Targeting Cerebral Vascular Injury for Intervention

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Aims & Scope:

Cerebral vascular injuries or pathologies may cause ischemic and hemorrhagic stroke, neurodegenerative disorders such as Alzheimer disease, or venous sinus thrombosis. Therefore, prevention of cerebral vascular injuries or pathologies may have potentials to prevent stroke and neurodegeneration disorders. In the meantime, cerebral vascular injury or pathologies can be the results of neurotrauma such as traumatic brain injury and spinal cord injury, or ischemic and hemorrhagic stroke, such as thrombosis/embolism in cerebral ischemia or vessel tear in intracerebral hemorrhage or aneurysmal rupture in subarachnoid hemorrhage. Finally, endovascular treatment for stroke or cerebral vascular disorders gained attention and is rapidly replacing surgical treatment. Endovascular treatment often leads to vascular injuries or narrowing of arteries such as after stenting. Therefore, treating cerebral vascular injuries or pathologies will help to reduce neurological deficits and improve patient outcomes after neurotrauma and stroke.

The aims of this special issue are to update the new developments in the basic science research of cerebral vascular injuries and pathologies, and discuss the role of cerebral vascular injury in stroke, neuro-trauma and neurodegenerative disorders. Potential pharmacological and molecular treatment options, targeting cerebral vascular tissues, especially their potential translations into future clinical trials and managements will be discussed.

Review articles, commentary articles, and experimental bench studies are welcome. All submitted articles will need to follow the guideline of Current Drug Delivery and all papers will be subjected to peer review by at least two reviewers. All published articles will be made available on PubMed Central and indexed in PubMed and SCI-E at the time of publication.

Key words: Stroke, traumatic brain injury, neurodegenerative disorders, cerebral vascular injury

Subtopics of interest include, but are NOT limited to:

Role of cerebral vascular injury as etiology in ischemic stroke
Role of cerebral vascular injury as etiology in hemorrhagic stroke

Role of cerebral vascular injury as etiology in neurodegenerative disorders

Cerebral vascular pathologies after ischemic stroke

Cerebral vascular pathologies after hemorrhagic stroke

Cerebral vascular pathologies after endovascular treatment

Cerebral vascular injury and oxidative stress

Cerebral vascular injury and inflammation

microRNA and cerebral vascular injury

Genetic alterations and cerebral vascular injury

Drug delivery to cerebral vascular tissues

Cerebral smooth muscle phenotype changes after stroke

Endothelial phenotype changes and venous thrombosis

Venous roles in acute stroke and neurotrauma

**Schedule:**

Manuscript submission deadline: November 1, 2015

Peer Review Due: March 1, 2016

Revision Due: May 1, 2016

Notification of acceptance by the Guest Editor: July 1, 2016

Final manuscripts due: **August 1, 2016**