

Triple versus guideline antiplatelet therapy to prevent recurrence after acute ischaemic stroke or transient ischaemic attack: the TARDIS RCT

Philip M Bath,^{1,2*} Lisa J Woodhouse,¹
Jason P Appleton,^{1,2} Maia Beridze,³
Hanne Christensen,⁴ Robert A Dineen,⁵
Katie Flaherty,¹ Lelia Duley,⁶ Timothy J England,⁷
Diane Havard,¹ Stan Heptinstall,¹ Marilyn James,⁸
Chibeka Kasonde,⁹ Kailash Krishnan,^{1,2}
Hugh S Markus,¹⁰ Alan A Montgomery,⁶
Stuart Pocock,¹¹ Marc Randall,¹² Annamarei Ranta,¹³
Thompson G Robinson,¹⁴ Polly Scutt,¹
Graham S Venables¹⁵ and Nikola Sprigg^{1,2}

¹Stroke Trials Unit, Division of Clinical Neuroscience, University of Nottingham, Nottingham, UK

²Stroke, Nottingham University Hospitals NHS Trust, Nottingham, UK

³Department of Neurology, Hospital of War Veterans, Tbilisi, Georgia

⁴Department of Neurology, Bispebjerg and Frederiksberg Hospital, University of Copenhagen, Copenhagen, Denmark

⁵Radiological Sciences, Division of Clinical Neuroscience, University of Nottingham, Nottingham, UK

⁶Nottingham Clinical Trials Unit, University of Nottingham, Nottingham, UK

⁷Vascular Medicine, Division of Medical Sciences and Graduate Entry Medicine, University of Nottingham, Nottingham, UK

⁸Health Economics, Division of Rehabilitation and Ageing, University of Nottingham, Nottingham, UK

⁹Lowdham Medical Centre, Nottingham, UK

¹⁰Department of Clinical Neurosciences, University of Cambridge, Cambridge, UK

¹¹Medical Statistics Unit, London School of Hygiene & Tropical Medicine, London, UK

¹²Department of Neurology, Leeds Teaching Hospitals NHS Trust, Leeds, UK

¹³Department of Neurology, Wellington Hospital and University of Otago, Wellington, New Zealand

¹⁴Department of Cardiovascular Sciences, University of Leicester, Leicester, UK

¹⁵Department of Neurology, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK

*Corresponding author philip.bath@nottingham.ac.uk

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Plain English summary

The TARDIS RCT

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Plain English summary

Brain damage due to a blood clot (stroke) is a common cause of disability in older adults. Mini-strokes are temporary damage to the brain that usually leave no long-term effect. Following a stroke or mini-stroke, there is an increased risk of having another one, especially over the next few hours. The risk of having another event can be reduced with blood-thinning drugs that reduce the formation of blood clots (e.g. aspirin, clopidogrel, dipyridamole). Typically, these are used alone (clopidogrel) or in combination (aspirin and dipyridamole). As one or two blood-thinning drugs are effective at reducing the risk of having another stroke, intensive treatment with all three might be even more beneficial, providing that excessive bleeding does not occur as a result.

The Triple Antiplatelets for Reducing Dependency after Ischaemic Stroke (TARDIS) trial recruited patients who could start treatment within 48 hours of a stroke or brief mini-stroke caused by a blood clot blocking a blood vessel. Participants were randomised ('put into groups using chance') to either intensive treatment with combined aspirin, clopidogrel and dipyridamole, or routine treatment; these treatments were given for 30 days, after which routine treatment was taken. The main result was the occurrence of a repeat stroke or mini-stroke, and how severe they were, by 90 days. The key safety outcome was a count of bleeds (because of blood-thinning drugs) and their severity.

The trial was stopped early on the recommendation of the Data Monitoring Committee after recruitment of 3096 participants from 106 hospitals in four countries. Although there was no difference in the number and severity of repeat strokes and mini-strokes between the treatment groups, serious or fatal bleeding was increased in the group of participants receiving three blood-thinning drugs. There were no differences between the treatment groups in the number of deaths.

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