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## **Reader response: Outcomes of patients with stroke treated with thrombolysis according to prestroke Rankin Scale scores**

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We applaud Dr. Gumbinger et al.<sup>1</sup> for examining thrombolysis outcomes in a stroke population with premorbid disability. Stroke patients with prevalent disability have traditionally been excluded from trials. However, the proportion of older adult stroke with prestroke impairments is substantial, and the optimal management of this group requires more consideration.<sup>2</sup> The study challenges the perception that prestroke disability precludes benefit from intervention and makes a call for more research in this patient group.

We agree that such research is needed, and a fundamental question is around how we robustly assess the prestroke state. In the study by Dr. Gumbinger, prestroke-modified Rankin Scale (mRS) score is assessed by physician estimate,<sup>3</sup> a method that seems open to several biases. Prestroke mRS is a robust predictor of poststroke prognosis,<sup>4</sup> but there is potential scope to improve its application. In large clinical registries, prestroke mRS has poor inter-rater reliability and validity issues.<sup>5</sup> There is a need for more reliable measures of premorbid disability that can be used in time-pressured settings such as acute stroke. Although we await the development of resources to improve prestroke assessment, studies that rely on the mRS may be better served by using multiple overlapping methods of ascertainment (patient, caregiver, and medical records) to improve validity.

### References

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