



Rapid Intervention with Glyceryl trinitrate in Hypertensive stroke Trial-2 (RIGHT-2):

Safety and efficacy of transdermal glyceryl trinitrate, a nitric oxide donor, and of the feasibility of a multicentre ambulance-based stroke trial

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RATIONALE

- High blood pressure (BP) is common in acute stroke and is associated with poor outcome
- Previous hospital-based trials testing the effect of lowering BP have been inconclusive.
- Glyceryl trinitrate (GTN), a nitric oxide donor, is a candidate treatment for acute stroke; it lowers blood pressure, does not alter cerebral blood flow or platelet function, and is neuroprotective in experimental stroke.
- The PIL-FAST,¹ FAST-Mag² and RIGHT³ trials confirmed the feasibility of performing ambulance-based stroke trials in different healthcare settings.
- Both RIGHT³ and ENOS-early⁴ (subgroup of patients recruited <6 hours) showed that transdermal GTN improved functional outcome.
- Based on these results, RIGHT-2 is testing the safety and efficacy of transdermal GTN in 850 patients in the pre-hospital setting.

METHODS

- Paramedics from 8 UK ambulance services serving 53 acute hospital stroke services screen, consent, randomise and treat 1050 FAST-positive patients with systolic BP >120 mmHg presenting within 4 hours of onset.
- Treatment comprises GTN or sham patch, initiated in the ambulance and continued daily in hospital for 3 days.
- The primary outcome is the modified Rankin Scale at day 90.
- Secondary outcomes include vascular events, disability, quality of life, mood and cognition.
- Neuroimaging and blood biomarkers will examine potential mechanisms of action.
- Recruitment commenced in **quarter 3, 2015**.
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- The trial is funded by British Heart Foundation and sponsored by the University of Nottingham



	RIGHT-2	East Midlands Ambulance Service	South Western Ambulance Service	Yorkshire Ambulance Service	East of England Ambulance Service	Welsh Ambulance Service	London Ambulance Service	West Midlands Ambulance Service	South Central Ambulance Service
Live		24 Sep 15	9 Oct 15	30 Nov 15	2 Feb 16	6 Oct 16	9 Jan 2017	1 Mar 2017	1 Mar 2018
Paramedics Trained		193	313	177	145	165	325	124	61
Ambulance Stations Live		63	102	63	89	37	26	15	3
Hospitals Live		9	13	10	5	4	3	4	1
Total	1131	214	261	151	178	86	201	36	4

References

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