Reviewer's report

Title: Th1/Th2 cytokine profile in relapsing-remitting multiple sclerosis patients treated with glatiramer acetate or natalizumab

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Reviewer: Oliver Neuhaus

Reviewer's report:

In this study, the authors measured serum levels of several Th1- and Th2-associated cytokines in 23 patients with relapsing-remitting multiple sclerosis treated for one year either with glatiramer acetate (GA) or with natalizumab (NAT). The authors observed several differences between the two groups confirming previous data on a Th2 shift in GA-treated patients. According to the putative mechanism of action of NAT, the authors observed a Th1 bias in the serum of NAT-treated patients.

As the authors state correctly, this study is limited by its small sample size and the cross-sectional study design with only one time point. The value of this study could be increased by adding data from untreated MS patients, ideally longitudinally from the same patients before and during treatment.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.