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DOI: 10.1183/09031936.00013107

Antibiotics in RSV bronchiolitis: still no evidence of effect

To the Editors:

Avoiding unjustified antibiotic use is of paramount importance in order to decrease worldwide development of resistance. In this context, the study by TAHAN *et al.* [1], which reports the results of a randomised, double-blind, placebo-controlled trial comparing clarithromycin 15 mg·kg⁻¹·day⁻¹ for 3 weeks with placebo in infants with respiratory syncytial virus (RSV) bronchiolitis, is disturbing. Careful analysis of the study shows important methodological flaws, making the results unreliable and the recommendations premature.

First, the trial has not been registered at www.controlled-trials.com, which is now a prerequisite for randomised controlled trials (RCTs) [2]. Secondly, and even more importantly, the RCT lacks a proper power analysis. In the design of an RCT it is necessary to know beforehand how large a sample is needed to enable statistical judgments that are accurate and reliable. The sample size seems to be too small to draw any evidence-based conclusions. Moreover, it is not known if patients with prior use of antibiotics were excluded from the analysis. Finally, why did TAHAN *et al.* [1] choose to use an antimicrobial drug that must be administered for 3 weeks, while the length of stay in the control group is only 88 h?

Numerous studies have shown that the occurrence of a secondary or concurrent bacterial infection in hospitalised children with RSV lower respiratory tract disease (LRTD) is <1% [3]. Despite this, nearly half of all hospitalised infants with RSV LRTD are treated with antibiotics [4–6]. This unjustified use of antibiotics must be avoided, because of the close link with the development of antimicrobial resistance [7]. Therefore, there is a rationale for a properly designed RCT equivalence trial studying antibiotics in hospitalised infants with RSV LRTD.

Unfortunately, studies such as the one by TAHAN *et al.* [1] do not provide a justified basis for the treatment of hospitalised infants with respiratory syncytial virus and do not help in a reduction of abuse of antibiotics.

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STATEMENT OF INTEREST

None declared.

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