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## In regard to a published article: the need to improve the quality of scientific literature in Spanish

### Respecto a un artículo publicado: en pos de una literatura científica en español de mayor calidad

The article by Aguirre-Ospina et al<sup>1</sup>, published in your journal, is an example of the fact that imprecise language as well as errors or omissions in data management (statistical analysis) obscure and distort what could have been a useful piece of research. To the point: (a) the statement “Baseline variables were analysed regarding the 2 randomisation groups with the aim of finding associations and primary and secondary outcomes” is incomprehensible; (b) Paragraphs 2 and 3 of the section “primary and secondary outcomes” are contradictory; (c) although the primary outcome is a discreet continuous variable (analog numerical scale), the statistical tests used to determine whether the differences are significant (Chi-square and Fisher’s test) are designed to assess categorical variables,<sup>2</sup> and no data transformation is reported (had it been done, there would be no reason for such an omission)<sup>3,4</sup>; (d) there is a problem of semantics in the statement “Sample size was estimated with the purpose of showing pain reduction . . .” because sample size cannot be used to “demonstrate” but rather to avoid type I and II errors.<sup>2</sup>

Situations like the one found in the cited article<sup>1</sup> are not exclusive of anesthesiology, the country or the language (statistical errors have been reported in relation to articles published in *Nature Medicine*).<sup>3,5,6</sup> However, considering that Spanish is the second native language most widely spoken in the world,<sup>7</sup> the Spanish-speaking scientific

community should have a better positioning. Scientific communication needs to be clear so that it can be interpreted correctly. It behooves us to work toward improving the quality of scientific literature in Spanish.

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#### Conflicts of interest

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