

## Letters to the Editors

### Letter: rapid infliximab infusion is not always safe

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SIRS, Biological therapies with antitumour necrosis factor- $\alpha$  drugs, including infliximab, are now one of the popular therapies in the treatment of inflammatory bowel diseases and other diseases related to dysregulated immunity.<sup>1, 2</sup> Despite their effectiveness in control of exacerbations and maintaining remission of these diseases, this class of drugs may have serious side effects including death.<sup>3–5</sup> One of the major recommendations since introduction of infliximab, the first of these drugs to be commercially available, was slow infusion to avoid side effects. Neef *et al.* in their article have claimed that rapid infusion of infliximab is not associated with more side effects compared with standard infusion rate.<sup>6</sup>

As they have mentioned, this could not be generalised to every patient especially those who are naïve to this therapy. After several doses of infusion, patients usually develop antibodies to this chimeric protein. These antibodies could be neutralising or nonneutralising and accordingly could have different effects on occurrence of

anaphylactic and other types of acute infusion reactions, as well as the efficacy of drug.<sup>7–9</sup>

I want to emphasise that the work of Neef *et al.* should not lead to a change in infusion rates for infliximab, especially in naïve patients.

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### Letter: rapid infliximab infusion is not always safe – authors' reply

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SIRS; We thank Lankarani for the letter in response to our meta-analysis.<sup>1, 2</sup> Although infliximab may occasionally result in serious side effects, including death, the focus of our meta-analysis was to specifically examine infusion-related adverse effects of infliximab. In this regard, our data demonstrated that rapid infusions are not associated with greater risk of infusion reaction. We specifically addressed the risk of serious infusion re-

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actions (Figure S5) and delayed infusion reactions (Figure S6), which were either the same or decreased in patients receiving rapid infliximab infusions.

We acknowledge that the rate of infusion could influence adverse effects associated with infliximab other than that of infusion reactions. It should be noted that none of the studies included in our meta-analysis identified a death secondary to infusion reaction with rapid infliximab infusions. In one paper, there were two deaths reported that were deemed to be unrelated to infliximab infusions (one due to tuberculosis).<sup>3</sup>

As noted, we appropriately concluded that rapid infusion of infliximab is not associated with increased rate of infusion reaction compared with standard infusions in patients that have previously tolerated at least three standard rate infusions. Although we do not conclude that infliximab infusions are always safe, we do conclude that the evidence demonstrates that rapid infusions are as safe as standard infusions with regard to risk of infusion

reactions in this infliximab-experienced population. We do agree that there is insufficient evidence to support initiation of rapid infliximab infusions in infliximab-naïve patients.

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