



Northwestern Medical Journal

Official Journal of İzzet Baysal
Training and Research Hospital

Owner

Assoc. Prof. Muhammed Nur Ögün, MD
Director, Bolu İzzet Baysal Training and Research
Hospital, Turkey
dr.mogun@gmail.com
Orcid: 0000-0001-5524-5767

Editor in Chief

Prof. Ahmet Ural, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine,
Department of Otorhinolaryngology - Head & Neck
Surgery, Turkey
ahmetural@ibu.edu.tr
Orcid: 0000-0002-6088-1415

Editorial Assistant

Assoc. Prof. Ümit Doğan, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine,
Department of Ophthalmology, Turkey
u_dogan@hotmail.com
Orcid: 0000-0002-8249-2621

Assoc. Prof. Tülin Fırat, MD
Bolu Abant İzzet Baysal University,
Faculty of Medicine, Department of Histology and
Embryology, Turkey
tulins2000@gmail.com
Orcid: 0000-0002-8317-7092

Assist. Prof. Murat Taşçı, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine,
Department of Internal Medicine,
Division of Rheumatology, Turkey
dr_murat9113@hotmail.com
Orcid: 0000-0002-4635-5179

Statistical Editor

Assoc. Prof. Başar Erdivanlı, MD
Recep Tayyip Erdogan University, Faculty of Medicine,
Department of Anesthesiology and Reanimation, Rize,
Turkey

Publishing Assistant

Social Worker Ayfer Say
Bolu İzzet Baysal Training and Research Hospital, Turkey
nwmedj@gmail.com

Publication Type

International peer-reviewed journal

Publisher

Bolu İzzet Baysal Training and Research Hospital

Publisher Address

Bolu İzzet Baysal Training and Research Hospital Gökloy
14280 Bolu - Turkey
Phone: +90 374 253 46 18 / +90 374 253 46 56
E-mail: nwmedj@gmail.com
Web: izzetbaysaleah.saglik.gov.tr

E-ISSN: 2757-7724

2022
Volume: 2
Issue: 2



Northwestern Medical Journal

Official Journal of İzzet Baysal
Training and Research Hospital

Northwestern Medical Journal is the publication of
İzzet Baysal Training and Research Hospital, Bolu, Turkey.

It is published three times a year (February, June, October)
NWMEDJ is an open access, free and pre-reviewed journal

**You can reach all publication policies and author guidelines from
www.nwmedj.org**

© All rights are reserved. Rights to the use and reproduction, including in the electronic media, of all communications, papers, photographs and illustrations appearing in this journal belong to İzzet Baysal Training and Research Hospital. Reproduction without prior written permission of part or all of any material is forbidden.

Publishing Services

Akdema Informatics and Publishing
Address: Balkiraz Mah. Saraycık Cad.
No: 19/6 06620 Mamak/Ankara
Certificate number: 52576
E-mail: bilgi@akdema.com
Tel: +90 533 166 80 80
Web: www.akdema.com

Printing

Teknoart Digital Ofset Reklamcılık
Matbaacılık İth. İhr. San. ve Tic. Ltd. Şti.
Address: Cevizlidere Mahallesi 1288
Sok. No: 1/1 Çankaya/Ankara
Certificate number: 47644
Tel: +90 312 473 92 97
Web: www.printandsmile.com.tr



Advisory Board

Prof. Niyazi Acer, PhD

*Istanbul Arel University, Faculty of Medicine,
Department of Anatomy, Turkey*

Elif Açar, Consultant, MD

*Yozgat Sorgun Public Hospital, Department of
Chest Diseases, Turkey*

Assist. Prof. Nurcan Akbaş Güneş, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Family Medicine, Turkey*

Assoc. Prof. Barış Akcan, MD

*Aydın Adnan Menderes University, Faculty of
Medicine, Department of Pediatrics, Division of
Neonatology, Turkey*

Assoc. Prof. Remzi Adnan Akdoğan, MD

*Recep Tayyip Erdoğan University, Faculty of
Medicine, Department of Internal Medicine,
Division of Gastroenterology, Turkey*

Şengül Aksakal, MD

*Health Sciences University, Samsun Training
and Research Hospital, Faculty of Medicine,
Department of Internal Medicine, Division of
Immunology, Turkey*

Assoc. Prof. Gülali Aktaş, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Internal Medicine, Turkey*

Assoc. Prof. Ferit Akıl, MD

*Dicle University, Faculty of Medicine, Department
of Otorhinolaryngology - Head & Neck Surgery,
Turkey*

Assoc. Prof. İbrahim Faruk Aktürk, MD

*Bakırköy Training and Research Hospital,
Department of Cardiology, Turkey*

Assist. Prof. Murat Alışık, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Biochemistry, Turkey*

Assoc. Prof. Turhan Aran, MD

*Karadeniz Technical University, Faculty of
Medicine, Department of Gynecology and
Obstetrics, Turkey*

Assist. Prof. Ali Osman Arslan, PhD

*Bolu İzzet Baysal Training and Research Hospital,
Faculty of Medicine, Department of Medical
Biology, Turkey*

Assoc. Prof. Hesna Müzeyyen Astarıcı, MD

*Lokman Hekim University, Faculty of Medicine,
Department of Pathology, Turkey*

Burçin Meryem Atak, Consultant, MD

*Bolu İzzet Baysal Training and Research Hospital,
Faculty of Medicine, Department of Internal
Medicine, Turkey*

Assoc. Prof. Elif Ateş, MD

*Karadeniz Technical University, Faculty of
Medicine, Department of Family Medicine, Turkey*

Assist. Prof. Asma Ali Awadh, MD

Public Health, Ministry of Health, Nairobi, Kenya

Prof. Dr. Erol Ayaz, PhD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Parasitology, Turkey*

Assoc. Prof. Pınar Çağlar Aytac, MD

*Başkent University Hospital Adana, Faculty
of Medicine, Department of Obstetrics and
Gynecology, Turkey*

Assist. Prof. Zümriit Bahat, MD

*Karadeniz Technical University, Faculty of
Medicine, Department of Radiation Oncology,
Turkey*

Assist. Prof. Abdallah Bajaber, MD

*University of Nairobi, Kenyatta National Hospital,
Department of Pediatrics, Kenya*

Assoc. Prof. Seval Bayrak, DDS, PhD

*Bolu Abant İzzet Baysal University, Faculty of
Dentistry, Department of Dentomaxillofacial
Radyology, Turkey*

Assist. Prof. Mustafa Behçet, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Microbiology, Turkey*

Prof. Devrim Bektaş, MD

*Giresun University, Faculty of Medicine,
Department of Otorhinolaryngology - Head &
Neck Surgery, Turkey*

Cansu Benli, Consultant, PhD

*Health Sciences University, Samsun Training
and Research Hospital, Faculty of Medicine,
Department of Pathology, Turkey*

Assoc. Prof. Güray Can, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Internal Medicine,
Division of Gastroenterology, Turkey*

Assist. Prof. Hatice Sonay Yalçın Cömert, MD

*Karadeniz Technical University, Faculty of
Medicine, Department of Pediatric Surgery, Turkey*

Prof. Meryem Çam, MD

*Istanbul Arel University, Faculty of Medicine,
Department of Histology and Embryology, Turkey*

Assist. Prof. Oğuz Çatal, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of General Surgery, Turkey*

Assist. Prof. Kaan Çelik, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Emergency Medicine,
Turkey*

Assoc. Prof. Ayhan Çetinkaya, PhD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Physiology, Turkey*

Assoc. Prof. Hatice Bengü Çobanoğlu, MD

*Karadeniz Technical University, Faculty of
Medicine, Department of Otorhinolaryngology -
Head & Neck Surgery, Turkey*

Assoc. Prof. Emine Dağistan, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Radiology, Turkey*



Advisory Board

Assoc. Prof. Cem Dane, MD
İstinye University, Faculty of Medicine, Department of Gynecology and Obstetrics, İstanbul, Turkey

Ayşegül Daniş, Consultant, MD
Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology, Turkey

Prof. Abdullah Demirhan, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Turkey

Assist. Prof. Murat Dıramalı, MD
Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Anatomy, Turkey

Assoc. Prof. Mustafa Dilek, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Pediatrics, Division of Neonatology, Turkey

Assist. Prof. İbrahim Dönmez, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Cardiology, Turkey

Assoc. Prof. Görkem Dülger, MD
Düzce University, Faculty of Medicine, Department of Medical Biology, Turkey

Assoc. Prof. Esra Ercan, DDS, PhD
Çanakkale Onsekiz Mart University, Faculty of Dentistry, Department of Periodontology, Turkey

Emrah Erdal, Consultant, MD
Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Cardiology, Turkey

Assoc. Prof. Güliz Erdem, MD
İstanbul Kent University, Department of Cardiology, Faculty of Health Sciences, Turkey

Assist. Prof. Selma Erdoğan Düzcü, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Pathology, Turkey

Assoc. Prof. Hashairi Fauzi, MD
Universiti Kebangsaan Malaysia, Faculty of Medicine, Department of Emergency, Kubang Kerian, Kelantan, Malaysia

Assist. Prof. Ali Gökkaya, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Plastic - Reconstructive and Aesthetic Surgery, Turkey

Assoc. Prof. Pınar Göksedef, MD
Yeniüzyıl University, Faculty of Medicine, Department of Gynecology and Obstetrics, Turkey

Assoc. Prof. Hasan Tahsin Gözdaş, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Infectious Diseases, Turkey

Prof. Adnan Güçük, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Urology, Turkey

Prof. Ender Güçlü, MD
Düzce University, Faculty of Medicine, Department of Otorhinolaryngology - Head & Neck Surgery, Turkey

Assoc. Prof. Mehmet Yalçın Günal, MD
Alanya Alaaddin Keykubat University, Faculty of Medicine, Department of Physiology, Turkey

Assoc. Prof. Akif Güneş, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Otorhinolaryngology - Head & Neck Surgery, Turkey

Assoc. Prof. Orçun Gürbüz, MD
Bursa International Ceylan Hospital, Department of Cardiovascular Surgery, Turkey

Assist. Prof. Müjgan Gürler, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Internal Medicine, Turkey

Assist. Prof. Ali Güvey, MD
Kütahya Health Sciences University, Department of Otorhinolaryngology - Head & Neck Surgery, Turkey

Prof. Ali İrfan Güzel, PhD
Recep Tayyip Erdoğan University, Faculty of Medicine, Department of Medical Biology, Rize, Turkey

Filiz Halıcı, Consultant, MD
Dışkapı Yıldırım Beyazıt Training and Research Hospital, Department of Public Health, Turkey

Assist. Prof. Abdullahi Mohammed Hasan, MD
Abrar University, Faculty of Medicine, Department of Cardiology, Mogadishu, Somalia

Assist. Prof. Tuan Salwani Tuan Ismail
Universiti Sains Malaysia, Faculty of Medicine, Department of Pathology, Kubang Kerian, Kelantan, Malaysia

Prof. Cengiz Işık, MD
Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Orthopedics and Traumatology, Turkey

Prof. Mustafa İmamoğlu, MD
Karadeniz Technical University, Faculty of Medicine, Department of Pediatric Surgery, Division of Pediatric Urology, Turkey

Assist. Prof. Dono İndarto
Universitas Sebelas Maret, Faculty of Medicine, Department of Physiology and Biomedical Laboratory, Surakarta, Indonesia

Prof. Yıldız İyidoğan, PhD
İstanbul Arel University, Faculty of Medicine, Department of Biochemistry, Turkey



Advisory Board

Assoc. Prof. İbrahim Karagöz, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Turkey

Assist. Prof. Elif Karalı, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Otorhinolaryngology - Head & Neck Surgery, Turkey

Assist. Prof. Yasin Emre Kaya, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Orthopedics and Traumatology, Turkey

Prof. Arzu Kılıç, MD

Balikesir University, Faculty of Medicine, Department of Dermatology, Turkey

Assist. Prof. Aysu Kıyan, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Public Health, Turkey

Gençehan Kumtepe, Consultant, MD

Isparta Meddem Hospital, Department of Cardiovascular Surgery, Turkey

Assoc. Prof. Şerife Mehlika Kuşkonmaz, MD

Ankara Training and Research Hospital, Department of Internal Medicine, Endocrinology And Metabolic Diseases, Turkey

Assoc. Prof. Mehmet Zahid Koçak, MD

Necmettin Erbakan University, Faculty of Medicine, Department of Internal Medicine, Turkey

İsmail Mall, PhD

Durban University of Technology, Faculty of Health Science, Department of Pharmacology, South Africa

Aslı Kurtar Mansiroğlu, Consultant, MD

Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Cardiology, Turkey.

Ozayr Haroon Mahomed, MD

University of Kwazulu Natal, Faculty of Medicine, Department Public Health, Durban South Africa

Assist. Prof. Rohimah Mohamad

Universiti Sains Malaysia, Faculty of Medicine, Department of Immunology, Kubang Kerian, Kelantan, Malaysia

Assoc. Prof. Salim Neşelioğlu, MD

Yıldırım Beyazıt University, Faculty of Medicine, Department of Biochemistry, Turkey

Assist. Prof. Mohd Zarawi Mat Nor

Universiti Sains Malaysia, Faculty of Medicine, Department of Medical Education, Kubang Kerian, Kelantan, Malaysia

Assoc. Prof. Julia Omar

Universiti Sains Malaysia, Faculty of Medicine, Department of Pathology, Kubang Kerian, Kelantan, Malaysia

Ali Can Önal, Consultant, MD

Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Pathology, Turkey

Assoc. Prof. Zerrin Özgürin Coşkun, MD

Recep Tayyip Erdoğan University, Faculty of Medicine, Department of Otorhinolaryngology - Head & Neck Surgery, Rize, Turkey

Assoc. Prof. Zeynep Güneş Özunal, MD

İstanbul Maltepe University, Faculty of Medicine, Department of Pharmacology, Turkey

Hande Özkalaycı, Consultant, MD

Bolu İzzet Baysal Training and Research Hospital, Faculty of Medicine, Department of Medical Genetics, Turkey

Assist. Prof. Can Özlü, MD

Kütahya Health Sciences University, Faculty of Medicine, Department of Internal Medicine, Division of Hematology, Turkey

Assoc. Prof. Yusuf Öztürk, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Child & Adolescent Psychiatry, Turkey

Prof. Mualla Polat, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Dermatology, Turkey

Assist. Prof. Ömer Polat, MD

Düzce University, Faculty of Medicine, Department of Neurosurgery, Turkey

Kop Roly, MD

Hospital Beyond Boundaries, Phnom Penh, Cambodia

Prof. Muslim Uddin Sabuj

Bangladesh Chattogram International Medical College and Hospital, Department of Pediatrics, Chittagong, Bangladesh

Assist. Prof. Parisa Sharafi, PhD

TOBB ETU University, Faculty of Medicine, Department of Medical Biology, Turkey

Assist. Prof. Emrullah Söğütülen, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Urology, Turkey

Assist. Prof. Mürsel Şahin, MD

Karadeniz Technical University, Faculty of Medicine, Department of Cardiology, Turkey

Assist. Prof. Aslıhan Şaylan, PhD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Histology and Embryology, Turkey

Assoc. Prof. Tuba Taslamacioğlu Duman, MD

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Internal Medicine, Turkey

Duygu Tecer, Consultant, MD

Health Sciences University, Gülhane Training and Research Hospital, Faculty of Medicine, Department of Internal Medicine, Division of Rheumatology, Turkey



Advisory Board

Ferhat Tek, Consultant, MD

*Asklepios Klinikum Harburg, Otorhinolaryngology
- Head & Neck Surgery, St George Hamburg,
Germany*

Assist. Prof. Beliz Öztok Tekten, MD

*Bolu Abant İzzet Baysal University Faculty of
Medicine Department of Emergency Medicine,
Turkey*

Assoc. Prof. Hakan Temiz, MD

*Dicle University, Faculty of Medicine, Department
of Microbiology, Diyarbakır, Turkey*

Prof. Mustafa Tunali, DDS, PhD

*Çanakkale Onsekiz Mart University, Faculty of
Dentistry, Department of Periodontology, Turkey*

Assist. Prof. Sevim Türay, MD

*Düzce University, Faculty of Medicine, Department
of Pediatrics, Division of Pediatric Neurology,
Turkey*

**Assist. Prof. Tengku Ahmad Damitri Al-Astani
Tengku Din, PhD**

*Universiti Sains Malaysia, Department of
Pathology, Kubang Kerian, Kelantan, Malaysia*

Assist. Prof. Serdar Ferit Toprak, MD

*Dicle University, Faculty of Medicine, Department
of Otorhinolaryngology - Head & Neck Surgery,
Turkey*

Assist. Prof. Sinan Tüfekci, MD

*Tekirdağ Namık Kemal University, Faculty of
Medicine, Department of Pediatrics, Division of
Neonatology, Turkey*

Meral Uluköylü Mengüç, Consultant, MD

*Bolu İzzet Baysal Training and Research Hospital,
Faculty of Medicine, Department of Internal
Medicine, Division of Hematology, Turkey*

Assoc. Prof. Gülbahar Ustaoglu, DDS, PhD

*Bolu Abant İzzet Baysal University, Faculty of
Dentistry, Department of Periodontology, Turkey*

Prof. Özge Uzun, PhD

*İstanbul Arel University, Faculty of Medicine,
Department of Pharmacology, Turkey*

Hüseyin Übeyli, Consultant, MD

*Asklepios Klinikum Harburg, Orthopedics and
Traumatology, St George Hamburg, Germany*

Assist. Prof. Brian Wasita

*Universitas Sebelas Maret, Faculty of Medicine,
Department of Anatomical Pathology, Surakarta,
Indonesia*

Assist. Prof. Osman Yakşi, MD

*Bolu Abant İzzet Baysal University Faculty of
Medicine Department of Thoracic Surgery, Turkey*

Assist. Prof. Kerem Yaman, PhD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Parasitology, Turkey*

Assist. Prof. Mohamad Nurman Yaman, MD

*University of Kwazulu Natal, Faculty of Medicine,
Department Public Health, Durban South Africa*

Assist. Prof. Mustafa Fatih Yaşar, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Physical Medicine and
Rehabilitation, Turkey*

Assoc. Prof. İsa Yıldız, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Anesthesiology and
Reanimation, Turkey*

Banu Yılmaz, Consultant, MD

*Bursa Provincial Health Directorate, Department of
Public Health, Turkey*

Assist. Prof. Murat Yılmaz, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Neurology, Turkey*

Assoc. Prof. Hamit Yoldaş, MD

*Bolu Abant İzzet Baysal University, Faculty of
Medicine, Department of Anesthesiology and
Reanimation, Turkey*

Assoc. Prof. Sadık Yurttutan, MD

*Kahramanmaraş Sütçü İmam University, Faculty
of Medicine, Department of Pediatrics, Division of
Neonatology, Turkey*

Assoc. Prof. Ahmet Yüksel, MD

*Bursa City Hospital, Department of Cardiovascular
Surgery, Turkey*

Assist. Prof. Susilorini, MD, MSc, Med, SpPA

*Universitas Islam Sultan Agung, Faculty of
Medicine, Department of Pathology Anatomy,
Semarang Indonesia*



Manuscript Preparation

It is mandatory to upload the articles submitted to the journal in scientific and formal terms in accordance with the format of the journal. According to the type of article you uploaded, the desired features are detailed below. If the article submitted to the journal is in conformity with the formal principles, it will be evaluated first by the editor and statistical editor.

As a result of the preliminary evaluation, the editor has the right to reject the articles directly, considering the scientific content of the article, the journal's publication ethics and principles.

Articles deemed suitable for further evaluation are reviewed by at least two consultants under the supervision of field editors and assistant editors using a double-blind review system.

Articles submitted for publication should not have been published elsewhere for publication.

If there is a previously published citation, table, picture in the article, the authors must obtain written permission from the copyright holder and authors and state this in the article.

Therefore, in order for the articles to be evaluated, they must fill in, sign and upload a copy of the "Copyright Form", "Statement of Potential Conflict of Interest" and "Ethics Committee Approval" or the form in the system for ethical approval. Manuscripts that do not contain these forms will not be evaluated.

In addition, the authors should indicate that the ethics committee approval was obtained for clinical studies in the "Materials and Methods" section, together with the protocol number, so that the referees who will review the article know that the study is ethical committee approval.

Again, authors should include information about potential conflict of interest and funding in the "Acknowledgments" section.

Reviews are evaluated if invited. Any uninvited reviews will not be considered.

The publishing rights of the articles accepted for publication belong to the institution that publishes the journal. The opinions and suggestions in the articles are under the responsibility of the authors and no fee is paid to the authors for their articles.

Writing rules

The language of Northwestern Medical journal is English only. Manuscripts should be double-spaced, in Times New Roman font, 12 pt., 2.5 cm margins from the margins, and prepared on a standard A4 page, Microsoft Office Word document or rich text format. Each section must start on a new page. Articles should be numbered starting from the title page, page numbers should be written in the lower right corner.

Title page

The title of the article should contain a short heading not exceeding 40 characters to be used at the headings. Corresponding author's name-surname, academic title, institution, telephone, e-mail and correspondence addresses, ORCID ID must be included.

In the acknowledgement part; If there is a conflict of interest, financial support, donation and all other editorial (statistical analysis, language assessment) and / or technical assistance, it should be presented at the end of the text.

Abstract

It should be prepared in English according to the type of the article.

Keywords

A minimum of 3 and a maximum of 6 should be written in English. Words must be separated from each other with semicolons (;). English words must match the Medical Subjects Headings list in Index Medicus.

Figures and tables

The places where figures, pictures, tables and graphics are included in the text should be indicated at the end of the relevant sentence. It should be numbered consecutively and presented separately from the text. Explanations of figures, pictures, tables and graphics should be added at the end of the article. Abbreviations used should be indicated in the explanation under the figures, pictures, tables and graphics. Images should be sent in TIFF, JPG format, and photos should be at 300 dpi and vector illustrations at 600 dpi resolution.



Manuscript Preparation

References

The list of references at the end of the article should be prepared according to the order of the sources in the article. The format used for resource writing should be in accordance with Index Medicus. (See: www.icmje.org). Vancouver bibliography format should be used as the bibliography format in Northwestern Medical Journal. Other bibliographic formats will not be accepted. References should be indicated in the article, in parentheses at the end of the relevant sentence. References should be separated by commas in parentheses. If three or more references are given, the first and last reference number should be written and separated with a dashed line. When specifying the source, if the name of the author is given, the reference number should be specified immediately after the author name as superscript without spaces.

If the number of authors in the reference is 6 or less, all authors should be specified; If more than 6, only the first 6 names should be written and the others should be shown as (et al).

Congress papers, personal experiences, unpublished publications, theses and internet addresses cannot be cited as references.

For on-line publications; DOI is the only acceptable on-line reference.

Examples for writing references (Please pay attention to punctuation marks):

• For the article

Surname (s) of the author (s) and the first letter (s) of the name (s), name of the article, journal name, year, volume, number, page number should be specified.

* Rempel D, Dahin L, Lundborg G. Pathophysiology of nerve compression syndromes: response of peripheral nerves to loading. *J Bone Joint Surg.* 1999; 81 (11): 1600-10.

• For the book

Author (s) surname (s) and first letter (s) of the name (s), chapter title, editor (s) name, book name, edition, city, publisher, year and pages should be specified.

* Kozin SH, Bishop AT, Cooney WP. Tendinitis of the wrist. In Cooney WP, Linscheid RL, Dobins JH, eds. *The wrist: diagnosis and operative treatment.* Vol. 2. St. Louis: Mosby, 1998. p. 1181-96.

Digital Object Identifier (DOI):

* Zhang M, Holman CD, Price SD, Sanfilippo FM, Preen DB, Bulsara MK. Comorbidity and repeat admission to hospital for adverse drug reactions in older adults: retrospective cohort study. *BMJ.* 2009 Jan 7; 338: a2752. doi: 10.1136/bmj.a2752.

Article types

Original research:

Prospective or retrospective, all kinds of experimental and clinical studies related to all fields of medicine. Abstract (In English, with an average of 200-250 words; It should consist of aim, materials and methods, results and conclusion sections), introduction, materials and methods, results, discussion / conclusion, acknowledgements, references.

Clinical review:

Prepared by invited authors. It should be prepared in a way to include the latest medical literature for all kinds of subjects showing medical characteristics. Abstract (Average 200-250 words, no sections, in English), headings related to the subject, references.

Case report:

These are rare articles that differ in diagnosis and treatment. Abstract (average 100-150 words; no sections; in English), introduction, case report, discussion, references.

Letter to the editor:

It is sent in response to articles published in the journal within the last year. It includes the different opinions, experiences and questions of the readers about the article.

There are no title and abstract sections. Does not contain figures and tables. It should be stated which article (number, date) is dedicated and the name, institution and address of the author should be found at the end. The reply to the letter is given by the editor or the authors of the article, again published in the journal.