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Letter to the Editor

Response to "regarding the article 'Predictive score for oral corticosteroid-induced initial worsening of seropositive generalized myasthenia gravis'"

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We thank Dr. Panahi immensely for the insightful correspondence regarding our publication. We thoroughly enjoyed learning about the statistical methodology.

As Dr. Panahi suggested, the comparison between the score model and the multivariate logistic regression model should be presented. In our paper, the univariate logistic regression analysis of the score model revealed the area under the curve (AUC) of 0.775 ($P = 0.0001$), whereas the stepwise multivariate logistic regression analysis revealed the AUC of 0.774 ($P = 0.0017$) [1]. We are convinced that little difference exists between both regression models.

In our paper, we only included variables with $P < 0.05$. As Dr. Panahi recommended, we reanalyzed using variables with higher significance level ($P < 0.20$), including age, facial palsy, and immunosuppressants; however, the results remained same, implying that thymoma-associated or early-onset MG, initial prednisolone doses ≥ 40 mg/day, and upper limb weakness were the absolute risk factors of initial worsening. Likewise, the results remained same with $P < 0.50$ level. Furthermore, the bootstrapping AUC in this study suggested a little overestimating problem, which corroborated our previous paper [2].

We were exclusively interested in the directed acyclic graph (DAG) procedure and entirely concur that DAG would easily reveal confounder [3]; however, we just needed to exclude a variable if two independent variables exhibited a robust correlation, and considered these three characteristics (thymoma-associated or early-onset MG; initial prednisolone doses ≥ 40 mg/day; and upper limb weakness) as clinically independent.

Disclosure of conflicts of interest

None.

Acknowledgments

None.

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