

## Correspondence

### Association between K469E polymorphism of intracellular adhesion molecules-1 (ICAM-1) and Behçet's disease

To the Editor

In a recent paper, Chmaisse et al,<sup>1</sup> reported the association between polymorphism of intracellular adhesion molecules-1 (ICAM-1) and Behçet's disease (BD) in the Lebanese population. The substitution at nucleotide 469 of ICAM-1 that occurs in exon 6 of the gene, results in a change from lysine (K) to glutamic acid (E). The authors included 39 Lebanese patients diagnosed with BD and 32 controls without BD, matched for ethnic background, in their study. They found that the E469 allele increased the risk of BD.<sup>1</sup> While there are several elements of the study design that warrant further discussion, I would like to point out the most egregious, as follows:

The sample size was very small. Suppose that we wished to test that the E469 allele has the effect of increasing the risk of BD by odds ratio (OR) equal to 1.5, as reported by other investigators.<sup>2,3</sup> Then with  $\beta=0.80$  and  $\alpha=0.05$ , we require at least 842 subjects (equal number of patients and controls). The total number of subjects of Chmaisse et al was 71 (39 patients and 32 controls).

The authors reported that the frequency of the E469 allele in their control group was equal to 0.109. However, this frequency is lower than reported from several populations of Europe,<sup>4,8</sup> East-Asia,<sup>2,9</sup> and the Middle-East.<sup>3</sup> Based on the published data, the frequency of the E469 allele ranged from 0.30 to more than 0.50.<sup>2,9</sup> It is reported that the frequency of the E469 allele is approximately 0.383 in a Jordanian or Palestinian sample.<sup>3</sup> Unfortunately, the authors did not mention why, in the Lebanese population the allelic frequency of E469 is lower than other populations, especially in comparison with Jordanian and Palestinian populations.

Therefore, the findings of Chmaisse et al might be interpreted with caution.

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### Reply from the Author

No reply was received from the Author.

### References

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