Advances in Pharmacological Sciences

Hindawi

Special Issue on

Protective Effects of Kallikrein-Kinin and Renin-Angiotensin Systems

CALL FOR PAPERS

The kallikrein-kinin system is comprised of several proteins and enzymes and functions in inflammatory responses and blood pressure control. However, recently its involvement in other regulatory processes such as neuronal differentiation factors has been studied. Kinins, such as bradykinin and kallidin, mediate their cellular effects by activating the kinin-B2 receptor, while the B1 receptor is activated by the cleavage products of these kinin, des-Arg9-bradykinin, and des-Arg^9-kallidin. Based on recent published data, the B2 receptor protects against cell death, while the B1 subtype behaves in a detrimental manner. The renin-angiotensin system acts in a similar manner. Angiotensin II induces vasoconstriction cardiac remodeling and arrhythmias while angiotensin 1-7 counteracts many of the effects of angiotensin II in and its beneficial reducing, cardiac remodeling, and hypertension. The kallikrein-kinin system is thought to be interconnected with the angiotensin-converting enzyme which can be inhibited to avoid degradation of bradykinin and the conversion of angiotensin I to angiotensin II.

We invite investigators to contribute with original works and review articles that seek to address the mechanisms involved in protection against cell death by components of the kallikrein-kinin system and renin-angiotensin system in different organs. Special attention will be given to works, which may change existing paradigms and provide novel function in differentiation process and mechanisms of cellular protection for different proteins and enzymes of these systems.

Potential topics include, but are not limited to:

- Recent developments involved with the understanding of the effect of bradykinin in neuroprotection
- Controversies in the potential neuroprotective effect of bradykinin after stroke
- Protective role of angiotensin (1-7) in heart, lung, and brain
- Intracrine role of renin in different cells
- Cardiac remodeling induced by inhibitors of angiotensin-converting enzyme and mechanism of action
- Potential outcomes of renin-angiotensin blockage in patients with comorbidities
- Angiotensin II receptor blockage and its role in neurodegenerative diseases

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/aps/pek/.

Lead Guest Editor
Antonio H. Martins, University of Puerto Rico, Puerto Rico, USA
antonio.martins@upr.edu

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walmor.de-mello@upr.edu

Domenico Regoli, University of Ferrara, Ferrara, Italy
rgd@unife.it

Henning Ulrich, University of Sao Paulo, Sao Paulo, Brazil
henning@iq.usp.br

Manuscript Due
Friday, 21 October 2016

First Round of Reviews
Friday, 13 January 2017

Publication Date
Friday, 10 March 2017