

Call for Basic Science Papers Introduction of a New Format

Wolf-Rüdiger Schäbitz, MD; Marc Fisher, MD;
Jaroslaw Aronowski, MD

Stroke, a Journal of the American Heart Association/American Stroke Association, encompasses the entire field of cerebrovascular diseases, including all important aspects of experimental and clinical stroke. *Stroke* is now soliciting the submission of original basic science manuscripts focusing on translationally important cerebrovascular research. This applies to all in vivo experimental studies featuring brain circulation and imaging, pathophysiology, modeling, and metabolism, as well as all different modes of treatment and intervention.

Stroke has a long history of publishing fundamentally important and translationally relevant basic science articles. Prominent examples include the discovery and explanation of the ischemic penumbra,¹ the first introduction of the suture occlusion model in rats,² and the proof of efficacy of craniectomy in experimental infarction.³ An important reason to publish in *Stroke* is the visibility of its articles within the field. Articles published in *Stroke* are highly accessed with >11.6 million full article downloads in 2017. The journal's high Article Influence Score 2.213 (2016 Journal Citation Reports [Clarivate Analytics, 2017]), measuring the high relative importance of the journal on a per-article basis, compares favorably with other neurological and cardiovascular journals. Indeed, top-ranked basic science articles outperformed articles published in high impact journals, such as *Nature Neurology* and *Neuron* for a 10-year period.⁴ It is well-known in the scientific community that basic science articles published in *Stroke* have better methodological quality as compared with others in higher ranked journals.^{5,6}

Presently, the available types of articles for presenting basic/translational research in *Stroke* are the Original Contributions (which represent the majority of articles, now allowing manuscripts up to 5500 words) and Brief Reports (with up to 2000 words). Besides these 2 main formats, the Journal also features Topics Reviews to provide a distinct platform for presenting new and important topics in stroke research. *Stroke* also features Controversies in Stroke, which

covers contrasting opinions on various topics including those related to basic research, and *Stroke* Literature Synopses, which provides updates on key discoveries in the field of stroke, that have been published elsewhere. All the basic research articles published in *Stroke* are peer reviewed and are selected based on the presence of impactful hypotheses, innovation of the findings, and translational impact.

Since we recognize that *Stroke* plays a prominent role in advancing basic and translational research, we are now introducing a new format of short (up to 750 words) articles on impactful studies that report preliminary data, neutral/negative results, or that confirm or negate already published results. This format Basic Science Research Report will not contain an abstract, will only have up to 5 references, will not include tables or figures, and will be published online only. Additional data, which are necessary for full evaluation/review of the article, which describe in details the experimental methods and results, will be published online as a supplement with a 2000 word limit. This new format will provide a great opportunity to share quality research data with the scientific community, but at the same time because of its nature, the data included in these reports will require the same or even greater attention to scientific rigor than the other types of papers in *Stroke*. The reasons for generating negative or neutral results could range from technical problems to testing inappropriate dosages, using unrealistic time windows, or to pharmacokinetic issues with the drug being evaluated. Negative results could in fact include either neutral outcomes (no effect) or even worse outcomes of the treatment compared with placebo, for example, harmful effect. The later could, for instance, come from using a toxic dose but also could identify intrinsically harmful pathways, which could help to identify new therapeutic targets. If this approach is found to be useful to the stroke community, it may be expanded to clinical manuscripts in the future.

Disclosures

None.

References

1. Astrup J, Symon L, Branston NM, Lassen NA. Cortical evoked potential and extracellular K⁺ and H⁺ at critical levels of brain ischemia. *Stroke*. 1977;8:51–57.
2. ZeaLunga E, Weinstein PR, Carlson S, Cummins R. Reversible middle cerebral artery occlusion. *Stroke*. 1989;20:84–91.
3. Forsting M, Reith W, Schäbitz WR, Heiland S, von Kummer R, Hacke W, et al. Decompressive craniectomy for cerebral infarction. An experimental study in rats. *Stroke*. 1995;26:259–264.
4. Lo E, Fisher M. Stroke: impact beyond the impact factor? *Stroke*. 2011;42:1803–1804.
5. Minnerup J, Zentsch V, Schmidt A, Fisher M, Schäbitz WR. Methodological quality of experimental stroke studies published in the

The opinions expressed in this article are not necessarily those of the American Heart Association.

From the Department of Neurology, EvKB-Bethel, Bielefeld, Germany (W.-R.S.); University of Münster, Germany (W.-R.S.); Department of Neurology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA (M.F.); and Department of Neurology, University of Texas Health Science Center, McGovern Medical School, Houston (J.A.).

Correspondence to Wolf-Rüdiger Schäbitz, MD, Department of Neurology, EvKB-Bethel, Burgsteig 13 33617 Bielefeld, Germany. E-mail wolf.schaebitz@evkb.de

(*Stroke*. 2018;49:00-00.)

DOI: 10.1161/STROKEAHA.118.021784.)

© 2018 American Heart Association, Inc.

Stroke is available at <http://stroke.ahajournals.org>

DOI: 10.1161/STROKEAHA.118.021784

Stroke journal: time trends and effect of the basic science checklist. *Stroke*. 2016;47:267–272. doi: 10.1161/STROKEAHA.115.011695.

- Ramirez FD, Motazedian P, Jung RG, Di Santo P, MacDonald ZD, Moreland R, et al. Methodological rigor in preclinical cardiovascular studies: targets to enhance reproducibility and promote research

translation. *Circ Res*. 2017;120:1916–1926. doi: 10.1161/CIRCRESAHA.117.310628.

KEY WORDS: Editorials ■ basic science ■ publications ■ stroke ■ translational medical research



Stroke

Stroke

JOURNAL OF THE AMERICAN HEART ASSOCIATION



Call for Basic Science Papers: Introduction of a New Format Wolf-Rüdiger Schäbitz, Marc Fisher and Jaroslaw Aronowski

Stroke. published online June 26, 2018;
Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2018 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the
World Wide Web at:

<http://stroke.ahajournals.org/content/early/2018/06/25/STROKEAHA.118.021784.citation>

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Stroke* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

Reprints: Information about reprints can be found online at:
<http://www.lww.com/reprints>

Subscriptions: Information about subscribing to *Stroke* is online at:
<http://stroke.ahajournals.org/subscriptions/>