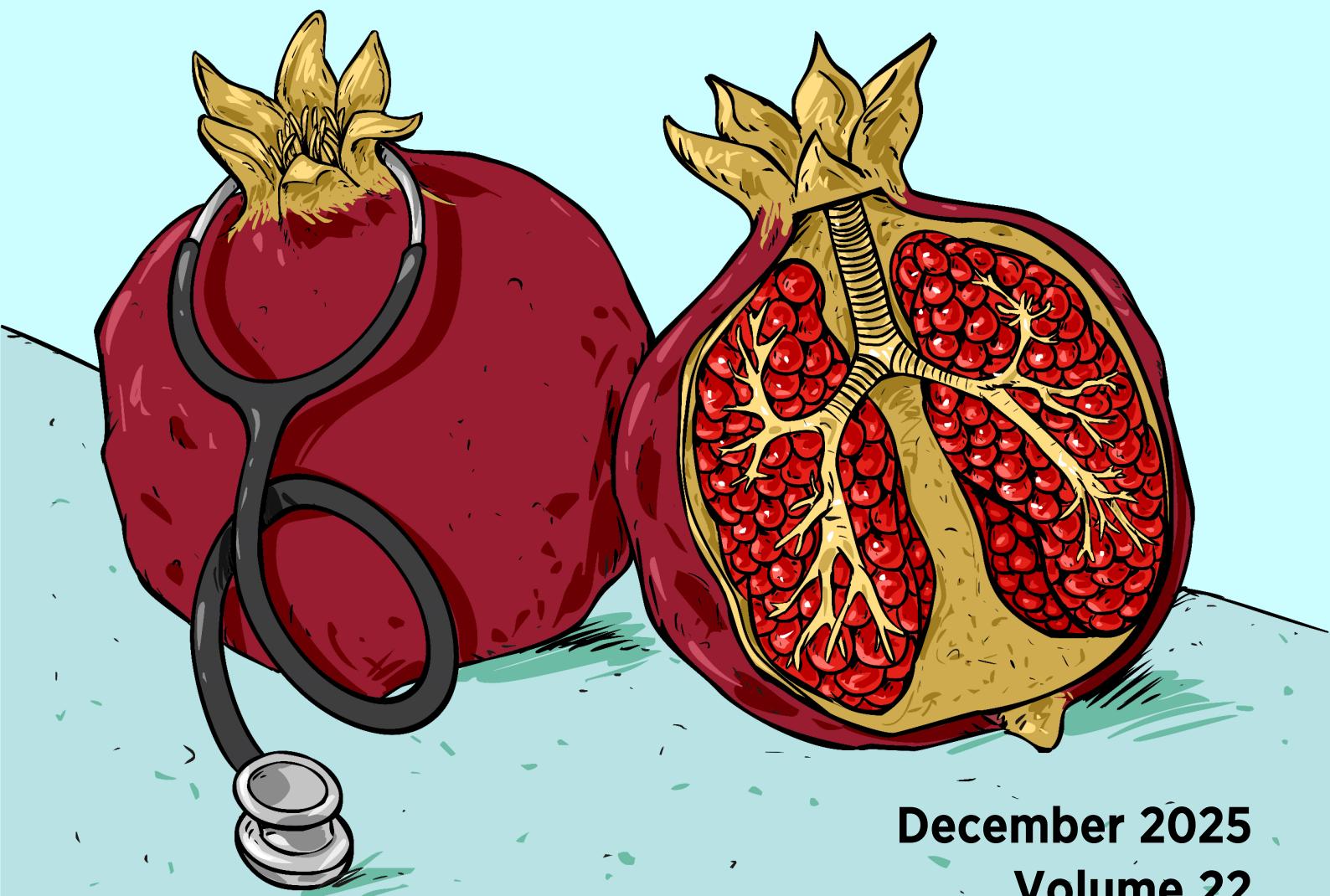


ISSN: 2516-3507

ELECTRONIC JOURNAL OF GENERAL MEDICINE



December 2025
Volume 22
Issue 6

Published by: **Modestum**

Publication Office: Modestum LTD, 29 Gildredge Road, Eastbourne, East Sussex, BN21 4RU, United Kingdom

Serbia Office: Modestum DOO, Bulevar Zorana Đindića 125D, sprat 1, stan 12C, 11070 Belgrade, SERBIA

Phone: +381 61 6600107

Email: publications@modestum.co.uk

Publisher: <https://www.modestum.co.uk>

Journal Web: <https://www.ejgm.co.uk>

© 2004-2025. All rights reserved by Modestum. Copyright for Open Access Content is Retained by Authors. Also, authors continue to hold the copyrights of their own papers by acknowledging that their papers are originally published in the Electronic Journal of General Medicine. Hence, articles published are licensed under a "Creative Commons Attribution 4.0 International License."

ISSN: 2516-3507 (Online)

ELECTRONIC JOURNAL OF GENERAL MEDICINE

December 2025

Volume 22

Issue 6



This page is intentionally left blank

ELECTRONIC JOURNAL OF GENERAL MEDICINE

Electronic Journal of General Medicine (*Abbrev. Electron J Gen Med*) is an English multidisciplinary double-blind peer-reviewed open-access medical journal publishing articles in the fields of general medicine with ISSN 2516-3507. **Electronic Journal of General Medicine** is published bimonthly (February, April, June, August, October and December).

Electronic Journal of General Medicine encourages submissions from all authors throughout the world. Manuscripts are judged by two experts solely on the basis of their contribution of original data, ideas and their presentation. All manuscripts must comply with Manuscript Preparation Guidelines and Publication Ethics. The following articles will be considered for publication: editorials, original and review articles, brief reports/short communications, case reports, letters to the editor, interviews, and book reviews. Submitted manuscripts must not have been published, accepted for publication or be under consideration elsewhere.

COPYRIGHT & LICENSING

Articles are published under the [Creative Commons Attribution License](#). Authors do not have to transfer copyright to the journal or publisher and retain ownership of their articles. They grant **Modestum** the license to publish the work as the original publisher.

Authors are not allowed to use copyrighted material in their articles unless explicit permission from the copyright holder is received to reproduce the material under [Creative Commons Attribution License](#). Authors or their institution/company cannot reserve particular use rights, and the publisher cannot insert a declaration in any published document stating, "all rights reserved."

As a result, everyone is free to use, copy, distribute, transmit, and adapt the work, if the article's original authors and citation information are acknowledged.

AIMS AND SCOPE

Electronic Journal of General Medicine publishes original articles in the following areas:

Basic Sciences

- Anatomy
- Biophysics
- Biostatistics
- Physiology
- Histology and Embryology
- Medical Biochemistry
- Medical Biology
- Biostatistics
- Medical Education and Informatics
- Medical Microbiology
- Medical History and Ethics

Medical Sciences

- Cardiology
- Chest Diseases
- Emergency Medicine
- Family Medicine
- Forensic Medicine
- Infectious Diseases and Clinical Microbiology
- Internal Medicine
- Medical Genetics
- Medical Pharmacology
- Neurology
- Nuclear Medicine Pediatrics
- Public Health
- Radiation Oncology
- Radiology
- Sports Medicine
- Child and Adolescent Psychiatry
- Dermatology
- Physical Medicine and Rehabilitation
- Psychiatry

Surgical Sciences

- Anesthesiology and Reanimation
- Pediatric Surgery
- General Surgery
- Chest Surgery
- Cardiovascular and Thoracic
- Ophthalmology
- Obstetrics and Gynecology
- Otorhinolaryngology
- Neurosurgery
- Orthopedics and Traumatology
- Medical Pathology
- Plastic Reconstructive and Aesthetic Surgery
- Urology

INDEXING AND ABSTRACTING

Electronic Journal of General Medicine is indexed and/or abstracted in:

- Web of Science – Emerging Sources Citation Index (ESCI)
- Scopus
- ROAD
- CINAHL
- EBSCO-Academic Research Complete
- EBSCO-Academic Research Alumni Edition
- EMBASE
- CAB Abstracts
- Library Ru
- Bioline International
- Scilit
- Chemical Abstracts Service
- Academic Search Complete
- CrossRef
- Google Scholar

All articles are archived by:

- The British Library
- Portico

EDITORIAL BOARD

Editors

Abduzhappar Gaipov, Nazarbayev University, School of Medicine, Nur-Sultan, Kazakhstan

Marcos Roberto Tovani-Palone, University of São Paulo, Ribeirão Preto, SP, Brazil

Associate Editors

Alin Laurentiu Tatu, Clinical Medical Department, Dunarea de Jos University of Galati, Romania

Davor Štimac, Department of Gastroenterology, Clinical Hospital Centre Rijeka, University of Rijeka, Croatia

Kristiyan Georgiev (2022-2027), University Hospital for Multidisciplinary Active Treatment "Sveta Marina" Varna, Bulgaria & Department of Neurological Ohio, of Neurological diseases and Neurosciences, Medical University of Varna, Bulgaria

Namrata Singhania (2020-2025), Department of Hospital Medicine, Mount Carmel East Hospital, Columbus, Ohio, USA & Family Medicine, Ohio University Heritage College of Osteopathic Medicine, Athens, Ohio, USA

Olivera M Knežević, Faculty of Sport and Physical Education, University of Belgrade, Serbia

Editorial Board Members

Abdulbaki "Baki" Agbas, Department of Basic Sciences, College of Osteopathic Medicine, Kansas City University of Medicine and Biosciences, USA

Adi Pinkas, Department of Pathology, Albert Einstein College of Medicine, USA

Ahmed El-Nawawy, Pediatrics & Pediatric Critical Care, Alexandria University, Egypt

Ahmed Abushahin, Pediatric Pulmonology, Sidra Medicine, Doha, Qatar

Aleksa Igić, Department of Interventional Radiology, University Clinical Center of Serbia, Belgrade, Serbia

Alfio Ferlito, Department of Surgical Sciences, School of Medicine, University of Udine, Italy

Ali Mohammad Ibrahim Al-Radaideh, Department of Medical Imaging, Faculty of Applied Health Sciences, The Hashemite University, Jordan

Bhagath Kumar Potu, Department of Anatomy, Arabian Gulf University, Kingdom of Bahreyn

Bilal Lashari, Pulmonary and Critical Care Medicine, Temple University Hospital, Philadelphia, USA

Birnur Yılmaz, Department of Radiology, Okan University Hospital, Turkey

BMDB Basnayake, Nephrology and Transplant Unit, National Hospital Kandy, Sri Lanka

Branka Marković, Department of Anatomy, Faculty of Sports and Physical Education, University of Belgrade, Belgrade, Serbia

Cheng-Wei Liu, Department of Internal Medicine, Tri-Service General Hospital Songshan Branch, National Defense Medical Center, Taipei, Taiwan & Graduate Institute of Clinical Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan

Chinna Nneka Orish, Department of Anatomy, College of Health Sciences, University of Port Harcourt, Nigeria

Dagmar Eigner, Medical Anthropology, Medical University of Vienna, Austria

David W. Holt, Bioanalytics, St George's University of London, UK

Dejan Marković, Department of Pediatric and Preventive Dentistry, School of Dental Medicine, University of Belgrade, Serbia

Demian Arturo Herrera Morban, Hospital Infantil Dr Robert Reid Cabral, Dominican Republic

Eliane Trovatti, School of Biotechnology in Regenerative Medicine and Medicinal Chemistry, University of Araraquara (UNIARA), Brazil

Erwin Hernando Hernández Rincón, Department of Family Medicine and Public Health, Universidad de La Sabana, Spain

Gabriela Sanchez-Petitto, Department of Stem Cell Transplant and Cellular Therapy, The University of Texas M.D. Anderson Cancer Center, USA

George P. Patrinos, Department of Pharmacy, University of Patras, Greece

Georgia Gioula, Medical Microbiology, Aristotle University of Thessaloniki, Greece

Gerard Criner, Thoracic Medicine and Surgery, Lewis Katz School of Medicine at Temple University, USA & Temple Lung Center, USA

Gernot Schulte-Altedorneburg, Department of Neuroradiology, University of Munich, Germany

Gianluigi Bisleri, Cardiac Surgery, The KGH Research Institute (KGHRI) & Queen's University, Canada

Giovanni Impronta, Department of Public Health, University of Naples "Federico II", Italy

Gregory G. Homish, Department of Community Health and Health Behavior, University of Buffalo, USA

Harunor Rashid, Specialty of Child and Adolescent Health, The University of Sydney, Australia

Hilal Hizli Guldemir, Department of Nutrition and Dietetics, Anadolu University, Turkiye

Hyeon Ju Kim, Department of Family Medicine, Jeju National University, Republic of Korea

Jagoš Golubović, Clinic of Neurosurgery, University of Novi Sad, Serbia

Joe James, Department of Neurology, Government Medical College Kozhikode, India

Joseph Inungu, Central Michigan University, USA

Jovana Rosić, Department of Genetics & Evolution, Faculty of Medicine, University of Belgrade, Serbia

Khodabakhsh Javanshir, Department of Physiotherapy, Babol University of Medical Sciences, Iran

Magdalena Lachowska, Department of Otorhinolaryngology, Medical University of Warsaw, Poland

Makram Koubaa, Department of Infectious Diseases, Hedi Chaker University Hospital, Tunisia

Marcio José Concepción-Zavaleta, Endocrinology and Metabolism, Perú

Marko Miladinov, Clinic for Digestive Surgery—First Surgical Clinic, University Clinical Center of Serbia, Belgrade, Serbia

Maryam Baradaran Binazir, Community Medicine, Tabriz University of Medical Science, Iran

Masaru Tanaka, Neuroscience Research Group, University of Szeged, Hungary

Mohammad Asif Hussain, Biomedical, King Abdulaziz University, Saudi Arabia

Naotaka Hamasaki, Department of Clinical Chemistry and Laboratory Medicine, Kyushu University School of Medicine, Fukuoka, Japan & Faculty of Pharmaceutical Sciences, Nagasaki International University, Sasebo, Nagasaki, Japan

Nicolino Ambrosino, Scientific Director of Auxilium Vitae Volterra, Italy

Nikola M Stojanović, Venter for Mental Health Protection, University Clinical Centre Niš, Serbia

Ohnmar Htwe, Department of Orthopaedics and Traumatology, University Kebangsaan Malaysia, Malaysia

Osama H. Al-Jiffri, Department of Medical Laboratory Technology, Faculty of Applied Medical Sciences, King Abdulaziz University, Saudi Arabia

Patil Shital, Pulmonary Medicine, MIMSR Medical College, India

Petar Avramovski, Internal Medicine, Higher Medical School, JZU Clinical Hospital "Dr. Trifun Panovski", Republic of Macedonia

Praveen Kumar Potukuchi, University of Tennessee, USA

Rahmat A. Khan, Department of Biotechnology, University of Science and Technology Bannu, Pakistan

Raida Ben Salah, Internal Medicine, Hédi Chaker University Hospital, Tunisia

Rajendra Shrestha, Department of Neurosurgery, West China Hospital, Sichuan University, China

Rizwan Ishtiaq, Department of Gastroenterology, Beth Israel Deaconess Medical Center, USA

Roger W. Byard, Forensic Science SA and the School of Biomedicine, The University of Adelaide, Australia

Seyhan Hasirci, Sport Psychology, Nisantasi University, Türkiye

Shigeyuki Kano, Department of Tropical Medicine and Malaria, National Center for Global Health and Medicine in Japan, Japan

Simona Gurzu, University of Medicine and Pharmacy of Tîrgu Mureş, Romania

Suhail Ahmad, Nephrology, NorthWest Kidney Center, University of Washington, USA

Su-Ying Tsai, Department of Health Management, I-Shou University, Taiwan

Suzana Otašević, Department of Microbiology and Immunology, University of Niš, Niš, Serbia

Udai P. Singh, Department of Pharmaceutical Sciences, The University of Tennessee Health Science Center, USA

Vesna Stojanović, Department of Pediatrics, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia

Vaysel Kayser, Sydney School of Pharmacy, Faculty of Medicine and Health, The University of Sydney, Australia

Vincenzo Russo, Cardiology Unit, Department of Medical Translational Sciences, University of Campania "Luigi Vanvitelli", Italy

Viroj Wiwanitkit, Department of Laboratory Medicine, Chulalongkorn University, Thailand & Department of Biological Science, Joesph Ayobabalola University, Ikeji-Arakeji, Nigeria

Vladimir J. Šimunović, Department of Family Medicine, University of Split, Republic of Croatia

Yogesh Shejul, Radiation Medicine, Bhabha Atomic Research Centre Hospital, India

Editorial Assistant

Aleksandra Piljak, MSc, Modestum DOO, Serbia

CONTENTS

Review Article

The impact of artificial intelligence on precision medicine and personalized oncology: A systematic review with narrative synthesis em689
Muayyad Ahmad
<https://doi.org/10.29333/ejgm/17046>

Original Article

Combined analysis of health flow data assessment and local surveillance in industrial areas em690
Mario Negrone, Michele Greco, Francesco Arbia, Antonio Sinisgalli
<https://doi.org/10.29333/ejgm/17047>

Original Article

Genetic association between methionine sulfoxide reductase B1 polymorphisms and risk of noise-induced hearing loss em691
Hanin Alwaqfi, Safa Alqudah, Amjad A Mahasneh, Margaret Zuriekat
<https://doi.org/10.29333/ejgm/17048>

Review Article

Retronymchia: A comprehensive review of etiologies, clinical manifestations, diagnostics, and management em692
Maryam M. Alfaraj, Almakrami Mohammed, Ziyad A. Aljabr, Aljawharah K. Alsaleh, Shahad K. Al-Ghanem, Shatha A. Alotaibi, Juman O. Alammar, Sara H. Al Breiki
<https://doi.org/10.29333/ejgm/17168>

Case Report

Integration of artificial intelligence in the diagnosis of cervical tuberculous lymphadenitis: A case study em693
Herodes Ramírez-Ramírez, Yaneya Acosta-Aguirre, David Zapata-Hernández, Susely Figueroa-Iglesias, Pedro Martínez-Lozano, Juan Nicolás Cuenca-Zaldívar, Eleuterio Atanasio Sánchez Romero
<https://doi.org/10.29333/ejgm/17170>

Original Article

Prevalence of post-vaccination COVID-19 side effects among medics and paramedics healthcare providers in Saudi Arabia em694
Saeed M Kabrah, Layal K Jambi, Abdullah Majed Bajandouh, Abdulwahab Aydah Alaswad, Eyad Mohammad Alghamdi, Ghassan Mohammed Ali Jabr, Hala Yusef Alsehli, Hassan Abdullah Bondagge, Jawad Khalid Alharbi, Khulood Mohammed Hariri, Meshal Hamoud Almatrafi, Muath Sharaf Alsahli, Naif Amin Alansari, Nashwa Mohammed Faden, Shahad Hasan Bawayan, Talal O Zain Aldeen, Wesam Abdulghaffar Mirza, Rania Ali Altdlawi
<https://doi.org/10.29333/ejgm/17180>

Original Article

Exploring P62/SQSTM1 and Nrf2 as predictors of chemoresistance in ovarian cancer: An *in vitro* and clinical analysis

em695

Khaldoon Alsamman, Amani Y Owaideh, Faisal Azam, Miral Mashhour, Kholoud Alwosaibai, Ghaida A Aldossary, Morouj H Althagafi, Nesma A Ghazal, Omar S El-Masry
<https://doi.org/10.29333/ejgm/17252>

Original Article

Anatomical variations of the azygos lobe from a developing country population: A computed tomography study

em696

Qasim A El-Dwairi, Sakha'a A Twaissi, Kusai M Al-Muqbel, Karem H Alzoubi, Rania Mahafdeh
<https://doi.org/10.29333/ejgm/17350>

Review Article

Improving fruit/vegetable behaviors as a social determinant of health among children: A systematic review

em697

Katherine Taelman, Frank Snyder, Najat Yahia
<https://doi.org/10.29333/ejgm/17391>

Original Article

***Escherichia coli* and MSSA urinary tract infections: Carbapenem de-escalation challenges and outcomes**

em698

Rana K Abu-Farha, Lobna Gharaibeh, Rama Alkhawaldeh, Khawla Abu Hammour, Ammena Y Binsaleh, Sireen A Shilbayeh, Fahmi Y Al-Ashwal
<https://doi.org/10.29333/ejgm/17392>

Original Article

Characteristics of multidrug-resistant pathogens and treatment outcomes of lobar pneumonia in Northern Vietnam

em699

Tung Anh Dinh Duong, Thanh Hang Tran Thi
<https://doi.org/10.29333/ejgm/17393>

Review Article

Effects of inspiratory muscle training on functional fitness in obese and overweight adults: A systematic review of randomised control trials

em700

Maali Mohammed Alqahtani, Shibili Nuhmani, Maher AlQuaimi, Mohammed Essa Al-Subaiei, Shakil Ahmad, Hana Jama Alsomali, Alsayed Shanb
<https://doi.org/10.29333/ejgm/17394>

Original Article

Diversity, equity, inclusion, and access: Confronting the myth of meritocracy in nursing academia

em701

Kechi Iheduru-Anderson, Roop Jayaraman, Joseph Inungu, Vincent E Mumford
<https://doi.org/10.29333/ejgm/17437>

Original Article

Analysis of epidemiological characteristics of leukemia in Kazakhstan using unified nationwide electronic healthcare data

em702

Abdulafeez Katibi Abdulkadir, Arnur Gusmanov, Muhammad Kabir Musa, Usman Abubakar Haruna, Enyinnaya Ukaegbu, Ainash Oshibayeva, Saltanat Kyrykbayeva, Zhanar Zhagiparova, Gulnaz Nuskabayeva, Aliya Ualiyeva, Dinara Galiyeva, Abduzhappar Gaipov

<https://doi.org/10.29333/ejgm/17438>

Original Article

Detection of 30bp deletion LMP1 oncogene as potential diagnostic and prognostic Biomarker among nasopharyngeal carcinoma patients

em703

Aseel Al-Hussien, Mai Abusalah, Yaqeen Rjoub, Khaled Al-Qaoud, Anwar Rjoop, Yasmin AlSaidat, Lubna H Khwaileh, Manal Abusalah, Naveed Ahmed

<https://doi.org/10.29333/ejgm/17439>

Case Report

A coordinated AOT model to address behavioral health disparities through social determinants of health: A case study

em704

Nicole A DuPont, Sean P Field

<https://doi.org/10.29333/ejgm/17440>

Original Article

“I no longer feel that diabetes is the end of everything, but rather the beginning of a healthier lifestyle”: Experience of type 2 diabetes mellitus patient to achieve glycemic control

em705

Rifky Octavia Pradipta, Sylvia Dwi Wahyuni, Hakim Zulkarnain, Ferry Efendi, Mei Chan Chong

<https://doi.org/10.29333/ejgm/17498>

Original Article

Association between single nucleotide polymorphisms in the ribosomal protein L5 gene and the risk of deep vein thrombosis in Saudi population

em706

Fathelrahman Hassan, Afnan Alsultan, Waleed Albuali, Dalal K. Bubshait, Elfadil Abass, Mudathir Elbasheer, Saeed Sattar Shaikh, Abdulmohsen Alkhanbashi, Faisal M. Alzahrani

<https://doi.org/10.29333/ejgm/17525>
