

Special Issue

Is Gene Therapy the Answer to Overcoming Diabetes?

Message from the Guest Editors

Diabetes mellitus (diabetes) is a group of related metabolic diseases characterized by high blood sugar levels. Type 1 diabetes (T1D) is caused by autoimmune destruction of insulin-producing beta (b) cells of the pancreas, resulting in hyperglycaemia and life-threatening complications: retinopathy, neuropathy, cardiac, central nervous system diseases. Type 2 diabetes is a chronic disorder with insulin resistance and sedentary lifestyles. Gene therapy offers a promising avenue for treating T1D, in particular by preventing b-cell destruction and engineering insulin-secreting cells through expression of beta (b) cell transcription factors.

This Special Issue seeks reviews, original articles, and opinions examining new insights outlining the various gene research and gene transfer methods, including viral gene therapy techniques used to date and promising novel techniques for maintaining euglycemia in treating diabetes. Specifically, though gene therapy is not widely examined for T2D, insights into pancreatic gene expression improving insulin production or gene modification regulating glucose metabolism are highly relevant.

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About the Journal

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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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