Reply to Chan-Tack et al

TO THE EDITOR—With interest we read the comments by Chan-Tack et al [1]. They summarize information on the use of intravenous zanamivir, an agent available through the US Food and Drugs Administration’s Emergency Investigational New Drugs application process, for treatment of severe influenza. Mortality among intravenous zanamivir–treated patients was observed to be relatively high, with 21 deaths among 47 patients with outcome/follow-up data reported. Although this data set should be interpreted with caution because information from a substantial part of the follow-up period is missing, the data presented are largely in line with those generated by us in our previous article [2]: the apparently limited effectiveness of intravenous zanamivir treatment is hard to judge, because in both studies most of the treated patients were critically ill, including those with confirmed or suspected oseltamivir resistance. Antiviral resistance often occurs in this population and limits further treatment options [3]. Furthermore, the high number of patients with preexisting medical conditions, especially those affecting the immune system, is striking. Notably, 53% of the patients with comorbidities reported in the study by Chan-Tack et al were immunocompromised, comparable to the 60% included in our study [1]. One should realize that the incidence and severity of influenza in immunocompromised patients can be extremely high. For example, in our tertiary care hospital, 335 patients tested positive for influenza A virus between August 2009 and July 2012. A total of 113 patients (34%) were immunocompromised, of whom 94 (83%) were adults. Most adult patients had neoplastic disorders (Fraaij et al, unpublished data).

Both studies are in agreement that it is inappropriate to judge the clinical effectiveness of intravenous zanamivir treatment solely on the basis of data obtained from patients who had a plethora of different severe clinical conditions that were extremely difficult to treat. Interestingly, data on the use of intravenous peramivir, inhaled zanamivir, and extracorporeal membrane oxygenation showed similarly poor survival results [4–6].

We agree with Chan-Tack et al that randomized controlled trials on the effectiveness of intravenous zanamivir treatment in critically ill influenza patients, including those who are immunocompromised, are needed. It should, however, be noted that for both ethical and logistical reasons, these studies will be challenging to perform.

Notes

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References


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