Dear Editors,

We read with great interest the article published by Fonseca et al. about the contribution of quantitative electroencephalographic (qEEG) analyses in the diagnosis of Alzheimer’s disease (AD). In this article, the authors concluded that the study of coherence and power in the qEEG showed a relatively limited accuracy, with respect to its application in the routine clinical practice. Beyond this great paper, some concerns arouse regarding methodological issues of the research.

First of all, the authors state that one exclusion criterion was “a score lower than 4 on the Hachinski scale in order to minimize the possibility of vascular disease and focal lesions in the neuroimaging exams”. We believe that it is a type error because if “Hachinski scale lower than 4” was an exclusion criterion, all patients included were higher than four, so patients with vascular dementia were included. Second, it is very difficult to explain a Control Group with significant lower education compared to AD patients, mainly because this variable might affect on MMSE and, precisely, this instrument was used to differentiate cases from control patients. Finally, another issue to point and to analyze when results are discussed is the fact that depression was not consider in exclusion/inclusion criteria, considering that such condition could affect on EEG in patients with dementia as previously reported.

Despite these issues, we consider that the paper is very interesting, as well as a novel research that wakes up a renewed interest of qEEG in the diagnosis of AD patients. Our congratulations to the authors.

References