Topical Collection

Stem Cell Application in Infertility

Message from the Collection Editors

Assisted reproductive technologies (ART) such as invitro fertilization (IVF) have overcome several types of infertility. Nevertheless, about 10% of couples suffer from infertility due to problems with the female reproductive system, insufficient production of gametes, or the poor ability of sperm or oocytes.

Recently, attempts have been made to treat the problems with the female reproductive system in clinics using adult stem cells such as mesenchymal stem cells (MSCs) or hematopoietic stem cells (HSCs). The results were promising, but no clear mechanism has been investigated.

Further, embryonic stem cells (ESCs) or induced pluripotent stem cells (iPSCs) could be converted into germ cells such as sperm or oocytes. However, a few laboratories can perform this technology.

This Special Issue focuses on therapeutic mechanisms for stem cell application in the field of infertility, including basic, preclinical and clinical studies, and the replication of current technologies.

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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