

## Fluctuations in eGFR and urine albumin

Both eGFR and urinary albumin have random fluctuations that can cause changes that have no clinical importance. However, changes in eGFR beyond  $\pm 20\%$  are likely to be caused by actual changes in kidney function. For urine albumin, reductions beyond 50% or elevations beyond 100% are probably beyond the random fluctuations.

Would you say that Grace has active glomerular disease?

No

CKD is common,  
Active Glomerular disease is not

GFR and ACR categories and risk of adverse outcomes		ACR categories (mg/mmol), description and range			
		<3 Normal to mildly increased	3–30 Moderately increased	>30 Severely increased	
		A1	A2	A3	
GFR categories (ml/min/1.73 m <sup>2</sup> ), description and range	>90 Normal and high	G1	No CKD in the absence of markers of kidney damage		
	60–89 Mild reduction related to normal range for a young adult	G2			
	45–59 Mild–moderate reduction	G3a <sup>1</sup>	X		
	30–44 Moderate–severe reduction	G3b	X		
	15–29 Severe reduction	G4			
	<15 Kidney failure	G5			

Increasing risk →

↑ Increasing risk

<sup>1</sup> Consider using eGFRcystatinC for people with CKD G3aA1 (see KDIGO recommendations 1.1.14 and 1.1.15)

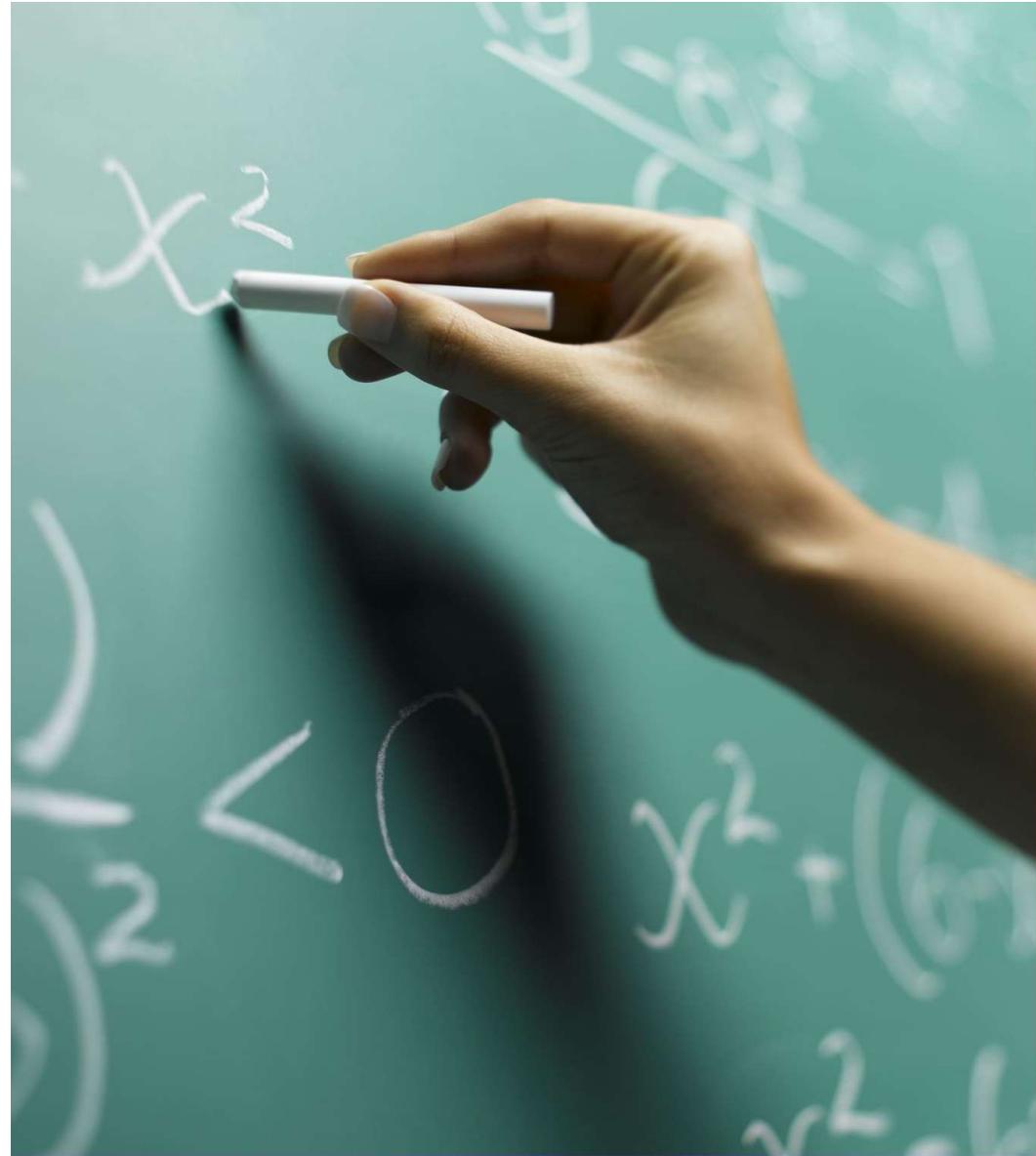
Abbreviations: ACR, albumin:creatinine ratio; CKD, chronic kidney disease; GFR, glomerular filtration rate

Adapted with permission from Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group (2013) KDIGO 2012 clinical practice guideline for the evaluation and management of chronic kidney disease. Kidney International (Suppl. 3): 1–150

# Stable CKDG3a/bA1

## What is Grace's Risk of Progressing to ESKD?

- [The Kidney Failure Risk Equation](#)
- NZ validated version coming
- **Egfr, Age, Albuminuria, Sex**



# Grace's Risk of Progression

## YOUR RESULTS



**9** mg/mmol  
URINE ALBUMIN



**F**  
SEX



**62**  
AGE



**45** mL/min/1.73 m<sup>2</sup>  
GFR

ASSESSMENT

# STAGE 3

MODERATE DECREASE IN FUNCTION



### Risk thresholds used in health systems include:

- 3-5 % over 5 years for referral to a kidney doctor
- 10 % over 2 years for team based care (Kidney Doctor, Nurse, Dietician, Pharmacist)
- 20-40 % over 2 years for planning a transplant or fistula

# Grace's Management Plan

## 1. BP Optimisation

- Target BP 130/80mmHg
- Continue ARB
- SGLT-2 ?

## 2. Avoid Further Kidney Injury

- Strict NSAID avoidance
- Educate about **“sick day rules”**
- → WH Losartan if unwell or dehydrated

## 3. Cardiovascular Risk Reduction

- Continue Statin
- Encourage exercise
- Smoking cessation

## 4. Lifestyle Modification

- sodium restriction (<2g/day)
- protein intake 0.8/kg/day
- maintain hydration

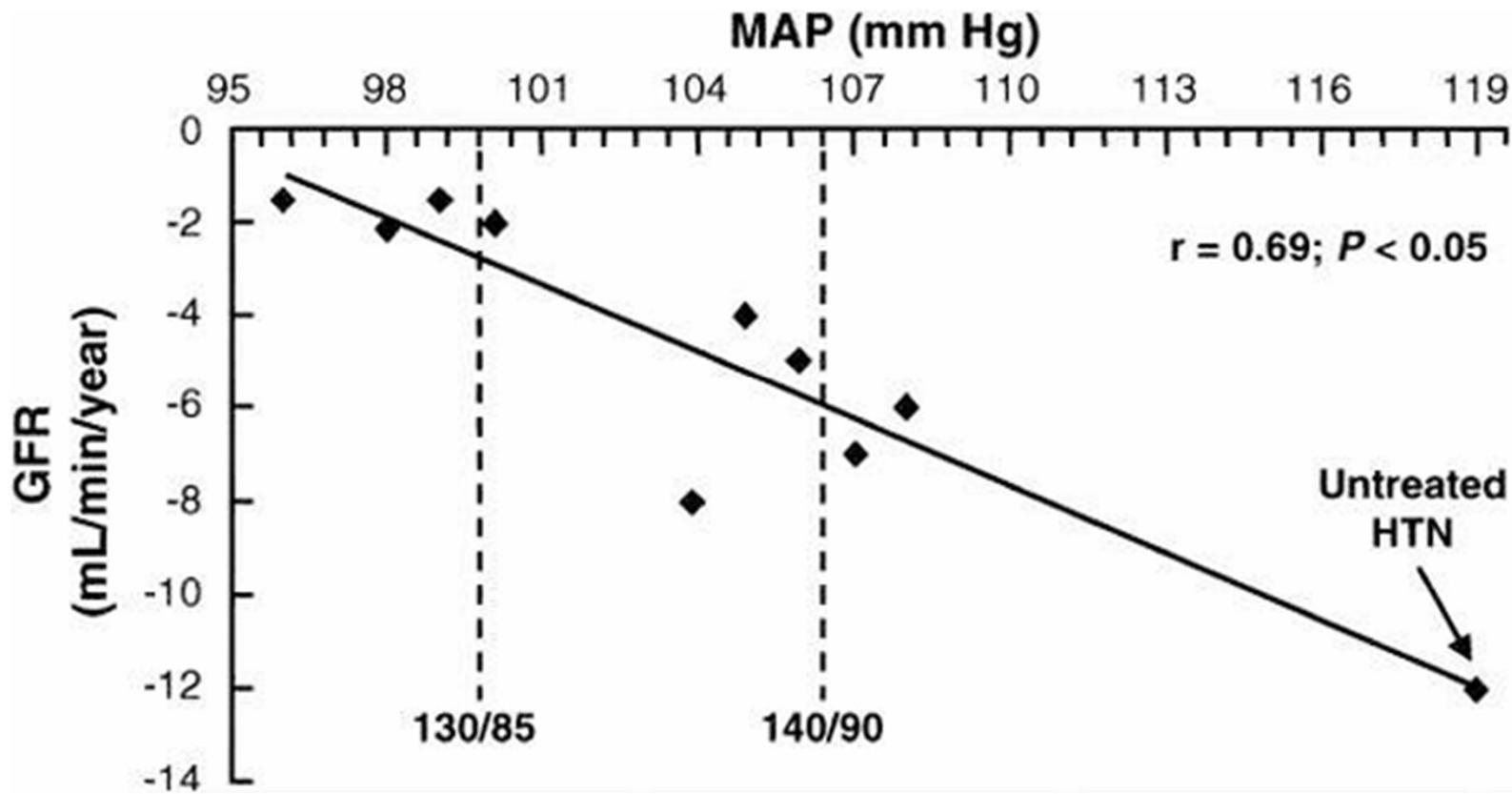
## 5. Nephrology Referral if:

- eGFR decline >5mL/year
- uACR climbing
- hyperkalaemia



#1

Bakris et al, AJKD 2000



## #2 Sick Day Plan

All patients with CKD should have an AKI prevention and management plan

- S** Sulfonylureas
- A** ACE-inhibitors
- D** Diuretics
- M** Metformin
- A** Angiotensin receptor blockers
- N** Non-steroidal anti-inflammatory
- S** SGLT2 inhibitors

## MANAGEMENT – DISCONTINUATION AND RESTART OF MEDICATIONS

If medications are discontinued during an acute illness, communicate a clear plan of when to restart the discontinued medications to the affected person and healthcare providers, and ensure documentation in the medical record. Failure to restart these medications may lead to unintentional harm.



## #3 Managing Cardiovascular Risk

CKD is a potent risk factor for CVD

With CKD, individual's cardiac death risk is **2-3x** greater than without CKD

With CKD, individuals are **20 times more likely** to die from CVD than survive to need dialysis or transplant

*Though this is perhaps changing....*

# #4 Lifestyle changes



- Home
- Our Services ▾
- News & Events ▾
- How You Can Help ▾



Providing wrap-around support services for those with kidney conditions and their whānau



## Welcome to Kidney Health New Zealand

Not sure where to start? Talk to our friendly nurse team on [0800 \(KIDNEY\) 543 639](tel:0800-KIDNEY-543-639).