

## **Special Issue for CURRENT STEM CELL RESEARCH & THERAPY**

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# **CURRENT STATUS OF BIOTHERAPY IN RESEARCH AND CLINICAL APPLICATIONS**

### **Aims & Scope:**

Bio-immunotherapy is an emerging area for treatment of cancers and autoimmune diseases, which are difficult to cure with current regimens. Bio-immunotherapy includes the methods used to elicit, reactivate or reverse immune responses, promote the repairs of diseased tissues and restore the functions of cells, tissues or organs by applying biological responder modifiers (BRMs), cytokines and/or growth factors, immune cells, or stem cells. The aim of the thematic issue is to historically review the various types of the methods for bio-immunotherapy in research or clinical practice, reveal advantages and disadvantages for each approach, evaluate their potential efficacy for treatment of cancers or autoimmune diseases, and prospectively propose potential strategies to overcoming the limitations of current bio-immunotherapy approaches. The thematic issue will provide a comprehensive update on bio-immunotherapy beneficially for research scientists and clinical physicians.

**Key words:** Bio-immunotherapy; stem cells, cytokines; cancers; autoimmune diseases

### **Subtopics:**

1. Safety and efficacy of dendrite cells combined with cytokine-induced killers (DC-CIK) in treatment of cancers
2. Novel approaches to development of tumor vaccines
3. Development of chimeric antigen receptors (CAR)
4. Role of  $\gamma\delta$  T cells in treatment of autoimmune diseases
5. Regulator T cells in treatment of autoimmune disease
6. Efficacy of mesenchymal stem cells in treatment of autoimmune diseases and cancers
7. Novel biological approaches to switch hepatitis
8. Roles of BRMs in preventing tumor development
9. Autologous immune cell transplantation for cure of aplastic anemia
10. Current status of cytotherapy of leukemia
11. Release the brake of anti-tumor immunity through blocking checkpoints of immune responses.
12. Progress in stem cell expansion ex vivo
13. Tumor vaccines and their potential applications
14. Stem cell transplantation for the cure of the central nervous system diseases
15. Cord blood cell transplantation for the cure of autoimmune diseases and cancers

### **Schedule:**

Manuscript submission deadline:	May 2015
Peer Review Due:	June 2015
Revision Due:	July 2015
Notification of acceptance by the Guest Editor:	August 2015
Final manuscripts due:	August 2015