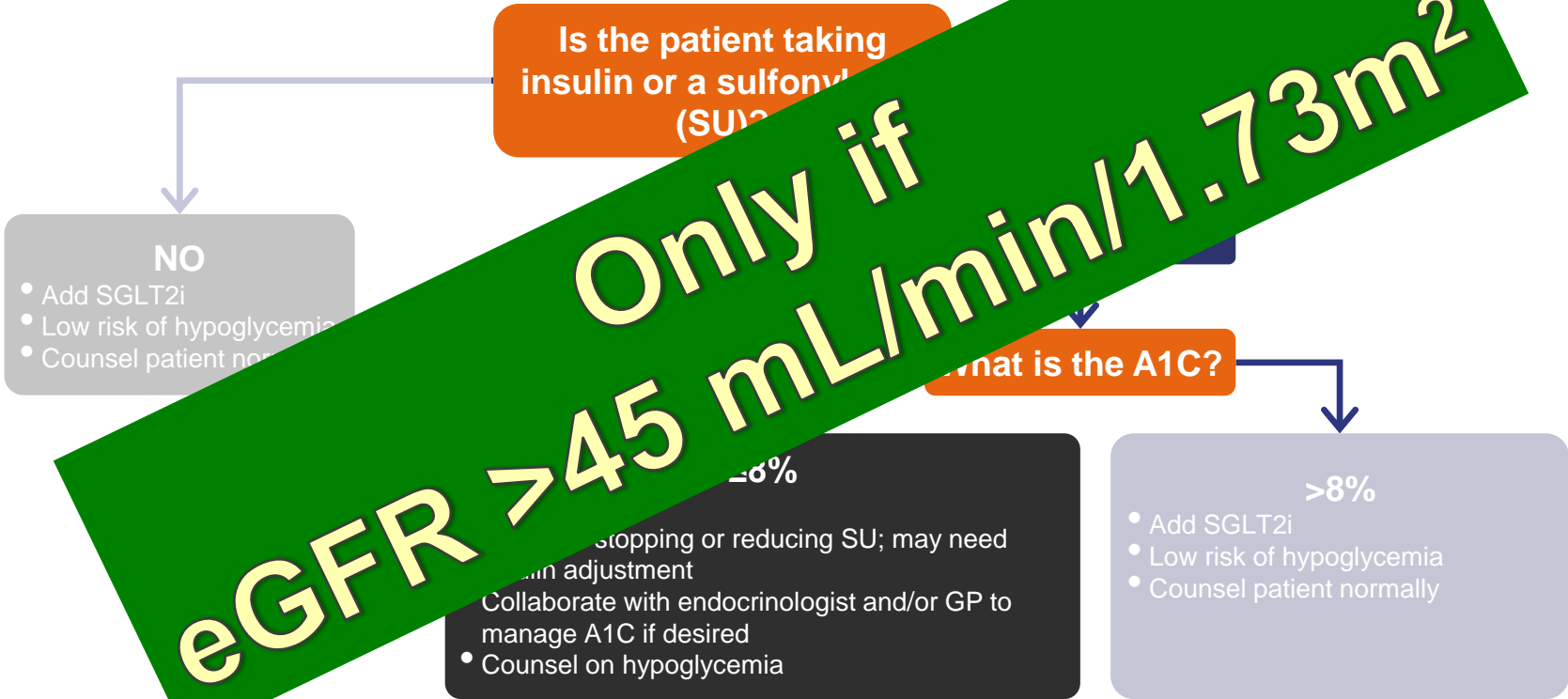
S sulfonylureas
A ACE-inhibitors
D diuretics, direct renin inhibitors

M metformin
A angiotensin receptor blockers
N non-steroidal anti-inflammatory
S SGLT2 inhibitors

Antihyperglycemic Medications When Initiating SGLT2 inhibitors



Antihyperglycemic Medications When Initiating SGLT2 inhibitors



Only if eGFR >45 mL/min/1.73m²

DKA and SGLT2 Inhibitors

- If someone needs insulin, give them insulin
- Be cautious with insulin dose reductions
- Do not hold insulin in acute illness (must continue to SMBG)
- Hold SGLT2 inhibitors during acute illness (SADMANS), prolonged fasting, perioperative
- Caution (or don't use) in T1DM

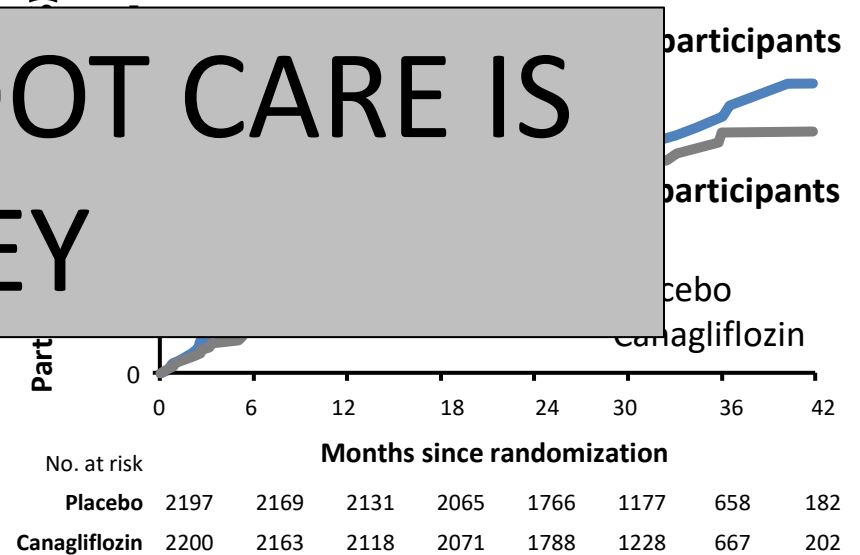
What about feet?

Increased risk of lower-limb amputation (toes, feet or legs) with canagliflozin compared to placebo^{1,2}

- Not seen in other SGLT2i trials³
- Highest risk among patients with peripheral vascular disease
- No increase seen in CREDENCE^{3,4}

PROPER FOOT CARE IS KEY

Lower-limb amputations in CREDENCE⁴

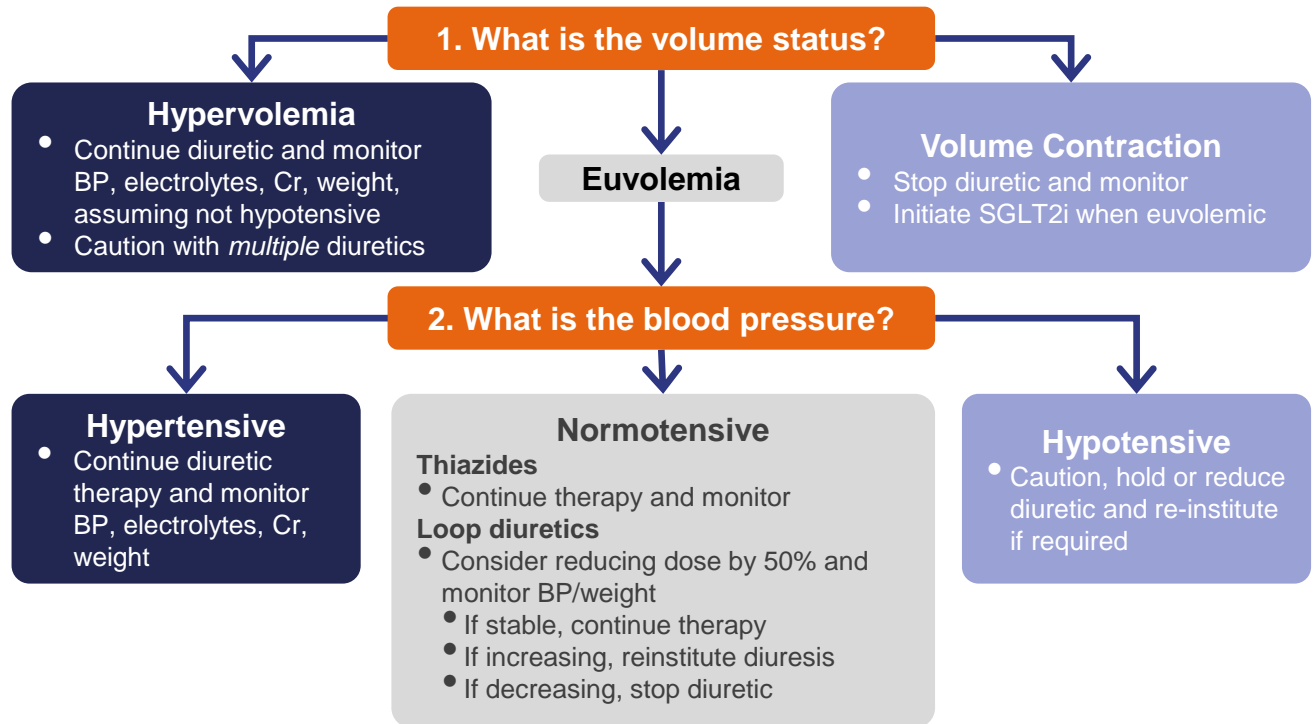


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Management of Diuretics in Patients Taking SGLT2i

When adding an SGLT2i, continue diuretic and monitor

An option for management of diuretics with SGLT2 inhibitors




What about eGFR to initiate? (answer based on data)


DEPENDS ON **WHY** YOU ARE USING THE SGLT2 INHIBITOR!

- **HFrEF**: ≥ 20 mL/min/1.73m² (empa); ≥ 30 mL/min/1.73m² (dapa)
- **CKD**: ≥ 30 mL/min/1.73m² (cana); ≥ 25 mL/min/1.73m² (dapa)
- **Cardiorenal effects in T2D**: ≥ 30 mL/min/1.73m² (cana, dapa, empa, ertu)
- **Glycemic control**: ≥ 45 mL/min/m² – continue to get A1c lowering

SGLT2 Inhibitors: eGFR initiation and discontinuation

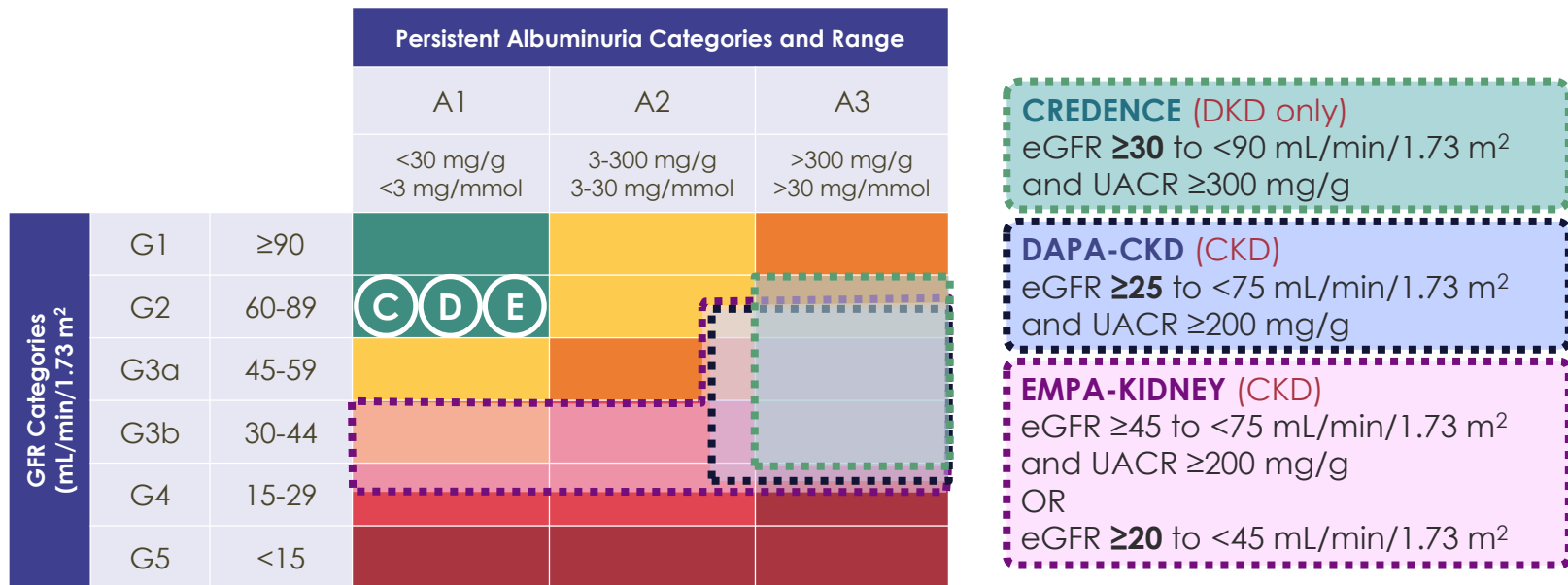
 SGLT2i agent	eGFR (mL/min/1.73 m ²)		
	<30	≥30 to 45	>45 to 60
Canagliflozin		100 mg/day	
Dapagliflozin		5-10 mg/day	
Empagliflozin		10-25 mg/day	

*In patients already initiated on canagliflozin therapy who meet the criterion of an eGFR <30 mL/min/1.73 m² with albuminuria >33.9 mg/mmol, therapy can be continued at 100 mg once daily and should be discontinued at the initiation of dialysis.

 SGLT2i agent	eGFR (mL/min/1.73 m ²)			
	<30	30-44	≥45-59	>60
Dapagliflozin	Not indicated for glycemia		10 mg	May initiate 10 mg
	Not indic for HF	10 mg		
Empagliflozin	Not indicated		10 mg	May initiate 10-25 mg

What if eGFR < 30 mL/min/1.73m²?


Spectrum of patients in the SGLT2i renal outcome studies




C: CANVAS Program; CKD: chronic kidney disease; D: DECLARE-TIMI 58; DKD: diabetic kidney disease; E: EMPA-REG OUTCOME; eGFR: estimated glomerular filtration rate; KDIGO: Kidney Disease: Improving Global Outcomes; UACR: urine albumin-to-creatinine ratio.

1. Heerspink et al. Nephrol Dial Transplant. 2020;35:274-82.

SGLT2 Inhibitors: eGFR initiation and discontinuation

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Summary

- Simple explanations
- Easy to use in diabetes
 - If no SU or insulin – just start it
 - If SU or insulin – look at A1c (if eGFR >45)
 - Do not stop their insulin
- Really easy to use outside of diabetes

