Editors' Note: Saifee et al. comment on the Pre-Hospital Acute Neurological Treatment and Optimization of Medical care in Stroke (PHANTOM-S) pilot study and discuss the concept of “stroke to syringe time” vs “call to needle time” or “door to needle time.” Commenting on the study by Brown et al., “Neighborhood socioeconomic disadvantage and mortality after stroke,” Mittal and McCormick suggest potential confounders that may have affected the study results. Sposato and Grimaud dismiss these confounders due to lack of evidence for their effect on stroke mortality.

Chafic Karam, MD, and Robert C. Griggs, MD

PREHOSPITAL THROMBOLYSIS IN ACUTE STROKE: RESULTS OF THE PHANTOM-S PILOT STUDY

Tabish A. Saifee, Christian M. Burd, Cristina Koppel, London: In their PHANTOM-S pilot study of prehospital administration of thrombolytic treatment for acute ischemic stroke, Weber et al.¹ explored a method of improving “call to needle times.” Despite a widening time window for thrombolysis for acute ischemic stroke,² the importance of minimizing time delay between symptom onset and administration of thrombolytic treatment has led to phrases such as “time is brain” and “door to needle time” to engender this concept. This focus on minimizing hospital factors and delays has been shown to result in better outcomes after thrombolysis in stroke patients.³ Weber et al. greatly emphasized this early part of the time window for treatment of stroke. However, equally important delays persist between onset of symptoms and time to patients calling for medical assistance despite public health campaign efforts such as “act FAST” by the UK government and other similar endeavors.⁴ With respect to expediting thrombolytic treatment, we suggest an effort is spread to minimize delays in all parts of this therapeutic window, both prehospital and in-hospital, and so we suggest the recently coined term⁵ “stroke to syringe time” as more reflective of this aim.

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1. Weber JE, Ebinger M, Rozanski M, et al. Prehospital thrombolysis in acute stroke: results of the PHANTOM-S pilot study. *Neurology* 2013;80:163–168.
2. Sandercock P, Wardlaw JM, Lindley RI, et al. The benefits and harms of intravenous thrombolysis with recombinant tissue plasminogen activator within 6 h of acute ischaemic

stroke (the third international stroke trial [IST-3]): a randomised controlled trial. *Lancet* 2012;379:2352–2363.

3. Hacke W, Kaste M, Bluhmki E, et al. Thrombolysis with alteplase 3 to 4.5 hours after acute ischemic stroke. *N Engl J Med* 2008;359:1317–1329.
4. Kerns JM, Heidmann D, Petty M, Prabhakaran S. Optimizing public health strategies for stroke education: need for a controlled trial. *Am J Ther* 2011;18:81–90.
5. Hughes T. Chameleons, confusion and the clinical historian. *Pract Neurol* 2013;13:29–30.

NEIGHBORHOOD SOCIOECONOMIC STATUS AND STROKE MORTALITY: DISENTANGLING INDIVIDUAL AND AREA EFFECTS

Manoj K. Mittal, Jennifer B. McCormick, Rochester, MN: Brown et al.¹ reported higher poststroke mortality among residents of the most socioeconomically disadvantaged census tracts relative to the residents of the least disadvantaged census tracts. The authors did not find any association by race or income.

Table e-2 shows that white patients have 1.49 times higher risk of poststroke mortality at 1 year ($p = 0.06$). Interestingly, a previous cardiovascular health study showed 2.9 times higher risk of poststroke mortality in black patients ($p < 0.05$).² This association of race and mortality is surprising. The authors could address this paradox by comparing the race/ethnicity of participants who were excluded secondary to geocoding issues with their addresses to those who were included.

Other potential confounders could be patient mobility status and use of IV thrombolysis, which are independent risk factors for poststroke mortality.^{2–4} Black race and low income are significant predictors for not receiving IV thrombolysis.⁵ The effect of neighborhood on mortality should be adjusted for mobility status and use of IV thrombolysis.

Better health policies are needed to improve access of care for minorities and the poor to provide lifesaving, US Food and Drug Administration–approved treatments like IV thrombolysis and poststroke care.

Disclaimer: The views expressed by the authors do not represent the views of the Mayo Clinic.

Author Response: Luciano A. Sposato, London, Canada; Olivier Grimaud, Paris: Drs. Mittal and McCormick comment on the article by Brown et al.,¹ who studied socioeconomic disadvantage and

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Prehospital thrombolysis in acute stroke: Results of the PHANTOM-S pilot study

Tabish A. Saifee, Christian M. Burd and Cristina Koppel

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