Case-Based Learning: Optimizing Care for Patients with CKD and T2D with/at risk of CVD

### **Case Presentation**

73-year-old female with long-standing type II diabetes, obesity, proteinuria and hyperlipidemia

#### Physical exam:

- BP 110/60
- HR 67
- BMI 37

#### **Current medications**

- Rosuvastatin 10 mg daily
- Metformin 1000 mg bid
- Furosemide 20 mg daily
- Carvedilol 3.125 mg bid
- Losartan 100 mg daily



#### **Recent Labs**

HbA1c 7.5% Potassium 3.9 mmol/l Creatinine 0.64 mg/dl EGFR >85 ml/min/1.73 m2 UACR 147 mg/g NT- pro BNP 320 pg/ml

#### **CKM Stage?**

#### **Additional Labs?**





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### **Patient Course**

- She is started on empagliflozin
- **Two weeks later**  $\rightarrow$  develops a urinary tract infection which is treated
- Four weeks later→ develops a genital mycotic infection which is treated, and she discontinues the medication

#### What would you recommend?



### **Patient Course**

- Finerenone 20 mg daily is started
- Labs 6 weeks after starting finerenone reveal potassium of 4.3 and creatinine of 0.7
- GLP-1 RA also started



# FLOW Trial: Semaglutide (GLP-1 RA) in Patients with CKD and T2DM

#### Major Kidney Disease Events

Hazard ratio, 0.76 (95% CI, 0.66-0.88); P=0.0003







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Perkovic V, et.al. N Engl J Med. 2024 Jul 11;391(2):109-121.

# SURMOUNT-2: Tirzepatide (GLP-1/GIP RA) in Patients with T2DM and Obesity



Time since randomisation (weeks)



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## 3 month Follow up

- UACR improved from 147 mg/g to 96 mg/g
- Weight loss progress?



### **Take Home Points**



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Ndumele CE, Rangaswami J, Chow SL, et al. Circulation. 2023;148(20):1606-1635.