

For Clinicians Treating Type 2 Diabetes

Urine Albumin-to-Creatinine Ratio (uACR) Test



Why order a urine albumin-to-creatinine ratio (uACR)?

- KED HEDIS measure requires that a patient have both a uACR and an eGFR test in the same calendar year. The urine protein-to-creatinine ratio and urine albumin alone do not meet this requirement.
- If you only order urine albumin, it can be an inaccurate estimate as the urine may be dilute or concentrated depending on the individual's fluid (water) intake.
- You must order the albumin-to-creatinine ratio to ensure the test is accurate, as it accounts for urine concentration or dilution, which can impact the results.



Understanding albumin and creatinine and the role of uACR.

What is albumin?

It's a protein in blood.

What is urine albumin?

Albumin filtered into the urine. Normally, albumin does not filter across the glomerular basement membrane or does so in very minimal amounts, if at all.

What is creatinine?

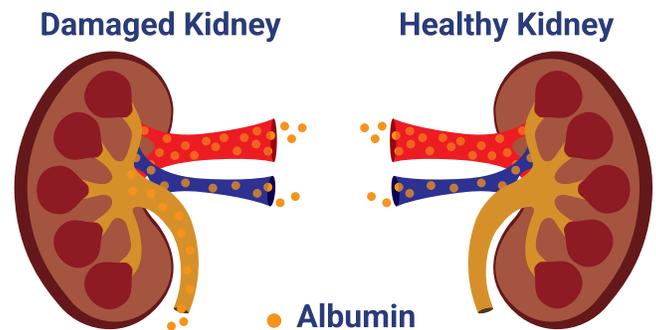
It is a breakdown product of muscle metabolism and proteins from food.

What is uACR?

uACR is the ratio of albumin to creatinine in a spot urine sample that provides an estimate of the 24-hour excretion of albumin in the urine. We obtain the ratio because the urine concentration can vary, and to account for this, we must factor in the creatinine level, the 24-hour excretion of which is fairly constant within individuals.

Why is urine albumin important?

Normally, minimal albumin is filtered into the urine and is completely reabsorbed in the proximal tubules, so that net albuminuria is minimal. Albuminuria is one of the earliest detectable signs of kidney disease and a risk factor for cardiovascular disease (both in patients with and without diabetes).



uACR values:

