









## Nuts & Bolts of RAASi Therapy in the Intersection of Kidney and Cardiovascular Diseases

ACEI, ARB, SMRA\*, nSMRA, ARNI\* (\*for managing heart failure only)

#### **Indications for RAASi**

**Hypertension** 



**Diabetes with CKD** 



**Chronic Kidney Disease** 



**Heart Failure** 



For all indications: avoid any combination of ACEi, ARB, direct renin inhibitor

# **Early Monitoring**

Monitor kidney function and electrolytes at start and 2 - 4 weeks following RAASi initiation or dosage adjustments RAASi:

- Creatinine

- Potassium

- Bicarbonate

\*Consider creatinine rise up to 30 % as an appropriate hemodynamic change

### Long-Term Management

- Closely follow the labs for the items in the "early monitoring" box above until they are in safe ranges.
- Include monitoring of kidney function and electrolytes (creatinine, potassium and bicarbonate) during routine visits
- Up-titrate RAASi to maximally tolerated, evidence-based doses
- Mitigate the risk of hyperkalemia with preventive measures (continuous review of concomitant drugs, diet, use of diuretics, acidosis correction and K binders) to ensure optimal RAASi utilization

### Potential Issues

- **Hyperkalemia** if hyperkalemia arises, manage according to this tool. Discontinue RAASi as a last resort.
- **Acute decline in kidney function:** if increase in creatinine occurs, manage according to <u>this tool</u>. Discontinue RAASi as a last resort.
- **Metabolic acidosis:** review diet and reduce intake of animal protein and processed foods. Consider prescription of oral bicarbonate.