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## Immune Responses to Ocular Cell and Gene therapies

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submissions:

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### **Message from the Guest Editors**

Gene- and cell-based therapies offer huge improvements for managing blinding retinal disorders. The retina has specific advantages due to its accessibility for diagnostic imaging and its immune privilege status, maintained via the blood–retinal barrier, leading to a highly immunosuppressive microenvironment. Furthermore, the penetrance of drugs to retinal tissues has improved, allowing a more targeted therapeutic approach.

The commonly used AAV vectors in gene therapy have been successfully applied in ophthalmic clinical trials.

The therapeutic potential of stem cells is also widely studied in ocular disease. Whilst mesenchymal stem cells (MSCs) have been shown to be well-tolerated by the recipient in allogeneic transplantation, risks of adverse reactions by the host have been reported.

The aim of this Special Issue is to collect original research findings and reviews discussing the immune responses triggered by these advanced therapeutics at the cellular and molecular level, and to debate the potential strategies for modulating host immunity in order to improve the safety and efficacy of ocular treatments.



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# Special Issue



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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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