De Gruyter Brill

SPECIAL ISSUE AT OPEN MEDICINE

ADVANCES IN CLINICAL TRIAL METHODOLOGY, STATISTICS, AND EPIDEMIOLOGY

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OVERVIEW

We are pleased to announce the Special Issue entitled “Advances in Clinical Trial Methodology, Statistics, and Epidemiology". The field of clinical trials is rapidly evolving in line with adaptive trials, artificial intelligence, digital health tools, and pragmatic designs utilizing electronic health records and real world data (e.g., causal inference and targeted trial emulation). Innovative and adaptive trials ultimately lead to efficient development timelines, cost reductions, and increased success rates.

In particular, advanced methods for conducting and analyzing clinical trials includes Bayesian methods, machine learning-based approaches, response-adaptive randomization, and multi-arm bandit designs, within the context of master protocols, platform studies with shared referent-control arms, basket/umbrella trials, and targeted emulation studies employing causal inference methods. As well, improvements in digital platforms facilitate interchange and dialog among patients, researchers, clinicians, and key decision-makers, culminating in improved adherence to trial protocols and better patient retention.

Artificial intelligence and machine learning tools also aid in the analysis of large databases, prediction of patient outcomes, and identification of patterns leading to improved treatment strategies and personalized approaches. This includes the automation of patient recruitment, enhanced adverse event reporting, and better data quality control.

Targeted therapies evolving from advances in genomics and biomarker research enable the tailoring of clinical trial therapies to individual patient characteristics.

We hope this special issue will be of interest to you. Collaboration with students and research fellows in your group also is encouraged. Following submission, manuscripts will receive prompt attention and undergo fair but through review by experts in the field.

SCOPE / KEYWORDS:

Potential Topics of Interest include, but are not limited to:

Clinical trial statistical and epidemiologic methods

Targeted trial emulation

Pragmatic trials

Master protocols

Basket/umbrella trials

Platform studies

Ethical and patient-centered clinical trials

Data bias

Algorithm transparency

Causal inference

Mendelian randomization

Imputation techniques

Genetic biomarker analysis

Statistical genetics modeling

Bayesian methods

Pharmacoepidemiological analytics

Machine learning/Artificial intelligence

Adaptive models

Digital health tools

Shared referent-control arms

HOW TO SUBMIT

To Submit a paper please use our system: https://www.editorialmanager.com/openmed/
As a Section Category please choose: **SI Advances in Clinical Trial.**
Deadline for manuscripts submission: **31 December 2026.**

In case of any question please contact: **magdalena.wierzchowiecka@degruyterbrill.com.**