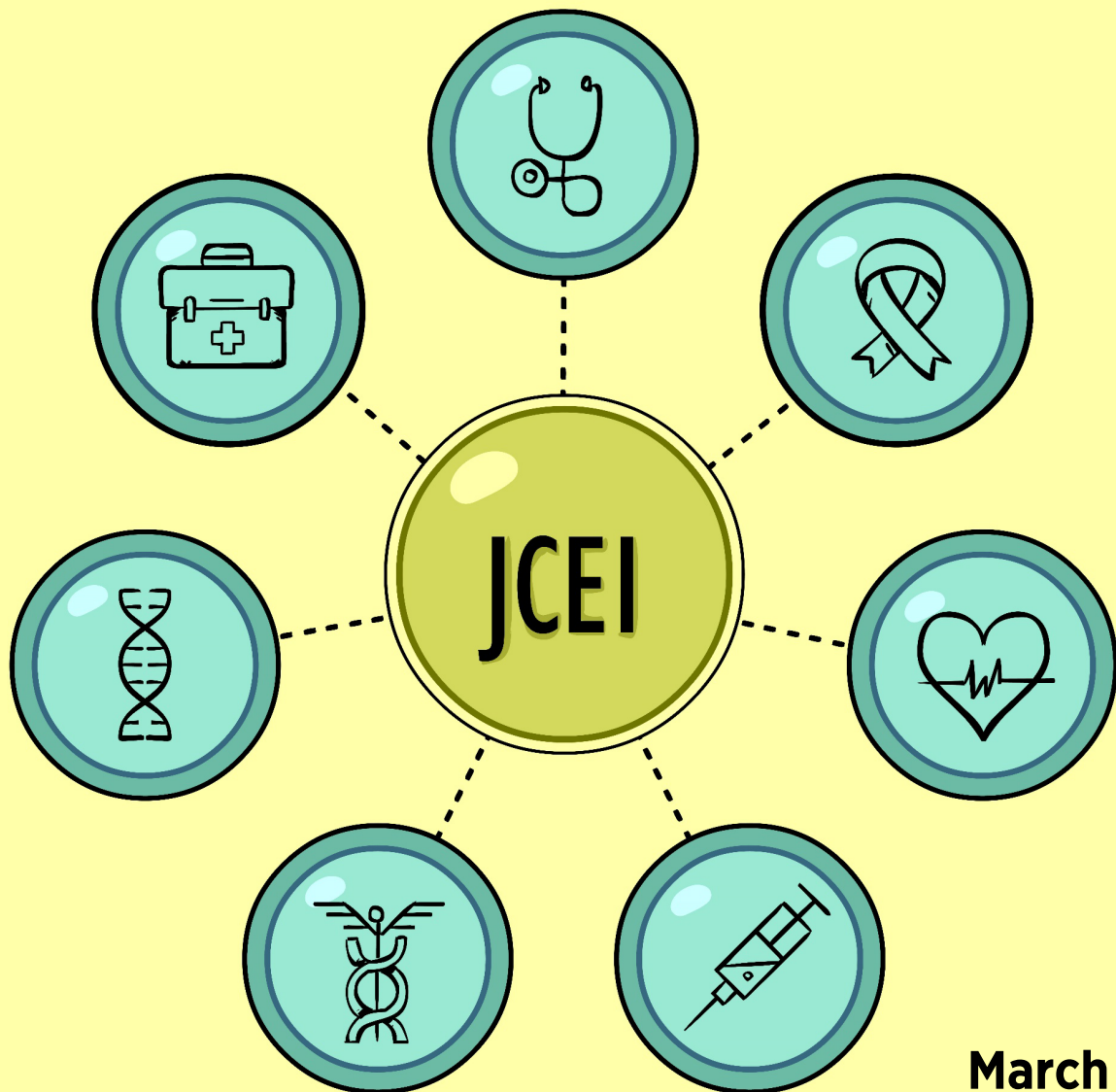


ISSN: 1309-6621

JOURNAL OF CLINICAL AND EXPERIMENTAL INVESTIGATIONS



March 2026
Volume 17
Issue 1

Published by: **Modestum**

Publication Office: Modestum DOO, Bulevar Zorana Đinđića 125D, sprat 1, stan 12C, 11070 Belgrade, SERBIA

UK Office: Modestum LTD, 29 Gildredge Road, Eastbourne, East Sussex, BN21 4RU, UNITED KINGDOM

Phone: +381 61 6600107

Email: publications@modestum.co.uk

Publisher: <https://modestum.co.uk>

Journal Web: <https://www.jceionline.org/>

© 2010-2026. All rights reserved by Modestum. Copyright for Open Access Content is Retained by Authors. Also, authors continue to hold the copyrights of their own papers by acknowledging that their papers are originally published in the Journal of Clinical and Experimental Investigations. Hence, articles published are licensed under a “Creative Commons Attribution 4.0 International License.”

ISSN: 1309-6621 (Online)

JOURNAL OF CLINICAL AND EXPERIMENTAL INVESTIGATIONS

March 2026

Volume 17

Issue 1



This page is intentionally left blank

JOURNAL OF CLINICAL AND EXPERIMENTAL INVESTIGATIONS

Journal of Clinical and Experimental Investigations / JCEI is a multidisciplinary “external peer review”, open access medical journal. The Journal is published four times a year (March, June, September and December). **JCEI** is published by **MODESTUM**.

JCEI accepts original articles that report results of clinical or experimental research. We would also like to consider publication of unique case reports and brief reports. Comprehensive and informative review articles on actual issues are also within scope of the journal.

Manuscripts written only in English are published. The manuscripts should be as concise as possible, written in English, take ethical principles into consideration and utilize good language.

Journal of Clinical and Experimental Investigations receives submissions from all authors throughout the world. Research studies with high scientific quality will be treated with high priority for publication.

ISSN: 1309-6621 (Online)

Abbreviation: J Clin Exp Invest

DOI: <https://doi.org/10.29333/jcei>

OPEN ACCESS POLICY

Journal of Clinical and Experimental Investigations is an Open Access journal. All content is freely available without charge to the user or his/her institution and without any embargo period. The journal follows the BOAI definition (<https://www.budapestopenaccessinitiative.org/read/>) of open access. Articles are published under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>). Everyone can download and read the article, as well as share and adapt the articles, even for commercial purposes, without requesting consent of the author or the publisher beforehand, if appropriate credit is given to the original publication. Additionally, authors are encouraged to self-archive their articles in open electronic archives that conform to standards of Open Archives Initiative (<https://www.openarchives.org/>).

INDEXING

Journal of Clinical and Experimental Investigations is indexed / abstracted by Crossref, EBSCO – Academic Search Complete, GALE, Google Scholar, HINARI®WHO, Index Copernicus, OpenAIRE, ROAD, SCILIT, and Socol@r.

All articles are archived by Portico.

If you have any question do not hesitate to contact us via email to jcei@jceionline.org

EDITORIAL BOARD

Editor-in-Chief

Yakup Gümüşalan, MD

Department of Neuroanatomy, Institute of Anatomy and Cell Biology, Faculty of Medicine,
Albert-Ludwigs University of Freiburg, Freiburg, GERMANY

Email: jcei@jceionline.org

Associate Editors

Metin Aytekin, PhD

Pittsburgh Heart, Lung, and Blood Vascular Medicine Institute, University of Pittsburgh School of
Medicine, USA

Email: metin.aytekin@pitt.edu

Kaijun Yu, Prof., MD

School of Medical Instruments, Shanghai University of Medical and Health Sciences, Shanghai,
CHINA

Email: yukj@sumhs.edu.cn

Edmond Puca, Dr, PhD, Infectiolog

University Health Center Mother Teresa, Tirana, ALBANIA

E-mail: edmond_puca@yahoo.com

Kahharov J. Nematovich, MD, Prof.

Tashkent Medical Academy, Department of Surgery and Oncology, Tashkent, UZBEKISTAN

Email: kahharov.jn@mail.ru

Abdulsattar Khan, MD, Assist. Prof.

Khan King Faisal University Medical Faculty, Department of Family Medicine, SAUDI ARABIA

Email: drsattarkhan@gmail.com

Muharem Zildzic, MD, Prof.

Academy of Science and Arts, Department of Medical Sciences, Sarajevo, BOSNIA AND HERZEGOVINA

Email: zildzic@yahoo.com

Leonas Valius, MD, Prof.

Kaunas University of Medicine, Department of Family Medicine, LITHUANIA

Email: valius@bpg.lt

Bakir Mehić, MD, Prof.

University of Sarajevo, Sarajevo, BOSNIA AND HERZEGOVINA

Email: mehicb@bih.net.ba

Kemal S. Akbarov, MD

National Center of Oncology, Department of Radiotherapy, Baku, AZERBAIJAN

Email: akperovkamal@yahoo.com

Ibragimov S. Narzikulovich, MD

Scientific Head of the Department Radiotherapy and Radiology, ROSC, UZBEKISTAN

Email: shavkat1967@inbox.ru

Zaim Jatic, MD, Assist. Prof.

Sarajevo University Medical Faculty, Department of Family Medicine, BOSNIA AND HERZEGOVINA

Email: jaticzaim@gmail.com

Boris Itkin, MD

Medico Oncologo en Juan Fernandez General Hospital, Buenos Aires, ARGENTINA

Email: borisitkin1@gmail.com

Ksenija Tušek-Bunc, MD, Assist. Prof.

University of Maribor and Ljubljana Medical School, Family Medicine, SLOVENIA

Email: ksenija.tusek-bunc@guest.arnes.si

Anake Kijjoa, PhD, Prof.

Chemistry of the Biomedical Sciences Institute of Abel Salazar (ICBAS), University of Porto,
PORTUGAL

Email: ankijjoa@icbas.up.pt

Carmen Busneag, MD, Assoc. Prof.

Spiru Haret University, Family Medicine Office, ROMANIA

Email: carmenbusneag@yahoo.com

Editorial Board Members

Abu Sayem, University of Dhaka, Bangladesh

Amra Adrovic, Department of Child Health and Diseases, Istanbul University, Cerrahpasa, Istanbul,
Turkey

Aukse Mickiene, Department of Infectious Diseases, Lithuanian University of Health Sciences,
Kaunas, Lithuania

Ayesha B. M. Kharsany, Centre for the AIDS Programme of Research in South Africa, South Africa

Biljana Carevic, Department of Hospital Epidemiology, Clinical Center of Serbia, Belgrade, Serbia

Bojana Beovic, Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia

Gamil Sayed Gamil Zeedan, National Research Center, Cairo, Egypt

Jakhongir Alidjanov, Department of Urology, Pediatric Urology and Andrology, Justus-Liebig
University of Giessen, Giessen, Hessen, Germany

Michael L. Tapper, Division of Infectious Diseases at Lenox Hill Hospital, New York, USA

Mira Niyazalieva, Department of Microbiology, Virology and Immunology, Kyrgyz State Medical
Academy, Bishkek, Kyrgyzstan

Nagwa Khamis, Ain Shams University Specialized, Hospital, Cairo, Egypt

Omar Bagasra, The South Carolina Center for Biotechnology, Claflin University, Orangeburg, SC,
USA

Padman Jayaratne, Faculty of Health Sciences, Department of Pathology and Molecular Medicine, McMaster University, Hamilton, ON, Canada

Regine Hakenbeck, Department of Microbiology, University of Kaiserslautern, Kaiserslautern, Germany

Riaz Qureshi, Family Medicine, Aga Khan University, Pakistan

Sead Ahmetagic, University Clinical Center Tuzla, Tuzla, Bosnia and Herzegovina

Shaheen Mehtar, Unit for Infection Prevention & Control, Stellenbosch University, South Africa

Souha S. Kanj, Department of Medicine, American University of Beirut, Beirut, Lebanon

Tebit Kwenti Emmanuel, Department of Medical Laboratory Science, University of Buea, Cameroon

Vincent T.K. Chow, MD, PhD, Department of Microbiology and Immunology, National University of Singapore, Singapore

Yasmin A. Malik, Department of Medical Microbiology, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

CONTACT

Address for correspondence:

Prof. Yakup Gümüşalan, Editor

Publication Office: Modestum DOO, Bulevar Zorana Đinđića 125D, sprat 1, stan 12C, 11070 Belgrade, SERBIA

Phone: +381 61 6600107

W: <http://www.modestum.co.uk/>

E: publications@modestum.co.uk

E: jcei@jceionline.org

INSTRUCTIONS FOR AUTHORS

New manuscripts should be submitted through the online portal accessible via the [Submit Manuscript](#) link on the journal website.

Only manuscripts written in **English** language will be considered for publication. Authors may use British or American English provided they are consistent throughout the manuscript. Submissions must be relevant to the journal's scope and prepared in compliance with its [Publication Ethics, recommendations](#) of ICMJE (International Committee of Medical Journal Editors), and COPE (Committee on Publication Ethics) [guidelines](#). All authors agree to the submission and share full

responsibility for all content presented in the manuscripts, including opinions, results, images, discussions, and conclusions. The article should be original work by authors, not be published before or currently being evaluated for publication in another journal.

All co-author information **must** be entered on the submission portal **at the time of submission**. Any request to change authorship (such as adding/deleting authors or modifying order of authors) during revisions must be well justified, and they are subject to editorial approval. No change in authorship is allowed after the manuscript is accepted for publication.

Manuscript Preparation

Manuscripts should be prepared using a word processing software, such as Microsoft Word, and saved as one of the following acceptable file formats: .docx, .doc, or .rtf. Authors are encouraged to use the following layout options: A4 size, normal margins, portrait orientation, single columns, 1.5 line spacing, justified text alignment with 11-pt or 12-pt sized common fonts, such as Calibri or Times New Roman. First-, second-, and third-order headings should be clearly distinguishable.

Although there is no limit on the length of the research articles, authors are recommended to keep the main text of the body below 10,000 words. Review articles should integrate current knowledge with a novel methodology or present important suggestions to shape the area of study, rather than merely summarizing existing literature.

Authors should provide three separate documents during submission: title page, disclosure of interest form, and blinded text.

Title page: This document provides the names and institutions of the authors as well as the corresponding author's contact information. Additional declarations such as contributions of each author, potential competing interests, acknowledgements of people, and funding should be provided in this document. Title page should not contain any abbreviations. If the work is derived from a thesis or preliminary versions were previously presented in a scientific meeting, details should be included in this document.

Disclosure of interest form: To avoid ambiguity and standardize disclosures, authors should declare on an accompanying [ICMJE Form for Disclosure of Potential Conflicts of Interest](#) whether or not such competing interests exist.

Blinded text: This document constitutes the main body of the text. In accordance with the double-blind peer-review rules adopted by the journal, it should not contain information that may disclose the authors' credentials, including their names, institutions, contact information, and references to their own works. Grammar and punctuation standards should be followed when preparing the content. Authors should try not to use abbreviations, and if unavoidable, they should be cited in parentheses the first time they are used. References, figures and tables should be numbered sequentially in the text. International system of units should be followed in the representation of all units in the text. Appendices and supplementary materials should be placed after the references.

Blinded text should include the following sections:

- **Title and Running head:** The manuscript should include a title of no more than 15 words which presenting a brief description of the work. Title should not include any abbreviations or acronyms.
- **Abstract and keywords:** In this section, the work should be summarized in a clear and concise manner. The abstract should be no more than 150 words long and should not include any undefined abbreviations or references. Authors should provide three to six keywords. In selecting key words, authors should refer to the Medical Subject Headings (MeSH) list of the Index Medicus.
- **Contribution to the literature:** In three or four sentences, authors should summarize how the article contributes to the current literature. Authors can highlight the uniqueness and importance of their work in terms of research topics, its methodologies, and/or outcomes. This part is intended for readers to easily compare the article with earlier works, and to understand how this article enhances the scholarship in the subject.
- **Structured text:** Authors are recommended to structure their manuscript as follows: *Introduction* should introduce readers to some background information required to understand the rest of the article, and clearly define the purpose of the research. *Materials and Methods* should describe how the research was carried out, and provide information such as the study's design, timeline, context, participant profiles, and interventions. *Results* should present the data collected and statistical analysis performed during the study. *Discussions* should explain the significance of the results by comparing them with those of earlier studies. *Conclusions* should state main conclusions, limitations of the study, and possible future studies.
- **References:** Vancouver-NIH method formatting and style guidelines should be followed in references. Unique Digital Object Identified (DOI) numbers, PMids, and PMCids should be included whenever possible. More information on references and citations will be provided below.

References and Citations

Vancouver-NIH style should be used as the referencing style. Authors should maintain consistency across the references.

- Each citation inside the text must be included in the list of references. Alternatively, each reference should be cited inside the text.
- References should be numbered sequentially within square brackets, such as [1], [2], [3], and so on, in the order in which they are mentioned in the text.
- Full references should be included at the end of the manuscript with matching numbers.
- Up to 6 authors should be listed, and et al. should be used afterwards.
- If there are multiple references, comma should be used to separate each number, and hyphen should be used to indicate a series of inclusive numbers (e.g., [1, 2, 4], [1-4]).

- Journal titles should be abbreviated according to [NLM Title Abbreviation](#) or List of Title Word Abbreviations (LTWA).
- A paper published online but not (yet) in print can be cited using the Digital Object Identifier (DOI).

The following are some examples:

Journal articles

1. Alam F, Abidi SH, Farooqi N, Jehan F, Rehman R. Oxidative stress and metformin: An in-vitro study on serum and primary human granulosa cell cultures. *Electron J Gen Med.* 2022;19(4):em381. <https://doi.org/10.29333/ejgm/12037>
2. Tovani-Palone MR, Garoli F, Shah PA, Kamal MA, Nawaz FA. Underreporting of cases during the COVID-19 pandemic: A worrying warning for Africa. *J Contemp Stud Epidemiol Public Health.* 2022;3(1):ep22001. <https://doi.org/10.30935/jconseph/11467>
3. Gondauri D, Mikautadze E, Batiashvili M. Research on COVID-19 virus spreading statistics based on the examples of the cases from different countries. *Electron J Gen Med.* 2020;17(4):em209. <https://doi.org/10.29333/ejgm/7869>
4. Cioni G, Zuccotti M, Daviddi F, Buffini G. Headache and atypical presentation of motor disorders in a paraneoplastic myasthenic syndrome secondary to thymoma: A case report. *J Clin Exp Invest.* 2022;13(2):em00794. <https://doi.org/10.29333/jcei/11704>
5. Prapty CNBS, Reshad RAI, Mim SK, Araf Y, Miah MF. COVID-19 second bloom and comfortable lockdown in Bangladesh. *Electron J Med Ed Te.* 2022;15(2):em2203. <https://doi.org/10.29333/ejmets/11537>

Books

6. Field AP. *Discovering statistics using SPSS: (and sex, drugs and rock 'n' roll)*. 3rd ed. Los Angeles: SAGE Publications; 2009.
7. Hatch DJ, Sumner E, Hellman J. *The Surgical Neonate: Anaesthesia and Intensive Care*, 3rd edn. London: Edward Arnold; 1994.

Chapter in book

8. Griffiths M. Internet addiction: does it really exist? In: Gackenbach J, editor. *Psychology and the Internet: intrapersonal, interpersonal, and transpersonal implications*. San Diego, California: Academic Press; 1998. p. 61-75.
9. Motoyama EK. Respiratory physiology in infants and children. In: Motoyama EK, Davis PJ, editors. *Smith's anesthesia for infants and children*, 5th edn. St. Louis: C.V. Mosby; 1990. P. 11-76.

Tables and Figures

Tables should be self-descriptive and easily understandable. The information in the table should present new information and should not merely a repetition of the text. Tables should include clear and concise

captions placed above the table. They should be provided as editable raw data and not as images. Authors should ensure that the tables fit on a single page. If too large, data should be split across multiple datasets.

Figures are visual representations of information, such as photos, maps, charts, drawings, or graphs. Figure captions should be placed below the figure. Original digital files in a major file format (e.g., jpeg, tiff, png, and bmp) for each figure must be supplied separately through the submission portal. They must be of high quality and resolution (300 dpi or better). Lowercase letters (a, b, etc.) should be used to denote multi-part figures. Figure sizes can be adjusted during the production stage to fit inside the journal's columns.

Tables and figures should be numbered in order of appearance, have their positions clearly marked within square brackets (e.g., [Table 1], [Table 2], [Table 3], [Figure 1], [Figure 2]), and be provided on separate sheets after the References in the main text.

Final Checking

Authors should take the following points into consideration before submission:

- The readers should be able to comprehend and assess main aspects of your research study with ease.
- Ideas are presented in a clear, concise, and complete manner.
- Manuscript is free from any repetitions, irrelevant information, or unjustified generalizations.
- Theoretical framework is explicitly stated.
- All claims are backed up with evidence and references.
- Research problems' position and significance in existing literature is emphasized.
- Chosen methodology is suitable for the problem.
- Study's findings are well presented with sufficient discussions and comparisons to existing literature.
- Objective and convincing measures exist to support the validity and reliability of the methodology and results.
- Relevant literature is properly cited.
- All authors are entered into the submission portal at the time of submission.

Manuscript submission

Manuscripts should be submitted through the online portal at: <https://www.editorialpark.com/jcei>. In case of technical difficulties when submitting their works, authors should contact: support@editorialpark.com.

CONTENTS

Letter to Editor

Diverticulitis due to upper gastrointestinal series using barium

em00853

Yusaku Kajihara

<https://doi.org/10.29333/jcei/17808>

Review Article

**The role of fragmented QRS complexes in cardiovascular diseases:
Pathophysiology, prognosis, and clinical applications**

em00854

*Lütfü Bekar, Macit Kalçık, Abdullah Sarıhan, Ömer Burak Çelik, Abdülmelik Birgün,
Muhammet Cihat Çelik, Mücahit Yetim, Yusuf Karavelioğlu*

<https://doi.org/10.29333/jcei/17849>