

Validation of Albumin Creatinine Ratio Point of Care Devices for Community Testing

Methods

245

unselected urine samples



POC devices

(urine albumin:creatinine ratio):

- Siemens Clinitek[®]
- MinuteKidney[®]
- Allegro[®]



Sensitivity
% (95%CI)



Specificity
% (95%CI)



Results

Parameter for detecting uACR >3.39 mg/mmol and above

Allegro[®]

MinuteKidney[®]

Siemens Clinitek[®]

97.1%
(92.7% - 99.2%)

95.5%
(90.9% - 98.2%)

93.5%
(88.5% - 96.9%)

92.9%
(85.3% - 97.4%)

47.8%
(37.1% - 58.6%)

80.0%
(70.2% - 87.7%)



Compared with Roche quantitative

Semi quantitative thresholds:

- Normal: <3.39mg/mmol
- Abnormal: 3.39mg/mmol – 33.9mg/mmol
- High abnormal: >33.9mg/mmol

Roche ACR assay:



0.3mg/mmol to 936.2mg/mmol
Mean of 44.83mg/mmol



Normal: 90 (37%)
Abnormal: 91 (37%)
High abnormal: 64 (26%)

Conclusion: Performance of the POC ACR devices paralleled their accessibility and ability to be mobilised. These findings allow healthcare providers to understand the limitations of test performance when employing POC testing to screen for CKD.



Author: Griffiths K, *et al.*

VA by: Juan Daniel Díaz-García
@dano0790