



EISSN 2717



Journal of Critical and Intensive Care

Official Publication of Society of Turkish Intensivists

16th World **Intensive and Critical Care** Congress
26-30 August 2023

POSTER PRESENTATIONS



16TH WORLD
**INTENSIVE AND
CRITICAL CARE**
CONGRESS
26-30 August 2023

Official congress of



World Federation of
Intensive and Critical Care

Hosted by





Journal of Critical and Intensive Care



EISSN 2717-6428

Journal of Critical and Intensive Care is published three times a year in April, August and December.

Type of Publication

Periodical

Funding

Society of Turkish Intensivists.

© Copyright for papers, figures, tables or photographs in the Journal belongs to the Turkish Society of Medical and Surgical Intensive Care Medicine.

Journal of Critical and Intensive Care is indexed in Web of Science-Emerging Sources Citation Index, TUBITAK ULAKBIM TR Index, EMBASE, Scopus, EMCare, CINAHL, Gale/Cengage Learning, EBSCO, HINARI, ProQuest and Turkiye Citation Index.



Executive Committee of Society of Turkish Intensivists.

Prof Neriman Defne Altintas
President

Prof Emel Eryuksel
II. President

Prof Sema Turan
General Secretary

Prof Muge Aydogdu
Treasurer

Members

Prof Arzu Topeli Iskit

Prof Levent Yamanel

Prof Cenk Kirakli

Prof Ezgi Ozyilmaz

Prof Melda Turkoglu

Address

Kuleli Sokak 57/1
06700 Çankaya, Ankara, Turkey
www.jcritintensivecare.org
editor@jcritintensivecare.org

Editorial Board

Editor-in-Chief

Prof. Dr. Arzu Topeli

Hacettepe University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey
atopeli@hacettepe.edu.tr
<https://orcid.org/0000-0002-5874-9087>

Editor

Prof. Dr. Neriman Defne Altintas

Ankara University Faculty of Medicine, Ibni Sina Hospital, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey
defne98hac@yahoo.com
<https://orcid.org/0000-0002-7885-8942>

Associate Editor

Dr. Leyla Ferlicolak

Ankara University Faculty of Medicine, Ibni Sina Hospital, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey
leylatalan@gmail.com
<https://orcid.org/0000-0003-2023-5985>

Statistical Advisor

Prof. Dr. Banu Cakir

Hacettepe University Faculty of Medicine, Department of Public Health, Ankara, Turkey
banucakir4@gmail.com

Online Submission and Processing

Pleksus Bilişim Teknolojileri A.Ş.

Ankara Tekn. Geliştirme Bölgesi, Üniversiteler Mahallesi, 1606. Cad. No: 4 Cyberpark, Cyberplaza A Blok 2. Kat No: A208 Bilkent, Ankara, Turkey
Tel: +90 312 427 26 08
Fax: +90 312 427 26 02

Publishing Services



BAYT Bilimsel Araştırmalar Basın Yayın ve Tanıtım Ltd. Şti.

Ziya Gökalp Cad., 30/31, 06420 Kızılay, Ankara, Turkey
Phone: +90 312 431 30 62 | Fax: +90 312 431 36 02
E-mail: info@bayt.com.tr | www.bayt.com.tr



Editorial Board

Akin Kaya, Ankara University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Ali Kemal Kadiroglu, Dicle University Faculty of Medicine, Department of Internal Medicine, Division of Nephrology, Diyarbakir, Turkey

Aydin Ciledag, Ankara University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Begum Ergan, Dokuz Eylul University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Izmir, Turkey

Bilgin Comert, Dokuz Eylul University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Izmir, Turkey

Burcin Halacli, Hacettepe University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Can Kıraklı, Suat Seren Chest Diseases and Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Izmir, Turkey

Dilek Kazanci, Ankara City Hospital, Ministry of Health General Intensive Care Clinic, Ankara, Turkey

Despoina Koulenti, Critical Care Department, Attikon University Hospital, Athens, Greece & BTCRC UQ Centre for Clinical Research, Faculty of Medicine, University of Queensland, Brisbane, Australia

Ebru Ortac Ersoy, Hacettepe University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Emel Eryuksel, Marmara University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Emre Karakoc, Cukurova University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Adana, Turkey

Erhan Tabakoglu, Trakya University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Edirne, Turkey

Ethem Murat Arsava, Hacettepe University Faculty of Medicine, Department of Neurology, Ankara, Turkey

Ezgi Ozyilmaz, Cukurova University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Adana, Turkey

Fatma Yildirim, University of Health Sciences, Diskapi Yildirim Beyazit Research and Education Hospital, Division of Intensive Care Medicine, Ankara, Turkey

Gokay Gungor, Sureyyapasa Chest Diseases and Chest Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Gokhan M. Mutlu, University of Chicago

Goksel Guven, Tokat State Hospital, Department of Intensive Care, Tokat, Turkey

Gul Gursel, Gazi University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Gulbin Aygencel Bikmaz, Gazi University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Gurhan Taskin, Gulhane Research and Training Hospital, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Haldun Gundogdu, Ankara City Hospital, Ministry of Health General Surgery Clinic, Ankara, Turkey

Halima Salisu Kabara, Aminu Kano Teaching Hospital, Kano, Nigeria

Hatice Yagmurdu, University of Health Sciences, Gulhane School of Medicine, Department of Anesthesiology and Intensive Care, Ankara

Iskender Kara, Selcuk University Faculty of Medicine, Department of Anesthesiology and Reanimation, Division of Intensive Care Medicine, Konya, Turkey

Ismail Hakkı Akbudak, Pamukkale University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Denizli, Turkey

Jale Bengi Celik, Selcuk University Faculty of Medicine, Department of Anesthesiology and Reanimation, Division of Intensive Care Medicine, Konya, Turkey

Jordi Rello, Critical Care Department, Hospital Joan XXII of Tarragona and Hospital Vall Hebron, Universitat Autònoma de Barcelona, Barcelona, Spain

Kamil Gonderen, Kutahya University Faculty of Medicine, Evliya Celebi Training and Research Hospital, Department of Internal Medicine, Division of Intensive Care Medicine, Kutahya, Turkey

Kaya Yorganci, Hacettepe University Faculty of Medicine, Department of General Surgery, Ankara, Turkey

Kursat Gundogan, Erciyes University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Kayseri, Turkey

Madiha Hashmi, Ziauddin University, Department of Anesthesia and Intensive Care, Karachi, Pakistan

Mehmet Akif Topcuoglu, Hacettepe University Faculty of Medicine, Department of Neurology, Ankara, Turkey

Melda Turkoglu, Gazi University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Mine Durusu Tanriover, Hacettepe University Faculty of Medicine, Department of Internal Medicine, Ankara, Turkey

Muhammet Guven, Vice-President of Turkish Ministry of Health

Murat Sungur, Erciyes University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Kayseri, Turkey

Muge Aydogdu, Gazi University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Nalan Adiguzel, Sureyyapasa Chest Diseases and Chest Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Nazlihan Boyaci, Gazi University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Ozlem Ediboglu, Suat Seren Chest Diseases and Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Izmir, Turkey

Ozlem Mocin, Sureyyapasa Chest Diseases and Chest Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Pervin Hanci, Erzurum Regional Education and Research Hospital Intensive Care Unit, Erzurum, Turkey

Sait Karakurt, Marmara University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Seda Banu Akinci, Hacettepe University Faculty of Medicine, Department of Anesthesiology, Division of Critical Care, Ankara, Turkey

Sema Turan, Ankara City Hospital, Ministry of Health General Intensive Care Clinic, Ankara, Turkey

Serpil Ocal, Hacettepe University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Ankara, Turkey

Seval Izdes, Yildirim Beyazit University Faculty of Medicine, Ankara City Hospital, Department of Anesthesiology and Reanimation, Division of Intensive Care Medicine, Ankara, Turkey

Sahin Temel, Erciyes University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Kayseri, Turkey

Tural Alekberli, Hadassah Medical Center, Department of Anesthesia, Critical Care and Pain Medicine, The Hebrew University of Jerusalem, Israel

Turgay Celikel, Marmara University Faculty of Medicine, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey

Turkay Akbas, Duzce University Faculty of Medicine, Department of Internal Medicine, Division of Intensive Care Medicine, Duzce, Turkey

Volkan Inal, Trakya University, Department of Internal Medicine, Division of Intensive Care Medicine, Edirne, Turkey

Zuhal Karakurt, Sureyyapasa Chest Diseases and Chest Surgery Training and Research Hospital, Department of Pulmonary Medicine, Division of Intensive Care Medicine, Istanbul, Turkey



Journal of Critical and Intensive Care



Aims and Scope

Journal of Critical and Intensive Care (*J Crit Intensive Care*) is the scientific and official publication of the Turkish Society of Medical and Surgical Intensive Care Medicine.

The journal is an international open access journal, published 3 times a year (*April, August, December*) and all of its contents are freely available at cost and there is no fee for submission and publication. All processing is conducted through the online submission system on the web site: www.jcritintensivecare.org. Only manuscripts written in English are accepted. It publishes original clinical, basic and translational research articles, case reports and letters to the editor related to intensive/critical care medicine including pediatric intensive care; neurointensive care; intensive care nursing; physiotherapy, nutrition and pharmacology in intensive care, as well as acute and emergency medicine. Editorials and review articles are only accepted upon invitation of the editor.

Manuscripts are accepted for publication through an independent unbiased and double-blinded peer review process.

The target group of Journal of Critical and Intensive Care is physicians and healthcare staff at clinical and basic science departments who are interested in intensive care. The full texts of all articles are issued online at (www.jcritintensivecare.org) and are available in PDF format.

Instructions to Authors are available on journal pages and in the following link: www.jcritintensivecare.org.

Journal of Critical and Intensive Care is indexed in Web of Science Emerging Sources Citation Index (ESCI), TUBITAK ULAKBIM TR Index, EMBASE, Scopus, EMCare, CINAHL, Gale/Cengage Learning, EBSCO, HINARI, ProQuest and Turkiye Citation Index.

Disclaimer: All opinions and reports within the articles that are published in the Journal of Critical and Intensive Care are the personal opinions of author(s), not editors-in-chief's, editorial boards' or the publisher's. The Turkish Society of Medical and Surgical Intensive Care Medicine, editors-in-chief, editorial board and the publisher do not accept any responsibility for these articles.

OPEN  ACCESS

Journal Contact

Address: Kuleli Sokak 57/1
06700 Çankaya, Ankara, Turkey

Web: www.jcritintensivecare.org

e-mail: editor@jcritintensivecare.org



Instructions to Authors

Journal of Critical and Intensive Care (*J Crit Intensive Care*) is the scientific and official publication of the Turkish Society of Medical and Surgical Intensive Care Medicine.

The journal is an open access journal, published 3 times a year and all of its contents are freely available with no cost and there is no fee for submission. It accepts manuscripts written in English and evaluates submissions through its online submission system on the web site www.jcritintensivecare.org only. It publishes original clinical, basic and translational research articles, case reports and letters to the editor related to intensive/critical care medicine and acute medicine. Editorials and review articles are only accepted upon invitation of the editor.

Manuscripts are accepted for publication through an independent unbiased and double-blinded peer review process. Authors are encouraged to suggest reviewers from other institutions; however editorial board will make the final selection of reviewers. As well, the editorial board reserves the right to reject the manuscripts not suitable for publication or the right to return manuscripts to authors for revision.

An approval of research protocols by ethics committee in accordance with international agreements (Helsinki Declaration of 1975, revised 2002 - available at <http://www.vma.net/e/policy/b3.htm> , "Guide for the care and use of laboratory animals" - www.nap.edu/catalog/5140.html) is required for all research articles. All manuscripts should be prepared in accordance with the latest International Committee of Medical Journal Editors (ICMJE) Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals (updated in December 2019 - <http://www.icmje.org/icmje-recommendations.pdf>).

All submitted manuscripts must comply with the instructions specified below:

1. The authors must state that the submitted manuscript is an original work that has not been previously published or is not currently under consideration for publication elsewhere.
2. During the submission process of the manuscript the authors must sign the "Copyright Transfer Agreement". No changes to the authorship (order, deletions or additions) are allowed after this stage and copyrights are directly transferred to the Turkish Society of Intensive Care for Internal and Surgical Medicine.
5. All content (text, figures, graphics, tables and others) which has been "sent for publication should be original. If not, permission from related person and/or institutions regarding copyright should have been obtained by the authors.
6. If the manuscript was partially or completely presented as a thesis or an abstract at a meeting, it should be clearly stated in the "Acknowledgements" section.
7. Foundations, organizations, drug and medical device companies that make a complete/partial contribution in cash and in kind, project funding, scholarships, etc. should be mentioned in the "Acknowledgements" section.
8. The authors should disclose any conflict of interest and any financial support that has been received relevant to the submitted manuscript in the "Acknowledgements" section.
9. The authors are responsible for compliance of the quality of research with high ethical standards. The "Materials and Methods" section should include a statement about ethics committee approval (*date, document no*) and informed consent. The journal reserves the right to refuse the publication of the manuscript in the presence of an ethical violation.
10. The manuscript will be checked if it is in accordance with instruction to the authors before sending to the editor. Any manuscript not prepared according to instructions will be returned for revision.
11. The manuscript will be evaluated by the editorial board for scientific adequacy and then sent to peer-reviewers who could be from the editorial board or independent reviewers.
12. The manuscript is checked for ethical violation and plagiarism.
13. If revision is required, authors should re-submit within maximum 2 months.
14. All points of the reviewer should be clarified within the re-submitted manuscript in different colour and a detailed letter stating or mentioning all revisions of reviewers on a point-by-point basis is required during revision. This letter is mandatory and if not provided, the manuscript will be returned.
15. Once the manuscript is accepted, the number or order of authors cannot be changed.

Preparation of Manuscripts

Manuscripts should be supplied in Microsoft Word for Windows format, and typed using 12 point Times New Roman font. The use of abbreviations in the title, abstract, table titles, figure legends and at the beginning of the sentences should be avoided. Abbreviations should be defined in parentheses the first time they appear in the text. Single digit numbers should be written in words in the text.

An original research article should include the following sections:

1. Title
2. The full name(s), highest academic degree(s), affiliation(s), role(s) (hypothesizing, manuscript drafting, analysis, etc.) of author(s)
3. Name and address for corresponding author (including phone, e-mail address)
4. **Abstract:** aim, study design, materials and methods, results, conclusion, maximum 250 words.
5. **Keywords** Four to eight keywords must be supplied, see www.nlm.nih.gov/mesh/MBrowser.html.
6. **Main Body:** The main text should include the following sections: *Introduction, Materials and Methods, Results, Discussion and Conclusion*. The background in the "Introduction" section should not be too long. Aim(s) or hypothesis must be clearly stated in the final paragraph of the "Introduction". The "Materials and Methods" section should include study design and statistical analysis. Unnecessary overlap between tables, figures and text should be avoided. Subheadings should be used in order to provide a better understanding in the "Results" and "Discussion" sections. The "Conclusion" section should comment on the main findings of the study in 1 or 2 sentences.



Journal of Critical and Intensive Care



7. **Tables:** Tables should be included after the references according to their sequence in the text. All tables should be titled. The use of abbreviations in the table title should be avoided if possible. If not, expansions of the abbreviations in the table should be listed as footnotes to the table. Table title must appear at the top of the table. Expressions of the results (i.e. mean±standard deviation or median and interquartile ranges) as well as units of measurements should be stated in tables. Each table should be typed on a separate page and should be numbered with Arabic numerals. P values should be provided.
8. **Figures:** Figures should be numbered with Arabic numerals according to their sequence in the text. Each figure should be submitted as separate files using JPG or TIFF format. For each figure, the file name should include the figure number. Expansion of each abbreviation should be listed in figure legend. P values should be indicated in figure legends. If applicable, statistical significance should be indicated by an asterisk on the figure.
9. **Figure Legends:** Figure legends should be self-explanatory and should be listed at the end of the text, after tables. Figure legends should be listed consecutively on a separate page. The use of abbreviations should be avoided.
10. **References:** Unpublished data and studies should not be included in the reference list. They must be cited in the text as "name(s), unpublished data, 19..." References should be listed according to their sequence in the text. Each reference should be cited in the text by Arabic numerals between brackets. References should be cited in the text right after the referred author. All journal titles should be abbreviated according to the Index Medicus (www.nlm.nih.gov/tsd/serials/lji.html). Names of all authors (name and initial) should be listed when there is three or less. When there are four or more authors, the first three should be listed, followed by "et al.". Full title of cited article, title of journal (abbreviated), year of publication, volume of the journal and page numbers should be included after author's names and initials.

Journal article:

O'Malley MK, Rhame FS, Cerra FB, et al. Value of routine pressure monitoring system changes after 72 hours of continuous use. *Crit Care Med* 1994; 22: 1424-30.

Chapter in a book:

Name of chapter author(s), title of chapter, name(s) of editor(s), title of book, publisher name, edition of book, year of publication and page numbers should be included.

Celinski S, Seneff MG. Arterial line placement and care. Irwin RS, Rippe JM. Irwin and Rippe's Intensive Care Medicine. Lippincott, Williams and Wilkins. 6th ed. 2008: 38-48.

11. Acknowledgements

A review article should include the following sections:

Review articles in Journal of Critical and Intensive Care are published as invited articles.

1. Title
2. The full name(s), highest academic degree(s), affiliation(s) of author(s)
3. Name and address for corresponding author (including phone, e-mail address)
4. Abstract
5. Keywords (see original research article)
6. Main Body: Appropriate subheadings should be used. The "Conclusion" section should include the main inference of the manuscript in 1 or 2 sentences.

7. Tables, figures and figure legends (original see research article)
8. References (see original research article)
9. Acknowledgements

A case report should include the following sections:

Identifying details of patients should not be included in the manuscript, figures, tables etc. Authors must obtain written informed permission from the patient, or next of kin for case reports. Copies of the permission must be provided when asked for.

1. Title
2. The full name(s), highest academic degree(s), affiliation(s) of author(s)
3. Name and address for corresponding author (including phone, e-mail address)
4. Abstract
5. Keywords (see original research article)
6. Main Body: Introduction, Case(s), Discussion and Conclusion should be included. In case series, cases should be numbered (i.e. Case 1)
7. Tables, figures and figure legends (original see research article)
8. References (see original research article)
9. Acknowledgements

Editorial

It is the brief evaluation of published manuscripts by an authority assigned by Editor-in-Chief. It can include subheadings; however, an abstract is not required. Tables and figures are not included in editorial.

Letters to the editor

Letters submitted within 2 months after the publication of an editorial in PDF format on the web page, will be accepted, if deemed appropriate, and will be published soon after or in the subsequent volume of the published editorial together with author's response.

Letters to the editor and author's response should include the following sections:

1. Title (English)
2. The full name(s), highest academic degree(s), affiliation(s) of author(s)
3. Name and address for corresponding author (including phone, e-mail address)
4. Main Body: It should begin with the statement of "To the Editor". Maximum one table or one figure can be included
5. References

Copyright transfer

Authors are responsible for opinions and suggestions as well as the accuracy of references in the manuscript. No copyright fee is paid for the manuscripts submitted to the journal. The publication rights of accepted manuscripts are directly transferred to the publisher. The authors should send duly signed "Copyright Transfer Agreement" to the publisher, during the manuscript submission.