

**Special Thematic Issue for Current Pharmaceutical Design**  
**“Recent advances towards the treatment of depressive disorders”**

**Guest Editors: Drs. Kefeng Li and Xu Wang**

**Aims & Scope:**

Depressive disorders affect more than 300 million people all over the world and 16% of US population. Depression is also the leading cause of disability worldwide and a major contributor to the overall global burden of disease. The first antidepressant was approved in the 1950s. In 2013, antidepressants became the most commonly prescribed drugs in the United States. However, the treatment of depression is changing since depression is a rather heterogeneous and complex disorder with various co-occurring symptoms and divergent responses to treatment.

Precision medicine, the capacity to really tailor treatments to specific populations and individuals, is a novel approach for the treatment of depression. The effective treatment would only be achieved through the precise classification of depression subtypes. The selection of antidepressant choices relies on the development of new techniques for measuring antidepressants in serum and pharmaceutical formulations.

Our understanding of the pathogenesis of depression and mechanisms of treatment is expanding. Besides the selective serotonin reuptake inhibitors (SSRIs) based on the classical neurotransmitters theory, drugs targeting on the purinergic signaling pathway, circadian rhythm, and kynurenine pathway are also under development. In addition, natural products from medicinal plants with multi-targets are a promising source of new antidepressants. Dietary improvement may also provide an efficacious and accessible treatment strategy for depression.

Current antidepressants are limited by their slow action. The standard antidepressants can take as long as six weeks to have an effect. Potentially safe and fast-acting interventions would be invaluable. Recently, ketamine has drawn attention for its potential to quickly reduce depression and suicidality. Having more rapid-acting options is a critical need.

Overall, the aim of this special issue to gather our recent discoveries regarding the diagnosis, pathogenesis and molecular mechanisms of treatment for depression. The critical visions from the contributors would be beneficial for the development of more effective treatments for major depressive disorders in the future.

**Keywords:** Depression, precision medicine, omics, antidepressants, neurotransmitters, circadian rhythm, purinergic signaling, natural products, nutrition, fast-onset.

**Subtopics:**

- Precision medicine for depression.
- Rapidly-acting antidepressants.
- The pathological basis of depression and mechanisms of treatment.
- Natural products as an emerging therapeutic alternative for the treatment of depression
- The dietary treatment of depression

**Schedule:**

- ◆ Manuscript submission deadline: May 2018
- ◆ Peer review due: May 2018
- ◆ Revision due: June 2018
- ◆ Announcement of acceptance by the guest editors: June 2018
- ◆ Final submission to the publisher: June 2018

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