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Correction: Prediction of the functional outcome of intensive inpatient rehabilitation after stroke using machine learning methods

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The original version of this Article contained errors in which two paragraphs were erroneously moved from the 'Results' section to the 'Conclusions' section. The following sections have been moved to the 'Results' section:

“The results of univariate analyses investigating associations between the selected predictor variables and the outcome are presented in Table SM3. The results on the ML models reported the SVR as the best performing algorithm on the validation set, obtaining a MAE [IQR] of 11.50 [14.00] on the internal test set (Table 2). For this reason, subsequent interpretability and error analyses, as well as external testing, were computed on the model using the SVR algorithm. Figure 3 is reporting scatter plots of the predicted and actual values on the mBI (panels A and C). The resultant RMSE and correlation coefficient for the SVR model were respectively 17.67 and 0.837 for the internal test predictions, 16.59 and 0.796 for the external testing predictions. On the external testing, the SVR obtained a MAE [IQR] of 8.96 [13.64].

Among the features collected at admission and mostly contributing to the prediction, greater motor capabilities on the upper limbs (motricity section of the Fugl-Meyer Assessment, FMA-M, and Motricity Index, MI, converted), higher functional level on the mBI, higher cognitive abilities (Montreal Cognitive Assessment, MoCA and Mini-Mental State Examination, MMSE converted), lower stroke severity (National Institutes of Health Stroke Scale, NIHSS), lower comorbidities (Cumulative Index Rating Scale, CIRS and Charlson Comorbidity Index, CCI converted), and younger age were those prediction an higher functional status at discharge (Fig. 4). The same variables were transversally encountered on both the external testing and each outer loop fold on the internal testing. These results were indeed confirmed by the statistical analyses, where the above-mentioned variables were significantly associated with the outcome (p -values < 0.001). Further, even with a lower contribution to the prediction, comorbidities (CIRS and CCI converted), clinical/rehabilitation markers of complexity (venous catheter), and lower limb performance (SPPB) were also selected among the features (Fig. 4).”

Additionally, the funding section was incomplete.

It now reads:

“The study was funded by the Italian Ministry of Health under the “Ricerca Corrente” program and by Regione Toscana under the Bando Ricerca Salute 2018 (TUNE_BEAM project), H14I20000300002.”

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