

## Special Issue

# Molecular Pathobiology and Drug Targeting Cardiovascular and Kidney Injury in Obesity and Diabetes

### Message from the Guest Editor

The global health burden of cardiovascular risk and kidney injury in the context of obesity/diabetes is on the rise, thereby increasing the health burden globally. However, the molecular mechanisms and mediators for cardiovascular and kidney injury remain poorly understood. Potential mechanisms include low-grade immune and inflammatory responses, inflammasome activation, oxidative stress through AGE/RAGE signaling, inappropriate activation of the renin–angiotensin–aldosterone system (RAAS), cytokine imbalances, and adipose tissue remodeling, particularly perirenal adipose tissue dysfunction. Additional contributors are endothelial–adipose tissue interactions, hypoglycemia-mediated vascular injury, renal hemodynamic changes, mitochondrial dysfunction, hypoxic microvascular injury (including vasa vasorum damage), and perivascular adipose tissue (PVAT) remodeling. Targeting these processes, either lifestyle interventions and/or precision theranostics, is critical for mitigating obesity- and diabetes-associated cardiovascular and renal injury.

### Guest Editor

Dr. Annayya R. Aroor

Department of Medicine, Division of Endocrinology, Diabetes and Metabolism, Cosmopolitan International Diabetes Center, School of Medicine, University of Missouri, Columbia, MO, USA

### Deadline for manuscript submissions

closed (31 July 2025)



## Cells

an Open Access Journal  
by MDPI

Impact Factor 5.2  
CiteScore 10.5  
Indexed in PubMed



[mdpi.com/si/225160](https://mdpi.com/si/225160)

*Cells*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[cells@mdpi.com](mailto:cells@mdpi.com)

[mdpi.com/journal/  
cells](https://mdpi.com/journal/cells)





# Cells

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.2  
CiteScore 10.5  
Indexed in PubMed



[mdpi.com/journal/  
cells](https://mdpi.com/journal/cells)



## About the Journal

### Message from the Editorial Board

*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.

---

### Editors-in-Chief

Dr. Alexander E. Kalyuzhny

Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE,  
Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation Centre, The University of Copenhagen,  
Copenhagen, Denmark

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).