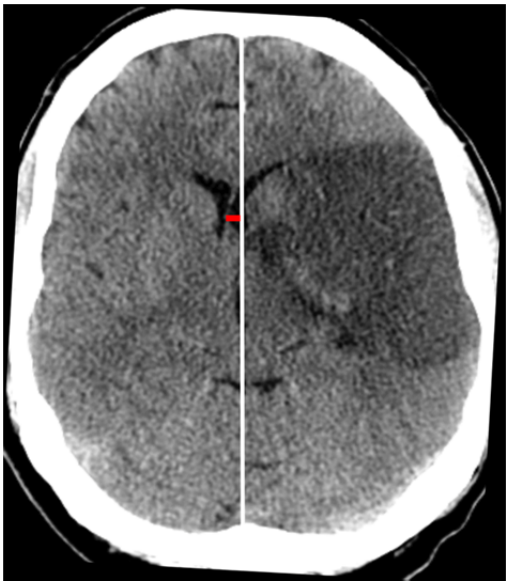
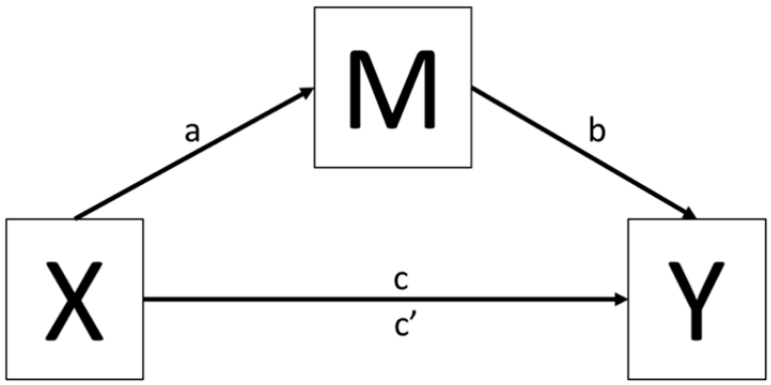
Supplementary Online Content

Kimberly WT, Dutra BG, Boers AMM, et al; the MR CLEAN Investigators. Association of reperfusion with brain edema in patients with acute ischemic stroke: a secondary analysis of the MR CLEAN trial. *JAMA Neurol*. Published online January 24, 2018. doi:10.1001/jamaneurol.2017.5162

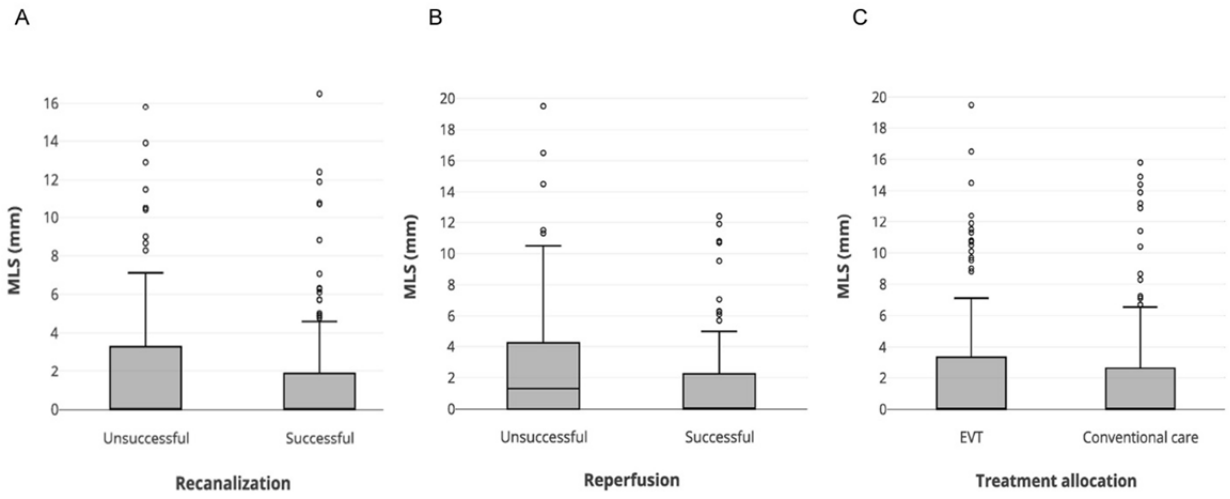
This supplementary material has been provided by the authors to give readers additional information about their work.



eFigure 1. Method of midline shift measurement. The midline (white line) was drawn by connecting a line from the anterior and posterior attachments of the falx cerebri. A second line (red line) perpendicular to the first was drawn and measured at the point of maximal deviation, as illustrated.



eFigure 2. Steps of mediation analysis. The first step (c) evaluates the association between the independent variable (X) and the dependent variable (Y). The second step (a) analyzes if X is associated with the mediator (M). Third step (b) evaluates the association between M and Y, adding X as independent variable. The last step (c') evaluates the association between X and Y, adding M as an independent variable. The effects in the third and fourth steps could be estimated in the same equation.



eFigure 3. MLS values on 24 hour CT scan (earlyFU) according to (A) reperfusion status, (B) recanalization status, and (C) treatment allocation. The box represents the interquartile range (25% to 75%), the solid horizontal line is the median value, the dashed horizontal line is the mean value, error bars encompass the 10th to 90th percentiles, small circles are the out values. The *p* values were p=.04, p=.01 and p=.46 for A, B, and C respectively. EVT: endovascular treatment; FU: follow-up; MLS: midline shift.

eTable 1. Common Odds Ratios (cOR) Expressing the Association between Continuous MLS and a Shift in the Direction of Worse Outcome on the mRS 90 Days. The *P* value was <.001 for all analyses.

	cOR	**acOR**
EarlyFU scan	1.21 (95%CI 1.15-1.28)	1.27 (95%CI 1.19-1.35)
LateFU scan	1.21 (95%CI 1.14-1.28)	1.23 (95%CI 1.16-1.30)

cOR: unadjusted common odds ratio; acOR: adjusted common odds ratio; 95%CI: confidence interval of 95%; FU: follow-up