

**CPAL**Central Pennsylvania Alliance
Laboratory

Technical Bulletin

No. 42

March 9, 2004

Change Of The Calculation for 24 Hour Microalbumin

Test Name: Microalbumin: 24 hr urine**Test Mnemonic:** 24 MICRALB**Explanation:**

CPAL has been reporting the result of 24 hour microalbumin as mg/24 hour. This 24 hour microalbumin result is equivalent to the albumin excretion rate for a 24 hour urine collection. However CPAL has been correcting the 24 hour microalbumin result for body surface area using information of patient's height and weight. According to the guidelines of the American Diabetes Association and the National Kidney Foundation's K/DOQI (kidney disease outcome initiative), microalbuminuria is defined as the albumin excretion rate (AER) of 30 to 300 mg/24 hours or the albumin/creatinine ratio of 30 to 300 mg/g. The correction for body surface area in the calculation of albumin excretion rate is not necessary. Therefore, CPAL Lab has decided to follow this guideline and remove the body surface area correction from the calculation. Furthermore, the K/DOQI found albumin/creatinine ratio from a spot urine is more accurate than albumin excretion rate from a 24 hour urine collection due to the lack of accuracy of a self-collected 24 hour urine.

Date of Change:

Starting April 12, 2004, CPAL Lab will change the calculation for 24 hour microalbumin using albumin concentration and 24 hour urine volume only. We no longer need the information of patient's height and weight. The reference interval of the 24 hour microalbumin will be changed to 0 - 30 mg/24h.

References:

1. K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification, and Stratification. Part 7. Stratification Of Risk For Progression Of Kidney Disease And Development Of Cardiovascular Disease Guideline 14. Association Of Chronic Kidney Disease With Diabetic Complications.
2. American Diabetes Association. Diabetes nephropathy. Diabetes Care 1999;22 (Suppl 1):S66-9.
3. The National Academy of Clinical Biochemistry. Guidelines And Recommendations For Laboratory Analysis In The Diagnosis And Management Of Diabetes Mellitus. Volume 13, 2002

Laboratory Contact: Lu Song, Ph.D. , DABCC, Technical Director, 717-851-1422

Issued on: March 9, 2004

For question about this, and other, information, call Central Pennsylvania Laboratory at 1-888-480-1422