

Tentative Outline

Special Thematic Issue for the journal *Current Neuropharmacology*

Title of the Thematic Issue: "Role of autophagy and its potential therapeutic value in stroke"

Guest Editors: Weilin Xu, Anwen Shao and John H. Zhang

• Scope of the Thematic Issue:

Stroke, which accounts for 9% of all death globally, causes great burden on society and family. It occurs when the blood supply to the brain is blocked or the blood vessel ruptures. Over the past decades, although great efforts have been made in treating stroke, few effective therapeutic strategies were applied clinically. Therefore, better understanding of the underlying mechanisms is important for the development of effective neuroprotective strategies. In the past decades, it has been reported that autophagy plays a critical role in stroke. However, whether autophagy contributes to the poor prognosis of stroke or plays a neuroprotective role is still unclear. Recently, more and more evidence also indicates the specific role of selective autophagy (including mitophagy, pexophagy, aggrephagy, ER-phagy, lipophagy et al.) in stroke. The attack of stroke would greatly disturb cellular homeostasis. Selective autophagy of superfluous or dysfunctional organelles may provide a novel strategy for treating stroke.

This topic will provide a comprehensive overview on how autophagy regulates the progress of stroke and potential therapeutic targets. In particular, this topic preferably includes the articles regarding the relationship between selective autophagy and stroke.

Keywords: stroke, autophagy, selective autophagy, neuroprotection

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- The cellular and molecular mechanisms of autophagy and its roles in stroke
- The application of novel technologies in studying the relationship between autophagy and stroke, especially selective autophagy (mitophagy, pexophagy, aggrephagy, ER-phagy, lipophagy et al.)
- Translational researches or any therapeutic strategy regarding the treatment of stroke in an autophagic-dependent manner.
- New biomarkers or signaling pathways of autophagy in cerebrovascular diseases.

Tentative titles of the articles and list of contributors:

Tentative titles of the articles and list of contributors with their names, designations, addresses and email addresses should be provided.

(see another file)

Schedule:

- ✧ Thematic issue submission deadline: July 30, 2020

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