

# Wiadomości Lekarskie Medical Advances



**VOLUME LXXVI, ISSUE 12, DECEMBER 2023**

Official journal of Polish Medical Association has been published since 1928

ISSN 0043-5147  
E-ISSN 2719-342X



INDEXED IN PUBMED/MEDLINE, SCOPUS, EMBASE, EBSCO, INDEX COPERNICUS,  
POLISH MINISTRY OF EDUCATION AND SCIENCE, POLISH MEDICAL BIBLIOGRAPHY



# Wiadomości Lekarskie Medical Advances



---

VOLUME LXXVI, ISSUES 12, DECEMBER 2023

Official journal of Polish Medical Association has been published since 1928

ISSN 0043-5147  
E-ISSN 2719-342X



Memory of  
dr Władysław  
Biegański

Wiadomości Lekarskie is abstracted and indexed in: PUBMED/MEDLINE, SCOPUS, EMBASE, INDEX COPERNICUS,  
POLISH MINISTRY OF EDUCATION AND SCIENCE, POLISH MEDICAL BIBLIOGRAPHY

Copyright: © ALUNA Publishing.

Articles published on-line and available in open access are published under Creative Common Attribution-Non Commercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0) allowing to download articles and share them with others as long as they credit the authors and the publisher, but without permission to change them in any way or use them commercially.

The journal *Wiadomości Lekarskie* is cofinanced under Contract No.RCN/SN/0714/2021/1  
by the funds of the Minister of Education and Science



# Wiadomości Lekarskie Medical Advances

**Editor in-Chief:**

Prof. Władysław Pierzchała

**Deputy Editor in-Chief:**

Prof. Aleksander Sieroń

**Statistical Editor:**

Dr Lesia Rudenko

**Managing Editor:**

Agnieszka Rosa – amarosa@wp.pl

**International Editorial Office:**

Nina Radchenko (editor) – n.radchenko@wydawnictwo-aluna.pl

**Polish Medical Association (Polskie Towarzystwo Lekarskie):**

Prof. Waldemar Kostewicz – President PTL

Prof. Jerzy Woy-Wojciechowski – Honorary President PTL

---

**International Editorial Board – in-Chief:**

Marek Rudnicki Chicago, USA

**International Editorial Board – Members:**

Kris Bankiewicz	San Francisco, USA	George Krol	New York, USA
Christopher Bara	Hannover, Germany	Krzysztof Łabuzek	Katowice, Poland
Krzysztof Bielecki	Warsaw, Poland	Jerzy Robert Ładny	Białystok, Poland
Zana Bumbuliene	Vilnius, Lithuania	Henryk Majchrzak	Katowice, Poland
Ryszarda Chazan	Warsaw, Poland	Ewa Małecka-Tendera	Katowice, Poland
Stanislav Czudek	Ostrava, Czech Republic	Stella Nowicki	Memphis, USA
Jacek Dubiel	Cracow, Poland	Alfred Patyk	Göttingen, Germany
Zbigniew Gasior	Katowice, Poland	Palmira Petrova	Yakutsk, Russia
Mowafaq Muhammad Ghareeb	Baghdad, Iraq	Krystyna Pierzchała	Katowice, Poland
Andrzej Gładysz	Wrocław, Poland	Waldemar Priebe	Houston, USA
Nataliya Gutorova	Kharkiv, Ukraine	Maria Siemionow	Chicago, USA
Marek Hartleb	Katowice, Poland	Vladyslav Smiiianov	Sumy, Ukraine
Roman Jaeschke	Hamilton, Canada	Tomasz Szczepański	Katowice, Poland
Andrzej Jakubowiak	Chicago, USA	Andrzej Witek	Katowice, Poland
Peter Konturek	Saalfeld, Germany	Zbigniew Wszolek	Jacksonville, USA
Jerzy Korewicki	Warsaw, Poland	Vyacheslav Zhdan	Poltava, Ukraine
Jan Kotarski	Lublin, Poland	Jan Zejda	Katowice, Poland

---

**Distribution and Subscriptions:**

Bartosz Guterman prenumerata@wydawnictwo-aluna.pl

**Graphic design / production:**

Grzegorz Sztank fajne.work

**Publisher:**

ALUNA Publishing  
ul. Przesmyckiego 29,  
05-510 Konstancin – Jeziorna  
www.wydawnictwo-aluna.pl  
www.wiadomoscilekarskie.pl  
www.wiadlek.pl

## CONTENTS

### EDITORIAL ARTICLES

- Pawel Kalinski, Kathleen M. Kokolus, Rami Azrak, Mikhail Y. Berezin, Renier Brentjens, Brian Czerniecki, Sergii Dubrov, Kara Eaton, Shipra Gandhi, Elizabeth A. Griffiths, Andrew Hyland, Adam Kisailus, Marcin Kortylewski, Gary K. Koski, Leszek Kotula, Iwona Ługowska, Sandro Matosevic, Christopher McAleer, Michał Mięka, Michael I. Nishimura, Katie Noyes, Tetiana Orabina, Petar Ozretić, Gyorgy Paragh, Mark Parascandola, Vita Pašukonienė, Andras Perl, Daniel J. Powell Jr., Waldemar Priebe, Elizabeth A. Repasky, Marek Rudnicki, Anurag K. Singh, Elżbieta Sarnowska, Kęstutis Sužiedėlis, Anna Titkova, Karen Utz, Wei-Zen Wei, Piotr Rutkowski  
 MEETING HIGHLIGHTS: THE THIRD MARIE SKŁODOWSKA-CURIE SYMPOSIUM ON CANCER RESEARCH AND CARE AT ROSWELL PARK COMPREHENSIVE CANCER CENTER, BUFFALO, NY, SEPTEMBER 20-22, 2023 2543

### ORIGINAL ARTICLES

- Aidyn G. Salmanov, Iryna P. Netskar, Valerii V. Kostikov, Svitlana M. Korniyenko, Volodymyr Artyomenko, Victor O. Rud, Orusia A. Kovalyshyn, Khrystyna Zarichanska  
 VULVOVAGINAL CANDIDIASIS AFTER GYNECOLOGICAL SURGERIES AND ADVERSE PREGNANCY OUTCOME IN UKRAINE: A MULTICENTRE STUDY 2556
- Antonina A. Biesiedina, Maryna M. Demenko, Tetiana M. Oleshko, Anastasiia Yu. Starchenko, Zoia M. Levchenko  
 RELATIONSHIP OF DERMATOGLYPHICS WITH SPEED OF REACTION AND TYPE OF TEMPERAMENT OF ATHLETICS 2564
- Nataliia Pryimenko, Tetiana Koval, Tetiana Kotelevska, Vadym Bodnar, Liudmyla Syzova, Olena Marchenko  
 HEPATITIS A. THE FEATURES OF DISEASE COURSE IN ADULTS 2572
- Oleg Godik, Daria Diehtiarova  
 REX SHUNT IN CHILDREN: COULD DYSFUNCTION BE PROGNOSSED? A RETROSPECTIVE ANALYSIS 2579
- Iryna Makoyda, Mykola Ostrovskyy, Uliana Shevchuk-Budz, Olga Molodovets, Alla Zuban  
 OTOTOXICITY OF ANTIMYCOBACTERIAL THERAPY: MANIFESTATIONS, MECHANISMS OF MANAGEMENT AND CONTROL 2587
- Marta M. Zelinka-Khobzey, Kostiantyn V. Tarasenko, Leonid A. Nesterenko, Ivan I. Starchenko  
 MORPHOMETRIC CHARACTERISTICS OF PLACENTA IN WOMEN WITH PREECLAMPSIA AND OBESITY COMPARED TO WOMEN WITH NORMAL BODY WEIGHT 2593
- Victor I. Gorovyi, Volodymyr O. Shaprynskyi, Ihor V. Baralo, Oleh M. Kapshuk, Vasylysa G. Suleimanova, Ihor I. Dovgan, Valentyn R. Taheiev  
 ONE-STAGE PROSTATECTOMY ACCOMPANIED BY HERNIOPLASTY TO IMPROVE QUALITY-OF-LIFE OUTCOMES OF PATIENTS WITH COMBINED SURGICAL PATHOLOGIES 2601
- Yuriy Sobolevskiy, Olexandr Burianov, Volodymyr Kvasha, Dmytro Chekushyn, Dmytro Kovalchuk, Taras Omelchenko  
 ANATOMICAL AND BIOMECHANICAL ROLE OF STATIC STABILIZERS OF THE ACROMIOCLAVICULAR JOINT 2607
- Qayssar Joudah Fadheel, Rusul Ahmed Mohammed  
 EVALUATION OF THE ANTIHYPERTENSIVE EFFECT OF THE THYME AMONG PATIENTS SUFFERING FROM HYPERTENSION IN IRAQ 2614
- Ivan R. Romash, Iryna B. Romash, Andriy R. Tsona, Mykhaylo M. Pustovoyt  
 PECULIARITIES OF DYNAMICS OF INDICATORS OF PROTEINS OXIDATIVE MODIFICATION AND MATRIX METALLOPROTEINASE-9 ACTIVITY IN PATIENTS WITH PARANOID SCHIZOPHRENIA DEPENDING ON THE DISEASE DURATION 2625

Iryna Herasymets, Liudmyla Fira, Ihor Medvid, Dmytro Fira, Oleh Yasinovskyi, Liliia Grytsyshyn EFFECT OF DRY EXTRACT FROM REISHI MUSHROOMS ON THE STATE OF ANTIOXIDANT SYSTEM IN RATS WITH DMH-INDUCED COLON CARCINOGENESIS	2632
Oleksandr M. Ocheredko, Oleg V. Klimenyuk, Anastasya A. Rudenko, Volodimir P. Klimenyuk SAMPLE SIZE CALCULATION IN STRUCTURAL EQUATION MODELING OF EQUILIBRIUM	2641
Valerii V. Filonenko, Oleksandr A. Kaniura, Andrii V. Kopchak, Mykola G. Kryshchuk STUDY OF THE STRESS-STRAIN STATE OF THE MAXILLA DURING ORTHODONTIC TREATMENT OF DENTOGNATHIC DEFORMATIONS IN CHILDREN WITH CONGENITAL CLEFT LIP AND PALATE	2648
Raghad Abdul Hameed Ali, Murooj Altimimi, Najah Rayish Hadi THE POTENTIAL RENOPROTECTIVE EFFECT OF TILIANIN IN RENAL ISCHEMIA REPERFUSION INJURY IN MALE RAT MODEL	2657
Sergii Konovalenko, Myroslav Kritsak, Oleh Yasinovskyi, Bohdana Pavliuk, Iryna Stechyshyn, Tatyana Diadiun QUANTITATIVE MORPHOLOGICAL ASPECTS OF THE STUDY OF THE FEATURES OF THE REMODELING OF THE HEMOMICROCIRCULATORY CHANNEL OF THE TESTICLES UNDER THE ACTION OF ALUMINUM CHLORIDE ON THE BODY	2668
Ervin Asanov, Valeriy Shatilo, Ivanna Antonyuk-Shcheglova, Svetlana Naskalova, Iryna Dyba, Yuliia Holubova PECULIARITIES OF PULMONARY VENTILATION RESPONSE TO DOSED HYPOXIA IN ELDERLY PEOPLE WITH IMPAIRED GLUCOSE TOLERANCE	2674
Mariia S. Kirzhetska, Yuriy I. Kirzhetskyy, Natalia M. Zelenko, Vasyl A. Zelenko, Liliia Y. Klos, Mariana V. Shkoliar, Lesia Y. Gnylianska ACTIVITY-BASED COSTING: A PRACTICAL MODEL OF COST CALCULATION IN PSYCHIATRIC HOSPITALS	2679
O. Ya. Vovk, I. A. Holovanova, Alla Podvin, I. U. Popovuch, O. V. Filatova, O. D. Havlovsky, N. O. Liakhova CONTEXTUAL FACTORS ASSOCIATED WITH CERVICAL CANCER	2687
<b>REVIEW ARTICLES</b>	
Olexander Galuzinskii, Volodymyr Chornyj, Yevhenii Kozik, Yevhenii Fedin TOTAL HIP JOINT REPLACEMENT USING A CUSTOM TRIFLANGE ACETABULAR COMPONENT (LITERATURE REVIEW)	2694
Viktor Yelenskyi, Dmytro Dyachuk CONCEPTUAL DIRECTIONS OF THE ORGANIZATION OF DENTAL CARE FOR THE POPULATION OF UKRAINE AND EUROPEAN COUNTRIES	2700
Vasyl M. Mykhalchuk, Natalia A. Bilousova ANALYSIS OF THE WORLD'S BEST PRACTICES IN TRAINING PHARMACISTS FOR PROVIDING MENTAL HEALTH CARE TO PATIENTS	2706
Olena G. Rohova, Olena G. Ostapenko, Oleksandr I. Lysiak THE RIGHT TO HEALTH CARE IN THE CONTEXT OF PUBLIC AND PRIVATE INTERESTS	2714
Oleksandr O. Pompji, Viktor A. Tkachenko, Tetiana M. Kerimova, Elina S. Pompji MODERN TRENDS AND PERSPECTIVES OF THE DEVELOPMENT OF ADHESIVE DENTISTRY. INNOVATIVE TECHNIQUES FOR THE APPLICATION OF ADHESIVE SYSTEMS	2721

## CASE STUDIES

- Halyna Kovalchuk, Valeriy Vdovychenko, Oksana Kapustynska, Roksolana Yaremkevych  
ONSET OF NONSPECIFIC ULCERATIVE COLITIS POST COVID-19 (CASE STUDY) 2729
- Muhammad Fauzan Jauhari, Muhammad Arifin Parenrengi, Wihasto Suryaningtyas  
EXTRASKELETAL EWING'S SARCOMA IN PEDIATRIC PATIENT RARE CASE: A CASE REPORT 2733
- Tetiana Yarmola, Olga Gutsalenko, Lidiya Tkachenko, Olena Vlasova  
SARS-COV-2 INFECTION AS A POSSIBLE TRIGGER FOR MICROSCOPIC POLYANGIITIS: CASE REPORT AND MINI-REVIEW 2738



## MEETING HIGHLIGHTS: THE THIRD MARIE SKŁODOWSKA-CURIE SYMPOSIUM ON CANCER RESEARCH AND CARE AT ROSWELL PARK COMPREHENSIVE CANCER CENTER, BUFFALO, NY, SEPTEMBER 20-22, 2023

DOI: 10.36740/WLek202312101

**Pawel Kalinski, MD, PhD<sup>1</sup>; Kathleen M. Kokolus, PhD<sup>1</sup>; Rami Azrak, MD<sup>1</sup>; Mikhail Y. Berezin, PhD<sup>2</sup>; Renier Brentjens, MD, PhD<sup>1</sup>; Brian Czerniecki, MD, PhD<sup>3</sup>; Sergii Dubrov, MD<sup>4</sup>, PhD; Kara Eaton, MA, CPXP<sup>1</sup>; Shipra Gandhi, MD<sup>1</sup>; Elizabeth A. Griffiths, MD<sup>1</sup>; Andrew Hyland, PhD<sup>1</sup>; Adam Kisailus, MBA, PhD<sup>1</sup>; Marcin Kortylewski, PhD<sup>5</sup>; Gary K. Koski<sup>6</sup>, PhD; Leszek Kotula, MD, PhD<sup>7</sup>; Iwona Ługowska, MD, PhD<sup>8</sup>; Sandro Matosevic, PhD<sup>9</sup>; Christopher McAleer, PhD<sup>10</sup>; Michał Miłkuła, MD, PhD<sup>8</sup>; Michael I. Nishimura, PhD<sup>11</sup>; Katie Noyes, PhD, MPH<sup>12</sup>; Tetiana Orabina<sup>4</sup>; Petar Ozretić, PhD<sup>13,14</sup>; Gyorgy Paragh, MD, PhD<sup>1</sup>; Mark Parascandola, PhD, MPH<sup>15</sup>; Vita Pašukonienė, PhD<sup>16,17</sup>; Andras Perl, MD, PhD<sup>7</sup>; Daniel J. Powell Jr., PhD<sup>18</sup>; Waldemar Priebe, PhD<sup>19</sup>; Elizabeth A. Repasky, PhD<sup>1</sup>; Marek Rudnicki, MD, PhD<sup>20</sup>; Anurag K. Singh, MD<sup>1</sup>; Elżbieta Sarnowska, MD, PhD<sup>8</sup>; Kęstutis Sužiedėlis, PhD<sup>16,21</sup>; Anna Titkova, MBA, MD, PhD<sup>22,23</sup>; Karen Utz, JD<sup>24</sup>; Wei-Zen Wei, PhD<sup>25,26</sup>; Piotr Rutkowski, MD, PhD<sup>8,27</sup>**

<sup>1</sup>ROSWELL PARK COMPREHENSIVE CANCER CENTER, BUFFALO, NY, USA

<sup>2</sup>WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST LOUIS, MO

<sup>3</sup>MOFFITT CANCER CENTER, TAMPA, FL, USA

<sup>4</sup>MINISTRY OF HEALTH, KYIV, UKRAINE

<sup>5</sup>CITY OF HOPE COMPREHENSIVE CANCER CENTER, DUARTE, CA, USA

<sup>6</sup>KENT STATE UNIVERSITY, KENT, OHIO, USA

<sup>7</sup>SUNY UPSTATE MEDICAL UNIVERSITY, SYRACUSE, NY, USA

<sup>8</sup>MARIA SKŁODOWSKA-CURIE NATIONAL RESEARCH INSTITUTE OF ONCOLOGY, WARSAW, POLAND

<sup>9</sup>PURDUE UNIVERSITY, WEST LAFAYETTE, IN, USA

<sup>10</sup>AIM IMMUNOTECH, OCALA, FL, USA

<sup>11</sup>LOYOLA UNIVERSITY CHICAGO, MAYWOOD, IL, USA

<sup>12</sup>SUNY AT BUFFALO, BUFFALO, NY, USA

<sup>13</sup>RUĐER BOŠKOVIĆ INSTITUTE, ZAGREB, CROATIA

<sup>14</sup>CROATIAN ASSOCIATION FOR CANCER RESEARCH

<sup>15</sup>NATIONAL CANCER INSTITUTE, BETHESDA, MD, USA

<sup>16</sup>NATIONAL CANCER INSTITUTE, VILNIUS, LITHUANIA

<sup>17</sup>VILNIUS GEDIMINAS TECHNICAL UNIVERSITY, VILNIUS, LITHUANIA

<sup>18</sup>UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA, USA

<sup>19</sup>MD ANDERSON CANCER CENTER, HOUSTON, TX, USA

<sup>20</sup>ROSS UNIVERSITY SCHOOL OF MEDICINE, MIAMI, FL, USA

<sup>21</sup>VILNIUS UNIVERSITY, VILNIUS, LITHUANIA

<sup>22</sup>KHARKIV NATIONAL MEDICAL UNIVERSITY, KHARKIV, UKRAINE

<sup>23</sup>PRATIA UKRAINE, KHARKIV, UKRAINE

<sup>24</sup>EMPIRE STATE DEVELOPMENT, BUFFALO, NY, USA

<sup>25</sup>KARMANOS CANCER INSTITUTE, DETROIT, MI, USA

<sup>26</sup>WAYNE STATE UNIVERSITY, DETROIT, MI, USA

<sup>27</sup>MEDICAL RESEARCH AGENCY, POLAND