CORRESPONDENCE

HAQ score is an independent predictor of sustained remission in patients with rheumatoid arthritis: methodological issues

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Dear Editor,

We read the article conducted by Lee KE and colleagues that was published in Rheumatology International with great interest recently [1]. The authors assessed potential predictors of sustained remission for 2 years according to the Disease Activity Score in 28 joints (DAS28)-CRP in patients with rheumatoid arthritis (RA). They provided merit evidences that a lower HAQ score at baseline was an independent predictor of sustained remission at 2 years, according to DAS28-CRP [1], however, some methodological issues should be taken into account.

The authors selected variables for multivariate analysis when the variables with a p values < 0.05 in univariate analysis. However, it can induce Testimation bias in the results [2]. The factors with p values < 0.05 which have large effect on the results and p values < 0.2 may have a relatively small effect on the results. If we selected only those with p value < 0.05 in multivariable analysis, the effect of such predictors will be overestimated and in following the prediction power will be decreased. So, predictive factors

with p values < 0.2 should be selected to be imported into the multivariable model.

The authors indicated that a lower HAQ score at baseline was an independent predictor of sustained remission at 2 years, according to DAS28-CRP. However, the validity of prediction models need to be validated through using some appropriate methods such as cross-validation and bootstrapping, otherwise, these results would be optimistic interpretation [3].

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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