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Evidence-Based Practice Needs Stronger Prognostic Scores for the Prediction of Recurrent Stroke

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Letter to the Editor

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To the Editor:

The article by Weimer et al[1] is of great interest for internists and neurologists that have to prognostically stratify patients with acute or subacute cerebrovascular disease based on risk scores. However, we have to comprehend the actual and pragmatic value of the study findings for clinical practice. We previously underscored the importance of methodological matters to draw reliable conclusions by clinical studies[2,3] From this point of view, several issues are questionable and could weaken the conclusion validity. One marginal point is that any conclusion has to be cautiously interpreted when data are derived from a previously conducted study, like this case. On the contrary, substantial points regard results and their interpretation. The receiver operating characteristic curves of the 4 tested scores have each an area under the curve not very significant (<0.70), including 95% CIs. Sensitivity and specificity results were very scarce with positive predictive values <15%. Thus, the enthusiastic conclusions of the authors should be lightened. Scores (in particular, the Essen Stroke Risk Score [ESRS]) are valuable from a research point of view and have the capability to discriminate 2 different populations regarding stroke recurrence; the high-risk population has an annual incidence of 7.4% compared with the value of 4.2% of the low-risk one (statistically significant). However, 95% CIs overlapped compromising the clinical significance (more important of statistical significance) of the estimate.[4,5] Moreover, the low predictive value of all the scores makes themselves inapplicable on a single patient in clinical practice. Our view might help to stimulate research to find better predictive rules for recurrent stroke and vascular death in patients with transient ischemic attack or nondisabling stroke.

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