

Letter

The limitations of observational studies on the treatment of severe sepsis – authors' response

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The observations by Wiederman [1] on our recently published paper [2] raise some confusion between 'facts' and 'opinions'. In the area of the treatment of sepsis with antithrombin III, the results of our observational study are 'facts' and are therefore a contribution to a better knowledge of this therapeutic problem. While previous evidence was based only on randomised, controlled trials (RCTs), our study has provided some additional evidence using an observational design. Nobody can deny that having data from both RCTs and observational studies is better than having data from only RCTs.

The interpretation of our results ('opinions') is another issue. It is well known that the value of observational studies is a matter of debate [3–5] and, of course, our study does not make an exception. We think, however, that one cannot always restart from the beginning the debate on the usefulness of observational studies every time one such study is published.

The same considerations apply to meta-analysis. Detractors of meta-analysis may argue that there has been a 'spectacular failure ... to predict the outcomes of subsequent large scale RCTs'. Many other researchers have a different and more favourable view. In any case, numerous meta-analyses continue to be published in authoritative journals; in 2001, 152 articles were published in the *British Medical Journal*, five articles in the *New England Journal of Medicine*, 60 articles in the *Annals of Internal Medicine*, 94 articles in the *Journal of the American Medical Association*, and 10 articles in the *Lancet* (information based on a PubMed Medline [6] query launched on 11 October 2002 using the syntax: metaanalysis[*titl*] OR meta-analysis[*titl*] OR 'systematic review'[*titl*]; limits: 'only items with abstract'). This shows that the scientific community recognises the 'pros' of

this instrument (even though its 'cons' should always be kept in mind). Also in the case of meta-analysis, one cannot restart from the beginning the debate about the usefulness of meta-analysis [7,8] every time an article presents some results of this type.

In conclusion, we believe that both observational studies and meta-analytic assessments can be of value in some cases. The scientific community continues to accept them regardless of the occasional strong opinions of individual researchers that dislike these techniques.

Competing interests

None declared.

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