Reply to Ma et al.: Osteomyelitis caused by *Aspergillus* species

E. Gabrielli¹, A. W. Fothergill², L. Brescini¹, D. A. Sutton², E. Marchionni¹, E. Orsetti¹, S. Staffolani¹, P. Castelli¹, R. Gesuita³ and F. Barchiesi¹

1) Clinica Malattie Infettive, Università Politecnica delle Marche, Ancona, 2) Fungus Testing Laboratory, University of Texas Health Science Center, San Antonio, Texas and 3) Centro di Epidemiologia, Biostatistica e Informatica Medica, Università Politecnica delle Marche, Ancona, Italy

10.1111/1469-0691.12613

Corresponding author: Professor Francesco Barchiesi, Clinica Malattie Infettive, Università Politecnica delle Marche, Azienda Ospedaliero-Universitaria, Ospedali Riuniti Umberto I°-Lancisi-Salesi, Via Conca, 60020, Torrette di Ancona, Ancona, Italy
E-mail: f.barchiesi@univpm.it

We very much appreciated the interest that Ma et al. [1] have shown in our work.

As repeatedly pointed out in our article, the data presented are derived from a literature review, thereby determining the risk of bias. It must be underlined that the period we are considering (1936–2013) is significantly wider than that reported by other literature revisions. This fact, along with an increasing number of cases not described in detail (i.e. the broad and vague definition of ‘surgery’, which goes from drainage to stabilization), makes any ‘surgical intervention’ not significantly associated with a better prognosis in our analysis.

If this conclusion seems to contradict the ones recently reported by Gamaletsou et al., and by Koehler et al., it must be considered that in the first article the authors found that antifungal plus surgery was significantly associated with fewer relapses (and not with death, and worsening and chronicity of infection, as we considered the definition for negative outcome) while in the latter paper the combination of antifungal and surgery was associated with a trend towards a better survival (78% vs. 60%, not statistically evaluated) as in our report, although we found the difference less dramatically evident (62% vs. 58%).

The reason why in our analysis surgical intervention (here considered to be from drainage of infected tissues to stabilization) did not influence the outcome is difficult to explain. As reported, one can speculate that the patients treated with the combination of drugs and surgery were those who were most clinically compromised, and that even such aggressive therapy could not yield a positive outcome. Additionally, one important point that needs to be stressed is that the infections considered in our review ranged from post-traumatic bone involvement in immunocompetent hosts to complicated spondylodiscitis in patients with severe underlying diseases. The effect of ‘surgical intervention’ was analyzed in the overall population, and a sub-analysis specifically conducted in patients with spondylodiscitis, which might demonstrate beneficial effects of surgery, was not done in our study. Unfortunately, not all information was always available.

We strongly believe that, wherever it is possible, the combination of antifungal drugs and surgery is the reference standard in these infections, although here, surgery did not influence the outcome of aspergillosis osteomyelitis.

Transparency Declaration

The authors declare no conflicts of interest.

References