

## Special Issue on

# Safety of Stem Cell Transplantation

There has been a significant interest in clinical applications of stem cells in recent years, and the safety these therapies is of particular interest to both scientists and physicians. There is interest in the potential risk of tumorigenesis *in vivo* after stem cell transplantation with several hypotheses suggesting that tumorigenesis and some side effects may be related to stem cell characteristics and modifications in stem cells during the *in vitro* long-term expansion. Some studies have shown that the use of stem cells without *in vitro* expansion was safe in both preclinical and clinical applications.

Although there was some evidence of genetic alterations of expanded stem cells, *in vitro* expanded stem cells have been used in Phase II and Phase III clinical trials for different diseases. All trials showed that expanded stem cell transplantation was safe and had beneficial results on disease improvement.

In this special issue, we invite researchers to submit original research and review articles to contribute to the topic 'SAFETY OF STEM CELL TRANSPLANTATION'. Potential topics include, but are not limited to:

- Tumorigenesis or side effects and complications of stem cell transplantation
- Long-term safety of stem cell transplantation
- Safety of non-expanded stem cells therapy
- Safety of ex-vivo expanded stem cells therapy
- Safety of autologous stem cell transplantation
- Safety of allogenic stem cells for stem cell transplantation
- Preclinical safety assessment of stem cell transplantation
- Safety of *in-vitro* assessment of stem cell transformation
- GMP aspects in the field of stem cell transplantation
- Safety of pluripotent stem cells or embryonic stem cell transplantation
- Safety of adult stem cell transplantation
- *In vitro* stem cell expansion for clinical transplantation
- Manipulated stem cells (gene therapy)

## Important Dates

Manuscript Due	September 15, 2016
First Round of Reviews	December 15, 2016
Publication Date	March 15, 2017

## Lead Guest Editor

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