

JOURNAL OF PEDIATRIC ENDOCRINOLOGY AND METABOLISM

OFFICIAL JOURNAL OF THE GERMAN SOCIETY FOR PEDIATRIC
AND ADOLESCENT ENDOCRINOLOGY AND DIABETOLOGY

EDITOR-IN-CHIEF

Clemens Kamrath, Freiburg

FOUNDING EDITOR

Harry J. Hirsch, Jerusalem

HONORARY EDITOR

Zvi Laron, Petah Tikva

Zvi Zadik, Rehovot

ASSOCIATE EDITORS

Abdullah Bereket, Istanbul

Mehul Dattani, London

Jan Idkowiak, Birmingham

Sebastian Kummer, Duesseldorf

Feihong Luo, Shanghai

Raja Padidela, Manchester

Burcu Öztürk-Hişmi, Istanbul

Annette Richter-Unruh, Dortmund

Serhap Turan, Istanbul

EDITORIAL BOARD

Tadej Battelino, Ljubljana

Claudia Boettcher, Berne

Fernando Cassorla, Santiago de Chile

George Chrousos, Athens

Wayne Cutfield, Auckland

Johnny Deladoey, Montreal, QC

Rasha Tarif Hamza, Cairo

Eli HersHKovitz, Beersheba

Beate Karges, Aachen, Germany

Stephen LaFranchi, Portland, OR

Roberto Lanes, Caracas

Warren Lee, Singapore

Angelika Mohn, Chieti

Margaret Zacharin, Melbourne

MANAGING EDITOR

Anna Kirstein, Leipzig

DE GRUYTER

Please see the journal's homepage for Abstracting & Indexing Services information.

The publisher, together with the authors and editors, has taken great pains to ensure that all information presented in this work (programs, applications, amounts, dosages, etc.) reflects the standard of knowledge at the time of publication. Despite careful manuscript preparation and proof correction, errors can nevertheless occur. Authors, editors and publisher disclaim all responsibility for any errors or omissions or liability for the results obtained from use of the information, or parts thereof, contained in this work. The citation of registered names, trade names, trademarks, etc. in this work does not imply, even in the absence of a specific statement, that such names are exempt from laws and regulations protecting trademarks etc. and therefore free for general use.

ISSN 0334-018X · e-ISSN 2191-0251

All information regarding notes for contributors, subscriptions, Open access, back volumes and orders is available online at www.degruyter.com/jpem.

RESPONSIBLE EDITOR(S) Prof. Dr. Clemens Kamrath, Professor and Head of the Division of Pediatric Endocrinology and Diabetes, Centre of Child and Adolescent Health, University of Freiburg, Freiburg, Germany, e-mail: clemens.kamrath@uniklinik-freiburg.de

PUBLISHER Walter de Gruyter GmbH, Berlin/Boston, Genthiner Str. 13, 10785 Berlin, Germany

JOURNAL MANAGER Heike Jahnke, De Gruyter, Genthiner Str. 13, 10785 Berlin, Germany,
Tel.: +49 (0)30 260 05 – 220, e-mail: heike.jahnke@degruyterbrill.com

© 2025 Walter de Gruyter GmbH, Berlin/Boston

TYPESETTING TNQ Tech Private Limited, Chennai, India

PRINTING Franz X. Stücker Druck und Verlag e.K., Ettenheim

COVER ILLUSTRATION Medicalpicture/Friedhelm Achenbach

Questions about General Product Safety Regulation: productsafety@degruyterbrill.com



Contents

Original Articles

Clemens Kamrath, Alexander J. Eckert, Sarah Lignitz, Nikolas Hillenbrand, Axel Dost, Katharina Warncke, Daniela Klose, Karina Grohmann-Held, Reinhard W. Holl and Joachim Rosenbauer

Spatiotemporal associations between incidence of type 1 diabetes and COVID-19 vaccination rates in children in Germany – a population-based ecological study — 1117

Jessica L. Ruiz, Lisa A. Asaro, Allison S. Bernique, Elizabeth Healey, Jocelyn A. Silvester, David Wypij, Michael S.D. Agus and Christina M. Astley
Continuous glucose monitoring evidence of celiac disease in type 1 diabetes — 1126

Adriana Chader-Gata Garcia, Komalpreet Kaur, Rashida Talib, Parissa Salemi, Joanna Fishbein and Benjamin Udoka Nwosu
Impact of race and delayed adoption of diabetes technology on glycemia and partial remission in type 1 diabetes — 1135

Rasha Odeh, Abeer Alassaf, Hussam Alhawari, Hanan Jafar, Abdalla Awidi, Farah Bani Hani and Malik Sallam
Immunogenetic profiling of type 1 diabetes in Jordan: a case-control study on HLA-associated risk and protection — 1144

Phoebe Wamalwa, Lucy Mungai, Paul Laigong, Anjumanara Omar and Prisca Amolo
Annual case counts and clinical characteristics of pediatric and adolescent patients with diabetes in Kenyatta National Hospital, Nairobi, Kenya. A 14 year retrospective study — 1154

Michal Timkovski, Dhruva Patel, Elizabeth A. Brown, Bliss Magella, Amy S. Shah and Risa M. Wolf
Real-world effectiveness of sodium glucose transporter 2 inhibitors among youth with type 2 diabetes — 1161

Sevde Hasanoğlu Sayın, İbrahim Kandemir, Yasemin Oyacı, Shahri Khudiyeva, Memduh Şahin, Aylin Yetim Şahin and Sacide Pehlivan
Investigation of the association between nitric oxide synthase gene variants and NAFLD in adolescents with obesity — 1169

Gülcan Seymen, Murat İmal and Şükrü Hatun
Cardiometabolic outcomes in girls with premature adrenarche: a longitudinal analysis of typical vs. exaggerated presentations — 1179

Bahattin Erdoğan, Gonca Kılıç Yıldırım, Ezgi Susam and Aziz Serhat Baykara
A disease that is difficult to predict: regional distribution and phenotypic, histopathological and genetic findings in McArdle disease — 1187

Yi Gao and Fengfeng Qi
Causal analysis of uterine artery pulsatility index-related proteins and the risk of precocious puberty in girls: a Mendelian randomization study — 1195

Case Reports

Meliha Esra Bilici, Zeynep Şıklar, Elif Özsu, Serdar Ceylaner, Zehra Aycan, Rukiye Uyanık and Merih Berberoğlu
Understanding rickets in osteopetrosis via a case: mechanisms and treatment implications — 1209

Céline De Cuyper, Willem Staels, Siel Daelemans, Jesse Vanbesien, Elise Nauwynck and Inge Gies
A case of *JAGN1* mutation presenting with atypical diabetes and immunodeficiency — 1217

Panagiota Markopoulou, Amalia Sertedaki, Eirini Nikaina, Maria Binou, Ioanna Farakla, Tania Siahaidou and Christina Kanaka-Gantenbein
Compound heterozygous *ROBO1* gene variants in a neonate with congenital hypopituitarism, dysmorphic features and midline abnormalities: a case report and review of the literature — 1224

Yuko Seki, Haruna Kakimoto, Izumi Tamada, Shozo Oku, Satoshi Morita, Minako Tokunaga, Michiyo Mizota, Naoko Amano, Noboru Uchida, Tomonobu Hasegawa and Yasuhiro Okamoto
Phenotypic variation among four members in a family with *DAX1* deficiency — 1237

Abdulkirim Kolkiran, Tuğba Daşar and Abdullah Sezer
MMP13-related metaphyseal dysplasia: a differential diagnosis of rickets — 1241

ONLINE ONLY: CONGRESS ABSTRACTS

[https://www.degruyter.com/view/j/jpem.2025.38.issue-11/
issue-files/jpem.2025.38.issue-11.xml](https://www.degruyter.com/view/j/jpem.2025.38.issue-11/issue-files/jpem.2025.38.issue-11.xml)

Congress Abstracts

**JA-PED | Annual Meeting of the German Society for
Pediatric and Adolescent Endocrinology and Diabetology
(DGPAED e. V.)**

KONGRESSHALLE am Zoo Leipzig, Leipzig,
November 13–15, 2025 — **eA1**