

Urine Albumin

Recent studies show an estimated six million Australians have one or more risk factors for chronic kidney disease (CKD) and approximately 1.4 million Australian adults have CKD¹. Urine albumin is frequently used to determine risk of CKD.

Recently, a working group of leading experts representing ANZSN, AACB, RCPA, RACGP, ADS and Kidney Health Australia, published a position statement relating to the use of urine albumin in this context². The position statement was published in MJA 197(4) 20 August 2012.

Improved urine albumin reporting

Clinpath Laboratories have adjusted our reporting and interpretive comments to bring them in line with the recommendations in the position statement.

In summary, these recommendations include:

- Preferred method for detection of albuminuria is via urine albumin/creatinine ratio (ACR) on first void spot urine samples. Random samples are also acceptable.
- Simultaneous measurement of estimated glomerular filtration rate and urine ACR is required for optimal detection of CKD.

- Adults with one or more risk factors for CKD should have eGFR and ACR assessed every 12 months.
- A positive ACR should be repeated to confirm the presence of albuminuria. Two of three positive ACR results within three months are required for confirmation.
- Sex-specific cut-points for microalbuminuria and macroalbuminuria are recommended (refer algorithm overleaf).

The use of ACR exhibits improved sensitivity over urinary protein measurement, particularly for low grade but clinically important albuminuria.

Algorithm for detection of CKD

The algorithm overleaf is contained in the position statement and is reproduced here to assist in initial detection of CKD.



Dr Michael Metz BS, MD, FAAP, MAACB, FRCPA
Consultant Chemical Pathologist

- Joined Clinpath Laboratories in 2006
- Overriding interest is the role of the laboratory in assisting with patient management and he is always happy to be involved in the care of patients
- Assesses laboratories for NATA
- Clinical senior lecturer at the University of Adelaide

Contact

Dr Michael Metz – Chemical Pathologist

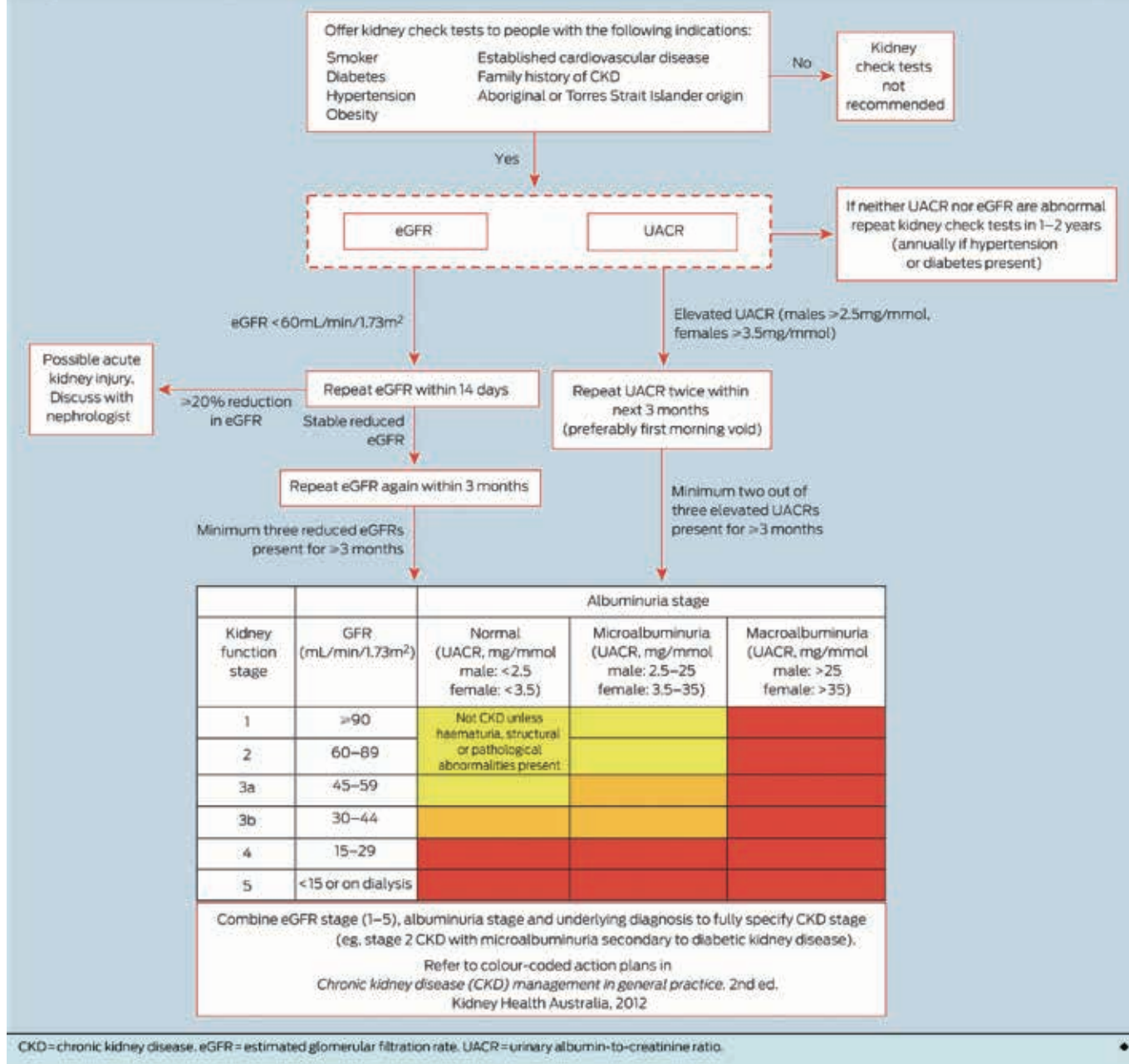
Clinpath Laboratories

Ph: 8366 2000

Ph: 8366 2000 | www.clinpath.com.au

Urine Albumin

2 Algorithm for initial detection of chronic kidney disease



References

1. Chadban SJ, Briganti EM, Kerr PG, et al. Prevalence of kidney damage in Australian adults: the AusDiab kidney study. *J Am Soc Nephrol* 2003; 14 (7Suppl 2):S131-S138.
2. Johnson DW, Jones GRD, Mathew TH, Ludlow MJ, Chadban SJ, Usherwood T, Polkinghorne K, Colagiuri S, Jerums G, MacIsaac R, Martin H. Chronic Kidney Disease and Measurement of Albuminuria or Proteinuria: a Position Statement. *MJA* 197(4) 2012.
3. <https://www.mja.com.au/journal/2012/197/4/chronic-kidney-disease-and-measurement-albuminuria-or-proteinuria-position>