

# Volume: 42

Issue: 1

# January 2025

# **Editorials**

3D Echo Advancements in Pulmonary Valve Diseases Kemaloğlu Öz and Badano. **Transdermal Drug Delivery** Aktürk and Gündüz.

**Invited Review** Autoinflammatory Bone Diseases

**Meta-analysis** Enteral-Parenteral Nutrition Post-Op for GI Cancer

# **Original Articles**

**Quercetin Alleviates ER Stress-Related Apoptosis Uremic Toxins Alter Atorvastatin Disposition Evaluating Newborn Screening Program for Cystic** Fibrosis in Türkiye Coksüer et al. Matrine's Mechanism in Inhibiting Breast Cancer Progression Association Between PALBI Grade and Mortality in

Patients with ARDS Ye et al.

# **Clinical Images**

**Cavernous Hemangioma of the Aqueduct of Sylvius** Yang and He. **Orbital Myositis During Anti-Tuberculosis Treatment** 

#### **Scientific Letters**

**High-Voltage Electrical Lung Injury** Čampar and Babić.

Trachelectomy After Supracervical Hysterectomy Totev et al.

FAVA Syndrome with Synovial Localization

Artificial Intelligence in Pediatric Nail Diseases: **Limitations and Prospects** Mondillo et al.

## Letters to the Editor

**Constrictive Pericarditis and COVID-19** Dos Santos et al. In response to "Constrictive Pericarditis Associated with COVID-19 or Vaccination" Kaya and Yalta.





Indexed in SCI Expanded and PubMed/MEDLINE • Citation Abbreviation: Balkan Med J www.balkanmedicaljournal.org

Cover Design: Zehra Atabey Cover Image: It is pictured in the photograph of Behiç Günalan.

(Sultan Bayezid II Complex: One of the Earliest Medical Schools, 148, Edirne)



## **Editor-in-Chief**

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

# **Honorary Editor**

Zafer KOÇAK, MD Department of Radiation Oncology, Trakya University School of Medicine, Edirne, Türkiye

Ahmet ULUGÖL, MD Department of Pharmacology, Trakya University School of Medicine, Edirne, Türkiye

#### **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

# Web and Social Media Editor

**Tuğba KEMALOĞLU ÖZ** Alice Springs Hospital, Australia

# **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 Şişli Memorial Hospital, İstanbul, Türkiye

Murat Mert ATMACA, MD Clinic of Neurology, Sultan 2. Abdülhamid Han Training and Research Hospital, İstanbul, Türkiye

Gamze Çan, MD Department of Public Health, Çanakkale Onsekiz Mart University School of Medicine, 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 Otology, 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, Istanbul, 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 PAPİLA, MD Department of General Surgery, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

Osman Ahmet POLAT, MD Department of Ophthalmology, Erciyes University Faculty of Medicine, Kayseri Türkiye

Sezgi SARIKAYA SOLAK, MD Department of Dermotology, 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

**Belgin ÜNAL, MD** Department of Public Health, Dokuz Eylül University School of Medicine, İzmir, 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

## Assistant Associate Editors

Gözde AKTÜRK, MD Department of Pharmacology, Trakya University School of Medicine, Edirne, Türkiye

Gökhan Çevik, MD Department of Urology, Trakya University School of Medicine, Edirne, Türkiye

Tuğcan Alp Kırkızlar, 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

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 KELEŞTIMUR, MD Department of Endocrinology, Erciyes University School of Medicine, Kayseri, 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.

The journal is printed on an acid-free paper.

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 Printing at: Trakya Üniversitesi Matbaası Edirne Teknik Bilimler M.Y.O Sarayiçi Yerleşkesi, 22020 Yeni İmaret, Edirne, Türkiye Phone: +90 (284) 224 02 83 Printing Date: January 2025 ISSN: 2146-3123 E-ISSN: 2146-3131 International scientific journal published bimonthly.

# CONTENTS

#### **Editorials**

- 1 Unlocking the Potential of Three-Dimensional Echocardiography for Diagnosing Pulmonary Valve Diseases Tuğba Kemaloğlu Öz, Luigi P. Badano; Alice Springs, Australia; Milan, Italy
- 3 Transdermal Drug Delivery: An Overview of the Evolving Field Gözde Aktürk, Özgür Gündüz; Edirne, Türkiye

#### **Invited Review**

#### 5 Autoinflammatory Bone Diseases

Fatih Haşlak, Nergis Akay, Ümit Gül, Aybüke Günalp, Elif Kılıç Könte, Sezgin Şahin, Özgür Kasapçopur; İstanbul, Türkiye

#### **Meta-analysis**

14 Efficacy and Safety of a Combination of Enteral and Parenteral Nutrition Support in the Postoperative Period for Patients with Gastrointestinal Cancer: A Systematic Review and Meta-Analysis

Meixiang Cai, Bo Yang, Yaping Zheng, Lei Ding; Changzhou, China

#### **Original Articles**

- 27 Quercetin Alleviates Hyperglycemic-Generated Endoplasmic Reticulum Stress-Contacted Apoptosis of Rat Nucleus Pulposus Cells Zhen Yu, Xianfeng Wang, Yusen Hu, Xinfa Wang, Zhenghuan Zhu, Xu Xu, Yiming Wang, Ailiang Zhang; Changzhou, Guiyang, China
- **37 How Uremic Toxins Alter Atorvastatin Disposition: Molecular Mechanisms of Inhibition of the Enzyme CYP3A4** *Ashna Asim, Fen Wang, Dong Pu, Sisi Wang, Dian Wang, Wenwen Li, Feng Yu, Li Ji; Nanjing, China*
- 45 Newborn Screening Program for Cystic Fibrosis in Türkiye: Experiences from False-Negative Tests and Requirement for Optimization Fevziye Çoksüer, Gökçen Kartal Öztürk, Handan Duman Şenol, Meral Barlık, Mehmet Mustafa Özaslan, Bahar Girgin Dindar, Ece Ocak, Ece Halis, Şükrü Atacan Öğütcü, Figen Gülen, Esen Demir, İzmir, Türkiye
- 54 Matrine Inhibits Breast Cancer Cell Proliferation and Epithelial-Mesenchymal Transition Through Regulating the LINC01116/miR-9-5p/ITGB1 Axis Lili Ren, Ziru Fang, Jiaojiao Xu, Xiaoxiao Wu, Yongjun Zhang, Hu Cai, Zhicun Han; Zhejiang, Hangzhou, China
- 66 Association Between Platelet-Albumin-Bilirubin Grade and the 30-Day Mortality in Patients with Acute Respiratory Distress Syndrome: Evidence from the MIMIC-IV Database

Dandan Ye, Wei Jiang, Deming Gu; Wuhu, China

#### **Clinical Images**

- 75 Intraventricular Peritoneal Shunt for Obstructive Hydrocephalus Caused by Cavernous Hemangioma of the Aqueduct of Sylvius Wei Yang, Chendong He; Nanjing, China
- 77 Orbital Myositis as a Paradoxical Reaction to Anti-Tuberculosis Treatment

Koichi Yano, Kyoko Yokosuka, Kiyomi Amemiya, Kentaro Sakashita, Takuto Ishida; Tokyo, Gifu, Japan

#### **Scientific Letters**

79 High-Voltage Electrical Lung Injury

Branko Čampar, Blagoje Babić; Podgorica, Montenegro

81 Trachelectomy After Supracervical Hysterectomy

Tihomir Pankov Totev, Georgi Danielov Prandzhev, Slavcho Tomov Tomov, Nadezhda Hristova Hinkova, Grigor Angelov Gortchev; Pleven, Bulgaria

- 83 FAVA Syndrome with Unique Synovial Localisation Mimicking Diffuse Pigmented Villonodular Synovitis Ufuk Usta, Meltem Ayyıldız Mercan, Gülşah Burgazdere, Fethi Emre Ustabaşıoğlu, Mert Çiftdemir; Edirne, Türkiye
- 86 Artificial Intelligence in Pediatric Nail Diseases: Limitations and Prospects

Gianluca Mondillo, Vittoria Frattolillo, Simone Colosimo, Alessandra Perrotta; Naples, Italy

#### Letters to the Editor

- 87 Constrictive Pericarditis Associated with COVID-19 or Vaccination
  Vitorino Modesto Dos Santos, Andressa Plaça Tedeschi, Laura Campos Modesto, Julia Campos Modesto; Brasília-DF, São Paulo-SP, Brazil
- 89 In response to "Constrictive Pericarditis Associated with COVID-19 or Vaccination"

Çağlar Kaya, Kenan Yalta; Edirne, Türkiye