

## Correspondence on 'Association between treatment with colchicine and improved survival in a single-centre cohort of adult hospitalised patients with COVID-19 pneumonia and acute respiratory distress syndrome'

I read with great interest the paper by Scarsi *et al.*<sup>1</sup> The authors examined the effect of colchicine (1 mg/day) in patients with COVID-19 by setting standard of care (hydroxychloroquine, and/or intravenous dexamethasone, and/or lopinavir/ritonavir).<sup>1</sup> The adjusted HR (95% CI) of colchicine for mortality was 0.151 (0.062–0.368). In contrast, older age, worse PaO<sub>2</sub>/FiO<sub>2</sub> and higher serum levels of ferritin at entry were no risk factors of mortality. The authors recommended controlled clinical trials to verify efficacy and safety, and I present the following information.

Deftereos *et al* conducted a prospective, open-label, randomised clinical trial to evaluate the effect of treatment with colchicine (maintenance doses of 0.5 mg two times per day) on cardiac and inflammatory biomarkers and clinical outcomes in patients with COVID-19.<sup>2</sup> Mean event-free survival time was significantly longer in the colchicine group, and there was no difference in adverse events between two groups, except for diarrhoea. Perricone *et al* speculated six mechanisms regarding the effectiveness of colchicine in patients with COVID-19,<sup>3</sup> but Deftereos *et al* reported no significant differences in high-sensitivity cardiac troponin or C reactive protein levels between two groups.<sup>2</sup>

Brunetti *et al* also conducted a prospective study and the adjusted ORs (95% CIs) of colchicine for discharge and mortality at the end of the 28 day were 5.0 (1.25–20.1) and 0.20 (0.05–0.80), respectively.<sup>4</sup> They speculated that anti-inflammatory and antiviral effects of colchicine might attenuate cytokine storm by severe COVID-19 infection, but there is no clear evidence on the preventive effect of colchicine for cytokine storm.<sup>5</sup>

In combination with exploring the inflammatory suppression mechanism of colchicine for clinical outcomes in patients with COVID-19, randomised clinical trials should be added to verify the relationship.

Tomoyuki Kawada 

**Correspondence to** Dr Tomoyuki Kawada, Hygiene and Public Health, Nippon Medical School, Bunkyo-ku 1138602, Japan; kawada@nms.ac.jp

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### ORCID iD

Tomoyuki Kawada <http://orcid.org/0000-0002-4426-4644>

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