Allopurinol dose relative to renal function and risk of hypersensitivity reactions

We thank Dr Corrado Campochiaro for the comments¹ on our paper examining the risks for severe cutaneous adverse reactions (SCAR) to allopurinol.² Dr Campochiaro notes that the ratio of baseline dose of allopurinol to glomerular filtration rate was not different to controls without allopurinol-SCAR in our patients with renal impairment (estimated glomerular filtration rate (eGFR) <30 mL/min) compared with Stamp *et al*,³ who found a higher ratio in their patients with SCAR. First, Dr Campochiaro asks if any of our subjects were being dialysed as this reduces plasma oxypurinol concentrations. They were not. There is a difference in the two studies, however, that might explain this apparent contrast, apart from the additional point made by Dr Campochiaro that our patients had worse renal function than the patients in the Stamp *et al* study. In our study, the ratio of dose to eGFR is that on presentation with SCAR. We do not have data on starting doses for our patients or controls. This contrasts with Stamp *et al* who have starting doses as well as doses at the time of SCAR. Larger prospective controlled studies examining the hypothesis of Stamp *et al* that lower commencing doses in relation to eGFR might reduce the risk of allopurinol-SCAR are needed.

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REFERENCES

- 1 Campochiaro C. Allopurinol-induced severe cutaneous adverse reactions. *Ann Rheum Dis* 2016;**75**:e20.
- 2 Chung WH, Chang WC, Stocker SL, *et al*. Insights into the poor prognosis of allopurinol-induced severe cutaneous adverse reactions: the impact of renal insufficiency, high plasma levels of oxypurinol and granulysin. *Ann Rheum Dis* 2015;**74**:2157–64.
- 3 Stamp LK, Taylor WJ, Jones PB, *et al*. Starting dose is a risk factor for allopurinol hypersensitivity syndrome: a proposed safe starting dose of allopurinol. *Arthritis Rheum* 2012;**64**:2529–36.