



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TÜRKİYE

Volume 29, Issue 1,  
January 2025

# ENDOCRINOLOGY RESEARCH AND PRACTICE



Formerly Turkish Journal of Endocrinology and Metabolism

EISSN 2822-6135

**Owner on behalf of the Society of Endocrinology and Metabolism of Türkiye**

Mustafa Cesur

Yüksek İhtisas University Faculty of Medicine, Güven Hospital, Ankara, Türkiye

**Editor-in Chief**

Murat Faik Erdoğan

Ankara University Faculty of Medicine, Ankara, Türkiye

**Deputy Editor**

Dilek Gogas Yavuz

Marmara University Faculty of Medicine, İstanbul, Türkiye

**Associate Editors**

Neslihan Başçıl Tütüncü

Baskent University Faculty of Medicine, Ankara, Türkiye

Canan Özyardımcı Ersoy

Bursa Uludağ University Faculty of Medicine, Bursa, Türkiye

Fatih Tanrıverdi

Memorial Kayseri Hospital, Kayseri, Türkiye

**Statistical Consultant**

Tuğba Akkaya Hocaçil

Ankara University Faculty of Medicine, Ankara, Türkiye

Can Ateş

Aksaray University Faculty of Medicine, Aksaray, Türkiye

Beyza Doğanay

Ankara University Faculty of Medicine, Ankara, Türkiye

Levent Dönmez

Akdeniz University Faculty of Medicine, Antalya, Türkiye

Atilla Elhan

Ankara University Faculty of Medicine, Ankara, Türkiye

İrem Kar

Ankara University Faculty of Medicine, Ankara, Türkiye

Deniz Özel

Ankara University Faculty of Medicine, Antalya, Türkiye

Derya Öztuna Gökmen

Ankara University Faculty of Medicine, Ankara, Türkiye

**Language Editor**

Jennifer Gabriel

California, USA



**Founder**

İbrahim KARA

**General Manager**

Ali ŞAHİN

**Finance Coordinator**

Sinem Fehime İLHAN

**Journal Managers**

Deniz KAYA

Irmak BERBEROĞLU

**Publications Coordinators**

Derya AZER

Nisanur ATICI

Şeref Mert GÜCÜN

Arzu ARI

Lütfiye ÇETİN

**Publications Technologies**

**Coordinator**

Ayça Nur SEZEN

**Project Assistants**

Batuhan KARA

Ozan ŞAHİN

Editor in Chief: Murat Faik Erdoğan

Address: Meşrutiyet Cad. Ali Bey Apt.

29/12 Kızılay, Ankara, Türkiye

E-mail: murat.erdogan@temd.org.tr

Publisher: AVES

Address: Büyükdere Cad. 199/6, 34394,

Şişli, İstanbul, Türkiye

Phone: +90 212 217 17 00

E-mail: info@avesyayincilik.com

Webpage: <https://www.avesyayincilik.com/>

### International Editorial Board

**Mine Adaş**

*İstanbul Prof. Dr. Cemil Taşcıoğlu City Hospital, İstanbul, Türkiye*

**Ersin Akarsu**

*Gaziantep University Faculty of Medicine, Gaziantep, Türkiye*

**Müjde Aktürk**

*Gazi University Faculty of Medicine, Ankara, Türkiye*

**Maria Alevizaki**

*Emeritus Professor, Athens University Faculty of Medicine, Athens, Greece*

**İnan Anaforoğlu**

*Acıbadem Maslak Hospital, İstanbul, Türkiye*

**Ayşeğül Atmaca**

*Ondokuz Mayıs University Faculty of Medicine, Samsun, Türkiye*

**Mustafa Kemal Balcı**

*Emeritus Professor, Akdeniz University Faculty of Medicine, Antalya, Türkiye*

**David Baylink**

*Loma Linda University, California, USA*

**Taner Bayraktaroğlu**

*Zonguldak Bülent Ecevit University Faculty of Medicine, Zonguldak, Türkiye*

**Fahri Bayram**

*Erciyes University Faculty of Medicine, Kayseri, Türkiye*

**Jens Bollerslev**

*Oslo University Faculty of Medicine, Norway*

**Steen Joop Bonnema**

*Odense University Faculty of Medicine, Denmark*

**Mehmet Furkan Burak**

*Brigham and Women's Hospital and Harvard Medical School, Massachusetts, USA*

**Zeynep Cantürk**

*Kocaeli University Faculty of Medicine, Kocaeli, Türkiye*

**Felipe F. Casaneuva**

*Emeritus Professor, University of Santiago de Compostela, Spain*

**Asena Gökçay Canpolat**

*Ankara University Faculty of Medicine, Ankara, Türkiye*

**Roger Chen**

*St Vincent's Hospital, Sydney, Australia*

**Erman Çakal**

*Ankara Etilik City Hospital, Ankara, Türkiye*

**Bekir Çakır**

*Yıldırım Beyazıt University Faculty of Medicine, Ankara, Türkiye*

**Mehtap Çakır**

*Kent Hospital, İzmir, Türkiye*

**Özge Telci Çaklılı**

*Kocaeli City Hospital, Kocaeli, Türkiye*

**Şevki Çetinkalp**

*Ege University Faculty of Medicine, İzmir, Türkiye*

**Sema Çiftçi**

*Dr. Sadi Konuk Training and Research Hospital, İstanbul, Türkiye*

**Abdurrahman Çömleki**

*Dokuz Eylül University Faculty of Medicine, İzmir, Türkiye*

**Selçuk Dağdelen**

*Hacettepe University Faculty of Medicine, Ankara, Türkiye*

**Leonidas H Duntas**

*Evgenideion Hospital, University of Athens, Greece*

**Tomris Erbaş**

*Hacettepe University Faculty of Medicine, Ankara, Türkiye*

**Mehmet Erdoğan**

*Ege University Faculty of Medicine İzmir, Türkiye*

**Eda Ertörer**

*Başkent University Faculty of Medicine, Adana, Türkiye*

**John W. Funder**

*Monash University, Victoria, Australia*

**Hossein Gharib**

*Mayo Clinic, Minnesota, USA*

**Ezio Ghigo**

*University of Torino, Torino, Italy*

**Sait Gönen**

*İstanbul University-Cerrahpasa, Cerrahpasa Faculty of Medicine, İstanbul, Türkiye*

**Sevim Güllü**

*Ankara University Faculty of Medicine, Ankara, Türkiye*

**Zeliha Hekimsoy**

*Celal Bayar University Faculty of Medicine, Manisa, Türkiye*

**Sema Hepşen**

*Ankara Etilik City Hospital, Ankara, Türkiye*

**Larry Jameson**

*Perelman School of Medicine University of Pennsylvania, Philadelphia, USA*

**Pınar Kadioğlu**

*İstanbul University Cerrahpasa Faculty of Medicine, İstanbul, Türkiye*

**Zuleyha Karaca**

*Erciyes University Faculty of Medicine, Kayseri, Türkiye*

**Muhammed Kızılgül**

*University of Minnesota, Minneapolis, USA*

**Ayşe Kubat Üzüm**

*İstanbul University İstanbul Faculty of Medicine, İstanbul, Türkiye*

**Fahrettin Keleştimur**

*Yeditepe University Koşuyolu Hospital, İstanbul, Türkiye*

**Pierre J. Lefebvre**

*University of Liege Faculty of Medicine, Liege, Belgium*

**Süleyman Nahit Şendur**

*Hacettepe University Faculty of Medicine, Ankara, Türkiye*

**Connie Newman**

*NYU School of Medicine, New York, USA*

**Tae Sun Park**

*Chonbuk National University Medical School, Jeonju, Korea*

**Andreas F. H. Pfeiffer**

*Charité Universitaetsmedizin Berlin, Germany*

**Gilles Russ**

*La Pitie Salpetriere Hospital, France*

**İlhan Satman**

*İstanbul University Faculty of Medicine, İstanbul, Türkiye*

**Fusun Saygılı**

*Ege University Faculty of Medicine, İzmir, Türkiye*

**Rauf Shahbazov**

*State University of New York Upstate Medical University, Suny  
Upstate Medical, New York, USA*

**Meaghan Stumpf**

*University of Virginia School of Medicine, Virginia, USA*

**Alper Sönmez**

*Ankara Güven Hospital, Ankara, Türkiye*

**İbrahim Şahin**

*Memorial Şişli Hospital, İstanbul, Türkiye*

**Mustafa Şahin**

*Ankara University Faculty of Medicine, Ankara, Türkiye*

**Refik Tanakol**

*American Hospital, İstanbul, Türkiye*

**Kürşad Ünlühızcı**

*Erciyes University Faculty of Medicine, Kayseri, Türkiye*

**İrfan Vardarlı**

*Universitaetsmedizin Mannheim, Heidelberg University,  
Mannheim, Germany*

**Sema Yarman**

*Emeritus Professor, İstanbul University Faculty of Medicine,  
İstanbul, Türkiye*

**Dilek Yazıcı**

*Koç University Faculty of Medicine, İstanbul, Türkiye*

**Bülent Okan Yıldız**

*Hacettepe University Faculty of Medicine, Ankara, Türkiye*

**Former Editor-in Chiefs**

1997-2002 Prof. Dr. Taylan Kabalak

2003-2004 Prof. Dr. Gürbüz Erdoğan

2005-2006 Prof. Dr. Şazi İmamoğlu

2007-2008 Prof. Dr. Sema Akalın

2008-2022 Prof. Dr. Nilgün Başkal

### **About the Endocrinology Research and Practice**

Endocrinology Research and Practice (Endocrinol Res Pract) is a peer reviewed, open access, online-only journal published by the Society of Endocrinology and Metabolism of Türkiye.

Endocrinology Research and Practice is a quarterly journal that is published in English in January, April, July, and October.

### **Journal History**

As of 2023, the journal has changed its title to Endocrinology Research and Practice. Previous title (1997-2022) was Turkish Journal of Endocrinology and Metabolism (EISSN: 1308-9846).

### **Abstracting and indexing**

Endocrinology Research and Practice is covered in the following abstracting and indexing databases; Web of Science – Emerging Sources Citation Index, Scopus, CINAHL, Directory of Open Access Journals (DOAJ), EBSCO, Embase, TUBITAK ULAKBIM TR Index, Gale.

All content published in the journal is permanently archived in Portico.

### **Aims, Scope, and Audience**

Endocrinology Research and Practice aims to publish studies of the high scientific value and encourages the submission of high-quality research that advances the understanding and treatment of endocrinological and metabolic conditions.

Endocrinology Research and Practice covers a wide range of topics related to thyroid, obesity, diabetes, osteoporosis, lipid metabolism and pituitary. The journal is interested in publishing original research that addresses important clinical questions and advances the understanding and treatment of these conditions. This may include studies on the effectiveness of different treatments, new diagnostic tools or techniques, and novel approaches to endocrinology and metabolism. Starting from July 2022, Endocrinology Research and Practice does not consider manuscripts on pediatric endocrinology for publication, unless they are related with the adulthood transition.

Endocrinology Research and Practice publishes clinical articles, case reports, reviews, scientific letters, short reports, and technical reports and letters to the editor. Conference proceedings may also be considered for publication.

Studies based on animal experiments or conducted with entirely in vitro molecular methods (excluding translational human studies) will not be considered for publication.

The target audience of the journal includes healthcare professionals, physicians, and researchers who are interested in or working in the endocrinology and metabolism field, and related disciplines.

### **Open Access Policy**

Endocrinology Research and Practice is an open access publication.

Starting on March 2020, all content published in the journal is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA) 4.0 International License which permits third parties to share and adapt the content for non-commercial purposes by giving the appropriate credit to the original work. In case of adaptation (remix, transform, or build upon), the contributions should be distributed with the same license as the original.

The content published before March 2020 was licensed under a traditional copyright, but the archive is still available for free access.

All published content is available online, free of charge at [endocrinolrespract.org](http://endocrinolrespract.org).

When using previously published content, including figures, tables, or any other material in both print and electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s).

### **Copyright Policy**

A Copyright Agreement and Acknowledgement of Authorship form should be submitted with all manuscripts. By signing this form, authors agree that the article, if accepted for publication by the Endocrinology Research and Practice will be licensed under a the Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA) 4.0 International License which permits third parties to share and adapt the content for non-commercial purposes by giving the appropriate credit to the original work. In case of adaptation (remix, transform, or build upon), the contributions should be distributed with the same license as the original.

When using previously published content, including figures, tables, or any other material in both print and electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s).

Authors retain the copyright of their published work in the Endocrinology Research and Practice.

### **Publication Fee Policy**

Endocrinology Research and Practice is funded by the Society of Endocrinology and Metabolism of Türkiye (SEMT). Authors are not required to pay any fees during the evaluation and publication process.

## CONTENTS

### Editorial

- 1** A Warm Welcome to 2025 with Curiosity, Collaboration, and Compassion Guiding us Trough Years  
Murat Faik Erdoğan

### Original Articles

- 3** The Rate and Associated Factors of Overbasalization in Patients with Type 2 Diabetes Mellitus in a Tertiary Hospital  
Sema Hepşen, Hayri Bostan, Ümran Gül, Serdar Kayihan, Gizem Ertepe Küçükğöde, Pınar Akhanlı, Özgür Özçelik, İlkur Öztürk Ünsal, Bekir Uçan, Muhammed Kızılgül, Mustafa Özbek, Erman Çakal
- 9** Prevalence of Obesity and Dyslipidemia in Maturity Onset Diabetes of the Young Patients  
Murat Calapkulu, İlkur Ozturk Unsal, Muhammed Erkam Sencar, Davut Sakiz, Mustafa Ozbek, Erman Cakal
- 15** Validity of Fasting Plasma Glucose in Reference to HbA1c for the Detection of Diabetes in an Overweight and Obese Population in Sri Lanka  
Upul Senarath, Prasad Katulanda, Nishan S. Kalupahana, Kunarathinam Partheepan, Gaya Katulanda
- 22** An Investigation of Long-Term Changes in Biometric and Biochemical Parameters in a Retrospective Cohort Using Uninterrupted SGLT-2 Inhibitor Therapy  
Emre Vuraloglu, Merve Alyamac Yasar, Esra Borazan, Altug Kut, Ayse Yavuz Derman, Özlem Turhan İyidir
- 30** The Relationship Between Serum Growth Hormone, Seminal Plasma Growth Hormone, and Sperm Parameters in Patients with Acromegaly in Remission  
Ebru Cicek, Cem Sulu, Hande Mefkure Ozkaya, Serdar Sahin, Dildar Konukoglu, Hamdi Ozkara, Rosario Pivonello, Pinar Kadioglu
- 36** Nesfatin-1, Kisspeptin, 5-Alpha Reductase-1, and Aromatase in Men with Metabolic Syndrome and Hypogonadism  
Halil Güner, Güzin Fidan Yaylalı, Mücahit Seçme, İbrahim Açıkbaş, Hande Şenol

### Review

- 43** Growth Hormone Deficiency in Adults  
Emre Urhan, Kursad Unluhizarci, Fahrettin Kelestimur

### Invited Reviews

- 52** Navigating Bone Health in Chronic Kidney Disease: A Comprehensive Review of CKD-MBD and Osteoporosis  
Ozlem Turhan İyidir
- 59** What is New in Multiple Endocrine Neoplasia Type 2?  
Mehtap Çakır

### Case Report

- 69** A Rare Co-occurrence of Acromegaly and Attenuated Familial Adenomatous Polyposis in a Young Patient: A Case Report and Review of Colonoscopy Screening Recommendations in Acromegaly  
Halil Durantas, Sema Hepşen, Ogulcan Boz, Hanife Saat, Harun Erdal, Erman Cakal

### Letter to the Editor

- 73** Comment on: Vertebral Fractures Increase the Long-Term Mortality of Patients with Coronavirus Disease 2019  
Ersen Karakilic, Emre Sedar Saygili

**Author's Response**

- 75** Vertebral Fractures Increase the Long-Term Mortality of Patients with COVID-19  
Cem Sulu, Esra Aktas, Serdar Sahin, Emre Durcan, Sebuğ Kurugoglu,  
Pinar Kadioglu, Hande Mefkure Ozkaya

**Letter to the Editor**

- 77** In the Case of HbA1c Variability, Could Predicted HbA1c Be An Alternative?  
Abdulrahman Naser

**Author's Response**

- 79** Author(s)' Response to Comments on "Effect of Iron Deficiency Anemia on HbA1c in Non-Diabetics:  
An Analytical Study from Eastern India"  
Nebedita Dutta, Arindam Ghosh

- 81** Erratum

- 82** Reviewer Acknowledgement