

OSOBNE INFORMACIJE

Nada Božina

ZVANJE

doktor medicine

TITULA

prof. dr. sc.

RADNO ISKUSTVO

04.2011 -

Pročelnik Kliničke jedinice za farmakogenomiku i individualizaciju terapije

Klinički bolnički centar Zagreb, 10 000 Zagreb, Kišpatićeva 12, www.kbc-zagreb.hr

www.kbc-zagreb.hr

Organizator i voditelj farmakogenetičkih ispitivanja u akreditiranom laboratoriju sa svrhom testiranja na genetičku predispoziciju za neočekivan-promijenjen odgovor na primijenjenu farmakoterapiju. Testiranja uključuju polimorfizme gena koji kodiraju metaboličke enzime faze I i II, transportnih proteina te receptora.

12.1997 - 03.2011

Voditelj laboratorija za farmakogenetiku

Klinički bolnički centar Zagreb, Kišpatićeva 12, 10 000 Zagreb, www.kbc-zagreb.hr

www.kbc-zagreb.hr

Organizacija rada laboratorija za farmakogenetiku i provođenje farmakogenetičkih testiranja

06.1987 - 11.1997

Voditelj laboratorija za stanične kulture u Centru za biomedicinska istraživanja

Klinički bolnički centar zagreb, Šalata 2, 10 000 Zagreb

Organiziranje rada u Laboratoriju za stanične kulture te provođenje testiranja aktivnosti i toksičnosti potencijalnih lijekova testovima in vitro

04.1983 - 05.1987

Analitičar u laboratoriju za stanične kulture

Klinički bolnički centar Zagreb

10.1979 - 03.1983

specijalizant na Klinici za unutarnje bolesti

Klinički bolnički centar

10.1977 - 09.1979

pripravnik

Klinički bolnički centar Zagreb

OBRAZOVANJE I OSPOBLJAVANJE

10.2000 - 10.2005

doktor biomedicinskih znanosti

Medicinski fakultet Sveučilišta u Zagrebu

10.1978 - 07.1980

magistar medicinskih znanosti

Medicinski fakultet Sveučilišta u Zagrebu

10.1972 - 07.1977

doktor medicine

Medicinski fakultet Sveučilišta u Zagrebu

OSOBNJE VJEŠTINE

Materinski jezik hrvatski

Ostali jezici	RAZUMIJEVANJE		GOVOR		PISANJE
	Slušanje	Čitanje	Govorna interakcija	Govorna produkcija	
engleski	C1/2: Iskusni korisnik	C1/2: Iskusni korisnik	B1/2: Samostalni korisnik	B1/2: Samostalni korisnik	B1/2: Samostalni korisnik

Komunikacijske vještine 2018. COST Association- CA17130 (The Action Enhancing Psychiatric Genetic Counselling, Testing, and Training in Europe – EnGagE)

Organizacijske / rukovoditeljske vještine Iskustvo u organizaciji rada i rukovođenju laboratorijem a trenutno organizacijom rada i upravljanje poslovima u Kliničkom odjelu.
Organizirala tečajeve trajnog usavršavanja i simpozij:
2019. Farmakogenomika u personaliziranoj medicini
2015. Znanstveni odbor, EPST Integration of Pharmacogenomics in clinical decision support
2015. Znanstveni odbor VI. hrvatski kongres humane genetike
2013-tečaj "Farmakogenomika i farmakovigilancija
- sprječavanje nuspojava u individualizaciji terapije - upute i smjernice"
2013 Suorganizator simpozija "GoldenHelix Pharmacogenomics Day", Zagreb

Poslovne vještine

Računalne vještine Microsoft Windows, Office

Vozačka dozvola B kategorija

DODATNE INFORMACIJE

Izdanja

1. Pejanovic-Skobic N, Markovic I, Bozina N, Basic S. Lack of association of SCN2A rs17183814 polymorphism with the efficacy of lamotrigine monotherapy in patients with focal epilepsy from Herzegovina area, Bosnia and Herzegovina. *Epilepsy Res.* 2019;158:106221. doi: 10.1016/j.epilepsyres.2019.106221.[Epub ahead of print]
2. Božina N, Sporiš IŠ, Božina T, Klarica-Domjanović I, Tvrđić A, Sporiš D. Pharmacogenetics and the treatment of epilepsy: what do we know? *Pharmacogenomics.* 2019;20(15):1093-1101.
3. Rojnic Kuzman M, Bosnjak Kuharic D, Ganoci L, Makaric P, Kekin I, Rossini Gajsak L, Prpic N, Bozina T, Bajic Z, Bozina N. Association of CNR1 genotypes with changes in neurocognitive performance after eighteen-month treatment in patients with first-episode psychosis. *Eur Psychiatry.* 2019 Sep;61:88-96.
4. Jaksic N, Šabić Džananović E, Aukst Margetic B, Rudan D, Cima Franc A, Bozina N, Ferić Bojić E, Kučukalić S, Džubur Kulenović A, Marjanović D, Avdibegović E, Babić D, Agani F, Kučukalić A, Bravo Mehmedbašić A, Kravic N, Muminović Umihanić M, Sinanović O, Babić R, Pavlović M, Haxhibeqiri S, Goci Uka A, Hoxha B, Haxhibeqiri V, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Jakovljevic M. A Candidate Gene Association Study of FKBP5 and CRHR1 Polymorphisms in Relation to War-Related Posttraumatic Stress Disorder. *Psychiatr Danub.* 2019;31(2):269-275. doi: 10.24869/psyd.2019.269. PubMed PMID: 31291236.
5. Hoxha B, Goçi Uka A, Agani F, Haxhibeqiri S, Haxhibeqiri V, Sabic Džananovic E, Kucukalic S, Bravo Mehmedbasic A, Kucukalic A, Dzubur Kulenovic A, Feric Bojic E, Marjanovic D, Kravic N, Avdibegovic E, Muminovic Umihanic M, Jaksic N, Cima Franc A, Rudan D, Jakovljevic M, Babic R, Pavlovic M, Babic D, Aukst Margetic B, Bozina N, Sinanovic O, Ziegler C, Warrings B, Domschke K, Deckert J, Wolf C, Vyshka G. The Role of TaqI DRD2 (rs1800497) and DRD4 VNTR Polymorphisms in Posttraumatic Stress Disorder (PTSD). *Psychiatr Danub.* 2019 Jun;31(2):263-268.
6. Goçi Uka A, Agani F, Blyta A, Hoxha B, Haxhibeqiri S, Haxhibeqiri V, Sabic Džananovic E, Kucukalic S, Bravo Mehmedbasic A, Kucukalic A, Dzubur-Kulenovic A, Feric Bojic E, Marjanovic D, Kravic N, Avdibegovic E, Muminovic Umihanic M, Jaksic N, Cima Franc A, Rudan D, Jakovljevic M, Babic R, Pavlovic M, Babic D, Aukst Margetic B, Bozina N, Sinanovic O, Ziegler C, Warrings B, Domschke K, Deckert J, Wolf C. Role of the Allelic Variation in the 5-Hydroxytryptamine Receptor 1A (HTR1A) and the Tryptophan Hydroxylase 2 (TPH2) Genes in the Development of PTSD. *Psychiatr Danub.* 2019;31(2):256-262.
7. Haxhibeqiri V, Haxhibeqiri S, Topciu-Shufta V, Agani F, Goci Uka A, Hoxha B, Dzubur Kulenovic A, Jakovljevic M, Avdibegovic E, Kravic N, Muminovic Umihanic M, Sinanovic O, Šabić Džananović E, Kučukalić S, Bravo Mehmedbašić A, Aukst Margetic B, Jakšić N, Cima Franc A, Rudan D, Pavlović M, Babić R, Ferić Bojić E, Marjanović D, Božina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Babić D. The Association of Catechol-O-Methyl-Transferase and Interleukin 6 Gene Polymorphisms with Posttraumatic Stress Disorder. *Psychiatr Danub.* 2019;31(2):241-248.
8. Muminovic Umihanic M, Babic R, Kravic N, Avdibegovic E, Dzubur Kulenovic A, Agani F, Jakovljevic M, Babic D, Kucukalic A, Kucukalic S, Sabic Džananovic E, Bravo Mehmedbasic A, Goci Uka A, Haxhibeqiri S, Hoxha B, Haxhibeqiri V, Aukst Margetic B, Jaksic N, Cima Franc A, Rudan D, Pavlovic M, Feric Bojic E, Marjanovic D, Bozina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Sinanovic O. Associations between Polymorphisms in the Solute Carrier Family 6 Member 3 and the Myelin Basic Protein Gene and Posttraumatic Stress Disorder. *Psychiatr Danub.* 2019;31(2):235-240
9. Ferić Bojić E, Kučukalić S, Džubur Kulenović A, Avdibegović E, Babić D, Agani F, Jakovljević M, Kučukalić A, Bravo Mehmedbašić A, Šabić Džananović E, Kravic N, Babić R, Pavlović M, Aukst Margetic B, Jaksic N, Cima Franc A, Rudan D, Haxhibeqiri S, Goci Uka A, Hoxha B, Haxhibeqiri V, Muminović Umihanić M, Sinanović O, Božina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Marjanović D. Associations of Gene Variations in Neuropeptide Y and Brain Derived Neurotrophic Factor Genes with Posttraumatic Stress Disorder. *Psychiatr Danub.* 2019;31(2):227-234.
10. Kučukalić S, Ferić Bojić E, Babić R, Avdibegović E, Babić D, Agani F, Jakovljević M, Kučukalić A, Bravo Mehmedbašić A, Šabić Džananović E, Marjanović D, Kravic N, Pavlović M, Aukst Margetic B, Jaksic N, Cima Franc A, Rudan D, Haxhibeqiri S, Goci Uka A, Hoxha B, Haxhibeqiri V, Muminović Umihanić M, Sinanović O, Božina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Džubur Kulenović A. Genetic Susceptibility to Posttraumatic Stress Disorder: Analyses of the Oxytocin Receptor, Retinoic Acid Receptor-Related Orphan Receptor A and Cannabinoid Receptor 1 Genes. *Psychiatr Danub.* 2019;31(2):219-226.

11. Kravić N, Šabić Džananović E, Muminović Umihanić M, Džubur Kulenović A, Sinanović O, Jakovljević M, Babić D, Kučukalić A, Agani F, Kučukalić S, Bravo Mehmedbašić A, Goci Uka A, Haxhibeqiri S, Haxhibeqiri V, Hoxha B, Aukst Margetić B, Jakšić N, Cima Franc A, Rudan D, Pavlović M, Babić R, Ferić Bojić E, Marjanović D, Božina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J, Avdibegović E. Association Analysis of Maa0 and Slc6a4 Gene Variation in South East European War Related Posttraumatic Stress Disorder. *Psychiatr Danub*. 2019;31(2):211-218.
12. Rojnic Kuzman M, Makaric P, Bosnjak Kuharic D, Kekin I, Rossini Gajsak L, Boban M, Bozina N, Bozina T, Celic Ruzic M, Darmopil S, Filipcic I, Ganoci L, Hladnik A, Madzarac Z, Malojcic B, Mihaljevic Peles A, Mueller DJ, Ostojic D, Petanjek Z, Petrovic R, Vogrinc Z, Savic A, Silic A, Sagud M, Zivkovic M, Bajic Z. Integration of complementary biomarkers in patients with first episode psychosis: research protocol of a prospective follow up study. *Psychiatr Danub*. 2019;31(2):162-171
13. Markovic I, Pejanovic-Skobic N, Bozina N, Susak Sporis I, Sporis D, Basic S. The lack of influence of IVS5-91 G>A polymorphism of the SCN1A gene on efficacy of lamotrigine in patients with focal epilepsy. *Neurol Res*. 2019;41(10):930-935.
14. Zivkovic M, Mihaljevic-Peles A, Muck-Seler D, Sagud M, Ganoci L, Vlatkovic S, Nikolac Perkovic M, Tudor L, Bozina N, Pivac N. The lack of association between COMT rs4680 polymorphism and symptomatic remission to olanzapine monotherapy in male schizophrenic patients: A longitudinal study. *Psychiatry Res*. 2019;279:389-390.
15. Škarić-Jurić T, Tomas Ž, Zajc Petranović M, Božina N, Smolej Narančić N, Janičević B, Salihović MP. Characterization of ADME genes variation in Roma and 20 populations worldwide. *PLoS One*. 2018;13(11):e0207671
16. Grubeljić Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J*. 2018;59(5):232-243
17. Klarica Domjanović I, Lovrić M, Trkulja V, Petelin-Gadže Ž, Ganoci L, Čajić I, Božina N (2018). Interaction between ABCG2 421C>A polymorphism and valproate in their effects on steady-state disposition of lamotrigine in adults with epilepsy. *Br J Clin Pharmacol*. 2018;84(9):2106-2119.
18. Bielen L, Kralj I, Čurčić E, Vodanović M, Boban A, Božina N. Acute kidney injury, agranulocytosis, drug-induced liver injury, and posterior reversible encephalopathy syndrome caused by high-dose methotrexate-possible role of low activity ABC and SLC drug transporters. *Eur J Clin Pharmacol*. 2018;74(9):1191-1192.
19. Vrkić Kirhmajer M, Macolić Šarinić V, Šimičević L, Ladić I, Putarek K, Banfić L, Božina N. Rosuvastatin-Induced Rhabdomyolysis - Possible Role of Ticagrelor and Patients' Pharmacogenetic Profile. *Basic Clin Pharmacol Toxicol*. 2018;123(4):509-518.
20. Lovrić M, Čajić I, Petelin Gadže Ž, Klarica Domjanović I, Božina N. Effect of antiepileptic drug comedication on lamotrigine concentrations. *Croat Med J*. 2018;28;59(1):13-19.
21. Makar-Aušperger K, Krželj K, Lovrić Benčić M, Radačić Aumiler M, Erdeljić Turk V, Božina N. Warfarin Dosing According to the Genotype-guided Algorithm is Most Beneficial in Patients With Atrial Fibrillation: A Randomized Parallel Group Trial. *Ther Drug Monit*. 2018;40(3):362-368.
22. Ziegler C, Wolf C, Schiele MA, Ferić Bojić E, Kucukalic S, Sabic Džananovic E, Goci Uka A, Hoxha B, Haxhibeqiri V, Haxhibeqiri S, Kravic N, Muminovic Umihanic M, Cima Franc A, Jaksic N, Babic R, Pavlovic M, Warrings B, Bravo Mehmedbasic A, Rudan D, Aukst-Margetic B, Kucukalic A, Marjanovic D, Babic D, Bozina N,
23. Jakovljevic M, Sinanovic O, Avdibegovic E, Agani F, Dzubur-Kulenovic A, Deckert J, Domschke K. Monoamine oxidase A gene methylation and its role in Posttraumatic Stress Disorder - First evidence from the South Eastern Europe (SEE)-PTSD study. *Int J Neuropsychopharmacol*. 2018;21(5):423-432.
24. Krasniqi V, Dimovski A, Bytyqi HQ, Eftimov A, Šimičević L, Božina N. Genetic polymorphisms of CYP2C9, CYP2C19, and CYP3A5 in Kosovar population. *Arh Hig Rada Toksikol*. 2017;68(3):180-184.
25. Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajs Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. *Nord J Psychiatry*. 2017;71(7):513-520
26. Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, Trkulja V. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol*. 2017;73(9):1129-1140.

27. Knezovic A, Loncar A, Homolak J, Smailovic U, Osmanovic Barilar J, Ganoci L, Bozina N, Riederer P, Salkovic-Petrisic M. Rat brain glucose transporter-2, insulin receptor and glial expression are acute targets of intracerebroventricular streptozotocin: risk factors for sporadic Alzheimer's disease? *J Neural Transm* (Vienna) 2017;124(6):695-708.
28. Potočnjak I, Likić R, Šimić I, Juričić Nahal D, Čegec I, Ganoci L, Božina N. Dapsone-induced agranulocytosis-possible involvement of low-activity N-acetyltransferase 2. *Fundam Clin Pharmacol*. 2017;31(5):580-586.
29. Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther*. 2017;32(1):11-21.
30. Šagud M, Vuksan-Ćusa B, Božina N, Lovrić M, Mihaljević-Peleš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol* 2016;36(6):733-735.
31. Mizzi C, Dalabira E, Kumuthini J, Dzimiri N, Balogh I, Bašak N, Böhm R, Borg J, Borgiani P, Bozina N, Bruckmueller H, Burzynska B, Carracedo A, Cascorbi I, Deltas C, Dolzan V, Fenech A, Grech G, Kasiulevicius V, Kádaši L, Kučinskas V, Khusnutdinova E, Loukas YL, Macek M Jr, Makukh H, Mathijssen R, Mitropoulos K, Mitropoulou C, Novelli G, Papantoni I, Pavlovic S, Saglio G, Setric J, Stojiljkovic M, Stubbs AP, Squassina A, Torres M, Turnovec M, van Schaik RH, Voskarides K, Wakil SM, Werk A, Del Zompo M, Zucic B, Katsila T, Lee MT, Motsinger-Rief A, McLeod HL, van der Spek PJ, Patrinos GP. A European Spectrum of Pharmacogenomic Biomarkers: Implications for Clinical Pharmacogenomics. *PLoS One*. 2016;11(9):e0162866.
32. Šimić I, Potočnjak I, Kraljičković I, Stanić Benić M, Čegec I, Juričić Nahal D, Ganoci L, Božina N. CYP2D6 *6/*6 genotype and drug interactions as cause of haloperidol-induced extrapyramidal symptoms. *Pharmacogenomics*. 2016;17(13):1385-9.
33. Karmelić I, Lovrić J, Božina T, Merkler A, Bozina N, Sertic J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Ann Hum Biol*. 2016;1-25.
34. Ladić A, Božina N, Borzan V, Brinar M, Vucelić B, Cuković-Cavka S. AN EPIDEMIOLOGICAL STUDY OF THIOPURINE-METHYLTRANSFERASE VARIANTS IN A CROATIAN INFLAMMATORY BOWEL DISEASE PATIENT COHORT. *Acta Clin Croat*. 2016;55(1):16-22.
35. Kulenovic AD, Agani F, Avdibegović E, Jakovljević M, Babic D, Kucukalic A, Kucukalic S, Džananović ES, Mehmedbasic AB, Uka AG, Haxhibeqiri S, Haxhibeqiri V, Hoxha B, Sinanović O, Kravac N, Muminović M, Aukst-Margetić B, Jaksic N, Franc AC, Rudan D, Pavlovic M, Babic R, Bojic EF, Marjanovic D, Bozina N, Ziegler C, Wolf C, Warrings B, Domschke K, Deckert J. Molecular Mechanisms of Posttraumatic Stress Disorder (PTSD) as a Basis for Individualized and Personalized Therapy: Rationale, Design and Methods of the South Eastern Europe (SEE)-PTSD study. *Psychiatr Danub*. 2016;28(2):154-63.
36. Krasniqi V, Dimovski A, Domjanović IK, Bilić I, Božina N. How polymorphisms of the cytochrome P450 genes affect ibuprofen and diclofenac metabolism and toxicity. *Arh Hig Rada Toksikol*. 2016;67(1):1-8.
37. Koršić M, Muršić D, Badovinac S, Božina N, Roglić M, Jakopović M, Čučević B. Erlotinib-related rhabdomyolysis: the role of pharmacogenetics and drug-drug interaction. *Cancer Chemother Pharmacol* 2015;76(6):1317-9.
38. Mandić D, Bozina N, Mandić S, Samardžija M, Milostić-Srb A, Rumora L. VKORC1 gene polymorphisms and adverse events in Croatian patients on warfarin therapy. *Int J Clin Pharmacol Ther*. 2015;53(11):905-13.
39. Mirošević Skvrce N, Macolić Šarinić V, Šimić I, Ganoci L, Muičević Katanec D, Božina N. ABCG2 polymorphism as risk factor for developing adverse drug reactions in patients taking atorvastatin: a case-control study. *Pharmacogenomics* 2015;16(9):959-70.
40. Šupe S, Poljaković Z, Božina T, Ljevak J, Macolić Šarinić V, Božina N. Clinical Application of Genotype-guided Dosing of Warfarin in Patients with Acute Stroke. *Arch Med Res*. 2015;46(4):265-73.
41. Markeljević J, Sarac H, Bozina N, Henigsberg N, Simić M, Cicin Sain L. Serotonin transporter gene polymorphisms: Relation with platelet serotonin level in patients with primary Sjogren's syndrome. *J Neuroimmunol* 2015; 282:104-9.
42. Samardžić J, Bozina N, Skoric B, Ganoci L, Petricević M, Krpan M, Pasalić M, Milčić D. CYP2C19*2 genotype influence in acute coronary syndrome patients undergoing serial clopidogrel dose tailoring based on platelet function testing: Analysis from randomized controlled trial NCT02096419. *Int J Cardiol*. 2015;186:282-5.
43. Mitropoulou C, Fragoulakis V, Bozina N, Vozikis A, Šupe S, Bozina T, Poljaković

- Z, van Schaik RH, Patrinos GP. Economic evaluation of pharmacogenomic-guided warfarin treatment for elderly Croatian atrial fibrillation patients with ischemic stroke. *Pharmacogenomics* 2015;16(2):137-48.
44. Supe S, Božina N, Matijević V, Bazina A, Mišmaš A, Ljevak J, Alvir D, Habek M, Poljaković Z. Prevalence of genetic polymorphisms of CYP2C9 and VKORC1 - implications for warfarin management and outcome in Croatian patients with acute stroke. *J Neurol Sci* 2014;343(1-2):30-5.
45. Bilic P, Jukic V, Vilibic M, Savic A, Božina N. Treatment-resistant schizophrenia and DAT and SERT polymorphisms. *Gene* 2014;543(1):125-32.
46. Kao AC, Rojnic Kuzman M, Tiwari AK, Zivkovic MV, Chowdhury NI, Medved V, Kekin I, Zai CC, Lieberman JA, Meltzer HY, Božina T, Božina N, Kennedy JL, Sertic J, Müller DJ. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res* 2014;54:36-42.
47. Trkulja V, Lalić Z, Nađ-Škegro S, Lebo A, Granić P, Lovrić M, Pasini J, Božina N. Effect of cyclosporine on steady-state pharmacokinetics of mycophenolic acid (MPA) in renal transplant recipients is not affected by the MPA formulation: analysis based on therapeutic drug monitoring. *Ther Drug Monit* 2014;36(4):456-64.
48. Zivković M, Mihaljević-Peles A, Božina N, Sagud M, Nikolac-Perkovic M, Vuksan-Cusa B, Muck-Seler D. The association study of polymorphisms in DAT, DRD2, and COMT genes and acute extrapyramidal adverse effects in male schizophrenic patients treated with haloperidol. *J Clin Psychopharmacol*. 2013;33(5):593-9.
49. Mirošević Skvrce N, Božina N, Zibar L, Barišić I, Pejnović L, Macolic Šarinic V. CYP2C9 and ABCG2 polymorphisms as risk factors for developing adverse drug reactions in renal transplant patients taking fluvastatin: a case-control study. *Pharmacogenomics*. 2013;14(12):1419-31.
50. Brinar M, Cuković-Cavka S, Božina N, Ravic KG, Markos P, Ladic A, Cota M, Krznaric Z, Vucelic B. MDR1 polymorphisms are associated with inflammatory bowel disease in a cohort of Croatian IBD patients. *BMC Gastroenterol*. 2013;13:57.
51. Sporis D, Božina N, Basić S, Lovrić M, Babić T, Susak I, Marković I. Lack of association between polymorphism in ABCC2 gene and response to antiepileptic drug treatment in Croatian patients with epilepsy. *Coll Antropol*. 2013;37(1):41-5.
52. Božina N, Pejnović L. Pharmacogenetics in clinical practice - recommendations and guidelines. *Paediatr Croat* 2013;57(4):318-30.
53. Marusic S, Lisicic A, Horvatic I, Bacic-Vrca V, Božina N. Atorvastatin-related rhabdomyolysis and acute renal failure in a genetically predisposed patient with potential drug-drug interaction. *Int J Clin Pharm*. 2012;34(6):825-7.
54. Sarac H, Markeljevic J, Mokrovic G, Erdeljic V, Božina N, Cicin-Sain L. Platelet serotonin in primary Sjögren's syndrome: level and relation with disease activity. *J Neuroimmunol*. 2012;251(1-2):87-9.
55. Lovrić M, Božina N, Hajnšek S, Kuzman MR, Sporiš D, Lalić Z, Božina T, Granić P. Association between lamotrigine concentrations and ABCB1 polymorphisms in patients with epilepsy. *Ther Drug Monit*. 2012;34(5):518-25.
56. Božina N, Jovanović N, Podlesek A, Rojnić Kuzman M, Kudumija Slijepčević M, Roguljić A, Dimitrović A, Božina T, Lovrić J, Ljubić H, Medved V. Suicide ideators and attempters with schizophrenia--the role of 5-HTTLPR, rs25531, and 5-HTT VNTR Intron 2 variants. *J Psychiatr Res*. 2012;46(6):767-73.
57. Karmelić I, Lovrić J, Božina T, Ljubić H, Vogrinc Ž, Božina N, Sertić J. Adiponectin level and gene variability are obesity and metabolic syndrome markers in a young population. *Arch Med Res*. 2012;43(2):145-53.
58. Božina N, Čuković-Čavka S, Šupe S, Nađ-Škegro S, Šimić I, Makar-Aušperger K, Kovačević I. Pharmacogenetics and adverse drug reactions-polymorphism of metabolic enzymes. *Neurol Croatica* 2012;61(Suppl.2):121-132.
59. Sertić J, Božina T, Skorić B, Lovrić J, Slaviček J, Šimičević L, Jelaković B, Božina N, Miličić D, Reiner Ž. New trends in laboratory diagnostics: biomarkers of atherosclerosis; preventive and personalized medicine. *Neurol Croatica* 2012;61(Suppl.2):137-149.
60. Sporiš D, Bašić S, Božina N, Babić T, Hajnšek S, Sertić J, et al. ABCB1 gene variants as predictors of multidrug-resistant epilepsy in Croatian population. *Neurologia Croatica*. 2011;60(2):63-71.
61. Mirošević Skvrce N, Macolic Šarinic V, Mucalo I, Krnic D, Božina N, Tomic S. Adverse drug reactions caused by drug-drug interactions reported to Croatian Agency for Medicinal Products and Medical Devices: a retrospective observational study. *Croat Med J*. 2011;52(5):604-14.
62. Kuzman MR, Medved V, Božina N, Grubišin J, Jovanovic N, Sertic J. Association study of MDR1 and 5-HT2C genetic polymorphisms and antipsychotic-induced metabolic disturbances in female patients with schizophrenia. *Pharmacogenomics J*. 2011;11(1):35-44.

63. Jovanović N, Božina N, Lovrić M, Medved V, Jakovljević M, Peleš AM. The role of CYP2D6 and ABCB1 pharmacogenetics in drug-naïve patients with first-episode schizophrenia treated with risperidone. *Eur J Clin Pharmacol*. 2010;66(11):1109-17.
64. Skvrce NM, Božina N, Sarinić VM, Tomić S. Adverse drug reactions of hydroxymethylglutaryl-CoA reductase inhibitors reported to agency for medicinal products and medical devices]. *Lijec Vjesn*. 2010;132(9-10):277-82.
65. Mihaljević-Peles A, Sagud M, Božina N, Zivković M, Jovanović N. Pharmacogenetics and antipsychotics in the light of personalized pharmacotherapy. *Psychiatr Danub*. 2010;22(2):335-7.
66. Božina N. The pharmacogenetics of warfarin in clinical practice. *Biochemia Medica*. 2010;20(1):33-44.
67. Marusic S, Gojo-Tomic N, Franic M, Božina N. Therapeutic efficacy of acenocoumarol in a warfarin-resistant patient with deep venous thrombosis: a case report. *Eur J Clin Pharmacol*. 2009;65(12):1265-6.
68. Mihaljević-Peles A, Sagud M, Božina N, Zivković M, Jovanović N. Pharmacogenetics and interactions of antidepressants in the treatment of comorbid illness. *Psychiatr Danub*. 2009;21(3):399-400.
69. Božina N, Bradamante V, Lovrić M. Genetic polymorphism of metabolic enzymes P450 (CYP) as a susceptibility factor for drug response, toxicity, and cancer risk. *Arh Hig Rada Toksikol*. 2009;60(2):217-42.
70. Božina N, Jovanović N, Lovrić M, Medved V. Clinical significance of a CYP2D6 poor metabolizer--a patient with schizophrenia on risperidone treatment. *Ther Drug Monit*. 2008;30(6):748-51.
71. Kuzman MR, Medved V, Božina N, Hotujac L, Sain I, Bilusic H. The influence of 5-HT(2C) and MDR1 genetic polymorphisms on antipsychotic-induced weight gain in female schizophrenic patients. *Psychiatry Res*. 2008;160(3):308-15.
72. Mihaljević-Peles A, Sagud M, Božina N, Zivković M. Pharmacogenetics and antidepressant treatment in integrative psychiatry perspective. *Psychiatr Danub*. 2008;20(3):399-401.
73. Basic S, Hajnsek S, Božina N, Filipčić I, Sporis D, Mislov D, Posavec A. The influence of C3435T polymorphism of ABCB1 gene on penetration of Phenobarbital across the blood-brain barrier in patients with generalized epilepsy. *Seizure*. 2008;17(6):524-30.
74. Mihaljević-Peles A, Božina N, Sagud M, Rojnic Kuzman M, Lovrić M. MDR1 gene polymorphism: therapeutic response to paroxetine among patients with major depression. *Prog Neuropsychopharmacol Biol Psychiatry*. 2008;32(6):1439-44.
75. Božina N, Kuzman MR, Medved V, Jovanović N, Sertić J, Hotujac L. Associations between MDR1 gene polymorphisms and schizophrenia and therapeutic response to olanzapine in female schizophrenic patients. *J Psychiatr Res*. 2008;42(2):89-97.
76. Božina N, Peleš AM, Sagud M, Bilusic H, Jakovljević M. Association study of paroxetine therapeutic response with SERT gene polymorphisms in patients with major depressive disorder. *World J Biol Psychiatry*. 2008;9(3):190-7.
77. Božina N, Medved V, Kuzman MR, Sain I, Sertić J. Association study of olanzapine-induced weight gain and therapeutic response with SERT gene polymorphisms in female schizophrenic patients. *J Psychopharmacol*. 2007;21(7):728-34.
78. Mihaljević-Peles A, Božina N, Sagud M. Pharmacogenetics in modern psychiatry. *Psychiatr Danub*. 2007;19(3):231-3.
79. Sertić J, Slavicek J, Božina N, Malenica B, Kes P, Reiner Z. Cytokines and growth factors in mostly atherosclerotic patients on haemodialysis determined by biochip array technology. *Clin Chem Lab Med*. 2007;45(10):1347-52.
80. Božina N. Interactions of antiepileptic and psychotropic drugs - pharmacogenetics of CYP enzymes and P-glycoprotein transporter. *Paediatrica Croatica*. 2006;50(2):41-8.
81. Božina N, Mihaljević-Peles A, Sagud M, Jakovljević M, Sertić J. Serotonin transporter polymorphism in Croatian patients with major depressive disorder. *Psychiatr Danub*. 2006;18(1-2):83-9.
82. Božina N, Granić P, Hajnšek S, Lalić Z, Bašić S, Lovrić M, et al. Genetic polymorphisms of CYP2C9, CYP2C19 and MDR1 genes and their effect on phenytoin disposition. *Period Biol*. 2005;107(2):183-7.
83. Hajnšek S, Bašić S, Poljaković Z, Sporiš D, Božina N. The effect of MDR1 gene C3435T polymorphism on pharmacotherapeutic efficacy in epilepsy. *Neurologia Croatica*. 2004;53(3-4):69-78.
84. Božina N. Role of pharmacogenomics in pharmacotherapy - from functional genomics to rational therapy. *Pharmaca*. 2004;42(2):71-86.
85. Skaza A, Grsković B, Pleština S, Božina N, Potocnik M, Waugh MA. Prevalence of asymptomatic chlamydial urethritis in military recruits in the Celje region, Slovenia. *Int J STD AIDS*. 2003;14(11):765-9.

86. Božina N, Granić P, Lalić Z, Tramišak I, Lovrić M, Stavljenić-Rukavina A. Genetic polymorphisms of cytochromes P450: CYP2C9, CYP2C19, and CYP2D6 in Croatian population. *Croat Med J.* 2003;44(4):425-8.
87. Božina N, Tramišak I, Granić P, Puljević D, Stavljenić-Rukavina A. Prevalence of ultraextensive drug metabolizers in Croatian population--long-PCR based detection of amplified CYP2D6 gene. *Lijec Vjesn.* 2002;124(3-4):63-6.
88. Božina N, Tramišak I, Medved V, Mihaljević-Peješ A, Granić P, Stavljenić-Rukavina A. CYP2D6 genotype and psychotropic drug-induced adverse effects. *Period Biol.* 2001;103(4):309-14.

Poglavlja u knjizi-priručniku:

- Božina N (ur). *Farmakogenomika u personaliziranoj medicini.* Zagreb: Medicinska naklada; 2019:1-280.
- Božina N. *Farmakogenomika antiepileptika.* U: *Epilepsija, dijagnostički i terapijski pristup.* Petelin Gadže Ž, Poljaković Z, Nanković S, Šulentić V (ur). Medicinska Naklada, Zagreb 2019:136-146.
- Božina N, Šimičević L, Ganoci L, Božina T. *Dometi farmakogenomike u preciznoj medicini.* U: *Primijenjena genomika.* Sertić J, Gamulin S, Sedlić F (ur). Medicinska Naklada, Zagreb 2019:105-122.
- Božina N. *Prepoznajemo li nuspojave lijekova-farmakogenomička objašnjenja.* U: *Pedijatrija danas 2017: Uočimo rane znakove bolesti.* Tješić-Drinković D, Senečić-Čala I, Vuković J (ur). Medicinska Naklada, Zagreb 2017:31-40.
- Vitezić D, Božina N, Mršić-Pelčić J, Erdeljić Turk V, Francetić I. *Personalized Medicine in Clinical Pharmacology.* U: *Bodiroga-Vukobrat N, Rukavina D, Pavelić K, Sander GG. Personalized Medicine, A New Medical and Social Challenge.* Springer International Publishing, 2016: 265-278.
- Božina N. *Farmakogenomika.* U: *Klinička kemija i molekularna dijagnostika u kliničkoj praksi.* Sertić J. (ur). Zagreb, Medicinska naklada, 2015.
- Božina N. *Farmakogenomika-genski polimorfizam i primjena lijekova.* U: *Francetić I. Vitezić D. ur. Klinička farmakologija.* Zagreb: Medicinska naklada, 2014:193-204.
- Božina N, Pejnović L. *Osnove farmakogenomike.* U: *Božina N, Macolić-Šarinić V (ur.). Farmakogenomika i farmakovigilancija - sprječavanje nuspojava u individualizaciji terapije – upute i smjernice.* Zagreb: Medicinska naklada; 2013:1-22.
- Čuković-Čavka S, Božina N. *Farmakogenomika i upalne bolesti crijeva.* U: *Božina N, Macolić-Šarinić V (ur.). Farmakogenomika i farmakovigilancija - sprječavanje nuspojava u individualizaciji terapije – upute i smjernice.* Zagreb: Medicinska naklada; 2013:49-58.
- Božina N, Šimić I, Bradamante V. *Interakcije lijekova - načela i primjeri kliničkih posljedica.* U: *Božina N, Macolić-Šarinić V (ur.). Farmakogenomika i farmakovigilancija - sprječavanje nuspojava u individualizaciji terapije – upute i smjernice.* Zagreb: Medicinska naklada; 2013:113-126.
- Božina N. *Farmakogenetika.* U: *Bulić-Jakuš F i Barišić I., ur. Emeryjeve Osnove medicinske genetike.* Zagreb: Medicinska Naklada, 2011;185-191.
- Božina N. *Biotransformacija lijeka.* Božina N. i Šalković-Petrišić M. *Antidepresivi.* Božina N. i Bradamante V. *Dermatološka farmakologija.* U: *Trkulja V. Klarica M. Šalković-Petrišić ur. Temeljna i klinička farmakologija.* Medicinska Naklada, 2011; 53-66; 509-530; 1047-1066.
- Božina N. *Farmakogenomika U: Vrhovac B, Jakšić B, Reiner Ž, Vucelić B ur. Interna Medicina.* Zagreb: Naklada Ljevak, 2008:222-224.
- Božina N. *Farmakogenomika-genski polimorfizam i primjena lijekova.* U: *Francetić I. Vitezić D. ur. Osnove kliničke farmakologije.* Zagreb: Medicinska naklada, 2007:193-204.
- Božina N. *Farmakogenomika.* U: *Sertić J. ur. Klinička kemija i molekularna dijagnostika.* Medicinska naklada, 2007: 302-310.

Prezentacije

Hrvatsko društvo farmakologije (HDF): edukativni simpozij „Aktualne teme iz farmakologije“. Božina N. *Farmakogenomika u kliničkoj praksi: preporuke i smjernice,* Zagreb, 12.12.2018.

Projekti

2017. Voditelj projekta , potpora Sveučilišta u Zagrebu“ Uloga farmakogenetike u interakcijama i nuspojavama opioidnih lijekova“
2013- Voditelj projekta:“Farmakogenomika i farmakovigilancija - sprečavanje nuspojava u individualizaciji terapije”.
Suradnik na međunarodnom projektu, 2018.- COST Association- CA17130 (The Action Enhancing Psychiatric Genetic Counselling, Testing, and Training in Europe – EnGagE)
2018. - suradnik na projektu , Potpora Sveučilišta u Zagrebu, "Uloga genskog polimorfizma metaboličkih enzima citokroma P450(CYP) kao čimbenika hepatotoksičnosti"
Suradnja sa Sveučilištem u Würzburgu na projektu "Molecular Basis of Neuropsychiatric Disorders“, podprojekt "Molecular Mechanisms of Posttraumatic Stress Disorder“, financiran od Deutscher Akademischer Austauschdienst (DAAD), Stability Pact for South Eastern Europe.
Suradnik na projektu Sveučilišta: "Farmakogenomko ispitivanje u djece s idiopatskim nefrotskim sindromom" (voditelj prof.dr.sc. D. Milošević)
Suradnik na projektima MZOS: od 2006. „Funkcijska genomika i proteomika rizičnih čimbenika ateroskleroze“ (voditelj prof.dr.sc. J.Sertić); „Farmakogenetska varijabilnost u psihijatrijskih bolesnika“ (voditelj prof.dr.sc. A. Mihaljević Peleš); „Upalne bolesti crijeva“ (voditelj prof.dr.sc. B. Vucelić)
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Konferencije

Sudjelovala kao pozvani predavač na više konferencija i simpozija s temama farmakologija i toksikologija, sigurnost primjene lijeka, farmakogenomika

Priznanja i nagrade

Nagrade na simpozijima:
2013. Falk Symposium, London: Cota M, Cukovic-Cavka S, Bozina N, Brinar M, Crncevic Urek M, Turk N, Krznicaric Z, Vucelic B. "Inosine Triphosphate Pyrophosphatase And Xanthine Oxidase Gene Variability in Croatian Inflammatory Bowel Disease Patients“
2012. 2nd EFCC-UEMS Congress “Laboratory Medicine at the Clinical Interface”, Mirošević Skvrce N, Božina N, Pejnović L, Barišić I, Zibar L, Macolić-Šarinić V. “ABCG2 Gene Variant And Fluvastatin Adverse Drug Reactions in Renal Transplant Recipients”
2012. Deveti psihijatrijski dani: Vlatkovic S, Zivkovic M, Mihaljevic-Peles A, Sagud M, Bozina N. Pisa Syndrome And Bipolar Affective Disorder.
2006. XIV World Congress on Psychiatric Genetics: Božina N, Mihaljević-Peleš A, Šagud M, Jakovljević M, Sertić J."Serotonin Transporter Polymorphism And Paroxetine Drug Response in Major Depression Disorder"
2001. III Hrvatski kongres farmakologije: Božina N, Tramišak I, Medved V, Mihaljević-Peleš A, Granić P, Stavljenić-Rukavina A. "CYP2D6 Genotype And Psychotropic Drug-Induced Adverse Effects".

Članstva

Hrvatsko društvo za farmakogenomiku i personaliziranu terapiju, Hrvatsko društvo farmakologa
Hrvatsko društvo za humanu genetiku
Hrvatsko društvo za biologijsku psihijatriju
European Society of Pharmacogenomics and Personalised Therapy (ESPT), International Association of therapeutic drug monitoring and clinical toxicology, European Society of Human Genetics
Hrvatski predstavnik u European Medicines Agency (EMA) Scientific Committee and working party meetings, European Network of Centre for Pharmacoepidemiology and Pharmacovigilance (ENCePP) i u Pharmacogenomics working party