

## **Tranexamic acid for hyperacute spontaneous IntraCerebral Haemorrhage**

Haemorrhagic stroke, caused by bleeding into the brain, is the most devastating form of stroke. Haematoma expansion and re-bleeding both occur after intracerebral haemorrhage (ICH) and lead to poor outcome (death and disability).[1] Haemostatic agents, aimed at limiting haematoma expansion are a potential treatment option for ICH.

Tranexamic acid is a licensed anti-fibrinolytic drug that can be administered intravenously or orally and is used to reduce bleeding. In a recent mega-trial (CRASH-2) in 20,000 patients with major bleeding following trauma, tranexamic acid significantly reduced mortality, with no increase in thromboembolic events.[2] Treatment was most effective when given rapidly; delayed administration was associated with lack of efficacy and potential harm.[3] In a subgroup analysis of patients with traumatic ICH, tranexamic acid showed a non-significant trend to reduced mortality, and death or dependency. [4]

We are running an International Randomised controlled trial, testing the safety and efficacy of tranexamic acid in ICH, TICH-2 ([tich-2.org](http://tich-2.org)). Specifically, this PhD project will investigate the effects of tranexamic acid, including effects on haematoma expansion and in a sub study, ischaemic events in patients with ICH - using MRI.

The successful applicant will be jointly supervised by Dr Nikola Sprigg and Professor Philip Bath, Professor in Stroke Medicine, School of Medicine. Applicants should have, or expect to obtain, a first or 2.1 honours degree (or equivalent) in a relevant subject, with medical, pharmacology or radiology background who are able to spend a substantial amount of time to conduct research in a clinical environment, with contacts with patients, their families, and members of the multi- disciplinary clinical team. Applicants would also need to analyze images. Standard vetting procedures, including Disclosure and Baring Service check, will be required.

For application please email a CV with a covering letter and the names, address, telephone and email contact of two academic referees to Susan Blencowe, Secretary to Stroke, Division of Clinical Neuroscience, Clinical Sciences Building, Nottingham University, City Hospital Campus, NG5 1PB

For further information or informal enquiries please e-mail with CV to: [nikola.sprigg@nottingham.ac.uk](mailto:nikola.sprigg@nottingham.ac.uk).

**Theme(s):** Clinical trials of haemostatic agents to improve outcome after intracerebral haemorrhage

**Keywords:** Stroke, Haemorrhage, Outcome, Randomised controlled trials

**Fee band:** Low cost research  
Available to Home & EU students/International Students

### **References**

- 1:Steiner. Stroke, 2010.
- 2: CRASH-2. Lancet, 2010.
- 3: CRASH-2. Lancet, 2011.
- 4: CRASH-2 Intracranial Bleeding Study. BMJ, 2011.