



14 March 2023

## Estimated Glomerular Filtration Rate (eGFR) in adult males

I advise that SA Pathology recently identified an error in the estimated Glomerular Filtration Rate (eGFR) formula used for males; this error has now been corrected.

eGFR is a useful tool in early identification and monitoring of chronic kidney disease (CKD). A recent meta-analysis<sup>1</sup> estimated a significant change in eGFR for an individual patient to be  $\pm 12.5\%$ .

SA Pathology has been using CKD-EPI formulae (4 formulae encompassing separate formulae for males and females at different creatinine thresholds) for calculating eGFR since September 2017.

As a result of this error, SA Pathology has been reporting eGFR values approximately 2% higher than eGFR calculated by the correct formula in adult male patients.

It is important to note that this difference is less than what can be accounted for within individual biological variation.

Please direct any queries to Dr Penelope Coates, Clinical Director, Chemical Pathology on 8222 3391 or the Clinical Biochemist on-call on 8222 3444.

1. Thöni S, Keller F, Denicolò S, Buchwinkler L, Mayer G. Biological variation and reference change value of the estimated glomerular filtration rate in humans: A systematic review and meta-analysis. *Front Med (Lausanne)*. 2022 Oct 6;9:1009358. doi: 10.3389/fmed.2022.1009358. PMID: 36275823; PMCID: PMC9583397.

Regards

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