
PREDICTING OUTCOME OF IV THROMBOLYSIS-TREATED ISCHEMIC STROKE PATIENTS: THE DRAGON SCORE

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Strbian et al.¹ derived an outcome score, DRAGON, from a large dataset of nonbasilar artery alteplase-treated stroke patients. They propose that a high DRAGON score can identify those patients who should promptly begin endovascular, hypothermia, or other therapy due to poor outcome after alteplase. Statistically, it is not clear that the same scores achieved by different items are equivalent or if they are truly independent. Although widely used, multivariate analysis of complex datasets can only go so far in addressing independence of factors because they often fail to meet the underlying assumptions necessary for their valid use.²

While there is considerable interest in stroke outcome predictive scores (e.g., iScore,³ diffusion/perfusion mismatch⁴), many have been disappointing in predicting actual treatment response, since they are typically composed of factors merely related to outcome. It is preferable to focus on pathophysiologic mechanisms to predict whether thrombolysis is the best choice.

While increased use of hemicraniectomies may have modified the worst outcomes,⁵ it is still unclear whether poor response to IV alteplase can be overcome by any known therapy. It seems reasonable to use the DRAGON score to identify patients for new approaches.

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