

CORRESPONDENCE

Response to the letter entitled “Glomerular filtration rate estimation for carboplatin dosing in patients with gynaecological cancers”



We thank Cartwright and colleagues¹ for their comments on our work and for sharing their analysis on the topic. It was reassuring to see consistency with our data regarding the fact that the Wright area under the curve 5 (AUC5) and Cockcroft and Gault max body weight adjustment (MBW C&G) AUC6 formula(e) resulted in increased doses of carboplatin for most patients when compared with hypothetical dosing using adjusted body weight C&G (AdBW C&G) and CamGFRv2 using AUC5.²

Platinum chemotherapy remains the backbone of chemotherapy regimes in gynaecological cancers. Optimal dosing to maximise efficacy while minimising toxicities is therefore important in everyday clinical practice. Although nuclear medicine glomerular filtration rate (nmGFR) remains the gold standard for assessing renal function, this test comes with resource implications and may not be practical or possible in many settings. Establishing the gold-standard formula to enable accurate dosing is key and will help to ensure high quality and equal care across all centres.

As Cartwright et al. stated, both historical and more recent trials in ovarian cancer have used C&G AUC6 to dose carboplatin.³⁻⁵ Similar to our own data, a recent study⁶ demonstrated the propensity of C&G AUC6 to overestimate GFR when compared with nmGFR AUC5. Indeed, the authors of this study piloted the use of nmGFR AUC6 to more closely mimic dose intensity used in clinical trials and did not report excessive haematological toxicity. Similarly, Cartwright et al. did not detect increased haematological toxicity after one cycle in those dosed with C&G AUC6 versus Wright AUC5. Although a separate clinical question, these data raise the possibility of using nmGFR AUC6 in clinical practice, but much larger studies would be needed to ascertain safety signals. Nonetheless, where local practice is to dose patients using nmGFR AUC5, then the most accurate estimation may be achieved using AdBW C&G or CamGFRv2 AUC5 compared with other methods of estimation.

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