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The SPRINT Trial Score web calculator

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We recently described the SPRINT Trial Score, published in the *European Journal of Preventive Cardiology*, for quantitatively defining the participants of a clinical trial based on baseline characteristics and not on inclusion and exclusion criteria.¹ SPRINT showed that many people with hypertension have better outcomes when a systolic blood pressure of 120 mmHg is targeted instead of 140 mmHg.² Applied to SPRINT, the Trial Score described the landscape of trial participants and illustrated how they compare to both a real world population (NHANES) and another contemporary blood pressure trial in patients with diabetes (ACCORD-BP).³ Real-world patients were more likely to occupy the trial's data-limited or data-free zones.¹ For ACCORD-BP, the SPRINT Trial Score was able to discriminate a subpopulation of patients with diabetes who were in SPRINT's data-rich zone and responded to intensive blood pressure control in the same way as SPRINT even though ACCORD-BP, on the whole, was a 'negative' trial.^{1,3}

We have now operationalized the SPRINT Trial Score so that it can be used to give clinicians a sense, in real time, of how their patients compare to the SPRINT population. This web-based calculator will show where a patient falls in the 'data zones' of SPRINT (data-rich, data-limited, or data-free) and gives a breakdown of which characteristics are most similar or dissimilar to the typical trial participants. It is nearly impossible for clinicians to remember the characteristics of a specific trial's participants when making decisions about patients sitting in front of them.⁴ For SPRINT, this calculator can help. The calculator is programmed in R, freely available worldwide, and can be used as a web app on conventional computers as well as mobile devices. It can be found at: https://alenghatlab.shinyapps.io/SPRINT_TSC/.

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Author contribution

LJJ and FJA contributed to the conception and design of the work. FJA developed the web-based calculator. Both authors gave final approval and agree to be accountable for all aspects of the work, ensuring integrity and accuracy.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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