Exploration of Endocrine and Metabolic Diseases

Open Exploration

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Message of welcome from the editor-in-chief

Stefan R. Bornstein[1,2,3]*

[1]Department of Internal Medicine III, University Hospital Carl Gustav Carus, Technische Universität Dresden, 01307 Dresden, Germany

[2]School of Cardiovascular and Metabolic Medicine & Sciences, Faculty of Life Sciences and Medicine, King's College London, WC2R 2LS London, UK

[3]Centre for Regenerative Therapies, Technische Universität Dresden, 01307 Dresden, Germany

***Correspondence:** Stefan R. Bornstein, Department of Internal Medicine III, University Hospital Carl Gustav Carus, Technische Universität Dresden, 01307 Dresden, Germany. Stefan.bornstein@uniklinikum-dresden.de

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We are pleased to present the first issue of *Exploration of Endocrine and Metabolic Diseases* (EEMD). In the field of endocrinology and metabolism, remarkable advancements have been witnessed in recent years. Currently, more than half a billion people worldwide are grappling with diabetes and metabolic diseases, posing significant challenges to our healthcare systems. Notably, metabolic diseases have also emerged as a major risk factor for severe outcomes in the context of the COVID-19 pandemic. With the advent of new therapies, including novel poly-agonist peptides, we are currently witnessing a revolution in the treatment and management of this threatening and omnipresent problem. The field of metabolism is at the forefront of developing advanced RNA-based therapies, such as Crispr-Cas and adeno-associated virus (AAV)-mediated gene therapies for both rare and common metabolic disorders. Our field is spearheading the integration of advanced therapies, ranging from cell and gene therapy to therapeutic apheresis. Furthermore, the diagnosis and management of modern medicine will be shaped by the advancement of the human-artificial intelligence interface, and endocrinologists, with their expertise in rare diseases and complex regulatory circuits, are eminently suited to lead in this new era. In conclusion, the imperative for in-depth exploration, enhanced understanding, and improved treatment of diabetes, metabolic disorders, and endocrine conditions cannot be overstated.

The rationale for introducing yet another journal in this field is straightforward. Beyond offering online open access, peer-reviewed content and serving as a wellspring of new knowledge, EEMD is poised to stand out with cutting-edge electronic review and publication processes. We're committed to expediting the duration from submission to publication, ensuring a rigorous and transparent peer review procedure, and upholding meticulous production standards. EEMD is a globally-focused journal that will serve as a hub for advancements in endocrinology and metabolic diseases, bridging the realms of clinical and basic research across a diverse spectrum of disciplines. Consequently, our journal caters to a broad readership, including medical and scientific researchers. Moreover, we are dedicated to presenting timely reviews of swiftly evolving fields and hosting special thematic issues that delve into specific specialties or interdisciplinary topics. To facilitate this process, we have assembled a distinguished international panel of Associate Editors, each of whom will oversee the review of papers within their respective medical and scientific disciplines.

In this first issue of EEMD, four papers are included. Endocrinology, unlike many other medical fields, deals with a highly intricate hormonal system involving multiple receptors, signalling pathways, and feedback mechanisms. The complexity, including circadian rhythms, remains beyond human comprehension, making it a prime candidate for artificial intelligence-driven solutions. Here, Oikonomakos et al. [1] provide a review about recent advances in artificial intelligence-assisted endocrinology and diabetes. Despite significant advances in diabetes care, patients with type 1 diabetes still face challenges in terms of morbidity, mortality, and quality of life. Steenblock et al. [2] provide a review exploring novel treatment approaches, including chimeric antigen receptor (CAR)-T cells and natural killer cells. Furthermore, Steenblock et al. [3] present an exciting study, where they have developed 3D spheroid cultures of adrenocortical and adrenomedullary cells, which might have the potential to be used for the treatment of adrenal insufficiency and neurodegenerative diseases. Bornstein et al. [4] have written a commentary featuring a micrograph that highlights the unique interplay between steroid-producing cells in the adrenal cortex, providing a distinctive ultrastructural depiction of essential biochemical and endocrine processes within the cells.

I am looking forward to future contributions and to an open discussion of the exciting challenges in our field.

Abbreviations

EEMD: *Exploration of Endocrine and Metabolic Diseases*

Declarations

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SRB: Writing—original draft, Writing—review & editing.

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The author declares that there are no conflicts of interest.

Ethical approval

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Consent to participate

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Consent to publication

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