

## **УНИВЕРЗИТЕТ У НИШУ МЕДИЦИНСКИ ФАКУЛТЕТ**

На основу решења декана Медицинског факултета Универзитета у Нишу, донетог 9.10.2024. године (број решења 01-12144 ), на основу члана 37 и члана 139 Статута Медицинског факултета Универзитета у Нишу (11-3204-2/1) са изменама и допунама од 26.11.2018., 9.8.2019., 20.7.2020., 25.1.2021., 11.1.2023., 29.9.2023. именована је комисија за припрему извештаја за избор проф.др. Вангелиса Каралиса са Фармацеутског факултета Националног Каподистријан Универзитета у Атени, за гостујућег професора Медицинског факултета Универзитета у Нишу за ужу научну област Фармакокинетика и клиничка фармација. Комисију чине:

1. Проф.др Александра Цатић Ђорђевић, ванредни професор за УНО Фармакокинетика и клиничка фармација, продекан за наставу на програму ИАС фармација, председник
2. Проф.др Ивана Нешић, редовни професор за УНО Фармацеутска технологија и биотехнологија Медицинског факултета Универзитета у Нишу, члан
3. Проф.др Александар Митић, декан Медицинског факултета Универзитета у Нишу, члан

Комисија је сачинила извештај на основу приложеног материјала у складу са одредбама Закона о високом образовању Републике Србије и Статутом Медицинског факултета Универзитета у Нишу.

### **ИЗВЕШТАЈ**

Проф.др Вангелис Каралис, ванредни професор, запослен на Националном Каподистријан Универзитету у Атени је писмено потврдио да жели да буде изабран за гостујућег професора за УНО Фармакокинетика и клиничка фармација Медицинског факултета Универзитета у Нишу.

#### **1. ОПШТИ ПОДАЦИ ПРОФЕСИОНАЛНЕ БИОГРАФИЈЕ**

Каријера ванредног професора Вангелиса Каралиса прати следећи хронолошки низ:

2022 - present : Associate Professor, Dpt. of Pharmacy, National and Kapodistrian University of Athens

2020 – 2022 : Assistant Professor (tenured), Dpt. of Pharmacy, National and Kapodistrian University of Athens

2017 - 2020 : Assistant Professor, Dpt. of Pharmacy, National and Kapodistrian University of Athens

2014 – 2016 : Lecturer, Dpt. of Pharmacy, National and Kapodistrian University of Athens

2005 - 2014 : Working in the field of pharmacy outside Academia (National Organization for Medicines, Thriassio General Hospital, Private sector)  
2004 - 2005 : Military service (Hellenic Airforce, 114 CW)  
2004 : PhD completion

Преглед предмета у чијој је реализацији проф.др Вангелис Каралис учествовао:

1. Интегрисане академске студије

2015 - present : Statistics (B206) Sole Instructor

2012 - present : Introduction into Clinical Pharmacy (Z761) Sole Instructor

2017 - present : Programming and Computational Methods

(Г354) Co-Instructor, Coordinator

2023 - present : Pharmaceutical Care Co-Instructor, Coordinator

2010 – present

& 2006 - 2008

: Laboratory practice in “Biopharmaceutics –

Pharmacokinetics I” (E510E) Co-Instructor

2013 - present : Laboratory practice in “Introduction into

Laboratory Practice” (1st semester) Co-Instructor

2012 - 2013 : Pharmacology I (E504) Co-Instructor

2010 - 2011 : Pharmacology I (E504). Teaching

‘Pharmacokinetics’ Co-Instructor

2000 - 2003 : Laboratory practice in “Pharmaceutical  
Technology” (H808E) Co-Instructor

2. Последипломске студије:

Clinical Pharmacy (Dpt. of Pharmacy, NKUA)

2015 - present : Applications of Pharmacokinetics to Therapeutics Co-Instructor,  
Coordinator

2015 - present : Clinical Practice Co-coordinator

2023 - present Clinical Pharmacology I / Pathology I Co-Instructor, Coordinator

2023 - present Clinical Pharmacology II / Pathology II Coordinator

2023 - present Exploration of Interesting Cases in Therapeutics Co-Instructor,  
Coordinator

2024 - present Advanced Biopharmaceutics - Pharmacokinetics Co-Instructor

2015 - present Seminars in Clinical Pharmacy Coordinator

Dermatopharmacology-Cosmetology (School of Medicine - Dpt. of Pharmacy, NKUA)

2015 – 2023 :

Action – Toxicity of Drugs and Cosmetics in the Skin (5002): a) Antibiotics, b)

Anti-inflammatory drugs [6 h]

2018 - 2023 : Seminars (Applied Statistics) [6 h]

Industrial Pharmacy (Dpt. of Pharmacy, NKUA)

2019 - present : Laboratory exercises in Industrial Pharmacy (6110): Adjusting dosage  
regimens [3h]

2019 - present : Special courses in Industrial Pharmacy: Modeling and Simulation in  
Drugs RD[2h]

2019 - 2022 Special courses in “Industrial Pharmacy” (co-coordinator)  
Clinical Pharmacokinetics (AFR de Pharmacie, Aix-Marseille Université, Marseille, France)  
2015 - 2022 : Clinical Pharmacokinetics (PK UE6). Spécialité: Pharmacocinétique [6 h]  
Personalized Medicine (School of Medicine – Dpt of Pharmacy, University of Patras)  
2023 - present In silico clinical studies – Bioequivalence studies  
Erasmus mundus joint master degree (EMJMD): University of Patras – University of Paris Descartes – University of Angers – University of Pavia  
2022 - 2023 Pharmacokinetics, Statistics [6 h]  
2017 - 2021 : Pharmacokinetics, Statistics [12h]  
Nanomedicine (School of Medicine - Dpt. of Pharmacy, NKUA) 2018 - present :  
Introduction into Pharmacokinetics [2h]  
Development of new drugs: research, launch and access (School of Medicine, NKUA)  
2019 - 2021 : In silico clinical studies [2h] Bioequivalence studies  
Respiratory Failure and Mechanical Ventilation (School of Medicine, NKUA) 2019 - 2021 : Pharmacokinetics [2h]  
ICU – Emergency Nursing (School of Medicine, NKUA) 2010 - 2013 : Pharmacology (MGY5). Co-Instructor. ICU and Emergency Nursing MSc

Почетком школске 2024/25. године постао је директор мастер студија Клиничке фармације на Националном Каподистријан Универзитету.

### **Научно и стручно усавршавање:**

2006 – 2008 : Post-doctoral research fellow in ‘Pharmacokinetics’, Department of Pharmacy, National and Kapodistrian University of Athens, Greece

### **Награде и признања**

- 2007 – 2008 : Post-doctoral research scholarship in ‘Pharmacy’ from the State Scholarship Foundation (IKY)
- 2000 : Postgraduate studies: Highest graduation score in MSc (1998-2000)
- 1999 : Best first academic year performance: Scholarship from the Department of Pharmacy, National and Kapodistrian University of Athens)

## **2. ПРЕГЛЕД НАУЧНОГ И СТРУЧНОГ РАДА КАНДИДАТА**

Радови објављени у часописима са SCI листе (са \* су означени радови у којима је био аутор задужен за кореспонденцију):

1. Karalis V, Claret L, Iliadis A, Macheras P. Fractal volume of drug distribution: it scales proportionally to body mass. Pharm. Res. 18: 1056-1060 (2001)

2. Karalis V, Macheras P. Drug disposition viewed in terms of the fractal volume of distribution. *Pharm. Res.* 19: 697-704 (2002)
3. Karalis V, Tsantili-Kakoulidou A, Macheras P. Multivariate statistics of disposition pharmacokinetic parameters for structurally unrelated drugs used in therapeutics. *Pharm. Res.* 19: 1829-1836 (2002)
4. Karalis V, Macheras P. Pharmacodynamic considerations in bioequivalence assessment: Comparison of novel and existing metrics. *Eur. J. Pharm. Sci.* 19: 45-56 (2003)
5. Karalis V, Tsantili-Kakoulidou A, Macheras P. Quantitative structure pharmacokinetic relationships for disposition parameters of cephalosporins. *Eur. J. Pharm. Sci.* 20: 115-123 (2003)
6. Karalis V, Dokoumetzidis A, Macheras P. A physiologically based approach for the estimation of recirculatory parameters. *J. Pharmacol. Exp. Ther.* 308: 198-205 (2004)
7. Kosmidis K, Karalis V, Argyrakis P, Macheras P. Michaelis-Menten kinetics under spatially constrained conditions: application to mibefradil pharmacokinetics. *Biophys. J.* 87: 1498-1506 (2004)
8. Dokoumetzidis A, Karalis V, Iliadis A, Macheras P. The heterogeneous course of drug transit through the body. *Trends Pharmacol. Sci.* 25: 140-146 (2004)
9. Karalis V, Symillides M, Macheras P. Novel scaled average bioequivalence limits based on GMR and variability considerations. *Pharm. Res.* 21: 1933-1942 (2004)
10. Karalis V, Macheras P, Symillides M. Geometric mean ratio dependent scaled bioequivalence limits with levelling-off properties. *Eur. J. Pharm. Sci.* 26: 54-61 (2005)
11. Kytariolos J, Karalis V, Macheras P, Symillides M. Novel Scaled bioequivalence limits with levelling-off properties. *Pharm. Res.* 23:2657-64 (2006)
12. Karalis V, Macheras P, Van Peer A, Shah V. Bioavailability and Bioequivalence: Focus on Physiological Factors and Variability. *Pharm. Res.* 25: 1956-62 (2008)
- 13\*. Karalis V, Symillides M, Macheras P. Comparison of the Reference Scaled Bioequivalence Semi-Replicate Method with other Approaches: Focus on Human Exposure to Drugs. *Eur. J. Pharm. Sci.* 38: 55-63 (2009)
- 14\*. Karalis V, Macheras P. Examining the Role of Metabolites in Bioequivalence Assessment. *J. Pharm. Pharmaceut. Sci.* 13: 198-217 (2010)
15. Karalis V, Magklara E, Shah V, Macheras P. From Drug Delivery Systems to Drug Release, Dissolution, IVIVC, BCS, BDDCS, Bioequivalence and Biowaivers. *Pharm. Res.* 27: 2018-2029 (2010)
- 16\*. Karalis V, Symillides M, Macheras P. Novel methods to assess bioequivalence. *Expert Opin Drug Metab Toxicol.* 7:79-88 (2011) (Invited Expert Opinion)
17. Karalis V, Symillides M., Macheras P. On the leveling-off properties of the new bioequivalence limits for highly variable drugs of the EMA guideline. *Eur J. Pharm. Sci.* 44:497-505 (2011)
- 18\*. Karalis V, Symillides M., Macheras P. Bioequivalence of highly variable drugs: a comparison of the newly proposed regulatory approaches by FDA and EMA. *Pharm. Res.* 29:1066-77 (2012)
19. Maltezou HC, Drakoulis N, Siahaidou T, Karalis V, Zervaki E, Dotsikas Y, Loukas YL, Theodoridou M. Safety and Pharmacokinetics of Oseltamivir for Prophylaxis of Neonates Exposed to Influenza H1N1. *Pediatr Infect Dis J.* 31:527-9 (2012)
- 20\*. Karalis V, Macheras P. Current approaches of bioequivalence testing. *Expert Opin Drug Metab Toxicol.* 2012 8:929-42. (Invited Expert Opinion) [Selected as 'Editor's Pick' in August 2012]
21. Symillides M, Karalis V, Macheras P. Exploring the relationships between scaled bioequivalence limits and within-subject variability. *J Pharm Sci.* 102:296-301 (2013)
- 22\*. Karalis V, Macheras P. An insight into the properties of a two-stage design in bioequivalence studies. *Pharm Res.* 30:1824-35 (2013)

23. Macheras P, Karalis V, Valsami G. Keeping a critical eye on the science and the regulation of oral drug absorption: A review. *J Pharm Sci.* 102: 3018-36 (2013)
- 24\*. Karalis V, Bialer M, Macheras P. Quantitative Assessment of the Switchability of Generic Products. *Eur J Pharm Sci.* 50:476-483 (2013)
- 25\*. Karalis V. The Role of the Upper Sample Size Limit in Two-Stage Bioequivalence Designs. *Int J Pharm.* 456:87-94 (2013)
26. Karalis V, Macheras P, Bialer M. Generic Products of Antiepileptic Drugs: A Perspective on Bioequivalence, Bioavailability and Formulation Switches Using Monte Carlo Simulations. *CNS Drugs.* 28:69-77 (2014)
- 27\*. Karalis V, Macheras P. On the Statistical Model of the Two-Stage Designs in Bioequivalence Assessment. *J Pharm Pharmacol.* 66(1):48-52 (2014)
28. Macheras P, Karalis V. A Non-Binary Biopharmaceutical Classification of Drugs: the AB $\Gamma$  system. *Int J Pharm.* 464:85-90 (2014)
- 29\*. Daousani C, Karalis V. Bioequivalence studies in Europe before and after 2010. *Clin Res Regul Affairs.* 32: 9-21 (2015) [Invited Review]
- 30\*. Soulele K, Macheras P, Silvestro L, Rizea Savu S, Karalis V. Population pharmacokinetics of fluticasone propionate/salmeterol using two different dry powder inhalers. *Eur J Pharm Sci.* 80: 33-42 (2015)
- 31\*. Karalis V. From Bioequivalence to Biosimilarity: The Rise of a Novel Regulatory Framework. *Drug Res.* 66: 1-6 (2016)
32. Markantonis SL, Melemenis A, Markidou M, Haikali SI, Karalis V, Fassoulaki A. Ropivacaine, IL-6 and TNF- $\alpha$  plasma levels during intermittent epidural and continuous wound infusion of ropivacaine for analgesia after hysterectomy or myomectomy: An observational study. *Pharmacology* 98(5-6): 294-8 (2016)
33. Gkinou C, Kani C, Souliotis K, Karalis V, Markantonis-Kyroudi S. Generic drugs – Do they offer the same safety and efficacy as originator medicines? Perceptions and attitudes of final year pharmacy students in Greece. *Value in Health* 19:A347-A766 (2016)
34. Vlachou M, Siamidi A, Diamantidi E, Iliopoulou A, Papanastasiou I, Ioannidou V, Kourbeli V, Foscolos AS, Vocatc A, Colec S, Karalis V, Kellici T, Mavromoustakos T. In vitro Controlled Release from Solid Pharmaceutical Formulations of two new Adamantane Aminoethers with Antitubercular Activity (I). *Drug Res* 67: 447-450 (2017)
- 35\*. Soulele K, Macheras P, Karalis V. Pharmacokinetic Analysis of Inhaled Salmeterol in Asthma Patients: Evidence from Two Dry Powder Inhalers. *Biopharm Drug Dispos.* 38: 407-419 (2017) [Top-20 downloaded article 2017-18]
- 36\*. Daousani C, Karalis V. Paediatric medicines: regulatory and scientific issues. *Drug Res* 67: 377-84 (2017)
37. Vlachou M, Siamidi A, Spaneas D, Lentzos D, Ladia P, Anastasiou K, Papanastasiou I, Foscolos AS, Georgiadis MO, Karalis V, Kellici T, Mavromoustakos T. In vitro Controlled Release of two new Tuberculocidal Adamantane Aminoethers from Solid Pharmaceutical Formulations (II). *Drug Res.* 67(11):653-60 (2017)
- 38\*. Soulele K, Macheras P, Karalis V. On the Pharmacokinetics of Two Inhaled Budesonide/Formoterol Combinations in Asthma Patients Using Modeling Approaches. *Pulm Pharmacol Ther.* 48: 168-78 (2017)
- 39\*. Soulele K, Karalis V. On the Population Pharmacokinetics and the Enterohepatic Recirculation of Total Ezetimibe. *Xenobiotica.* 27: 1-11 (2018)
- 38\*. Soulele K, Macheras P, Karalis V. On the Pharmacokinetics of Two Inhaled Budesonide/Formoterol Combinations in Asthma Patients Using Modeling Approaches. *Pulm Pharmacol Ther.* 48: 168-78 (2017)
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40. Ioannidis K, ..., Karalis V, Markantonis S. Do we need to adopt antifungal stewardship programs? *Eur J Hosp Pharm.* 25:A77-A78 (2018)

- 41\*. Georgiou E, Schoina E, Markantonis SL, Karalis V, Athanasopoulos P, Chrysoheris P, Antonakopoulos F, Konstantinidis K. Laparoscopic TEP Inguinal Hernia Repair: Retrospective Study on Prosthetic Materials, Postoperative Management and Quality of Life. *Medicine* 97(52):e13974 (2018)
- 42\*. Soulele K, Karalis V. Development of a joint population pharmacokinetic model of ezetimibe and its conjugated metabolite. *Eur J Pharm Sci.* 128: 18-26 (2019)
43. Daousani C, Karalis V, Malenović A, Dotsikas Y. Hematocrit Effect on Dried Blood Spots in Adults: A Computational Study and Theoretical Considerations. *Scand J Clin Lab Invest.* 79(5):325-33 (2019)
44. Kotroni E, Simirioti E, Kikionis S, Sfiniadakis I, Siamidi A, Karalis V, Vitsos A, Vlachou M, Ioannou E, Roussis V, Rallis M. In vivo evaluation of the anti-inflammatory activity of electrospun micro/nanofibrous patches loaded with *Pinus halepensis* bark extract on hairless mice skin. *Materials* 12: 2596: 1-13 (2019)
- 45\*. Karatza E, Karalis V. Modelling gastric emptying: a pharmacokinetic model simultaneously describing distribution of losartan and its active metabolite EXP-3174. *Basic Clin Pharmacol Toxicol* 126: 193-202 (2020)
46. Vlachou M, Siamidi A, Goula E, Georgas P, Pippa N, Karalis V, Sentoukas T, Pispas S. Probing the release of the chronobiotic hormone melatonin from hybrid calcium alginate hydrogel beads. *Acta Pharm.* 70: 527-38 (2020)
47. Karatza E, Markantonis S, Savvidou A, Verentzioti A, Siatouni A, Alexoudi A, Gatzonis S, Mavrokefalou E, Karalis V. Pharmacokinetic and Pharmacodynamic modeling of levetiracetam: investigation of factors affecting the clinical outcome. *Xenobiotica* 24: 1-11 (2020)
- 48\*. Karalis V, Ismailos G, Karatza E. Chloroquine dosage regimens in patients with COVID-19: safety risks and optimization using simulations. *Safety Science* 129: 104842 (2020)
49. Karatza E, Karalis V. Delay differential equations for the description of Irbesartan pharmacokinetics: a population approach to model absorption complexities leading to dual peaks. *Eur J Pharm Sci.* 153: 105498 (2020)
50. Karatza E, Ismailos G, Marangos M, Karalis V. Optimization of hydroxychloroquine dosing based on COVID-19 patients' characteristics: a review of the literature and simulations. *Xenobiotica* 51:127-138 (2021)
51. Karatza E, Karalis V. Non-linear mixed effects modeling and simulation for exploring variability sources in dissolution curves: a BCS class II case example. *J Bioequiv Avail* 12: 1-6 (2020)
- 52\*. Konstantinidou S, Kostaras P, Anagnostopoulos GE, Markantonis SL, Karalis V, Konstantinidis K. A Retrospective Study on the Evaluation of the Symptoms, Medications, and Improvement of the Quality of Life of Patients Undergoing Robotic Surgery for Gastroesophageal Reflux Disease. *Exp Ther Med* 21:174 (2021)
53. Kontostathi M, Isou S, ... Karalis V, Klamarias L, Dania F, Papaioannou GT, Roussis V, Polychronopoulos E, Anastassopoulou J, Theophanides T, Rallis MC, Black HS. Influence of Omega-3 Fatty Acid-Rich Fish Oils on Hyperlipidemia: Effect of Eel, Sardine, Trout, and Cod Oils on Hyperlipidemic Mice. *J Med Food* (2021). DOI: 10.1089/jmf.2020.0114
- 54\*. Vlachou M, Karalis V. An In Vitro – In Vivo Simulation Approach for the Prediction of Bioequivalence. *Materials* 14(3):555 (2021). DOI: 10.3390/ma14030555
- 55\*. Kousovista R, Athanasiou C, Liaskonis K, Ivopoulou O, Karalis V. Association of antibiotic use with the resistance epidemiology of *Pseudomonas Aeruginosa* in hospital setting: a four-year retrospective time series analysis. *Sci Pharm* (2021). doi.org/10.3390/scipharm89010013
- 56\*. Karatza E, Karalis V. Investigating the impact of gastric emptying on pharmacokinetic parameters using delay differential equations and principal component analysis. *Eur J Drug Metab* (2021). DOI: 10.1007/s13318-021-00683-3
- 57\*. Karatza E, Ismailos G, Karalis V. Colchicine for the treatment of COVID-19 patients:

efficacy, safety, and model informed dosage regimens. *Xenobiotica* (2021). DOI: 10.1080/00498254.2021.1909782 [Top 10 most cited articles in *Xenobiotica*]

58\*. Cardozo B, Karatza E, Karalis V. Osteoporosis treatment with risedronate: a population pharmacokinetic model for the description of its absorption and low plasma levels. *Osteoporos Int* (2021). DOI: 10.1007/s00198-021-05944-0

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65. Terpos E, Trougakos I, Karalis V .../...Dimopoulos MA. Kinetics of anti-SARS-CoV-2 antibody responses 3 months post complete vaccination with BNT162b2; a prospective study in 283 health workers. *Cells* 10: 1942 (2021) [Equal contribution as first authors]

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67. Terpos E, Karalis V, ... / ... Trougakos I, Dimopoulos MA. Robust neutralizing antibody responses 6 months post vaccination with BNT162b2: a prospective study in 308 healthy individuals. *Life* (2021)

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- machine learning analysis. *Biomedicines* (2022) [\* equal last authors]
- 74\*. Markantonis SL, Markou N, ... / ... Karalis V. The pharmacokinetics of levetiracetam in critically ill adult patients: an intensive care unit clinical study. *Applied Sci* [2022]
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86. Kousovista R, Karali G, Karalis V. Modeling the Double Peak Phenomenon in Drug Absorption Kinetics: The Case of Amisulpride. *BioMedInformatics* [2023] ESCI
- 87\*. Matsota P, Karalis V, Saranteas T, Kiospe F, Markantonis SL. Ropivacaine pharmacokinetics in the arterial and venous pools after ultrasound-guided continuous thoracic paravertebral nerve block. *J Anaesth Clin Pharmacol* [2022].D10.4103/joacp.joacp\_353\_22 ESCI
- 88\*. Karalis V. An In-Silico Approach Toward the Appropriate Absorption Rate Metric in Bioequivalence. *Pharmaceuticals* [2023] M21
89. Damnjanović I, Tsypkova N, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. Joint Use of Population Pharmacokinetics and Machine Learning for Optimizing Antiepileptic Treatment in Pediatric Population. *Ther Adv Drug Saf* [2023] [Editor's in Chief among the 4 Top Articles for 2023] M22
- 90\*. Kyritsi A, Tagka A, Stratigos A, Pesli M, Lagiokapa T, Karalis V. A retrospective analysis to investigate contact sensitization in Greek population using classic and machine learning techniques. *Adv Exp Med Biol* [2023] M22
- 91\*. Papadopoulos D, Karalis V. Variational Autoencoders for Data Augmentation in Clinical Studies. *Applied Sci* [2023] M22
92. Daousani C, Karalis V, Loukas Y, Schulpis K, Alexiou K, Dotsikas Y. Dried Blood Spots



in Neonatal Studies: A Computational Analysis for the Role of the Hematocrit Effect. Pharmaceuticals [2023] M21

93. Stratidakis N, Tagka A .../... Karalis V, Dallas P, Stratigos A, Rallis M. Octenidine versus dispase gels for wound healing after cryosurgery treatment in patients with basal cell carcinoma. Adv Exp Med Biol [2023] 10.1007/978-3-031-31986-0 M22

94\*. Gkousiaki M, Karalis V, Kyritsi K, Almpani C, Geronikolou S, Stratigos A, Rallis MC, Tagka A. Contact Allergy Caused by Acrylates in Nail Cosmetics: A Pilot Study from Greece. Contact Dermatitis [2024] <https://doi.org/10.1111/cod.14485> M21

95\*. Karalis V. The Integration of Artificial Intelligence into Clinical Practice. Applied Biosciences [2024] <https://doi.org/10.3390/applbiosci3010002> [Promoted for the Journal Title Story / Journal LinkedIn promoted] није категорисан

96\*. Papadopoulos D, Karalis V. Introducing an Artificial Neural Network for Virtually Increasing the Sample Size of Bioequivalence Studies. Applied Sci [2024] M22

97. Giakoumaki M, ... / ... Karalis V, Ralis M, Black H. Type I diabetes mellitus suppresses experimental skin carcinogenesis. Cancers [2024] M21

98\*. Kyritsi A, Tagka A, Stratigos A, Karalis V. Machine Learning in Allergic Contact Dermatitis: Identifying (Dis)similarities between Polysensitized and Monosensitized Patients. BioMedInformatics [2024] ESCI листа

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100\*. Nikolopoulos A, Karalis V. Implementation of a Generative AI algorithm for Virtually Increasing the Sample Size of Clinical Studies. Applied Sciences [2024] M22

101\*. Papadopoulos D, Karali G, Karalis V. Bioequivalence Studies of Highly Variable Drugs: An Old Problem Addressed by Artificial Neural Networks. Applied Sciences [2024] M22

102\*. Karalis V. A Vector Theory of Assessing Clinical Trials: An Application to Bioequivalence. J Cardiovasc Dev Dis [2024] M22

103\*. Kokkali M, Karalis V. Average Slope vs. Cmax: Which Truly Reflects the Drug Absorption Rate? Applied Sciences 14, 6115. (2024) M22

104. Karalis V, Catić-Đorđević A. Artificial Intelligence in Drug Development, Clinical Trials, and Healthcare. Acta Medica Medianae. 10.5633/amm.2025.0110. [2024] M51

105. Gkagkari P, Tagka A, Stratigos A, Karalis V, Kyritsi A, Vitsos A, Rallis MC. Differential Diagnosis of Irritant Versus Allergic Contact Dermatitis Based on Noninvasive Methods. Dermatol. Pract. Concept. [2024]

Проф.др Вангелис Каралис објавио је 103 рада у индексираним интернационалним часописима, од тога 63 рада у последњих пет година. Током 2023.и 2024.године објавио је 4 рада категорије M21, 11 радова у категорије M22, један рад категорије M23 и један рад категорије M51. Рад категорије M51 објавио је у домаћем националном часопису *Acta Medica Medianae*, чији је издавач Медицински факултет Универзитета у Нишу. Радови представљају важан допринос савременом фармакокинетичком приступу и укључују примену машинског учења у клиничкој фармацији дајући допринос клиничкој пракси. Др Каралис је рецензент већег броја интернационалих научних часописа.

### **Учешће на конференцијама и конгресима:**

#### **Conference Proceedings:**

1\*. Karatza E, Karalis V. A Semi-Physiological Modeling & Simulation approach for guided decision making in R&D. Proceedings of the AAPS Annual Meeting and Exposition, Washington, DC, USA. pg 4-7 (2018)

2\*. Deligiannopoulou A, Karalis V. Nanobots in Medicine. Physica Medica 104S2 (2022) S1-S66. DOI: 10.1016/S1120-1797(22)03185-4

3\*. Kyritsi K, Tagka A, Stratigos A, Karalis V. Analysis of Polysensitization and Monosensitization using Classic and Machine Learning Techniques. *Free Radic Biol Med*. 201 Sup(1), 49-50 (2023).

### **Poster Presentations**

1. Karalis V, Macheras P. Clearance viewed in terms of the fractal volume of drug distribution. AAPS annual meeting, (Denver/Colorado, October 21-25 2001)
2. Karalis V, Macheras P. Pharmacodynamically based direct curve metrics for the assessment of bioequivalence. International symposium on scientific and regulatory aspects of dissolution and bioequivalence (Athens, April 12-14 2002)
3. Karalis V, Tsantili - Kakoulidou A, Macheras P. Quantitative-structure pharmacokinetic relationships for cephalosporins using multivariate data analysis. AAPS annual meeting (Toronto/Ontario, November 10-14 2002)
4. Karalis V, Macheras P. Pharmacodynamically based direct curve metrics for the assessment of bioequivalence. AAPS annual meeting (Toronto/Ontario, November 10-14 2002)
5. Karalis V, Macheras P. Time dependence in nonlinear pharmacokinetics: The paradigm of mibefradil. AAPS annual meeting (Salt Lake City, Utah, October 26-30 2003)
6. Karalis V, Symillides M, Macheras P. Novel scaled average bioequivalence limits based on GMR and variability considerations. AAPS annual meeting (Baltimore, USA, November 2004)
7. Karalis V, Macheras P, Symillides M. GMR-dependent scaled bioequivalence limits with leveling-off properties. 12th Panhellenic Conference of Pharmacy (Athens, May 14-16 2005)
8. Karalis V, Macheras P, Symillides M. Geometric Mean Ratio dependent scaled bioequivalence limits with leveling-off properties. 2nd International symposium on scientific and regulatory aspects of dissolution and bioequivalence (Athens, June 3-5 2005)
9. Karalis V, Macheras P, Symillides M. Geometric Mean Ratio dependent scaled bioequivalence limits with leveling-off properties. AAPS annual meeting (Nashville, Tennessee, USA, November 6-10, 2005)
10. Kytariolos J, Karalis V, Macheras P, Symillides M. Scaled Bioequivalence Limits with Leveling-off Properties. AAPS Annual Meeting and Exposition (San Antonio, Texas October 29-November 2, 2006)
11. Karalis V, Macheras P. Bioequivalence in the light of metabolites: A computational approach. EUFEPS & COST B25 Conference on Bioavailability (BA) and Bioequivalence (BE): Focus on Physiological Factors and Variability (Athens, Greece, October 1-2, 2007)
12. Karalis V, Symillides M, Macheras P. Comparison of the Reference-Scaled Bioequivalence FDA Proposed Method with other Approaches: Focus on Exposure. AAPS Annual Meeting and Exposition (November 16–20, 2008, Atlanta, GA)
13. Karalis V, Macheras P. Towards the Elucidation of the Role of Metabolites in Bioequivalence Assessment. AAPS Annual Meeting and Exposition (November 16–20, 2008, Atlanta, GA)
14. Karalis V, Macheras P. Drug Metabolites and Bioequivalence: A Sensitivity Analysis. International Congress on New Delivery Systems, Biosimilars, Bioequivalence-Biowaivers: Scientific, Industrial and Regulatory Aspects. (July 2-3 2010, Titania Hotel, Athens)
15. Karalis V, Dokoumetzidis A, Macheras P. An improved phase plane method for the estimation and validation of the terminal half-life. AAPS Annual Meeting and Exposition (November 14-18 2010, New Orleans, Louisiana, USA) [R6425]
16. Karalis V, Macheras P. On the properties of a two-stage design for bioequivalence studies. 22th PAGE meeting (11-14 June 2013, Glasgow, Scotland) [2729]
17. Karalis V, Iliadis A, Macheras P. A stochastic modeling approach for the anomalous pharmacokinetics of amiodarone. 5th BBBB International Conference (Athens, 26-28 September 2013)
18. Karalis V, Macheras P. Two-stage bioequivalence designs: unveiling the performance. 5th

- BBBB International Conference (Athens, 26-28 September 2013)
19. Karalis V, Macheras P, Bialer M. Switchability of generic antiepileptic drug products. 5th BBBB International Conference (Athens, 26-28 September 2013)
  20. Charkoftaki G, Karalis V, Macheras P. Unveiling the relationship between the BCS/BDDCS classes and the pharmacokinetic parameters. 5th BBBB International Conference (Athens, 26-28 September 2013)
  21. Karalis V, Bialer, M, Macheras P. On the switchability of generics: a quantitative assessment. 5th BBBB International Conference (Athens, 26-28 September 2013)
  22. Karalis V, Symillides M, Macheras P. Scaled bioequivalence approaches with different variabilities of test and reference products. 5th BBBB International Conference (Athens, 26-28 September 2013)
  23. Karalis V, Iliadis A, Macheras P. An application of stochastic compartmental modeling to the anomalous amiodarone pharmacokinetics. 2013 AAPS Annual meeting and exposition, (San Antonio, Texas November 10-14) [T3206]
  24. Karalis V, Macheras P. Assessing the performance of a two-stage design in bioequivalence studies. 2013 AAPS Annual meeting and exposition (San Antonio, Texas November 10-14)
  25. Karalis V, Macheras P, Bialer M. On the bioequivalence and switchability of generic products of antiepileptic drugs. 2013 AAPS Annual meeting and exposition (San Antonio, Texas November 10-14) [R6366]
  26. Karalis V, Bialer, M, Macheras P. Quantitative assessment of the interchangeability of generic products. 2013 AAPS Annual meeting and exposition (San Antonio, Texas November 10-14) [T3391]
  27. Karalis V, Symillides M, Macheras P. The impact of test and reference products' variability on scaled average bioequivalence acceptance. 2013 AAPS Annual meeting and exposition (San Antonio, Texas November 10-14) [T2351]
  28. Karalis V, Macheras P. Non-Binary Biopharmaceutics Classification System (NB-BCS). 2013 AAPS Annual meeting and exposition (San Antonio, Texas November 10-14) [R6101]
  29. Soulele K, Macheras P, Karalis V. A population pharmacokinetic study of fluticasone/salmeterol in healthy subjects using two different dry powder inhalers. 23rd PAGE meeting (June 10-13, 2014, Alicante, Spain) [2729]
  30. Tsionou MI, Micha M, Xenos A, Karalis V, Paschalidou M, Stavropoulos P, Markantonis Kyroudi S. A Study of the Local Anaesthetic and Analgesic Action of Lidocaine. 2nd Congress of Pharmaceutical sciences (Patras, October 9-11, 2014) [PFT007]
  31. Stavridou M, Dimitriou X, Xenos A, Karalis V, Stavropoulos P, Markantonis-Kyroudi S. A study of the effect of topical application of a pomegranate and raspberry extract on skin elasticity. 2nd Congress of Pharmaceutical sciences (Patras, October 9-11, 2014) [PFT001]
  32. Soulele K, Macheras P, Karalis V. A population pharmacokinetic analysis using data from dry powder inhalers: the case of fluticasone/salmeterol. 2014 AAPS Annual meeting and exposition (San Diego, November 2-6) [R6325]
  33. Daousani C, Macheras P, Karalis V. On the Properties of the New Biopharmaceutic Classification System AB $\Gamma$ : Application to Actual Data. 2014 AAPS Annual meeting and exposition (San Diego, November 2-6) [T2127]
  34. Konstantinidou S, Ioannidou V, Karalis V. An insight into the undergraduate study programmes of two European faculties of pharmacy. 21st EAAP Annual Conference (Athens, May 14-16, 2015)
  35. Karavitaki M, Xenos A, Karalis V, Kouvardas E, Stavropoulos P, Markantonis-Kyroudi S. Influence of hydrolyzed collagen in combination with other active ingredients and beta-alanine on skin elasticity and body mass indices. 1st International CRS Congress (Aegli Zappiou, Athens, May 27-29, 2015) [PP23]
  36. Karalis V, Dokoumetzidis A, Macheras P. A computational methodology for the validation of the terminal slope estimate. 24th PAGE meeting (Hersonissos, Crete, June 2-5, 2015)
  37. Rerra E, Karalis V, Markantonis-Kyroudi S, Hirides P, Konstantinidis K. Analysis and

- evaluation of clinical measurements in patients with endometriosis. 6th Metrology Conference (War Museum, Athens, May 13,14, 2016)
38. Stratogianni K, Karalis V. Investigation and validation of population pharmacokinetic models for donepezil. 6th Metrology Conference (War Museum, Athens, May 13,14, 2016)
39. Soulele K, Macheras P, Karalis V. A population pharmacokinetic study of salmeterol in asthmatic patients using two dry powder inhalers. 25th PAGE meeting (Lisbon, Portugal, June 7-10, 2016)
40. Daoussani C, Macheras P, Karalis V. Identifying relationships between the pharmacokinetic properties of drugs and two classification systems, BCS and BDDCS. 2nd International CRS Congress (Aegli Zappiou, Athens, June 22-24, 2016)
41. Vlachou M, Iliopoulou A, Siamidi A, Ioannidou V, Kourbeli V, Foscolos SA, Karalis V, Papanastasiou I. Evaluation of modified release formulations of a new 1,3-disubstituted aminoadamantane derivative with tuberculocidal activity. 2nd International CRS Congress (Aegli Zappiou, Athens, June 22-24, 2016)
42. Soulele K, Macheras P, Karalis V. A comparison of the pharmacokinetics of inhaled salmeterol in healthy and asthmatic subjects: a population pharmacokinetic analysis. 2nd International CRS Congress (Aegli Zappiou, Athens, June 22-24, 2016)
43. Stratogianni K, Karalis V. Population pharmacokinetic modeling applied to the plasma concentration-time data of donepezil. 2nd International CRS Congress (Aegli Zappiou, Athens, June 22-24, 2016)
44. Gkinou C, Kani C, Souliotis K, Karalis V, Markantonis S. Generic drugs: Do they offer the same safety and efficacy as originator medicines? Perceptions and attitudes of final year pharmacy students in Greece. 19th ISPOR Annual European Congress, Vienna, Austria (29 October - 2 November 2016)
45. Daousani C, Macheras P, Karalis V. Understanding the Linkage between Pharmacokinetic Properties and the Two Classification Systems: BCS and BDDCS. 2016 AAPS Annual meeting and exposition (Denver, November 13-17) [10T0130]
46. Soulele K, Macheras P, Karalis V. A Comparison of the Pharmacokinetics of Inhaled Salmeterol in Healthy and Asthmatic Subjects: A Population Pharmacokinetic Analysis. 2016 AAPS Annual meeting and exposition (Denver, November 13-17) [10M0100]
47. Stratogianni K, Karalis V. Population pharmacokinetic modeling applied to the plasma concentration-time data of donepezil. 3rd PanHellenic conference of the Pharmaceutical University Departments (Thessaloniki, February 18-19 2017)
48. Soulele K, Macheras P, Karalis V. Population pharmacokinetic analysis of inhaled budesonide in asthma patients. 26th PAGE meeting (Budapest, Hungary, June 6-9, 2017)
49. Soulele K, Macheras P, Karalis V. On the population pharmacokinetics and the enterohepatic recirculation of inhaled formoterol in asthma patients. 26th PAGE meeting (Budapest, Hungary, June 6-9, 2017)
50. Kyrili A, Siamidi A, Pippa N, Pispas S, Demetzos C, Karalis V, Vlachou M. Thermal analysis and evaluation of liposomal systems and classic solid-state pharmaceutical excipients with furosemide. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
51. Poulou E, Karalis V. A Population Pharmacokinetic Analysis of Losartan. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
52. Soulele K, Macheras P, Karalis V. Population pharmacokinetic analysis of inhaled budesonide in asthma patients. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
53. Soulele K, Macheras P, Karalis V. Population pharmacokinetic analysis of inhaled formoterol in asthma patients. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
54. Kasviki P, Karalis V. Population pharmacokinetics of orally administered hydrochlorothiazide. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
55. Rerra E, Soulele K, Karalis V. Population pharmacokinetics of total ezetimibe in healthy

- subjects. 3rd International CRS Congress (Titania hotel, Athens, June 19-20, 2017)
56. Grigoropoulos A, ..., Karalis V., ... Rallis M. Clinical evaluation of wound healing capacity of isopod *Ceratothoa oestroides* oil extract. OCC World Congress 2017 and Annual SFRR-E Conference (Berlin, June 21-23, 2017)
57. Soulele K, Macheras P, Karalis V. A Pharmacokinetic Modeling Study on the Enterohepatic Recirculation of Inhaled Formoterol. 18th Panhellenic conference of Pharmacists (Zappeion Megaron, Athens, 6-8.10.2017)
58. Soulele K, Macheras P, Karalis V. Population Pharmacokinetic Analysis with Special Emphasis on the Lung Absorption Process of Inhaled Budesonide. 18th Panhellenic conference of Pharmacists (Zappeion Megaron, Athens, 6-8.10.2017)
59. Deli E, Kourounaki A, Kyriazi M, Sfiniadakis I, Karalis V, Rallis M. The effect of topical application of a new anti-inflammatory-antioxidant factor to the skin of diabetic mice after exposure to UV radiation. 18th Panhellenic conference of Pharmacists (Zappeion Megaron, Athens, 6-8.10.2017)
60. Soulele K, Macheras P, Karalis V. On the parallel (fast and slow) absorption of inhaled budesonide. 2017 AAPS Annual meeting and exposition (San Antonio, November 12-15) [M8076]
61. Soulele K, Macheras P, Karalis V. A study on the enterohepatic recirculation of inhaled formoterol using population pharmacokinetic modeling. 2017 AAPS Annual meeting and exposition (San Antonio, November 12-15) [M8077]
62. Dotsikas Y, Karalis V, Daousani C. On the haematocrit effect on the DBS measurements. 7th Metrology Conference (War Museum, Athens, May 11-12, 2017)
63. Filippakis A, Karatza E, Karalis V. Pharmacokinetic-Pharmacodynamic models in anticancer therapy. 7th Metrology Conference, ID=74, (War Museum, Athens, May 11-12, 2017)
64. Soulele K, Karalis V. Modeling of ezetimibe enterohepatic recirculation. EUFEPS Annual meeting (May 24-26 2018, Athens, Greece)
65. Karatza E, Karalis V. Mathematical modeling of gastric emptying: a joint model for losartan and its active metabolite EXP-3174. 27th PAGE meeting, II-68 (Montreux, Switzerland, May 29-June 1, 2018)
66. Kotroni E, Simirioti E, Kikionis S, Sfiniadakis I, Karalis V, Ioannou E, Roussis V, Rallis M. Antiinflammatory activity of pinus halepensis extract loaded on topical patches. 8th International Conference on Oxidative Stress in Skin Medicine and Biology (Andros, 6-9 September 2018)
67. Karatza E, Karalis V. A joint model describing gastric emptying driven pharmacokinetics of losartan and its active metabolite EXP-3174 based on data from two bioequivalence studies. 2018 AAPS Annual meeting and exposition (Washington DC, November 4-7, 2018)
68. Karatza E, Karalis V. A Semi-Physiological Modeling & Simulation approach for guided decision making in R&D. 2018 AAPS Annual meeting and exposition (Washington DC, November 4-7, 2018)
69. Vitsos A, ... Karalis V, Tentolouris N. Isopod *Ceratothoa oestroides* Extracts: Wound Healing Efficacy - Clinical Studies. Transatlantic Diabetic Lower Extremity and Chronic Wound Symposium" (Thira, October 18-20, 2018)
70. Karatza E, Karalis V. An In Vitro – In Vivo Simulation Methodology for Predicting the Outcome of Bioequivalence Studies. 28th PAGE meeting, IV-72 (Stockholm, Sweden, June 11-14, 2019)
71. Karatza E, Karalis V. Investigation of the impact of population parameters describing gastric emptying on bioequivalence metrics. 28th PAGE meeting, IV-73 (Stockholm, Sweden, June 11-14, 2019)
72. Karatza E, Karalis V. Modeling and simulation in oncology I: A joint model for the description of patients' pharmacokinetics and pharmacodynamics. 36th International

- Conference on the Advances in the Applications of Monoclonal Antibodies in Clinical Oncology (Grecian Park Hotel, Konnos Bay, Cyprus, 24-26 June 2019)
73. Karatza E, Karalis V. Modeling and simulation in oncology II: Adjusting the appropriate dosage regimen. 36th International Conference on the Advances in the Applications of Monoclonal Antibodies in Clinical Oncology (Grecian Park Hotel, Konnos Bay, Cyprus, 24-26 June 2019)
74. Karatza E, Karalis V. Application of delay differential equations in modeling of absorption problems related to Irbesartan pharmacokinetics. 2019 AAPS Annual meeting and exposition (San Antonio, Texas, November 3-6, 2019) [T1130-13-83]
75. Karatza E, Karalis V. The impact of dose and time delay between administration and absorption on Irbesartan pharmacokinetics and pharmacodynamics. 2019 AAPS Annual meeting and exposition (San Antonio, Texas, November 3-6, 2019) [M1130-13-83]
76. Karatza E, Karalis V. Population modeling for the investigation of factors affecting the clinical outcome in epileptic patients under levetiracetam therapy. 2019 AAPS Annual meeting and exposition (San Antonio, Texas, November 3-6, 2019) [M1430-13-83]
77. Karatza E, Karalis V. Nonlinear mixed effect modeling of donepezil after oral administration. 2019 AAPS Annual meeting and exposition (San Antonio, Texas, November 3-6, 2019) [T1330-13-83]
78. Karatza E, Karalis V. A modeling approach to predict the outcome of a bioequivalence study: Application to a triple combination tablet of amlodipine/irbesartan/hydrochlorothiazide. 2019 AAPS Annual meeting and exposition (San Antonio, Texas, November 3-6, 2019) [W1030-13-83]
79. Bacopoulou F, Koutroumpa A, Zoi V, Karatza E, Karalis V, Markantonis S, Siahaidou T. Correlation of serum chemerin concentrations with obesity/metabolic syndrome characteristics in pre-adolescents and adolescents. [# 1189] ESPE, (Vienna, September 19-21, 2019)
80. Kostaki M, Zouridaki E, Karalis V, Kousovista O, Rallis M, Sgontzou T. A prospective, non invasive, clinical, observational study for healing chronic ulcers. 15th Panhellenic conference of Dermatology and Aphrodisiology (Thessaloniki October 31 – November 3, 2019)
81. Karatza E, Karalis V. Description of Irbesartan distribution using delay differential equations and the impact of time delay on irbesartan pharmacokinetics and pharmacodynamics. Pharmacometrics Japan Conference (January 22-23, 2020, Tokyo Japan).
82. Konstantinidou S, Karalis V. Defining dosage regimens of erlotinib and gefitinib in non-small cell lung cancer patients using modelling and simulation. 25th European Association of Hospital Pharmacists Congress (March 25-27, 2020, Gothenburg, Sweden). [# CPS9279]
83. Karatza E, Karalis V. Nonlinear Mixed Effects Modeling for Exploring Variability Sources in Dissolution Curves: A BCS Class II Case Example. 2020 AAPS Annual meeting and exposition (October 26-28, 2020, New Orleans, Louisiana) [# 885201]
84. Cardozo B, Karatza E, Karalis V. Pharmacokinetic modeling of the long risedronate residence in the body. 2020 AAPS Annual meeting and exposition (October 26-28, 2020, New Orleans, Louisiana) [# 894255]
85. Tsyplakova A, Karalis V. Model-informed individualized dosage regimens for donepezil. 18thHellenic symposium of Medicinal Chemistry (February 25-27, 2021) [virtual]
86. Boutaghou S, Vasilakaki S, Karalis V. On the influence of sampling schemes on the demonstration of bioequivalence. 29th Virtual PAGE meeting, (September 7, 2021, poster session 3)
87. Tsyplakova A, Karalis V. Development and validation of a population pharmacokinetic model for donepezil. 29th Virtual PAGE meeting, (September 7, 2021, poster session 3)
88. Vlachou M, Karalia D, Siamidi A, Karalis V, Protopapa C. 3D-Printed oral dosage forms: Mechanical properties, applications, computational approaches and artificial intelligence input. GM3DPRINT2022 (October 10-12, 2022, Dubai, UAE).
89. Paschou S, Karalis V, ... Dimopoulos M. Patients with type 2 diabetes present similar

immunological response to COVID-19 BNT162b2 mRNA vaccine with healthy subjects: a prospective cohort study. European Association for the study of diabetes, 58th annual meeting, 12-23 September 2022, Stockholm [A-22-983-EASD].

90. Paschou S, Karalis V, ... Dimopoulos M. Patients with type 2 cancerous diabetes showing similar anosological disease in the COVID-19 BNT162b2 mRNA vaccine with normal patients: a prospective study. 20ο Πανελλήνιο Διαβητολογικό Συνέδριο, Divani Caravel, 18-21 May, Athens.

91. Kousovista R, Karali G, Karalis V. Explaining the double peak phenomenon in the absorption kinetics of amisulpride. 13th FORTH Retreat 2022, Foundation of Research and Technology, (Heraklion, Crete, July 15, 2022).

92. Kyritsi A, Tagka A, Stratigos A, Karalis V. Contact dermatitis: a retrospective analysis of patch test data in Greece. 31st Congress of the European Academy of Dermatology and Venereology (Milan 7-10 September, 2022)

93. Deligiannopoulou A, Karalis V. Nanobots in medicine. 1st Panhellenic conference Medical Physics (Royal Olympic, Athens, 23-25 September 2022) [#160]

94. Kyritsi A, Tagka A, Stratigos A, Pesli M, Lagiokapa T, Karalis V. A retrospective analysis to investigate contact sensitization in Greek population using classic and machine learning techniques. 5th Worldwide Conference on Genetics, Geriatrics, and Neurodegenerative Diseases Research (Corfu October 20-23, 2022) [#48]

95. Stratidakis N, Tagka A .../... Karalis V, Dallas P, Stratigos A, Rallis M. Octenidine versus dispase gels for wound healing after Cryosurgery treatment in patients with Basal Cell Carcinoma. 5th Worldwide Conference on Genetics, Geriatrics, and Neurodegenerative Diseases Research (Corfu October 20-23, 2022) [#125]

96. Kyritsi K, Tagka A, Stratigos A, Karalis V. Analysis of Polysensitization and Monosensitization using Classic and Machine Learning Techniques. Redox Biology Congress 2023 (Vienna, Austria, June 6-9, 2023)

97. Kyritsi K, Tagka A, Stratigos A, Karalis V. Machine Learning Applications for Dermatology Investigation of Patients Sensitization. 1st Panhellenic conference of physical sciences in health. (War museum, Athens, September 22-23, 2023)

98. Tsyplakova A, Damnjanović I, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. Machine Learning and Mathematical Modeling in the Analysis of Antiepileptic Drug Levels. 1st Panhellenic conference of physical sciences in health. (War museum, Athens, September 22-23, 2023)

99. Papadaki K, Karalis V. Prolonged Infusion of Antibiotics in Critically Ill Patients: Dosage Regimens Based on Simulations for Meropenem and Tobramycin. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023).

100. Nikolopoulos A, Lagopati N, Pippa N, Karalis V. Data mining in the design and development of liposomal anticancer drugs. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023).

101. Kyritsi K, Tagka A, Stratigos A, Karalis V. A Clinical Study Of Allergic Contact Dermatitis In Polysensitized And Monosensitized Patients: Machine Learning And Classic Methods. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023).

102. Theofili MI, Basdagianni H, Karalis V. Simulated dosing regimens of monoclonal antibodies and classical treatments for migraine. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023).

103. Tsyplakova A, Damnjanović I, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. Machine Learning and Modeling Approaches for the Analysis of Antiepileptic Plasma Levels. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023).

104. Kyritsi K, Tagka A, Stratigos A, Karalis V. Contact allergy to preservatives in a cohort of patients with occupational contact dermatitis: machine learning analysis of patch test data. 20th Panhellenic Pharmaceutical Conference (National Research Institute, 16-16/12 2023). [1st

award]

105. Nikolopoulos A, Karalis V. An artificial neural network for increasing the sample size in clinical studies. 32nd Panhellenic Conference of Pathology Days. AA39. (Crowne Plaza, Athens, April 4-6 2024).
106. Vavoula D, Karalis V. Simulations of dosage regimens of antifungal drugs. 32nd Panhellenic Conference of Pathology Days. AA02. (Crowne Plaza, Athens, April 4-6 2024).
107. Kyritsi A, Karalis V. Application of machine learning for the investigation of polysensitization in patients with acute allergic dermatitis. 32nd Panhellenic Conference of Pathology Days. AA25. (Crowne Plaza, Athens, April 4-6 2024).
108. Papadaki K, Karalis V. Prolonged infusion of antibiotics in critically ill patients: simulated dosage regimens for meropenem and tobramycin. 32nd Panhellenic Conference of Pathology Days. AA41. (Crowne Plaza, Athens, April 4-6 2024).
109. Papacharalambous M, Karalis V. In silico clinical trials of anticoagulant drugs. 32nd Panhellenic Conference of Pathology Days. AA44. (Crowne Plaza, Athens, April 4-6 2024).
110. Desypri S, Karalis V. Modeling and simulation of dosage regimens of modern antimicrobial agents. 32nd Panhellenic Conference of Pathology Days. AA17. (Crowne Plaza, Athens, April 4-6 2024).
111. Nikolopoulos A, Karalis V. An artificial neural network for virtually increasing the sample size of clinical studies. 6th Pan European Congress on Military Medicine (Zappeion Megaron, Athens, 16-19 April 2024).
112. Nikolopoulos A, Karalis V. An artificial neural network for increasing the sample size of clinical studies. 7th Congress of the Hellenic Society of Gene Therapy and Regenerative Medicine. Poster #: 10 (May 24-26, 2024, Aristotle University Research Dissemination Center, Thessaloniki).
113. Damnjanović I, Tsyplakova A, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. Population Pharmacokinetics of Valproic Acid, Lamotrigine, and Levetiracetam in the Pediatric Population. 32nd PAGE meeting (Rome, 26-28 June 2024).
114. Nikolopoulos A, Karalis V. A Generative Adversarial Network for Virtually Increasing the Sample Size of Clinical Studies. 32nd PAGE meeting (Rome, 26-28 June 2024).
115. Damnjanović I, Tsyplakova A, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. Pharmacokinetics of Valproic Acid, Lamotrigine, and Levetiracetam in a Pediatric Population: Joint Application of Population Pharmacokinetic and Machine Learning Methods. 3rd Educational Pharmacometrics Summer Symposium. Satellite to PAGE meeting, (Rome, 25 June 2024, Ergife Palace Hotel & Conference Center).
116. Papadopoulos D, Karalis V. On the Integration of Artificial Neural Networks in Clinical Trials. 2nd Panhellenic Conference of Medical Physics (October 4-6, 2024, Eugenides Foundation, Athens).
117. Kokkali M, Karalis V. Average Slope vs. Cmax: Which Truly Reflects the Drug Absorption Rate? 2nd Panhellenic Conference of Medical Physics (October 4-6, 2024, Eugenides Foundation, Athens).
118. Nikolopoulos A, Karalis V. Creating virtual patients with a generative artificial intelligence algorithm for clinical studies. 2nd Panhellenic Conference of Medical Physics (October 4-6, 2024, Eugenides Foundation, Athens).
119. Nikolopoulos A, Karalis V. Development of a generative artificial intelligence algorithm for the regeneration of virtual volunteers in bioequivalence studies. 2nd Panhellenic Conference of Medical Physics (October 4-6, 2024, Eugenides Foundation, Athens)

## Oral Presentations

1. Karalis V. Pharmacodynamic considerations of bioequivalence studies. 10th Panhellenic



- Conference of Pharmacy (Athens, April 27-30, 2001)
2. Karalis V. The normalized values of volume of drug distribution scale proportionally with body mass of species. 10th Panhellenic Conference of Pharmacy (Athens, April 27-30, 2001)
  3. Karalis V. Quantitative structure pharmacokinetic relationships for cephalosporins. 11th Panhellenic Conference of Pharmacy (Athens, March 29-31, 2003)
  4. Karalis V. On the heterogeneity of drug distribution and elimination. Department of Pharmacy, University of Patras, (12.1.2005)
  5. Karalis V. On the role of metabolites in Bioequivalence studies, 14th PanHellenic Pharmaceutical Conference, (Athens, 9-11.5.2009)
  6. Karalis V. Towards the Elucidation of the Role of Metabolites in Bioequivalence Assessment. From Drug Delivery Systems to Drug Release, Dissolution, IVIVC, BCS, BDDCS, Bioequivalence and Biowaivers (Titania Hotel, Athens, May 28-30, 2009)
  7. Karalis V. Pharmacokinetics and Pharmacodynamics of therapeutic macromolecules. Biotechnology products: Development and clinical applications (upcoming: University of Athens, Main Building, July 1, 2010)
  8. Karalis V. Formulation of Biotech Products. International Congress on New Delivery Systems, Biosimilars, Bioequivalence-Biowaivers: Scientific, Industrial and Regulatory Aspects. (Titania Hotel, Athens, July 2-3, 2010)
  9. Karalis V. An introduction to bioequivalence studies. In: Bioequivalence: Now and Future (N.I.M.T.S, 6.12.2010)
  10. Karalis V. Software demonstration: Online Simulator for Pharmacokinetics. 20th Population Approach Group in Europe (PAGE) meeting (Athens, June 7-10, 2011)
  11. Karalis V. Bioequivalence studies: Design and Analysis. 1st Congress of Pharmaceutical sciences (Athens, April 27-30, 2012)
  12. Karalis V. In vivo assessment of generics. 1st PanHellenic conference of clinical psychopharmacology with international participation. (Costa Navarino, Pylos, June 21-24, 2012)
  13. Karalis V. Generics 4th International meeting of urologists of central Greece. (Larissa Imperial, Larissa, February 2-3, 2013)
  14. Karalis V. New trends in bioequivalence studies. Greek controlled release society (Central building of the National and Kapodistrian University of Athens, April 22, 2013)
  15. Karalis V. Bioequivalence Assessment of Highly Variable Drugs – Replicate designs. Workshop for Scientists in Academia, Pharmaceutical Industry, Regulatory Agencies, and Bioequivalence CROs. Burning Regulatory Issues in: Bioequivalence, Regulations, Biowaivers, IVIVC, Biosimilars, Pharmaceutical Product Development, Continuous Process Verification, Bioanalytical Methods, GLP. 5th BBBB International Conference (Athens, September 25, 2013)
  16. Karalis V. In the Era of Two-Stage Designs: Why, When, How? Workshop for Scientists in Academia, Pharmaceutical Industry, Regulatory Agencies, and Bioequivalence CROs. Burning Regulatory Issues in: Bioequivalence, Regulations, Biowaivers, IVIVC, Biosimilars, Pharmaceutical Product Development, Continuous Process Verification, Bioanalytical Methods, GLP. 5th BBBB International Conference (Athens, September 25, 2013)
  17. Karalis V. Modeling and Simulation in Pharmacokinetics and Bioequivalence – Analysis of Dissolution, Pharmacokinetic, and Bioequivalence data. Workshop for Scientists in Academia, Pharmaceutical Industry, Regulatory Agencies, and Bioequivalence CROs. Burning Regulatory Issues in: Bioequivalence, Regulations, Biowaivers, IVIVC, Biosimilars, Pharmaceutical Product Development, Continuous Process Verification, Bioanalytical Methods, GLP. 5th BBBB International Conference (Athens, September 25, 2013)
  18. Karalis V. Clinical Designs in Bioequivalence Studies. Seminar in Bioequivalence organized by the Bionian Cluster (Athens Chamber of Commerce and Industry, Athens, June 18, 2014)
  19. Karalis V. Generics of Immunosuppressive Drugs in Solid Organ Transplantations. 9th

- Symposium in Transplantation, Organized by the University of Thessaloniki (Macedonia Palace, Thessaloniki, June 20, 2014)
20. Karalis V. From Pharmacokinetics to Bioequivalence and Therapeutic Equivalence. 2nd Congress of Pharmaceutical sciences (Patras, October 9-11, 2014)
  21. Karalis V. Modeling Approaches in: Bioequivalence - Regulatory Related Issues. CRS Satellite Workshop on: Advances in scientific-regulatory issues in drug development and authorization processes (Athens, Aegli Zappiou, May 29, 2015)
  22. Karalis V. Modeling and Simulation in the Field of Bioequivalence. PAGE Satellite Workshop on: Modeling and Simulation: Kinetic and Dynamic Complexity in Drug Transit-Response in the Human Body (Creta Maris Convention Center, Hersonissos, Crete, June 2, 2015)
  23. Karalis V. Modeling and Simulation in the Proof of Clinical Equivalence of Drugs. Invited talk. Michigan State University, College of Natural Sciences (Michigan, East Lansing, July 22-31, 2015).
  24. Karalis V. Mathematical Modeling in Pharmacokinetics. Invited talk. Michigan State University, College of Natural Sciences (Michigan, East Lansing, July 22-31, 2015).
  25. Karalis V. Pharmacokinetic Modeling for the Investigation of Equivalence between Two Oral Dry Powder Inhalers. 24th PanHellenic Pulmonology Conference. (Athens Hilton, November 26-29, 2015) [2nd Award for 'Best Oral Presentation']
  26. Karalis V. Modeling in Bioequivalence: Science, Solutions, Benefits. 2nd International CRS Congress (Aegli Zappiou, Athens, June 22-24, 2016)
  27. Karalis V. Mathematical modeling and Pharmacokinetics. (Rome, September 27-30, 2016)
  28. Karalis V. Statistical methods in clinical trials. (Rome, September 27-30, 2016)
  29. Karalis V. Proving bioequivalence using modeling and simulation approaches. 1st Meeting of the Pharma-Informatics Unit, "Athena" Research and Innovation Center (War Museum, Athens, 13.2.2017)
  30. Karalis V. On the Use of Mathematical Modeling Approaches in Pharmaceutical R&D. 18th Panhellenic Conference of Pharmacists, Zappeion Megaro (Athens, 6-8.10.2017)
  31. Karalis V. In silico clinical trials in oncology. 36th International Conference on the Advances in the Applications of Monoclonal Antibodies in Clinical Oncology (Grecian Park Hotel, Konnos Bay, Cyprus, 24-26 June 2019)
  32. Karalis V. Modeling and simulation approaches for the description of pharmacokinetics and pharmacodynamics of epacadostat. Konstantinidou S, Karalis V. 24th World Congress on Advances in Oncology & 24th International Symposium on Molecular Medicine. (October 10-12, 2019 Mystras, Sparta, Greece)
  33. Karalis V. Book presentation: The silence of Nature, the voice of science (National Research Institution, December, 11 2019)
  34. Karalis V. On the border between science and society. 19th Panhellenic Pharmaceutical Congress (Aegli Zappiou, Athens, December 17, 2019)
  35. Karalis V. Aix Marseille University, Workshop: Master Day Program, October 22, 2020
  36. Karatza E, Ismailos G, Marangos M, Karalis V. Optimization of hydroxychloroquine dosage regimens in COVID19 patients. Infections in the crossroad of 2020 (Divani Caravel, 30.10 –1.11, 2020)
  37. Karalis V. In silico clinical trials: from drug development to clinical practice. 7th Panhellenic conference of applied pharmaceutics (Thessaloniki May 22,23 2021, virtual)
  38. Karalis V. Pharmacokinetics of antineoplastic drugs in chronic kidney disease. 2nd Scientific and Educational Symposium in Tumor-Nephrology (June 25, 2021, virtual)
  39. Karalis V. Computational methods in drug development and clinical practice. 13th Panhellenic conference of hospital pharmacists (Thessaloniki 14-17 April, 2022)

40. Paschou S, Karalis V, ... / ... Dimopoulos MA. Patients with type 2 diabetes present similar immunological response to COVID-19 BNT162b2 mRNA vaccine with healthy subjects: a prospective cohort study. 58th EASD Annual Meeting (Stockholm ,2022).
41. Megapanou K, Karalis V. Nanochips in medical applications. 1st Panhellenic conference of Medical Physics (Royal Olympic, Athens, September 23-25, 2022).
42. Deligiannopoulou A, Karalis V. Nanobots in Medicine. 1st Panhellenic conference of Medical Physics (Royal Olympic, Athens, September 23-25, 2022).
43. Matsota P, Karalis V, Saranteas T, Kiospe F, Markantonis SL. Ropivacaine pharmacokinetics in the arterial and venous pools after ultrasound-guided continuous thoracic paravertebral nerve block (25th Panhellenic Anesthesiology Conference, Corfu, May 11-13, 2023). [1stAward for best experimental – clinical research]
44. Paschou S, Karalis V, ... / ... Terpos E, Dimopoulos MA. Patients with type 2 diabetes present similar immunological response to COVID-19 BNT162b2 mRNA vaccine with healthy subjects: a prospective cohort study. 50th Panhellenic conference of endocrinology and diabetes (Thessaloniki, 4-6 May 2022). [1st award K. Chlouveraki]
45. Karalis V. Artificial intelligence in clinical practice. 1st Panhellenic conference of physical sciences in health (War Museum, Athens, September 22-23, 2023).
46. Karalis V. Risperidone Ism: From Pharmacokinetics, to Bioequivalence, and Therapeutic Equivalence. 10th Conference of Psychopharmacology (Athens, December 1-3, 2023).
47. Karalis V. Artificial Intelligence from Drug Development to Clinical Practice. 11th SYFAK conference (September 14-15, 2024, Heraklion Crete).
48. Karalis V. From Drug Research and Development to the Patient: The Digital World Model. (September 14-15, 2024, Heraklion Crete).

#### **Articles in National Journals (with Impact Factor)**

1. Karalis V, Macheras P. Metrics for the Assessment of Bioequivalence. *Pharmakeftiki*. 15: 37-44 (2002)
2. Karalis V, Markantonis-Kyroudis S. Effects of Food on Pharmacokinetics. *Pharmakeftiki*. 20 (1): 21-34 (2007)
3. Karalis V, Markantonis-Kyroudis S. Gender Related Effects on Pharmacokinetics. *Pharmakeftiki*. 20 (2): 68-81 (2007)
4. Gavriil ES, Karalis V, Andreadou I. Clopidogrel: Factors that affect its action. *Pharmakeftiki*. 25: 1-15 (2013)
5. Doulou K, Karalis V, Markantonis-Kyroudi S, Petropoulos F, Zafiris E, Naoum G. A retrospective study aiming at correlating non-gastrointestinal symptoms with disorders of the digestive tract. *Pharmakeftiki* 30(1): 31-43 (2018)
- 6\*. Filippakis A, Karalis V, Karatza E. Mathematical models in cancer chemotherapy. *Pharmakeftiki*. 30: 45-63 (2018)
- 7\*. Ntousi S, Karalis V. SARS-CoV-2 coronavirus: pathogenesis, pharmacotherapy, and treatment with monoclonal antibodies. *Pharmakeftiki*. 34: 39-67 (2022)

#### **Уцбеници:**

##### **Preprints**

1. Kontogiannis O, Karalis V. On the in vivo kinetics of gene delivery vectors. *MedRxiv*. <https://doi.org/10.1101/2022.02.11.22269834> [medRxiv preprint]
2. Giannouli E, Karalis V. In the pursuit of longevity: anti-aging substances, nanotechnological preparations, and emerging approaches. doi: <https://doi.org/10.1101/2022.03.20.22272670> [medRxiv preprint]

##### **Book chapters**

1. Karalis V. Modeling and Simulation in Bioequivalence. pp. 227-255, Chapter 10. In:

Modeling in Biopharmaceutics, Pharmacokinetics and Pharmacodynamics. Homogeneous and Heterogeneous Approaches. 2nd Edition, Springer International Publishing, Switzerland (2016)

2. Karatza E, Karalis V, Markantonis-Kyroudi S. Pharmacokinetics in critically ill elder patients. pp. 930-943. In: Baltopoulos G, Boutzouka E, Tsigkou E, Katsoulas T (Eds): Intensive Care and Urgent Medicine. Epistimon (2018)

3. Karalis V. Artificial Intelligence in Drug Discovery and Clinical Practice. pp. 215-255. In: From Current to Future Trends in Pharmaceutical Technology. Eds. N. Pippa, M. Chountoulesi, C. Demetzos. Elsevier, Pub. March 1, 2023.

4. Karnaki A, Siamidi A, Karalis V, Lagopati N, Pippa N, Vlachou M. Thermo-responsive hydrogels: current status and future perspectives. Bioinspired Technology and Biomechanics - Annual Volume 2024, ISBN 978-1-80355-247-7. DOI: 10.5772/intechopen.114986.

5. Papadaki K, Karalis V. Prolonged intravenous administration of antibiotics. In: Baltopoulos G (Ed.): Intensive Care and Urgent Medicine: Water and electrolytes. Epistimon (2024)

Укупан број радова др Вангелиса Каралиса у националним и интернационалним часописима, као и учешће на бројним симпозијумима, конференцијала, Work Shop-овима показује његову дубоку опредељеност савремени научни приступ у области фармакокинетице и клиничке фармације. У претходној 2023.години и током текуће године објавио је 4 рада категорије M21 (у два рада је првопотписани аутор), 11 радова категорије M22 (у два рада је првопотписани аутор) и 1 рад категорије M23. Наведена листа радова, награде на конференцијама и награде часописа у којима су радови објављени квалификују проф. Каралиса као експерта у пољу биофармације, фармакокинетице и клиничке фармације. Сви наведени радови припадају ужој научној области фармакокинетице и клиничке фармације.

## **2.1. ЦИТИРАНОСТ РАДОВА**

Др Вангелис Каралис поседује AD Scientific Index ID: 1847552. Цитираност кандидата - укупан број хетероцитата је **1765**, од 2019.укупно 1165.

## **2.2. РУКОВОЂЕЊЕ ИЛИ УЧЕШЋЕ У НАУЧНИМ ПРОЈЕКТИМА**

- RESEARCH – CREATE – INNOVATE (project code: T1EDK-561) [ 100,000 euro]  
“Development of a Triple Combination Tablet for the treatment of Hypertension 3CT4Hypertension”
- Several other smaller (up to 6,000 euro each) grants

## **3. ПЕДАГОШКИ РАД И ДОПРИНОС РАЗВОЈУ НАСТАВЕ**

Кандидат има богато педагошко искуство, стечено кроз рад на факултету од места асистента до позиције директора мастер програма из Клиничке фармације. Учествовао је у развоју и унапређењу студијског програма фармације на енглеском језику. Редован је члан комитета за унапређење основних студија фармације на Националном Каподистријан Универзитету – Фармацеутском факултету

## **4. ДОПРИНОС РАЗВОЈУ НАСТАВНО-НАУЧНОГ ПОДМЛАТКА**

Др Вангелис Каралис, ванредни професор, био је ментор 3 одбрањене докторске дисертације, а актуелан је ментор 6 докторских дисертација у изради. Био је ментор 19 дипломских радова и 29 последипломских усавршавања.

Списак имена докторанада и њихових теза, као и година израде/одбране:

1. Konstantina Soulele:  
Pharmacokinetic Studies Focusing on the Field of Absorption and Distribution of Drugs from the Lung and Gastrointestinal Tract  
2018
2. Eleni Karatza:  
Clinical pharmacometrics: Mathematical modeling and simulation of in vivo and in vitro data  
2017 - 2020
3. Katerina Kyritsi:  
Artificial intelligence methods in clinical practice and research/development of drugs  
2021- 2024
4. Dimitrios Papadopoulos:  
Machine learning methods in bioequivalence and clinical studies  
2021 – 11/2024(planned)
5. Anastasia Tsyplakova:  
Artificial Intelligence and Modeling in Clinical Pharmacy  
Started 7/2023
6. Maria Kokkali:  
Machine Learning and Modeling in Clinical and Pharmaceutical Research Started 11/2023
7. Anastasios Nikolopoulos:  
Artificial Intelligence in Clinical Studies and Drug Development  
Started 11/2023
8. Ileana Maria Theofili  
Application of Artificial Intelligence in the Pharmacotherapy of patients  
Started 10/2024
9. Nikodimos Chatzigeorgiou  
Investigation of the pharmacotherapy of pilots and patients of the air force using artificial intelligence methods  
Started 10/2024

## 5. ЕЛЕМЕНТИ ДОПРИНОСА АКАДЕМСКОЈ И ШИРОЈ ЗАЈЕДНИЦИ

Др Вангелис Каралис активан је у члан академске заједнице, а својим активностима доприноси и широј заједници:

- Director of “Clinical Pharmacy” master [2024 - present]
- Undergraduate students’ practice program (ESPA) [2016-2022]
- Experimental Protocols Evaluation Committee [2019-2022]
- Election committees (Rector, Dean, Section Director, Department Head) [multiples times since 2014]
- Drug strategy for Hellenic parliament (2019)

## МИШЉЕЊЕ О ИСПУЊЕНОСТИ УСЛОВА И ЗАКЉУЧАК КОМИСИЈЕ

На основу приложене професионалне биографије, Комисија констатује да досадашњи научни и наставни рад квалификује ванредног професора др Вангелиса Каралиса за избор у звање гостујући професор за ужу научну област Фармакокинетика и клиничка фармација, због следећих разлога:

1. Ангажован је у звању ванредног професора, директора мастер студија Клиничке фармације на Фармацеутском факултету националног каподистријан Универзитета у Атини у Грчкој.
2. Показао је посебан допринос ужој научној области Фармакокинетика и клиничка фармација, својим научним активностима и публикацијама. Укупан број објављених радова износи 103, од тога током последње две године објавио је 17 радова /M21- 4, M22- 11, M23- 1, M51-1/ а заједничким објављивањем рада у интернационалном часопису M22 категорије( Damnjanović I, Tsyplakova N, Stefanović N, Tošić T, Catić-Đorđević A, Karalis V. JointUse of Population Pharmacokinetics and Machine Learning for Optimizing Antiepileptic Treatment in Pediatric Population. Ther Adv Drug Saf [2023] [Editor's in Chief among the 4 Top Articles for 2023] и објављивањем рада у националном часопису Acta medica Medianae (**Karalis V**, Catić-Đorđević A. Artificial Intelligence in Drug Development, Clinical Trials, and Healthcare. Acta Medica Medianae. 2024. 10.5633/amm.2025.0110) доказао је спремност за сарадњу са Медицинским факултетом Универзитета у Нишу .
3. Поседује изузетно педагошко искуство и доприноси развоју научног и наставног подмлатка.
4. Остварио је значајан допринос укупној научној заједници.
5. Показао је спремност на сарадњу и жељу да своја знања и вештине пренесе нашим студентима и наставницима кроз различите облике сарадње.


## 6. ПРЕДЛОГ КОМИСИЈЕ

Након приказане професионалне биографије и спремности др Вангелиса Каралиса, ванредног професора Националног Каподистријан Универзитета да оствари сарадњу са Медицинским факултетом Универзитета у Нишу, у складу са одредбама Правилника о условима и начину ангажовања гостујућег професора на Универзитету у Нишу и Статута Медицинског факултета у Нишу, Комисија са великом задовољством предлаже Изборном већу Медицинског факултета Универзитета у Нишу да усвоји извештај и изабере др Вангелиса Каралиса у звање гостујући професор за ужу научну област Фармакокинетика и клиничка фармација.

Комисија за писање извештаја:



Проф. др Александра Цатић Торђевић, ванредни професор за УНО Фармакокинетика и клиничка фармација, продекан за наставу на програму ИАС фармација, председник



Проф. др Ивана Нешић, редовни професор за УНО Фармацеутска технологија и биотехнологија Медицинског факултета Универзитета у Нишу, члан



Проф. др Александар Митић, декан Медицинског факултета Универзитета у Нишу, члан

Ниш, 31.10.2024. године