GEORGIAN MEDICAL MEWS

ISSN 1512-0112

NO 4 (337) Апрель 2023

ТБИЛИСИ - NEW YORK



ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press. Published since 1994. Distributed in NIS, EU and USA.

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

- 1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра. Используемый компьютерный шрифт для текста на русском и английском языках Times New Roman (Кириллица), для текста на грузинском языке следует использовать AcadNusx. Размер шрифта 12. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.
- 2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.
- 3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

- 4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).
- 5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи. Таблицы и графики должны быть озаглавлены.
- 6. Фотографии должны быть контрастными, фотокопии с рентгенограмм в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста в tiff формате.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

- 7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.
- 8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.
- 9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.
- 10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.
- 11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.
- 12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

- 1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface Times New Roman (Cyrillic), print size 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.
- 2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.
- 3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

- 4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.
- 5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles. Tables and graphs must be headed.
- 6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

- 7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.
- 8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html http://www.icmje.org/urm_full.pdf
- In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).
- 9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.
- 10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.
- 11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.
- 12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ᲐᲕᲢᲝᲠᲗᲐ ᲡᲐᲧᲣᲠᲐᲓᲦᲔᲑᲝᲓ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

- 1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში Times New Roman (Кириллица), ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ AcadNusx. შრიფტის ზომა 12. სტატიას თან უნდა ახლდეს CD სტატიით.
- 2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ,რუსულ და ქართულ ენებზე) ჩათვლით.
- 3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).
- 4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).
- 5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.
- 6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით tiff ფორმატში. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის ზედა და ქვედა ნაწილები.
- 7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა უცხოური ტრანსკრიპციით.
- 8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.
- 9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.
- 10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.
- 11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.
- 12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

GEORGIAN MEDICAL NEWS No 4 (337) 2023

Содержание:

APPLICATIONS OF VISCOELASTIC TESTING IN MICROSURGERY: A SYSTEMIC REVIEW AND META-ANALYSIS6-12
Ayat J. Kadam, Abdulsamie H. Alta'ee, Adel H. Al-Handawy, Zakariya M. Al-Ghazali, Mufeed J Ewadh. LONG-TERM USE OF GLUCOCORTICOID MODULATED PARATHYROID HORMONE LEVELS IN OSTEOPOROSIS PATIENTS
Azzam A. Ahmed. ISTENT INJECT W AND KAHOOK DUAL BLADE FOR TREATING MILD-TO-MODERATE GLAUCOMA
Kachanov D.A., Elistratov L.M., Guseinov H.M., Balaeva K.V., Popova N.A. A COMPARATIVE REVIEW OF THE USE OF DANIO RERIO (ZEBRAFISH) AS A MODEL OBJECT IN PRECLINICAL STUDIES
Mahde S. Hamad, Athraa Essa Ahmed, Shaimaa Essa Ahmed, Entedhar R. Sarhat, Moayad M. Al Anzy. SERUM LIPOCALIN-2, AND FETUIN-A LEVELS IN PATIENTS WITH ALZHEIMER'S DISEASE
Larisa M. Chernukha, Yaroslav V. Khrebtiy, Denis V. Tsygalko, Mikola O. Melnichuk. RESULTS OF TREATMENT OF DEEP VEINS THROMBOSIS IN PATIENTS WITH CONGENITAL ANOMALIES OF THE INFERIOR VENA CAVA
Osinskaya T.V, Zapolsky M.E, Shcherbakova Yu.V, Dzhoraieva S.K. PREVALENCE OF CHLAMYDIA AMONG WOMEN IN PLACES OF DEPRIVATION OF LIBERTY
Mohammed N. Almulayounis, Ahmed A. Al-Ali. EFFECT OF HEAT TREATMENT DURATION AND COOLING CONDITIONS ON TENSILE PROPERTIES AND HARDNESS OF SELECTIVE-LASER-MELTED COBALT-CHROMIUM ALLOY
Leonid Markin, Tetiana Fartushok, Nadiia Fartushok, Larysa Soyka, Yuri Fedevych. DIABETES MELLITUS AND COVID-19: TODAY'S CHALLENGES
Shaymaa Mohammed Allow, Entedhar R. Sarhat. METFORMIN EFFECTS ON BLOOD LEVELS OF GREMLIN-1 IN POLYCYSTIC OVARIAN WOMEN
Maryam Taher Tawfeq, Entedhar Rifaat Sarhat. METFORMIN EFFECTS ON NEUREGULIN-1 IN POLYCYSTIC OVARIAN WOMEN
Tchernev G, Kordeva S. NITROSOGENESIS OF SKIN (HUMAN) CANCER- THE HIDDEN TRUTH OF A NEVERENDING STORY: NITROSAMINE CONTAMINATION IN OLMESARTAN, VALSARTAN AND HCT AS MAIN RISK FACTOR FOR THE DEVELOPMENT OF KERATINOCYTECANCER
Pantus AV, Rozhko MM, Makhlynets NP, Kovalchuk NY, Yarmoshuk IR. CLINICOROENTGENOLOGICAL PECULIARITIES OF THE CONGENITAL AND ACQUIRED CRANIOFACIAL ANOMALIES
Tamta Motsonelidze, Sophio Kakhadze, Dudana Gachechiladze, Tea Changelia, Mamuka Gurgenidze, Teona Buachidze. SIGNIFICANCE OF TWO-DIMENSIONAL SHEAR WAVE ELASTOGRAPHY IN PREDICTING ESOPHAGEAL VARICOSE VEINS DURING CHRONIC LIVER DISEASE
Sergey Didenko, Vitaly Subbotin, Yuri Hupalo, Oleksandr Ivanko, Oleksandr Orlych. STUDY OF THE HEMOMICROCIRCULATORY CHANNEL IN PATIENTS WITH DIABETES AND THREATENING ISCHEMIA OF THE LOWER LIMB
Kordeva S, Cardoso JC, Tchernev G. CONGRESS REPORT OF THE 5TH NATIONAL CONGRESS OF THE BULGARIAN SOCIETY FOR DERMATOLOGIC SURGERY, SOFIA, 11TH MARCH 2023 WITH MAIN TOPICS: NITROSAMINES AS MOST POWERFUL TRIGGER FOR SKIN CANCER DEVELOPMENT AND PROGRESSION / PERSONALISED ONE STEP MELANOMA SURGERY AS POSSIBLE SKIN CANCER TREATMENT OPTION
Ia Murvanidze, Otar Tsetskhladze, Eteri Saralidze, Teona Gogitidze, Rajneesh Khurana, Nino Kedelidze, Tamar Peshkova, Ilia Nakashidze, Irina Nakashidze.
THE STUDY OF LIVER AND KIDNEY FUNCTION WITHIN COVID-19 PATIENTS
Liudmyla Hordiienko. JUSTIFICATION OF THE COMPREHENSIVE PROGRAM OF PREVENTION OF HYPERTENSION DISEASE IN MEDICAL

Rurua Magda, Ratiani L, Sanikidze T, Machvariani K, Pachkoria E, Ormocadze G, Mikadze I, Didbaridze T.
IMPACT OF THE ANGIOTENSIN-CONVERTING ENZYME (ACE) INHIBITORS ON THE COURSE OF THE SEPTIC
SHOCK DEVELOPED DURING COVID-19 AND OTHER SEVERE RESPIRATORY INFECTIONS IN PRESENCE OF
HYPERFERRITINEMIA
Dubivska SS, Omelchenko-Seliukova AV, Lazyrskyi VO, Viedienieva RY.
STUDY OF THE PROCESSES OF LIPID PEROXIDATION, THE STATE OF THE ANTIOXIDANT SYSTEM IN PATIENTS WITH
POLYTRAUMA AND ALCOHOL ANAMNESIS
Danielyan M.H, Karapetyan K.V, Sarkisyan S.H, Nebogova K.A, Isoyan A.S, Chavushyan V.A.
INFLUENCE OF LONG-TERM VIBRATION ON THE ACTIVITY OF THE SUPERIOR VESTIBULAR NUCLEUS NEURONS UNDER
THE CONDITIONS OF STIMULATION OF THE HYPOTHALAMUS NUCLEI
THE CONDITIONS OF STIMULATION OF THE HTT OTHALAMOS NOCLEI
Ahmad Mohammed SMADI, Salam Bani Hani, Abedalmajeed SHAJRAWI, Marwa Alhalabi.
COMPLIANCE AND CHALLENGES OF TRANSMISSION BASED PRECAUTION PRACTICES AMONG NURSES IN JORDANIAN
HOSPITALS DURING THE NOVEL COVID-19: A DESCRIPTIVE STUDY
Georgi Tchernev.
THE NITROSAMINE CONTAMINATION IN BETA BLOCKERS (BISOPROLOL/METOPROLOL), ACE INHIBITORS (LISINOPRIL/
PERINDOPRIL), THIAZIDES DIURETICS (HCT), CALCIUM CHANNEL BLOCKERS (AMLODIPINE/ FELODIPINE), SARTANS
(CANDESARTAN) AND THE SUBSEQUENT SKIN CANCER DEVELOPMENT AND PROGRESSION: APOCALYPSE NOW138-145
Boldyreva Yu.V, Zaharchuk E.V, Lebedev I.A, Tersenov G.O, Duboshinskii R. I.
MOLECULAR EFFECTS OF RESVERATROL IN THE TREATMENT OF AUTOIMMUNE DISEASES

CONGRESS REPORT OF THE 5TH NATIONAL CONGRESS OF THE BULGARIAN SOCIETY FOR DERMATOLOGIC SURGERY, SOFIA, 11TH MARCH 2023 WITH MAIN TOPICS: NITROSAMINES AS MOST POWERFUL TRIGGER FOR SKIN CANCER DEVELOPMENT AND PROGRESSION / PERSONALISED ONE STEP MELANOMA SURGERY AS POSSIBLE SKIN CANCER TREATMENT OPTION

Kordeva S1, Cardoso JC2, Tchernev G1,3.

¹Onkoderma- Clinic for Dermatology, Venereology and Dermatologic Surgery, General Skobelev 26, 1606 Sofia, Bulgaria.

²Department of Dermatology and Venereology, University Hospital of Coimbra, Coimbra, Portugal.

³Department of Dermatology and Venereology, Medical Institute of Ministry of Interior, General Skobelev 79, 1606, Sofia, Bulgaria.

Abstract.

Deciphering the mutational pattern of skin tumours, remains a major challenge for clinicians and researchers. Over 80% of mutations in tumours are acquired, which in practice also means preventable.

The surgical treatment of skin cancer and cancer in general is a worldwide, unsolved but at the same time not unsolvable problem. The problem concerning the dilemma of acquired mutations lies in the circumstance of their being allowed and subsequently treated. A more logical solution would be to eliminate the problem by making contact with mutagens in drugs public, clarifying it, studying it in detail and definitively stopping it.

At present, there is an alarming and unexplained tendency worldwide: 1) Potential acquired mutations, caused in all probability by contact with known exogenous mutagens- the nitrosamines in most commonly prescribed drugs, are allowed to occur.

2) And subsequently, the diseases generated by themtreated (at a later stage) by multiple surgical interventions and unjustifiably expensive targeted therapy; 3) Mutagens - such as nitrosamines for example, to be in a permissive or possibly permissive availability regime. Moreover, this permissible availability turns out to be ubiquitous and affects the most common medicines worldwide: metformin, ranitidine, propranolol, rifampicin, irbesartan, olmesartan, valsartan, telmisartan, eprosartan, losartan, ACE inhibitors, thiazide diuretics, etc.

In certain geographical regions, there is almost no patient taking this type of medication who has not had at least one tumour detected.

These significant correlations (nitrosamines/cancer) are labeled by the regulatory institutions as possible, probable, or not currently relevant. But in spite of "this inconclusiveness", the drugs, containing nitrosamines, are withdrawn from the pharmaceutical market: quickly and quietly, despite the fact that "they did not pose a threat".

The FDA was the only organization and the most important regulatory body worldwide, which lifted the veil from this ominous picture back in 2018: nitrosamines in blood medicines and cancer risk. Unfortunately, at the moment, the problems with this issue are proving to be more than the solutions, and at the same time it remains completely unclear who is to blame for this 'sporadic contamination': the packaging of the drug, the humidity in the rooms where the preparations are stored or the synthesis process itself - the explanations are divergent, the

responsibility is blurred.

This fuzzy liability does not affect the manufacturers and distributors of the preparations/nitrosamines themselves in the manner required by law for this (mis)act.

The Bulgarian Society of Dermatological Surgery remains to be the only organization worldwide that for the 5th consecutive year continues to seek solutions to the above-mentioned problems by:

1) Officialising all cases of skin tumors (but not only) occurring after intake of nitrosamine-contaminated drugs, 2) also officialising a significant number of cases of patients with cutaneous melanomas treated by the one-stage surgical removal method within one surgical session (OSMS).

The main priorities of the organization remain: 1) the complete elimination of nitrosamines from drugs worldwide, 2) the optimization of melanoma surgical treatment guidelines with the goal of treatment within 1 surgical session: for thin melanomas, dysplastic nevi and melanoma in situ, a surgical margin of safety of 1 cm in all directions and without detection and removal of the draining sentinel lymph node. Whereas for medium and thick melanomas, the focus should be directed to the following recommendation: 2 cm surgical margin of safety plus detection and removal of the draining lymph node within one surgical session.

The indication for the surgical removal of these lesions should be made on the basis of radically different criteria from those used to date by the AJCC/EJC, namely: based on 1) clinical presentation/ clinical morphology, 2) dermatoscopic finding, and if there is a melanoma suspected lesion with possible tumour thickness greater than 1 mm, 3) ultrasonographic measurement for preoperative determination of tumor thickness should be additionally performed.

The methodology is applicable in up to 80% of cases, excluding only some rare findings such as: amelanotic cutaneous melanomas, cutaneous melanomas with regression zones or those with localization in the neck and head. However, after careful individual assessment and a subsequent selected approach, even these exceptions could be included in the innovative algorithm for one step surgical removal of cutaneous melanomas.

The resulting problems of not resolving these two dilemmas could lead to:

- 1) Generation of skin cancer (but not only), through the availability of nitrosamines in drugs.
- 2) Unnecessary and stressful /surgeries for the patients- 2 in number, which not infrequently lead to complication of their status (due to delay of histopathological analysis/ desire for

second opinion/ delay regarding the timeframe for the second surgical intervention/ uncertainty regarding the resection lines within the first intervention/ failure to respect the recommended surgical security resection margins already within the first surgical session, etc.).

3) Huge additional costs to health care systems on the order of probably/roughly calculated about \$50 billion per year.

Resolution of these two dilemmas would likely result in a dramatic drop in cancer incidence worldwide and a significant improvement in the effectiveness/efficiency of surgical treatment for cutaneous melanoma.

Key words. Nitrosamines, metformin, irbesartan, telmisartan, eprosartan, Lisinopril, ranitidine, one step melanoma surgery, dermatologic surgery.

Report.

For the fifth year in a row, the Bulgarian Society for Dermatologic Surgery (BULSDS) hosted a very dynamic forum, in which the Bulgarian specialists/young scientists alongside colleagues from countries all over the world joined hands together to discuss the current hot topics in the dermatologic oncology/ surgery field. The national conference has established itself over the years as a place in which different approaches and unconventional thinking are always welcomed.

This year the congress was held again in the capital city of Sofia, Bulgaria on the 11th of March 2023. Many experts have presented their field of interest with interesting observations and engaging presentations.

The main focus at the 5th national congress this year was put on skin cancer in general in connection to external mutagens or the so-called nitrosamines and possible treatment options within the surgical therapy of cutaneous melanoma. The subject of discussion was not only rare dermatoses, but also innovations in the field of dermatosurgery and skin cancer prevention.

Since acquired mutations are the main cause for over 80% of all skin cancer incidents, identifying and eliminating these causes should be of primary importance [1].

In 2018 a serious step forward was taken by the Food and Drug Administration (FDA) with revealing the truth about the nitrosamine contamination within the antihypertensive drug – valsartan [2].

The dermatologists, who were keeping an eye on the situation, quickly started their own investigations and soon established a link between the possible contamination and the subsequent development of melanoma [3-5] or melanoma in combination with other types of tumors [6].

The BULSDS remains the only organization that over the years has been actively involved in solving and publicly announcing this issue. This topic is one of the reasons many international experts – dermatologists, dermatopathologists and dermatosurgeons from all over the world are willing to engage in the conference and give their expert opinion on the matter.

The congress remains a place where ideas, criticisms, doubts, and unconventional thinking are welcomed regarding the currently unresolved problems concerning the pathogenesis and treatment of skin cancer and the possible connection to nitrosamines.

The conference was divided into several sessions in which esteemed scientists from all over the world presented different perspectives and opinions regarding the current hot topics in the dermatology field – melanoma surgery/personalized (one step) melanoma surgery, adverse drug reactions and rare skin diseases and syndromes.

The first morning session began with the presentation of the well-known and internationally recognized dermatologist/dermatopathologist Prof Dr Michael Tronnier (Figure 1). He presented the current insides and updates concerning the diagnosis and management of atypical/dysplastic nevi which was well received by the audience and the other guest lecturers. The lecture demonstrated the need of precisely establishing the nevi's nature using clinical, dermatoscopic and histological methods and if necessary – their removal.



Figure 1. Prof Georgi Tchernev welcomes Prof Tronnier for his lecture on the 5th congress of the Bulgarian Society for Dermatologic Surgery, 11 march, 2023, Sofia, Hotel Marinela. A lot of jokes and smiles during and before the start of the congress.

The session was continued with a video lecture about the controversies in the melanoma surgery by another esteemed guest scientist - Prof Dr Uwe Wollina. The lecture itself was a direct recognition of the one step melanoma surgery model as possible in certain patients. In summary, it was stated that the resection lines of the different dermatosurgical societies around the world may differ, but they do not exceed 0.5 cm within the first excision under the standard guidelines.

Dr Simona Kordeva and Dr Manojj Dhanarajan continued with interesting presentations about the Bulgarian experience with the one step melanoma surgical approach and the successful surgical removal of thin melanomas, melanoma in situ and dysplastic nevi with another surgical margin: 1 cm in all directions and without SLN biopsy [7-9]. The use of guidelines for innovative melanoma treatment (OSMS) practically saves the re-exision of the lesion which will later on result in less traumatic experience and financial burden for the patient [9-11]. These conclusions resulted in a major positive reaction from the auditory and will perhaps be even more applicable in the near future. Optimizing and updating the guidelines should be a priority regarding patient benefits.

OSMS can be used in the treatment of severe dysplastic nevi, melanoma in situ and thin melanomas – lesions that are not always clearly differentiated from each other but could be treated the same way – with a field of initial surgical safety of

1 cm in all directions within one surgical session [7,11,12]. Several case reports were presented with successful outcomes for each patient following the OSMS guidelines [8,9].

The session was followed by two case presentations from Prof Georgi Tchernev about the applicability of one step melanoma surgery for thick melanomas (Figure 2) [13,14].



Figure 2. One step melanoma surgery might be a good therapeutic alternative fast in all cases with thick cutaneous melanomas: A lecture by Prof G. Tchernev.

Medium thick [15,16] and thick [13] melanomas – both were proven as possible candidates for the one step surgical approach with 2 cm and a sentinel lymph node removal within one surgical session [15,16].

Both the initial stages of medium thick and thick melanomas should be in the near future probably a top priority for every clinician [13,16]. OSMS is a personalized approach to surgical treatment which provides the patient with not only decreased risk of postoperative complications, but also reduces the psychological stress and financial burden [15].

This session was highly anticipated both by the young colleagues at the forum and the esteemed scientists in the field. Debates were carried out which resulted in different thoughts and observations. International specialists have thematized the OSMS approach several times, but it has never been fully addressed by the scientific community around the world [17]. But gradually, the veil is being lifted and more professionals are beginning to acknowledge the model.

In the second morning session another important topic was discussed with several original presentations about adverse drug reactions: nitrosamines, sartans and skin / other cancer development.

The first lecture was carried out by Assoc Prof Dr Kossara Drenovska about drug or paraneoplastic bullous disorders associated with anti-PD-1 and anti-PD-L1 therapy. It is not always clear whether it is a paraneoplastic bullous dermatosis within a melanoma recurrence or a drug-induced bullous dermatoses.

An important presentation by Prof Georgi Tchernev about sartans, nitrosamines and HCT as key factors for the development of lentigo maligna and dysplastic nevi was presented [18].

Both classes of medications have been reported as possibly contaminated [18-20]. It was stated that monotherapy with HCT is a separate risk for melanoma and non-melanoma skin cancers, so the question remained open: does the nitrosamine contamination in the given drug increase the risk for skin cancer development? [19,20]. Constructive debate about the pathogenetic form of the nitrosamine availability/contamination was started which resulted in all doubts being lost [21].

Dr Simona Kordeva had an interesting presentation about the simultaneous development of cutaneous melanoma, Kaposi sarcoma and colon carcinoma after valsartan/hydrochlorothiazide intake [22]. Several facts and controversies were questioned: possible carcinogenic effect of the active ingredient, of the additional substances available – nitrosamines or sporadic manifestations of three types of tumors within the therapy [22]. All of these questions were answered within the presentation which resulted in more clarity when addressing this major issue – nitrosamine contamination as a possible main triggering factor for skin and other cancers development. These answers led to the conclusion that nitrosamine contamination is "rather a reality than a myth" and their possible pathogenetic role for skin cancer development and progression needs to be further investigated [23,24].

Different independent case reports in the medical literature have been described stating that the commonly used angiotensin receptor blockers (ARBs) for the treatment of arterial hypertension are a definitive risk for cancer development [3,19,20,25-27]. After a careful analysis there was no doubt that a melanoma development after sartan intake is not an incidence but rather a strongly associated connection [3,19,20,25-27]. A nationwide study of 1.4 million valsartan (nitrosamine contaminated) users has reported an increased risk for melanoma [28] which led to this conclusion.

Dr Konstantin Stavrov presented three different clinical cases about problematic congenital nevi being disguised as melanoma imitators [29]. They could easily lead to devastating surgical interventions so that a histopathological examination might be important in order to prevent a misdiagnosis or unnecessary sentinel lymph node removal [29].

The following lecture was from Prof Georgi Tchernev about giant pretibial located melanoma with a focus on the clinician's behavior as the main triggering factor [14]. In the presented case report the patient was misdiagnosed which later on resulted with an advanced pretibial melanoma lesion with multiple lung metastases [14]. An importance of the precise diagnosis was discussed [14].

The second morning session was put to an end with two presentations by Dr Manojj Dhanarajan about achromatic melanoma in the genital area [30] and the danger of dark genital spots – vaginal melanosis/lentiginosis in the genital area [31]. A conclusion about the importance of an early diagnosis and histopathological evaluation after surgical excision of the lesion was ascertained in order to prevent a penectomy and partial penile amputation [30].

A heated debate about the choice of treatment for patients with vaginal melanosis and the potential risk of a possible

progression to melanoma lesion was started which resulted in different observations and opinions. Rare cases of vaginal melanosis/lentiginosis turned into melanomas over time have been reported [32]. While new therapeutic approaches may be on the horizon, for example, target therapy, a combination of chemo- and immunotherapy, the preferable treatment choice would be complete surgical removal of the lesion in terms of survival rate [32].

The third session was focused on nonmelanoma skin cancer, acne inversa and other dermatological conditions.

A breathtaking lecture by Prof Dr Ricardo Vieira revealed to the audience his unparalleled and invaluable experience in the surgical treatment of nail diseases. With his review on nail surgery, he presented not only great theoretical explanation but also different surgical approaches when commenting on the topic (Figure 3).



Figure 3. Important expert opinion form Prof Dr Ricardo Vieira about one step melanoma surgery and its applicability.

The session was continued with a lecture from Prof Dr Giovanni Damiani about hidradenitis suppurativa. His presentation "from genetics to epigenetics and back to therapy" was well received from the auditory despite the complexity of the subject. He introduced a new insights and breakthroughs regarding the genetics of this disease.

Following the subject, the next presentation was from Dr Chisti Biji about an early surgical approach in acne inversa/hidradenitis suppurativa as the best treatment option for the condition [33]. In world literature different approaches are described as successful and durable but only with a temporary improvement [33]. The case report showed the audience that recurrent mild to moderate HS (Hurly stage 1&2) can be successfully managed by serial excisions under local anesthesia [33].

The session resumed with the Bulgarian experience and, in particular, with a case report from the Medical Institute of the Ministry of Interior, regarding the treatment of hidradenitis suppurativa, with Dr Simona Kordeva presenting an expert opinion which was published not long ago in JEADV [34]. It was stated that the surgical approach in patients with advanced (Hurley 3) acne inversa should be acknowledged with a more priority than the systemic therapy with adalimumab [34].

Other rare dermatoses discovered and published by Bulgarian dermatologists in the recent past were commented on and presented.

Dr Hailey Kirilova introduced the audience an extremely rare case of progressive cutaneous hemangiomatosis with ocular involvement, discovered and published in the recent past by the famous Bulgarian dermatologist Dr. Anastasia Chokoeva [35].

Dr Heily Kirilova also presented a unique case of Senear Usher syndrome in a Bulgarian patient associated with a dissecting aneurysm of the aorta and sepsis, which resulted in a fatal outcome [36].

The first officially reported case of a Bulgarian patient with a comedogenic nevus in the neck area, treated successfully via surgery, was also presented by Dr Simona Kordeva [37]. Although benign in complicated cases the condition could cause discomfort and a surgical removal is recommended [37].

The last surgical session started with the lecture of one of the enigmatic surgeons/ dermatologic surgeon Prof Dr Ilia Lozev presenting his experience and observations in the surgical field. He introduced a giant advanced SCC of the scalp with cranial bone invasion, treated successfully via surgery and rotation advancement flaps, which was published again in JEADV [38]. The Department of Dermatosurgery of Medical Institute of the Ministry of Interior and the surgical interventions carried out so far for these types of tumors and others with similar localization were determined as exceptional not only for Bulgaria! (Figure 4).



Figure 4. Prof Ilia Lozev, Prof Michael Tronnier, Prof Georgi Tchernev and Assoc Prof Dr Kossara Drenovska in a visible good mood during the coffee breaks.

Dr Jose Carlos Cardoso once again impressed the audience with a precise and methodologically perfectly delivered lecture on basal cell carcinoma emphasizing the different clinicopathological features according to the underlying risk factors (Figure 5).

Dr Simona Kordeva continued the session with another interesting presentation about adverse drug events. She presented data from her publications for the first time in the world literature published cases of keratinocyte tumors developed after oral intake of potentially nitrosamine-contaminated sartans in combination with hydrochlorothiazide [39,40]. Two new cases of keratoacanthoma and squamous cell carcinoma development

after intake of nitrosamine-contaminated irbesartan and hydrochlorothiazide was presented [39,40], resulting in a serious dose of silence among the audience! The new concept of skin cancer pathogenesis enhanced by nitrosamines did not find any contradictions among the young audience and the scientists representing the global dermatological community.



Figure 5. Dr Jose Carlos Cardoso from Portugal with one of the best congress lectures about the BCC and the different clinicopathological features according to the underlying risk factors.



Figure 6. Final common photo after the last congress session, 5th congress of the Bulgarian Society for Dermatologic Surgery, 11 march, 2023, Sofia, Hotel Marinela. A.

There were also lectures by young doctors, which concerned the surgical treatment of medium and high-risk basal cell carcinomas of the face; rare lymphomas of the skin, mimicking long-standing atheromas; atheromas with atypical localization and difficult differential diagnosis or cutaneous lymphomas with systemic involvement. Dr Chloe Kam alongside Dr Christi Biji presented the auditory four new cases about high and intermediate risk BCCs of the face and neck areas [41,42]. Dr Irina Todorov presented an interesting case of extraarticular lipoma of the knee.

Assoc Prof Dr Julian Ananiev had a lecture about a slowly progressive B-cell lymphoma-like lesion of the back [43]. The session was then put to an end with two presentations by Dr Tania Popova about the treatment of lymphomas with different drugs on the market. Dr Popova's lectures emphasized the leading role of the interdisciplinary collaboration with oncohematology in order to achieve more reliable final results in the patient's treatment.

The annual national conference has established itself over the years as a place, in which the Bulgarian specialists/young scientists alongside international colleagues from all over the world gather together to discuss and debate the current topics in the dermatology field (Figure 6). Alternative ideas and unconventional thinking seem to have become an unwritten concept of the forum. For another year, the conference presented the latest achievements in the dermatology and dermatosurgical fields. This year the forum was extremely successful with international recognition from scientists from all around the world. Therefore, the BULSDS invites you to next year's annual national conference which will take place again in Sofia, 16 March 2024, Hotel Marinela, in which brand new ideas, observations and methods will be waiting to be presented.

REFERENCES

- 1. Davis EJ, Johnson DB, Sosman JA, et al. Melanoma: What do all the mutations mean? Cancer. 2018;124:3490-3499.
- 2. Sörgel F, Kinzig M, Abdel-Tawab M, et al. The contamination of valsartan and other sartans, part 1: New findings. J Pharm Biomed Anal. 2019;172:395-405.
- 3. Tchernev G, Temelkova I. Valsartan Induced Melanoma?! First Description in Medical Literature! Open Access Maced J Med Sci. 2018;6:2378-2380.
- 4. Tchernev G, Temelkova I. Additional 4 cases of valsartan/irbesartan-induced melanomas? J Biol Regul Homeost Agents. 2019;33:911-912.
- 5. Tchernev G, Temelkova I. Olmesartan/valsartan induced giant achromatic cutaneous melanoma: "modified" one-step surgical approach with favourable outcome. J Biol Regul Homeost Agents. 2019;33:1775-1777.
- 6. Tchernev G, Temelkova I. Valsartan/hydrochlorothiazide induced prostate carcinoma in a patient who subsequently developed melanoma. J Biol Regul Homeost Agents. 2019;33:1125-1127.
- 7. Tchernev G, Oliveira N, Kandathil LJ, et al. Personalised one step melanoma surgery with complete reciprocity between clinical and histopathological margins: a novel way to improve melanoma recurrence- free survival. Med pregled (med. Review). 2022;58:29-33.
- 8. Tchernev G, Oliveira N, Kandathil LJ, et al. Personalised One Step Melanoma Surgery and the Outdated/Current Guidelines for Surgical Treatment of Cutaneous Melanoma: Facts and Controversies. Acta Medica Bulgarica. 2022;49:51-58.

- 9. Tchernev G, Poterov G, Malev V. The Future of personalized Medicine: One Step melanoma Surgery. Acta Med Bulgarica. 2020;47:52-57.
- 10. Tchernev G, Ananiev J, Cardoso JC, et al. Multiple primary cutaneous melanomas in patients with FAMMM syndrome and sporadic atypical mole syndrome (AMS): what's worse? Wien Med Wochenschr. 2014;164:302-307.
- 11. Tchernev G, Temelkova I. The Novel Surgical Margin for One Step Melanoma Surgery (OSMS) (Without Using Ultrasonography Preoperatively): The End of Conformity! "Vivere militare est!". Open Access Maced J Med Sci. 2018;6:1263-1266.
- 12. Tchernev G, Malev V, Patterson JW, et al. A novel surgical margin (1 cm) might be from benefit for patients with dysplastic nevi, thin melanomas, and melanoma in situ: Analysis based on clinical cases. Dermatol Ther. 2020;33:e13261.
- 13. Tchernev G. One Step Melanoma Surgery for Patient with Thick Primary Melanomas: "To Break the Rules, You Must First Master Them! "Open Access Maced J Med Sci. 2018;6:367-371.
- 14. Tchernev G, Pidakev I, Chokoeva AA, et al. Advanced Pretibial Melanoma (APM): Clinicians Behaviour As Triggering Factor? Open Access Maced J Med Sci. 2017;6:64-66.
- 15. Kandathil LJ, Oliveira N, Patterson JW, et al. Borderline Intermediate Thickness Cutaneous Melanoma Class B: Isn't it Time for Personalised One Step Surgical Approach as Standard Clinical Behaviour? Clin Res Dermatol Open Access. 2021;8:1-5.
- 16. Tchernev G, Kandathil LJ, Oliveira N. Intermediate thickness cutaneous melanomas and the new trends in dermatologic surgery: the advantages of personalized one step surgical approach. J Med Review (Bulgarian). 2022;58:42-45.
- 17. Tchernev G, Oliveira N, Kandathil LJ, et al. 4th National Congress of the Bulgarian Society for Dermatologic Surgery, Sofia, 12th March 2022 with main topics: one step melanoma surgery and drug induced melanoma. Dermatol Reports. 2022;14:9542.
- 18. Tchernev G, Kandathil LJ, Oliveira N. Insights into the development of lentigo maligna and dysplastic nevi: spotlight on the possible relation with sartans, thiazides and nitrosamines. Port J Dermatol and Venereol. 2022;80:235-240.
- 19. Tchernev G, Bitolska A, Patterson JW. Telmisartan (and/or nitrosamine) induced occult melanoma: first reported case in world literature. Expert Rev Clin Pharmacol. 2021;14:1075-1080.
- 20. Tchernev G, Bitolska A, Patterson JW. Telmisartan (and/or nitrosamine) induced occult melanoma: first reported case in world literature. Expert Rev Clin Pharmacol. 2021;14:1075-1080.
- 21. Tchernev G, Kordeva S, Marinov V, et al. Nitrosamines in antihypertensives, metformin and raniti-dine as cofactors for melanoma and development of other cancers. Expert group opinion. Port J Dermatol and Venereol. 2022;80:332-334.
- 22. TchernevG, PoterovG. Drug induced cancers: Simultaneously development of cutaneous melanoma, colon carcinoma and Kaposi sarcoma under Valsartan/Hydrochlorothiazide. Clin Res Dermatol Open Access. 2020;7:1-8.

- 23. Tchernev G, Kordeva S, Patterson JW. Nitrosamines and skin cancer: rather reality than a myth? J Med Review (Bulgarian). 2023;59:5-7.
- 24. Tchernev G, Malev V, Patterson JW, et al. Sartans, Nitrosamines and melanoma development: The hidden truth. J Medical Review (Bulgarian). 2021;57:36-37.
- 25. Tchernev G, Temelkova I. Drug-Induced Melanoma: Irbesartan Induced Cutaneous Melanoma! First Description in the World Literature! Open Access Maced J Med Sci. 2019;7:114-116.
- 26. Tchernev G, Temelkova I. Irbesartan Induced Cutaneous Melanoma! Second Case in the Medical Literature! Open Access Maced J Med Sci. 2019;7:121-123.
- 27. Tchernev G, Temelkova I. Olmesartan/valsartan induced giant achromatic cutaneous melanoma: "modified" one-step surgical approach with favourable outcome. J Biol Regul Homeost Agents. 2019;33:1775-1777.
- 28. Mansouri I, Botton J, Semenzato L, et al. N-nitrosodimethylamine-Contaminated Valsartan and Risk of Cancer: A Nationwide Study of 1.4 Million Valsartan Users. J Am Heart Assoc. 2022;11:e8067.
- 29. Tchernev G, Chokoeva AA, Terziev I, et al. Small Dysplastic Congenital Melanocytic Nevi in Childhood as Possible Melanoma Imitators. Open Access Maced J Med Sci. 2018;6:149-151.
- 30. Tchernev G, Temelkova I. Preputial melanoma. Wien Med Wochenschr. 2021;171:41-42.
- 31. Tchernev G, Poterov G, Cardoso JC. Vaginal melanosis. Wien Med Wochenschr. 2021;171:65-67.
- 32. Dobrică EC, Vâjâitu C, Condrat CE, et al. Vulvar and Vaginal Melanomas-The Darker Shades of Gynecological Cancers. Biomedicines. 2021;9:758.
- 33. Tchernev G, Temelkova I. Hidradenitis Suppurativa (Hurley I/II): Serial Excisions with Primary Wound Closure Under Local Anesthesia As Most Adequate Treatment Approach. Open Access Maced J Med Sci. 2019;7:400-402.
- 34. Tchernev G, Temelkova I, Wollina U. Uncommon pretibial bilateral manifestation of Hidradenitis suppurativa (Hurley III) after discontinuation of systemic treatment with adalimumab: a serious reason to prefer surgery as a primary approach? J Eur Acad Dermatol Venereol. 2019;33:e449-e451.
- 35. Chokoeva AA, Fioranelli M, Roccia MG, et al. Multifocal infantile progressive hemangiomatosis with ocular involvement: unique presentation in a Bulgarian newborn. J Biol Regul Homeost Agents. 2016;30:61-63.
- 36. Temelkova I, Tchernev G. Tinea Imbricate- like Pemphigus erythematosus (Senear-Usher syndrome)!. Clin Res Dermatol Open Access. 2019;6:1-2.
- 37. Tchernev G, Temelkova I, Wollina U. Nevus comedonicus. J Medical Review (Bulgarian). 2019;55:71-72.
- 38. Lozev I, Chernin S, Kandathil LJ, et al. Giant advanced SCC of the scalp with cranial bone invasion: Surgical removal and simultaneous defect closure with several rotation advancement flaps. J Eur Acad Dermatol Venereol. 2022;36:e791-e792.
- 39. Tchernev G, Kordeva S, Batashki I, et al. SCC development after irbesartan/hydrochlorothiazide: potential role of nitrosamines as skin cancer triggering factors. J Med Review (Bulgarian). 2023;59:12-14.

- 40. Tchernev G, Oliveira N, Kandathil LJ, et al. Adverse drug reactions: keratoacanthoma development after systemic administration with irbesartan/hydrochlorothiazide. J Med Review (Bulgarian). 2022;58:47-50.
- 41. Tchernev G, Wollina U, Temelkova I. High-Risk Basal Cell Carcinomas of the Head and Neck: Selected Successful Surgical Approach in Three Bulgarian Patients! Open Access Maced J Med Sci. 2019;7:1665-1668.
- 42. Poterov G, Tchernev G. A "Cosa Nostra- like fellow" with a Problem?. Clin Res Dermatol Open Access. 2020;7:1-2.
- 43. Kordeva S, Batashki I, Tchernev G. Slowly progressive tumorous mass on the back. Port J Dermatol and Venereol. 2022;80:327-329.