

Special Issue on  
**Aldosterone: From Biosynthesis to Mechanism of Action**

# CALL FOR PAPERS

Arterial hypertension is the major cardiovascular risk factor affecting up to 45% of the adult population in westernized countries. About 10% of hypertensive patients referred to specialized hypertension centers have primary aldosteronism, characterized by autonomous aldosterone production due to an aldosterone producing adenoma or bilateral adrenal hyperplasia.

Under physiological conditions, aldosterone plays a key role in the regulation of sodium reabsorption and intravascular volume and, therefore, of vascular tone and blood pressure. Since, when abnormally produced, aldosterone causes damage in the kidney, heart, and vessels, identification of the mechanisms that regulate aldosterone production is a “hot” research topic in endocrinology.

In addition to angiotensin II, serum  $K^+$ , adrenocorticotrophic hormone, and endothelin-1, which are well-known secretagogue factors in zona glomerulosa cells, other factors, as urotensin II, could be modulators of aldosterone secretion. Moreover, the rare germline and somatic mutations that have been recently found in familial hyperaldosteronism and sporadic APA suggest new mechanisms promoting the development of APA.

Hence, comprehension of novel molecular mechanisms underlying aldosterone production in essential and adrenal hypertension could be of great interest for improving strategies to treat hypertension and discover new druggable targets.

We invite authors to contribute original research articles and review articles that will encourage progressing efforts to understand the molecular mechanisms underlying aldosterone production and its role in cardiovascular diseases.

Potential topics include but are not limited to the following:

- ▶ Factors affecting aldosterone production: insight into novel mechanisms
- ▶ Ion channels involved in aldosterone synthesis
- ▶ Aldosterone-induced damage in the kidney, heart, and vessels

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ije/abm/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

**Lead Guest Editor**

Brasilina Caroccia, University of Padova, Padova, Italy  
[brasilina.caroccia@gmail.com](mailto:brasilina.caroccia@gmail.com)

**Guest Editors**

Carmela Maniero, University of Cambridge, Cambridge, UK  
[cm699@cam.ac.uk](mailto:cm699@cam.ac.uk)

Elena A. B. Azizan, National University of Malaysia (UKM) Medical Centre, Kuala Lumpur, Malaysia  
[elena.azizan@ukm.edu.my](mailto:elena.azizan@ukm.edu.my)

Kazutaka Nanba, University of Michigan, Ann Arbor, USA  
[knamba@umich.edu](mailto:knamba@umich.edu)

**Submission Deadline**

Friday, 27 October 2017

**Publication Date**

March 2018