



BALKAN MEDICAL JOURNAL

The Official Journal of Trakya University School of Medicine

Volume: 43

Issue: 1

January 2026

Editorial

News from Balkan Medical Journal

Servet Altay.

Invited Review

FMF: Pathogenesis, Genetics, and Epigenetics

Ugurlu et al.

Original Articles

Depressive Symptoms and Risk of Hearing Loss

Xie and Tang.

AI Algorithm for Automated Assessment of Echocardiographic Parameters: Ejection Fraction and Myocardial Motion

Gül et al.

Glycation Index Links to ICU Delirium

Shi et al.

Clinical Image

Familial Gorlin-Goltz Syndrome with *PTCH1* Mutation

Dudak et al.

Scientific Letter

Indomethacin-Responsive Headache and Long-Lasting Autonomic Symptoms

Talibov et al.

Letters to Editor

YOLOv11 Model for PCOS Diagnosis: A Significant Contribution with Insights for Clinical Implementation

Gianluca Mondillo.

In Response to: YOLOv11 Model for PCOS Diagnosis: A Significant Contribution with Insights for Clinical Implementation

Baihua Zhao.

Material Embolism to the Lungs

Çağlar Kaya.

ISSN 2146-3123 • EISSN 2146-3131



Indexed in SCI Expanded and PubMed/MEDLINE • Citation Abbreviation: **Balkan Med J**

www.balkanmedicaljournal.org

Cover Design: Zehra Atabey
Cover Image: Designed after the photography by Behiç Günelan.

(Sultan Bayezid II Complex: One of the Earliest Medical Schools, 1488, Edirne)

Editor-in-Chief

Servet ALTAY, MD

Department of Cardiology, Trakya University School of Medicine, Edirne, Türkiye
drservetaltay@gmail.com

Honorary Editor

Ahmet ULUGÖL, MD

Department of Pharmacology, Trakya University School of Medicine, Edirne, Türkiye

Zafer KOÇAK, MD

Department of Radiation Oncology, Trakya University School of Medicine, Edirne, Türkiye

Deputy Editors

Suat ERDOĞAN, PhD

Department of Medical Biology, Trakya University School of Medicine, Edirne, Türkiye

Selçuk KORKMAZ, PhD

Department of Biostatistics and Medical Informatics, Trakya University School of Medicine, Edirne, Türkiye

Ufuk USTA, MD

Department of Pathology, Trakya University School of Medicine, Edirne, Türkiye

Fethi Emre USTABAŞIOĞLU, MD

Department of Radiology, Trakya University School of Medicine, Edirne, Türkiye

Alperen VURAL, MD

Department of Otolaryngology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

Associate Editors

Naziye AK, MD

Department of Oncology, İstanbul University, İstanbul Faculty of Medicine, İstanbul, Türkiye

Mutlu ARAT, MD

Department of Haematology and Bone Marrow Transplantation Unit, Demiroğlu Bilim University Faculty of Medicine, İstanbul, Türkiye

Murat Mert ATMACA, MD

Clinic of Neurology, Sultan 2. Abdülhamid Han Training and Research Hospital, İstanbul, Türkiye

Mehmet ÇELİK, MD

Department of Endocrinology, Trakya University School of Medicine, Edirne, Türkiye

Mustafa ÇIKIRIKÇIOĞLU, MD, PhD, FETCS

Division of Cardiovascular Surgery, Department of Surgery, University Hospitals of Geneva, Geneva, Switzerland

Nihat Demirhan DEMİRKIRAN, MD, PhD

Kütahya Health Sciences University Faculty of Medicine, Orthopedics and Traumatology, Kütahya, Türkiye

Dragoslava DJERIC, MD, PhD

Department of Otolaryngology, University of Belgrade School of Medicine, Belgrade, Serbia

Marco FIORE, PhD

Department of Molecular Biology, Institute of Cellular Biology and Neurobiology, CNR, Rome, Italy

Hüseyin GÜDÜCÜOĞLU, MD

Department of Microbiology, Trakya University School of Medicine, Edirne, Türkiye

Fethi GÜL, MD

Department of Anesthesiology and Reanimation, Head Chief of Critical Care Medicine, Marmara University School of Medicine, İstanbul, Türkiye

Hakan GÜRKAN, MD, PhD

Diagnostics Center for Genetic Diseases, Trakya University School of Medicine, Edirne, Türkiye

Muhammet Bekir HACIOĞLU, MD

Department of Oncology, Trakya University School of Medicine, Edirne, Türkiye

Mert İlker HAYIROĞLU, MD

Clinic of Cardiology, Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Marko HAWLINA, MD, PhD

Department of Ophthalmology, University of Ljubljana School of Medicine, Ljubljana, Slovenia

Irena HOCEVAR-BOLTEZAR, MD, PhD

Department of Foniatri and Audiology, University of Ljubljana School of Medicine, Ljubljana, Slovenia

Edin HUSARIC, MD, PhD

Department of Pediatric Surgery, University Clinical Center, Tuzla, Bosnia and Herzegovina

Cihan İNAN, MD

Department of Obstetrics and Gynecology, Trakya University School of Medicine, Edirne, Türkiye

Yasemin KARAL, MD

Department of Pediatrics, Trakya University School of Medicine, Edirne, Türkiye

Darko KASTELAN, MD, PhD

Department of Endocrinology, University of Zagreb School of Medicine, Zagreb, Croatia

Şiran KESKE, MD,

Clinic of Infectious Diseases and Clinical Microbiology, Koç University School of Medicine, İstanbul, Türkiye

Ayça KIYKIM, MD

Department of Pediatric Immunology and Allergy, İstanbul University-Cerrahpaşa Cerrahpaşa School of Medicine, İstanbul, Türkiye

Shima MEHRABIAN, MD, PhD

Department of Neurology, University Hospital Alexandrovska, Sofia, Bulgaria

Pavle MIKLIC, MD

Department of Neurosurgery, University of Zagreb School of Medicine, Zagreb, Croatia

Deniz PALAMAR KADIOĞLU, MD

Department of Physical Therapy and Rehabilitation, İstanbul University-Cerrahpaşa, Cerrahpaşa School of Medicine, İstanbul, Türkiye

Berrin PAPILA, MD

Department of General Surgery, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

Sezgi SARIKAYA SOLAK, MD

Department of Dermatology, Trakya University School of Medicine, Edirne, Türkiye

Milan STANKOVIC, MD, PhD

Department of Otolaryngology, University of Nis School of Medicine, Nis, Serbia

Eda TAHİR TURANLI, PhD, MSc

Department of Molecular Biology and Genetics, Acıbadem University School of Medicine, İstanbul, Türkiye

Alparslan TURAN, MD

Department of Outcomes Research, Anesthesiology Institute, Cleveland Clinic, Cleveland, Ohio USA

İsmail Barış TÜRKBEY, MD

Department of Radiology, National Cancer Institute, NIH, Bethesda MD, USA

Serdal UĞURLU, MD

Department of Rheumatology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

Yeşim Hülya UZ, MD

Department of Histology and Embryology, Trakya University School of Medicine, Edirne, Türkiye

Irena VELCHEVA, MD, PhD

Department of Neurology, Medical University, Sofia, Bulgaria

Stanislav YANEV, MD, PhD

Department of Pharmacology, Bulgarian Academy of Sciences, Sofia, Bulgaria

Ozan AKÇA, MD, FCCM

Department of Anesthesiology & Perioperative Medicine, Johns Hopkins University, University of Louisville, Baltimore, Louisville, United States

Biostatistics Editor**Selçuk KORKMAZ, PhD**

Department of Biostatistics and Medical Informatics, Trakya University School of Medicine, Edirne, Türkiye

Ethics Editor**Berna ARDA, MD, PhD**

Department of History of Medicine and Medical Ethics, Ankara University School of Medicine, Ankara, Türkiye

Assistant Associate Editors**Gözde AKTÜRK, MD**

Department of Pharmacology, Trakya University School of Medicine, Edirne, Türkiye

Gökhan ÇEVİK, MD

Department of Urology, Trakya University School of Medicine, Edirne, Türkiye

Tuğcan Alp KIRKIZLAR, MD

Department of Hematology, Trakya University School of Medicine, Edirne, Türkiye

İdris KURT, MD

Department of Gastroenterology, Trakya University School of Medicine, Edirne, Türkiye

Ethem YILDIZ, MD

Department of Chest Diseases, Trakya University School of Medicine, Edirne, Türkiye

Sinemis Çetin DAĞLI, MD

Department of Public Health, Van Yüzüncü Yıl University, Van, Türkiye

Ulviye KIVRAK, MD

Clinic of Ophthalmology, University of Health Sciences Türkiye, Kartal Dr. Lütfi Kırdar City Hospital, İstanbul, Türkiye

Language Editing**ENAGO****Editorial Advisory Board****Eyüp Sabri AKARSU, MD**

Department of Pharmacology, Ankara University School of Medicine, Ankara, Türkiye

Serhan ALKAN, MD

Department of Pathology, Cedars Sinai Medical Center, Los Angeles, CA, USA

Farid ALIYEV, MD

Clinic of Cardiology, Baku Heart Center, Azerbaijan

Christian APFEL, MD, PhD

Department of Anesthesiology and Perioperative Care, University of California San Francisco, San Francisco, CA, USA

Stavros J. BALOYANNIS, MD, PhD

Department of Neurology, Aristotle University of Thessaloniki School of Medicine, Thessaloniki, Greece

George N. CHALDAKOV, MD, PhD

Department of Cell Biology, Medical University of Varna, Varna, Bulgaria

Anthony H. DICKENSON, MD, PhD

Department of Pharmacology, University College London, London, UK

Dan M. FLISS, MD, PhD

Department of Maxillofacial and Skullbase Surgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

Ahmet GÜRAKAR, MD

Department of Hepatology, Johns Hopkins School of Medicine, Baltimore, MD, USA

Todor KANTARDJIEV, MD, PhD

Department of Parasitology and Microbiology, National Centre Infectious and Parasitic Diseases, Bulgaria

Özgür KASAPÇOPUR, MD

Department of Pediatric Rheumatology, İstanbul University-Cerrahpaşa, Cerrahpaşa School of Medicine, İstanbul, Türkiye

Fahrettin KELEŞTİMUR, MD

Department of Endocrinology, Yeditepe University Hospitals, İstanbul, Türkiye

Nicholas G. KOUNIS, MD

Department of Cardiology, Patras University School of Medicine, Patras, Greece

George KOLIOS, MD, PhD

Department of Pharmacology, Democritus University of Thrace School of Medicine, Alexandroupolis, Greece

Ana MARUSIC, MD, PhD

Department of Anatomy & Research in Biomedicine and Health, University of Split, Split, Croatia

Ranko MLADINA, MD, PhD

Department of Rhinology, University of Zagreb School of Medicine, Zagreb, Croatia

Eugene N. MYERS, MD, FACS, FRCS Edin (Hon)

Department of ORL, Head-Neck & Maxillofacial Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Jean-Marc NABHOLTZ, MD, PhD

Clinical and Translational Research Division, Jean Perrin Comprehensive Cancer Centre, Clermont-Ferrand, France

Keiji OGUMA, MD, PhD

Department of Bacteriology, Okayama University School of Medicine, Okayama, Japan

Metin ÖZDEMİRLİ, MD

Professor of Pathology, MedStar Georgetown University Hospital Washington DC, United States

Mustafa TEKİN, MD

Division of Clinical and Translational Genetics, Dr. John T. Macdonald Foundation Department of Human Genetics, University of Miami Miller School of Medicine, Miami, FL, USA

Juan A. TOVAR, MD

Department of Pediatric Surgery, La Paz University Hospital, Madrid, Spain

Mark D. WALTERS, MD, PhD

Department of Gynecology and Obstetrics, Cleveland Clinic, Cleveland, OH, USA

Enver ZEREM, MD, MS, PhD

Department of Gastroenterology, University Clinical Center, Tuzla, Bosnia and Herzegovina

Please refer to the journal's webpage (www.balkanmedicaljournal.org) for "Editorial Policy", "Instructions to Authors" and "Instructions to Reviewers".

The Balkan Medical Journal and/or its editors are members of ICMJE, COPE, WAME, CSE and EASE, and follow their recommendations. The Balkan Medical Journal is indexed in Science Citation Index Expanded (Web of Science), Journal Citation Reports, PubMed/MEDLINE, PubMed Central, Scopus, EMBASE, DOAJ, Chemical Abstracts, CINAHL, EBSCO, J-Gate, GALE, ProQuest, Türk Medline, Türkiye Atıf Dizini, IdealOnline, Global Health, UDL-EDGE, Hinari, GOALI, ARDI, OARE, AGORA, TÜBİTAK ULAKBİM TR Index and CNKI.

Owner: Sedat Üstündağ On Behalf of Trakya University School of Medicine

Responsible Manager: Servet ALTAY



Publisher Contact

Address: Molla Gürani Mah. Kaçamak Sk. No: 21/1

34093 İstanbul, Türkiye

Phone: +90 (530) 177 30 97 / +90 (539) 307 32 03

E-mail: info@galenos.com.tr/yayin@galenos.com.tr

Web: www.galenos.com.tr

Publisher Certificate Number: 14521

Publication Date: January 2026

E-ISSN: 2146-3131

International scientific journal published monthly.

CONTENTS

Editorial

1 News from the Balkan Medical Journal: Moving to Monthly Publication

Servet Altay; Edirne, Türkiye

Invited Review

3 Familial Mediterranean Fever: A Comprehensive Review of Pathogenesis, Genetics, and Epigenetic Regulation

Serdal Ugurlu, Ozgur Can Kilinc, Ilker Karacan, Kerem Parlar; İstanbul, Türkiye

Original Articles

15 Depressive Symptoms and Risk of Hearing Loss Among Adults Aged 55 Years and Older: A Population-Based Study

Erjie Xie, Yuedi Tang; Sichuan, China

25 A Multimodular AI Algorithm for Automated Assessment of Left Ventricular Function in Ischemic Heart Disease: Ejection Fraction, Wall Motion, and Regional Myocardial Segmentation

Sidem Gül, Reşit Taşdemir, Beyza Açıkgöz, Hakan Duman, Hamza Hodzic, Sena Köker, Nazlı Erdemir, Mehmet Kıvrak; Rize, Malatya, Kastamonu, İstanbul, Kocaeli, Türkiye

38 Association Between Hemoglobin Glycation Index and Delirium Risk in Sepsis Patients in the Intensive Care Unit

Miao Shi, Hu Sun, Yong Ma, Cheng Chi; Beijing, Urumqi, China

Clinical Image

48 Gorlin-Goltz Syndrome with *PTCH1* Gene Mutation in a Family Presenting with Odontogenic Keratocysts

Muharrem Ergün Dudak, Mert Kırdemir, Burak Borlu; İzmir, Türkiye

Scientific Letter

50 Rare but Critical: Indomethacin-Responsive Headache with Long-Lasting Autonomic Symptoms

Tural Talibov, Meltem İnci, Esme Ekizoğlu, Betül Baykan; İstanbul, Türkiye

Letters to Editor

52 YOLOv11 Model for PCOS Diagnosis: A Significant Contribution with Clinical Insights

Gianluca Mondillo; Naples, Italy

54 In Response to: YOLOv11 Model for PCOS Diagnosis: A Significant Contribution with Clinical Insights

Baihua Zhao; Hunan, China

56 Not All Emboli are Thrombotic: The Silent Cement to the Lungs

Çağlar Kaya; Edirne, Türkiye

57 Erratum