

Publications
RNDr. Karol Ondriaš, DrSc.
8.7.2022

1. **Karol Ondriaš, Pavol Balgavý, Svorad Štolc, László I. Horvath,**
A spin label study of the perturbation effect of tertiary amine anesthetics on brain lipid liposomes and synaptosomes.
Biochim. Biophys. Acta 732 (1983) 627-635, Netherlands
2. **Karol Ondriaš, László I. Horvath, Pavol Balgavý, Svorad Štolc,**
Effects of tertiary amine local anaesthetics on the phase behaviour of the dipalmitoylphosphatidylcholine model membrane. Electron spin resonance tetramethylpiperidinyloxy partition study.
Physiol. Bohemoslov. 33 (1984) 489-494, Czech Republic
3. **Karol Ondriaš, Svorad Štolc, Ludek Beneš, Pavol Balgavý,**
Perturbation effect of local anaesthetics on synaptosomes: Variation with depth of the spin probe.
Gen. Physiol. Biophys. 3 (1984) 327-337, Slovakia
4. **Jaroslav Kolena, Karol Ondriaš,**
Age-dependent changes in rat testicular LH/hCG receptors in relation to the membrane fluidity.
Gen. Physiol. Biophys. 3 (1984) 89-92, Slovakia
5. **Rado Nosál, Viera Jančinová, Karol Ondriaš, Ján Jakubovský, Pavol Balgavý,**
The interaction of β -adrenoceptor blocking drugs with platelet aggregation, calcium displacement and fluidization of the membrane.
Biochim. Biophys. Acta 821 (1985) 217-228, Netherlands
6. **Rado Nosál, Viera Jančinová, Karol Ondriaš,**
The effect of beta-adrenoceptor blocking drugs on platelet aggregation, calcium displacement and fluidization of the membrane.
In: Proc. 4th Cong. Hung. Pharmacol. Soc., Eds. L. Tardos, G. Rabloczky. Budapest 1985, Vol. 1., pp. 377-380, Hungary
7. **Karol Ondriaš, Vladimír Mišík, Svorad Štolc,**
Perturbation of lipid liposomes by local anaesthetic carbisocaine.
Drugs Exptl. Clin. Res. 12 (1986) 837-840, Switzerland
8. **Karol Ondriaš, Andrej Staško,**
A motionally restricted component of ESR spectra of fatty acid spin probe induced by local anesthetics in synaptosomal membranes.
Studia Biophys. 115 (1986) 23-27, Nemecko
9. **Karol Ondriaš, Alajos Berczi, Vladimír Mišík, Svorad Štolc,**
Influence of local anaesthetics on electrical conductivity of planar lipid membrane doped with gramicidin.
Studia Biophys. 115 (1986) 17-22, Nemecko
10. **Jaroslav Kolena, Pavol Blažíček, Stefan Horkovics - Kovats, Karol Ondriaš, E. Šebeková,**
Modulation of rat testicular LH/hCG receptors by membrane lipid fluidity.
Mol. Cell. Endocrin. 44 (1986) 69-76, Ireland
11. **Karol Ondriaš,**
Effect of local anesthetics and beta-adrenolytics on lipid and biological membrane fluidity.

- Bratisl. lek. Listy 88 (1987) 481-486, Slovensko
12. **Karol Ondriaš, Andrej Staško, Viera Jančinová, Pavol Balgavý,**
Comparison of the effect of eleven β -adrenoceptor blocking drugs in perturbing lipid membrane: an ESR spectroscopy study.
Mol. Pharmacol. 31 (1987) 97-102, United States
 13. **Ondriaš, Karol., Andrej Staško, Pavol Balgavý,**
Spin label study of the perturbation effect of the local anaesthetics tetracaine and dibucaine on synaptosomes at pharmacological concentrations.
Biochem. Pharmacol. 36 (1987) 3999-4005, Britania
 14. **Karol Ondriaš, Jana Gallová, H. Szocsová and Svorad Štolc,**
pH-dependent effects of local anaesthetics in perturbing lipid membranes.
Gen. Physiol. Biophys. 6 (1987) 271-277, Slovakia
 15. **Vladimír Mišík, Karol Ondriaš,**
Spontaneous formation of channels in planar lipid membranes prepared from synaptosomal lipids.
Studia Biophys. 125 (1988) 23-29, Nemecko
 16. **Rado Nosál, Karol Ondriaš, Jana Pečivová, Katarína Drábiková,**
Histamine liberation and membrane fluidisation of mast cells exposed to the beta-adrenoceptor blocking drug propranolol.
Agents and Actions 23 (1988) 143-145, Switzerland
 17. **Karol Ondriaš, Andrej Staško, Vladimír Marko, Rado Nosál,**
Influence of β -adrenoceptor blocking drugs on lipid-protein interaction in synaptosomal membranes. An ESR study.
Chem.-Biol. Interactions 69 (1989) 87-97, Ireland
 18. **Karol Ondriaš, Vladimír Mišík, Dalibor Gergel, Andrej Staško,**
Lipid peroxidation of phosphatidylcholine liposomes depressed by the calcium channel blockers nifedipine and verapamil and by the antiarrhythmic-antihypoxic drug stobadine.
Biochim. Biophys. Acta 1003 (1989) 238-245, Netherlands
 19. **Rado Nosál, Katarína Drábiková, Jana Pečivová, Karol Ondriaš,**
Membrane perturbation activity of beta-adrenoceptor blocking drugs in isolated rat mast cells.
Agents and Actions 27 (1989) 36-38, Switzerland
 20. **Karol Ondriaš, Ján Reguli, Andrej Staško, Emil Švajdlenka, Jozef Pogády, Daniela Martišová,**
Influence of chlorpromazine and its derivatives on the dynamics of lipid membranes.
Chem. Papers 43 (1989) 315-324, Slovensko
 21. **Karol Ondriaš,**
Use of electron spin resonance spectroscopy of spin labels for studying drug-induced membrane perturbation.
J. Pharmac. Biomed. Anal. 7 (1989) 649-675, England
 22. **Jozef Pogády, Daniela Martišová, Karol Ondriaš, Andrej Staško, Ján Reguli,**
Use of electron paramagnetic resonance spectroscopy spin labels in studying the properties of biological membranes.
Bratisl. Lek. Listy 90 (1989) 801-813, Slovakia
 23. **Rado Nosál, Katarína Drábiková, Jana Pečivová, Karol Ondriaš, Ján Jakubovský,**
Analysis of the adverse effects of drugs at the cellular and subcellular levels.

- Cesk. Farm. 39 (1990) 118-121, Czech Republic
24. **Andrej Staško, Karol Ondriaš, Vladimír Mišík, H. Szocsová, Dalibor Gergel',**
Stobadine - a novel scavenger of free radicals.
Chem. Papers 44(1990) 493-500, Slovensko
25. **Karol Ondriaš, Louis Borgatta, Do Han Kim, Barbara E. Ehrlich,**
Biphasic effects of doxorubicin on the calcium release channel from sarcoplasmic
reticulum of cardiac muscle.
Circulation Res. 67 (1990) 1167-1174, United States
26. **Ludek Beneš, Vladimír Mišík, Dalibor Gergel', Karol Ondriaš,**
Protective effect of TJ-9 (SHO-SAIKO-TO), TJ-15 (OREN-GEDOKU-TO), TJ-
23 (TOKI-SHAKUYAKU-SAN), TJ-114 (SAIREI-TO) and TJ-96 (SAIBOKU-
TO) on lipid peroxidation. Medicines of Plant Origin. In: Medicines of Plant
Origin. Patient Benefit and Japanese Kampo Products 1990.
Oxford Clinical Communications, Oxford, 1990, pp. 43-47, Slovakia
27. **Karol Ondriaš, Andrej Staško, Vladimír Mišík, Ján Reguli, Emil Švajdlenka,**
Comparison of perturbation effect of propranolol, verapamil, chlorpromazine
and carbisocaine on lecithin liposomes and brain total lipid liposomes. An EPR
spectroscopy study.
Chem.-Biol. Interactions. 79 (1991) 197-206, Ireland
28. **Vladimír Mišík, Andrej Staško, Dalibor Gergel', Karol Ondriaš,**
Spin-trapping and antioxidant properties of illuminated and nonilluminated
nifedipine and nimodipine in heart homogenate and model system.
Mol. Pharmacol. 40 (1991) 435-439, United States
29. **Vladimír Mišík, Dalibor Gergel', Karol Ondriaš,**
Comparison of effect of stobadine on lipid peroxidation of liver, heart, kidney
and brain homogenates.
Pharmazie, 46 (1991) 468-469, Germany
30. **Karol Ondriaš, Andrej Staško, Vladimír Mišík, Emil Švajdlenka,**
Comparison of dynamics of lecithin liposomes and brain total lipid liposomes
with synaptosomal membranes. An EPR spectroscopy study.
Gen Physiol. Biophys. 10 (1991) 411-421, Slovakia
31. **Young - Seob Lee, Karol Ondriaš, Adam J. Duhl, Barbara E. Ehrlich, Do Han
Kim,**
Comparison of calcium release from sarcoplasmic reticulum of slow and fast
twitch muscles.
J. Membrane Biol. 122 (1991) 155-163, United States
32. **Vladimír Mišík, Emil Švajdlenka, Jaroslav Filípek, Dalibor Gergel', Karol
Ondriaš,**
Inhibition of lipid peroxidation of lecithin liposomes kept in a pH-stat system
near neutral pH.
Free Rad. Res. Comms., 15 (1991) 159-165, Switzerland
33. **Vladimír Mišík, Karol Ondriaš, Dalibor Gergel', D. Bullová, Václav Suchý,
Máté Nagy,**
Lipid peroxidation of lecithin liposomes depressed by some constituents of
propolis.
Fitoterapia 62 (1991) 215-220, Taliansko
34. **Elena Ondriašová, Andrej Staško, Eva Račanská, Petr Švec, Karol Ondriaš,**

- Correlation between the potency of seven potential β -adrenoceptor blocking drugs and propranolol to decrease heart rate in reserpinized rats and to perturb liposomes prepared from platelet lipids.
Pharmazie 46 (1991) 889-890, Germany
35. **Vladimír Mišík, Dalibor Gergel', Karol Ondriaš,**
Dependence of peroxidation of lipid liposomes on buffer composition.
Pharmazie 47 (1992) 64-65, Germany
 36. **Karol Ondriaš, Andrej Staško, Dalibor Gergel', Melita Hromadová, Ludek Beneš,**
Formation of stable free radicals of kampo medicines tj-9, tj-15, tj-23, tj-96, tj-114 and their antioxidant effect on low density lipoproteins.
Free Rad. Res. Comm. 16 (1992) 227-237, Switzerland
 37. **Vladimír Mišík, Karol Ondriaš, Pavol Balgavý,**
Influence of Lipid Peroxidation on Molecular Arrangement of Phospholipids in Liposomes Prepared from Egg Yolk Phosphatidylcholine and from Total Rat Brain Lipids. A ^{31}P NMR Study.
Gen. Physiol. Biophys. 11 (1992) 317-325, Slovakia
 38. **Karol Ondriaš, Melita Hromadová,**
Antiarrhythmic-antihypoxic drug stobadine inhibits copper induced peroxidation of low density lipoprotein.
Pharmazie 47 (1992) 392, Germany
 39. **Karol Ondriaš, Stanislav Biskupič, Andrej Staško, Jozef Pogády,**
A Spin Probe Study of the Effects of Chlorpromazine and its Derivatives on Lipid-Protein Interactions in Synaptosomal Membranes.
Gen. Physiol. Biophys. 11 (1992) 345-357, Slovakia
 40. **Karol Ondriaš, Elena Ondriašová, Andrej Staško,**
Perturbation effect of eight calcium channel blockers on liposomal membranes prepared from rat brain total lipids.
Chem. Phys. Lipids 62 (1992) 11-17, Ireland
 41. **Dalibor Gergel', Vladimír Mišík, Karol Ondriaš,**
Effect of cisplatin, carboplatin and stobadine on lipid peroxidation of kidney homogenate and phosphatidylcholine liposomes.
Physiol. Res. 41 (1992) 129-134, Czech Republic
 42. **Elena Ondriašová, Karol Ondriaš, Andrej Staško, Rado Nosál, J. Csöllei,**
Comparison of the potency of five potential D -adrenoceptor blocking drugs and eight calcium channel blockers to inhibit platelet aggregation and to perturb liposomal membranes prepared from platelet lipids.
Physiol. Res. 41 (1992) 267-272, Czech Republic
 43. **Karol Ondriaš, Andrej Staško,**
Perturbation effect of the diheptanoyl phosphatidylcholine on rat brain total lipid liposomes. An electron paramagnetic resonance spectroscopy study.
Chem.-Biol. Interactions. 84 (1992) 143-151, Ireland
 44. **Marta Giertlová, Karol Ondriaš,**
Nifedipine and nimodipine solubility in the presence of diheptanoyl phosphatidylcholine.
Pharmazie 47 (1992) 861-864, Germany
 45. **Karol Ondriaš, Stanislav Biskupič, Melita Hromadová, Ludek Beneš,**
Antioxidačné vlastnosti Kampo medicines TJ-9, TJ-15, TJ-23, TJ-96 a TJ-114.
Česk. Farm. 41 (1992) 253-257, Czech Republic

46. **Ilya B. Bezprozvanny, Karol Ondriaš, Edward Kaftan, Detcho A. Stoyanovsky, Barbara E. Ehrlich,**
Activation of the calcium release channel (ryanodine receptor) by heparin and other polyanions is calcium dependent.
Molecular Biology of the Cell 4 (1993) 347-352, United States
47. **Dalibor Gergel', Karol Ondriaš,**
Incorporation of Amphotericin B (Fungizone(R)) in rat brain total lipid liposomes markedly decreases its IV toxicity in mice.
Pharmazie 48 (1993) 202-205, Germany
48. **Vladimír Mišík, Karol Ondriaš, Dalibor Gergel',**
Antioxidačné vlastnosti niektorých kardioaktívnych látok.
Bratisl. Lek. Listy 49 (1993) 66-70, Slovakia
49. **Karol Ondriaš, Vladimír Mišík, Vlasta Brezová, Andrej Staško,**
Reaction kinetics of alpha-tocopheroxyl radical with biologically and pharmacologically active substances.
Free Rad. Res. Comm. 19 (1993) 17-28, Switzerland
50. **Karol Ondriaš, Vladimír Mišík, Andrej Staško, Dalibor Gergel', Melita Hromadová,**
Comparison of antioxidant properties of nifedipine and illuminated nifedipine with nitroso spin traps in low density lipoproteins and phosphatidylcholine liposomes.
Biochim. Biophys. Acta 1211 (1994) 114-119, Netherlands
51. **Anne-Marie B. Brillantes, Karol Ondriaš, Andrew Scott, Evgeny Kobrinsky, Elena Ondriašová, Maria C. Moschella, Thottala Jayaraman, Mark Landers, Barbara E. Ehrlich, Andrew R. Marks,**
Stabilization of calcium release channel (ryanodine receptor) function by FK506-binding protein.
Cell 77 (1994) 513-523, United States
52. **Vladimír Mišík, Dalibor Gergel', P. Alov, Karol Ondriaš,**
An unusual temperature dependence of malondialdehyde formation in Fe²⁺/H₂O₂-initiated lipid peroxidation of phosphatidylcholine liposomes.
Physiol. Res. 43 (1994) 163-167, Czech Republic
53. **Andrej Staško, Vlasta Brezová, Stanislav Biskupič, Karol Ondriaš, Vladimír Mišík,**
Reactive radical intermediates formed from illuminated nifedipine.
Free Radical Biology & Medicine 17 (1994) 545-556, United States
54. **Pavol Balgavý, Daniela Uhríková, Karol Ondriaš,**
Effect of local anesthetic and β -blocker carbisocaine on phospholipid polymorphism.
Biologia 49 (1994) 863-869, Slovensko
55. **Thottala Jayaraman, Elena Ondriašová, Karol Ondriaš, David J. Harnick, Andrew R. Marks,**
The inositol 1,4,5-trisphosphate receptor is essential for T-cell receptor signaling.
Proc. Natl. Acad. Sci. USA. 92 (1995) 6007-6011, United States
56. **Dalibor Gergel', Vladimír Mišík, Karol Ondriaš, Arthur I. Cederbaum**
Increased cytotoxicity of 3-morpholinolinosydnonimine to HepG2 cells in the presence of superoxide dismutase.
J. Biol. Chem. 270 (1995) 20922-20929, United States
57. **Evgeny Kobrinsky, Karol Ondriaš, Andrew R. Marks,**

- Expressed ryanodine receptor can substitute for the inositol 1,4,5-triphosphate receptor in *Xenopus laevis* oocytes during progesterone-induced maturation.
Developmental Biology 172 (1995) 531-540, United States
58. **Thottala Jayaraman, Karol Ondriaš, Elena Ondriašová, Andrew R. Marks,**
Regulation of the inositol 1,4,5-trisphosphate receptor by tyrosine phosphorylation.
Science 272 (1996) 1492-1494, United States
59. **Karol Ondriaš, Anne-Marie B. Brillantes, Andrew Scott, Barbara E. Ehrlich, Andrew R. Marks,**
Single channel properties and calcium conductance of the cloned expressed ryanodine receptor/calcium release channel.
Soc. Gen. Physiol. Ser. 51 (1996) 29-45, United States
60. **Karol Ondriaš, Andrej Staško, Melita Hromadová, Václav Suchý, Máté Nagy,**
Pinobanksin inhibits peroxidation of low density lipoprotein and it has electron donor properties reducing α -tocopherol radical.
Die Pharmazie, 52 (1997) 566-567, Germany
61. **Marta Gaburjaková, Andrej Staško, Karol Ondriaš,**
Detection of nitric oxide by EPR spectroscopy.
In: Advances in Medical Physics, Biophysics and Biomaterials. (Edit. E.Kukurová, Bratislava 1997), pp. 43-46., Slovensko
62. **Karol Ondriaš, Andrej Staško, Dalibor Gergel', Elena Ondriašová, Melita Hromadová,**
Nafazatrom inhibits peroxidation of phosphatidylcholine liposomes, heart homogenate and low density lipoproteins.
Gen. Physiol. Biophys. 16 (1997) 151-162, Slovakia
63. **Kerry E. Quinn, Loriana Castellani, Karol Ondriaš, Barbara E. Ehrlich**
Characterization of the ryanodine receptor/channel of invertebrate muscle.
Am. J. Physiol. 274 (2 Pt 2) (1998) R494-R502, United States
64. **Karol Ondriaš, Andrej Staško, Dalibor Gergel', Melita Hromadová, Vladimír Mišík,**
Antioxidant and pro-oxidant effect of epinephrine and isoprenaline on peroxidation of LDL and lipid liposomes.
Physiol. Res. 47 (1998) 119-124, Czech Republic
65. **Steven O. Marx, Karol Ondriaš, Andrew R. Marks,**
Coupled gating between individual skeletal muscle Ca^{2+} release channels.
Science 281 (1998) 818-821, United States
66. **Karol Ondriaš, Steven O. Marx, Marta Gaburjakova, Andrew R. Marks,**
FKBP12 modulates gating of the ryanodine receptor/calcium release channel.
Annals N.Y. Acad. Sciences 853 (1998) 149-156, United States
67. **Marta Gaburjakova, Jens Schlossmann, Karol Ondrias,**
Properties of a new calcium-permeable single channel from tracheal microsomes.
Biochim. Biophys. Acta 1417 (1999) 25-31, Netherlands
68. **Nora Rosemlit, Maria C. Moschella, Elena Ondriašová, David E. Gutstein, Karol Ondriaš, Andrew R. Marks,**
Intracellular calcium release channel expression during embryogenesis.
Dev. Biol. 206 (1999) 163-177, United States
69. **Táňa Čemanová, Marta Gaburjaková, Jens Schlossmann, Elena Ondriašová, Karol Ondriaš,**

- Local anesthetic heptacaine inhibited potassium channel from tracheal microsomes.
Biologia, Bratislava, 54/Suppl. 6, 1999; 177-181, Slovakia
70. **Vladimír Mišík, Karol Ondriaš, Andrej Staško,**
 EPR spectroscopy of free radical intermediates of antiarrhythmic-antihypoxic drug stobadine, a pyridoindole derivative
Life Sciences, 1999, Vol 65, Iss 18-19, pp 1879-1881, Netherlands
71. **Karol Ondriaš,** Ilúzia pravdy. *Filozofia*, 1999, 54, pp. 612-623. Slovensko
72. **Karol Ondriaš,** *The Brain, Consciousness & Illusion of Truth.*
 Emma Nezinska (translator & editor), Universal Publishers/uPUBLISH.com, 1st Edition, 1999, USA, pp 220.
73. **Andrej Staško, Vlasta Brezová, Michal Zalibera, Stanislav Biskupič, Karol Ondriaš.**
 Electron transfer: A primary step in the reactions of sodium hydrosulphide, an H₂S/HS⁻ donor.
Free Radical Research, 43 (2009) 581-593.
74. **Lubomíra Žáčiková, Karol Ondriaš, Richard Kvetňanský, Olga Križanová,**
 Identification of type 1 IP₃ receptors in the rat kidney and their modulation by immobilization stress.
Biochim. Biophys. Acta 1466 (2000) 16-22, Netherlands
75. **Alexandra Mojžišová, Olga Križanová, Lubomíra Žáčiková, Viera Komínková, Karol Ondriaš**
 Effect of Nicotinic Acid Adenine Dinucleotide Phosphate on Ryanodine Calcium Release Channel in Heart.
Pflugers Archiv 441 (2001) 674-677, Germany
76. **Viera Komínková, M. Magová, Alexandra Mojžišová, Lubica Máleková, Karol Ondriaš**
 Effect of ethanol on tracheal potassium channels reconstituted into bilayer lipid membranes.
Physiol. Res. 50 (2001) 507-511, Czech Republic
77. **Steven O. Marx, Jana Gaburjakova, Marta Gaburjakova, Charles Henrikson, Karol Ondrias, Andrew R. Marks,**
 Coupled gating between cardiac calcium release channels (ryanodine receptors).
Circulation Res. 88 (2001) 1151-1158, United States
78. **Karol Ondrias,** Time for ‘digital signaling’?
Gen. Physiol. Biophys. 20 (2001) 213-214, Slovakia
79. **Karol Ondrias, Alexandra Mojzisoa,**
 Coupled Gating Between Individual Cardiac Ryanodine Calcium Release Channels. *Gen. Physiol. Biophys.* 21 (2002) 73-84, Slovakia
80. **Ludmila Zacikova, Karol Ondrias, Richard Kvetnansky, Olga Krizanova,**
 Immobilization stress affects the calcium homeostasis in rat kidney by modulation of calcium transport systems. In *Stress – Neural Endocrine and Molecular Studies.* (Eds. McCarty, R., Aguilera, G., Sabban, E.L., and Kvetnansky, R.). London: Taylor and Francis, 75-78, 2002, Slovensko
81. **J. Kocan, Lubomira Lencesova, Alexander Kiss, Karol Ondrias, Richard Kvetnansky, Olga Krizanova,**
 Distribution of Neuronal and non-neuronal spliced variants of type 1 IP₃-receptor in rat hypothalamus and brain stem.
Neurochem. Inter. 41 (2002) 65-70, England

82. **Nikhil deSouza, Steven Reiken, Karol Ondriaš, Yi-ming Yang, Scot Matkovich, Andrew R. Marks,**
Protein Kinase A and Two Phosphatases Are Components of the Inositol 1,4,5-Trisphosphate Receptor Macromolecular Signaling Complex. *J Biol Chem* 277, (2002) 39397-39400, United States
83. **Lubomira Lencesova, Karol Ondrias, Lucia Micutkova, Maxim L. Filipenko, Richard Kvetnansky, Olga Krizanova,**
Immobilization stress elevates IP₃ receptor mRNA in adult rat hearts by glucocorticoid-dependent manner.
FEBS 531 (2002) 432-436, Netherlands
84. **Jana Machova, Milan Stefek, Marián Kukan , M. Sinsky, Karol Ondrias, Lucia Rackova, Jana Navarova, Viktor Bauer ,**
Involvement of L-arginine-nitric oxide system in the response of isolated trachea to reactive oxygen species.
Methods Find Exp Clin Pharmacol. 2003 May;25(4):287-96, Spain
85. **Olga Krizanova, Karol Ondrias,**
The inositol 1,4,5-trisphosphate receptor – transcriptional regulation and modulation by phosphorylation.
Gen Physiol Biophys 22 (2003) 295-311, Slovakia
86. **Viera Kominkova, Marta Novotova, Karol Ondrias, Tatiana Ravingerova, Adam Szewczyk,**
Mitochondrial channels permeable by calcium ions.
Toxicol Mechanism Methods, 14, 2004, 35-39. UK
87. **Piotr Bednarczyk, Anna Kicinska , Viera Kominkova , Karol Ondrias , Krzysztof Dolowy, Adam Szewczyk,**
Quinine inhibits mitochondrial ATP-regulated potassium channel from bovine heart.
J Membr Biol 199, 2004, 63-72, United States
88. **Xiaogui Li, Krishnamurthy Malathi, Olga Krizanova, Karol Ondrias, Kirk Sperber, Vitaly Ablamunits, Thottala Jayaraman,**
Cdc2/cyclin B1 interacts with and modulates inositol 1,4,5-trisphosphate receptor (type 1) functions.
J Immunol. 175, (2005) 6205-6210, United States
89. **Jana Slavikova , Monika Dvorakova, Josef Reischig , Miklós Palkovits , Karol Ondrias, Tarabova B, Lubica Lacinova, Richard Kvetnansky, Marks A, Olga Krizanova ,**
IP₃ type 1 receptors in the heart: Their predominance in atrial walls with ganglion cells. *Life Sci.* 78, (2006) 1598-1602, Netherlands
90. **Lubica Malekova, Viera Kominkova, Miroslav Ferko, Peter Stefanik, Olga Krizanova, Atyla Ziegelhöffer, Adam Szewczyk, Karol Ondrias ,**
Bongkrekic acid and atractyloside inhibits chloride channels from mitochondrial membranes of rat heart.
Biochim. Biophys. Acta 1767 (2007) 31-44, Netherlands
91. **Izabela Koszela-Piotrowska, Katarzyna Choma, Piotr Bednarczyk, Krzysztof Dolowy, Adam Szewczyk, Wolfram S. Kunz, Lubica Malekova , Viera Kominkova , Karol Ondrias,**
Stilbene derivatives inhibit the activity of the inner mitochondrial membrane chloride channels.
Cell Mol Biol Lett. 2007;12(4):493-508, Poland

92. **Lubica Malekova, Jana Tomaskova, Marie Novakova ,Peter Stefanik, Juraj Kopacek, Boris Lakatos, Silvia Pastorekova, Olga Krizanova, Albert Breier, Karol Ondrias,**
Inhibitory effect of DIDS, NPPB, and phloretin on intracellular chloride channels. *Pflugers Arch* 455, (2007) 349-357, Germany
93. **Karol Ondrias , Andrej Stasko , Sona Cacanyiova , Zdena Sulova, Olga Krizanova, Frantisek Kristek, Lubica Malekova ,Vladimír Knezl , Albert Breier,**
H₂S and HS- donor NaHS releases nitric oxide from nitrosothiols, metal nitrosyl complex, brain homogenate and murine L1210 leukaemia cells. *Pflugers Arch - Eur J Physiol* (2008) 457:271–279. DOI: 10.1007/s00424-008-0519-0 (Impact Factor: 3.842 (2007), Germany)
94. **Karol Ondrias, Lubica Malekova, Olga Krizanova,**
Potassium-chloride promiscuous channels in mitochondrial membranes. *Gen. Physiol. Biophys.* 27, (2008) 38–44, Slovakia
95. **Karol Ondrias,**
Trends in pharmacological research – contribution from studies of the membrane transport and cell signaling. In “Trends in pharmacological research”, (Ed.: V. Bauer, Publ.: Institute of Experimental Pharmacology, SASc. Bratislava 2008, pp. 96-101.) Slovensko
96. **Karol Ondrias, Marta Sirova, Lucia Kubovcakova, Olga Krizanova,**
Uranyl acetate modulates gene expression and protein levels of the type 2, but not type 1 inositol 1,4,5-trisphosphate receptors in mouse kidney. *Gen. Physiol. Biophys.* 27 (2008) 187-193, Slovakia
97. **Lubica Malekova, Olga Krizanova, Karol Ondrias,**
H₂S and HS- donor NaHS inhibits intracellular chloride channels. *Gen. Physiol. Biophys.* 28 (2009) 190–194, Slovakia
98. **Andrej Stasko, Vlasta Brezova, Michal Zalibera , Stanislav Biskupic, Karol Ondrias,**
Electron transfer – a primary step in the reactions of sodium hydrosulfide, an H₂S/HS– donor. *Free Rad Res* 43 (2009) 581-593, England
99. **Juraj Kopacek, Karol Ondrias, Barbora Sedlakova, Jana Tomaskova, Lucia Zahradnikova, Jan Sedlak, Zdena Sulova, Alexandra Zahradnikova, Jaromir Pastorek, Olga Krizanova.**
Type 2 IP₃ receptors are involved in uranyl acetate induced apoptosis in HEK 293 cells. *Toxicology* 262 (2009) 73-79.
100. **Sona Hudcova, Barbora Sedlakova, Richard Kvetnansky, Karol Ondrias, Olga Krizanova,**
Modulation of the sodium–calcium exchanger in the rat kidney by different sequential stressors. *Stress* 13 (2010) 15-21.
101. **Zuzana Tomaskova, Sona Cacanyiova, Andrej Bencko, Frantisek Kristek, Lea Dugovicova, Jan Hrbac, Karol Ondrias.**
Lipids modulate H₂S/HS⁻ induced NO release from S-nitrosoglutathione. *Biochemical and Biophysical Research Communications* 390 (2009) 1241–1244, doi:10.1016/j.bbrc.2009.10.128
102. **Sedlakova B., Cacanyiova S., Ondrias K., Kristek F., Krizanova O.**
Effect of 7-nitroindazole on the expression of intracellular calcium channels in

- the kidney of spontaneously hypertensive rats.
General Physiology and Biophysics, 28 (2009) 225-232
- 103. Zuzana Tomaskova, Karol Ondrias.** Mitochondrial chloride channels - what are they for? *FEBS Letters* 584 (2010) 2085–2092;
 DOI:10.1016/j.febslet.2010.01.035
- 104. Viera Kominkova, Lubica Malekova, Zuzana Tomaskova, Peter Slezak, Adam Szewczyk and Karol Ondrias.**
 Modulation of intracellular chloride channels by ATP and Mg²⁺.
Biochim. Biophys. Acta 1797 (2010) 1300-1312.
 doi:10.1016/j.bbabi.2010.02.031
- 105. Anna Bertova, Sona Cacanyiova, Zuzana Tomaskova, Frantisek Kristek, Olga Krizanova, Karol Ondrias.**
 The hypothesis of the main role of H₂S in coupled sulphide-nitroso signalling pathway.
Gen. Physiol. Biophys. 29 (2010) 402-410; doi:10.4149/gpb_2010_04_402
- 106. Barančík, M., Ondriaš, K.:** Mitochondrie. V „Biomembrány: štruktúra a dynamika membrán vo vzťahu k bunkovým funkciám. (Petrus, 2010, ed. L. Lacinová) str. 206-226“.
- 107. Zuzana Tomaskova, Anna Bertova, Karol Ondrias.**
 On the Involvement of H₂S in Nitroso Signaling and Other Mechanisms of H₂S Action.
Current Pharmaceutical Biotechnology. 12 (2011) 1394-1405. (I.F.=3,5)
- 108. Karol Ondrias, Lencesova L., Sirova M., Labudova M., Pastorekova S., Kopacek J., Krizanova O.**
 Apoptosis induced clustering of IP3R1 in nuclei of nondifferentiated PC12 cells.
Journal of Cellular Physiology. Gen. Physiol. Biophys. 30 (2011) 396–402;
 doi: 10.1002/jcp.22665.
- 109. Marian Grman, Anton Misak, Sona Cacanyiova, Frantisek Kristek, Zuzana Tomaskova, Anna Bertova and Karol Ondrias.**
 The aqueous garlic, onion and leek extracts release nitric oxide from S-nitrosoglutathione and prolong relaxation of aortic rings.
Gen. Physiol. Biophys. 30 (2011) 396–402; doi:10.4149/gpb_2011_04_396
- 110. S. Cacanyiova, F. Kristek, M. Malekova, K. Ondrias.**
 Effect of chronic neuronal nitric oxide-synthase inhibition on arterial function and structure in spontaneously hypertensive rats.
J. Physiol. Pharmacol. 63 (2012) 23-28.
- 111. Antoni Wrzosek, Zuzana Tomaskova, Karol Ondrias, Agnieszka Łukasiak, Adam Szewczyk.**
 The potassium channel opener CGS7184 activates Ca²⁺ release from the endoplasmic reticulum.
Eur. J. Pharmacol. 690 (2012) 60–67,
<http://dx.doi.org/10.1016/j.ejphar.2012.06.029>
- 112. Ming Liu, Anna Bertova, Nicolas Illy, Blandine Brissault, Jacques Penelle, Karol Ondrias and Valessa Barbier.**
 A Polymeric Membrane Permeabilizer Displaying Densely Packed Arrays of Crown Ether Lateral Substituents.
RSC Advances 2 (2012) 8606–8609. DOI:10.1039/C2RA20548C. IF=2,56

- 113. Marian Grman, Anton Misak, Claus Jacob, Zuzana Tomaskova, Anna Bertova, Torsten Burkholz, Peter Docolomansky, Ladislav Habala, Karol Ondrias.**
Low molecular thiols, pH and O₂ modulate H₂S-induced S-nitrosoglutathione decomposition - [•]NO release.
Gen. Physiol. Biophys. 32 (2013) 429–441. DOI: 10.4149/gpb_2013026
- 114. Frantisek Kristek, Magdalena Malekova, Karol Ondrias, Sona Cacanyiova.**
Blood pressure-independent hypotrophy of the heart, kidneys and conduit arteries after 7-nitroindazole administration to wistar rats from the prenatal period to adulthood.
Journal of Physiology and Pharmacology 64 (2013) 35-39.
www.jpp.krakow.pl
- 115. Lencesova L., Hudecova S., Csaderova L., Markova J., Soltysova A., Pastorek M., Sedlak J., Wood M.E., Whiteman M., Ondrias K., Krizanova O.**
Sulphide signalling potentiates apoptosis through the up-regulation of IP3 receptors type 1 and 2. Acta Physiol (Oxf). 208 (2013) 350-361.
doi: 10.1111/apha.12105
- 116. Viera Kominkova, Karol Ondrias, Zuzana Tomaskova.**
Inhibitory effect of glybenclamide on mitochondrial chloride channels from rat heart. Biochem Biophys Res Commun. 434 (2013) 836-840.
<http://dx.doi.org/10.1016/j.bbrc.2013.04.024>
- 117. Anton Misak, Marian Grman, Lubica Malekova, Marta Novotova, Jana Markova, Olga Krizanova, Karol Ondrias, Zuzana Tomaskova.**
Mitochondrial chloride channels - electrophysiological characterization and pH induction of channel pore dilation. Eur Biophys J. 42 (2013) 709-720.
DOI 10.1007/s00249-013-0920-2
- 118. Markova J, Hudecova S, Soltysova A, Sirova M, Csaderova L, Lencesova L, Ondrias K, Krizanova O.**
Sodium/calcium exchanger is upregulated by sulfide signaling, forms complex with the β 1 and β 3 but not β 2 adrenergic receptors, and induces apoptosis.
Pflugers Arch - Eur J Physiol 466 (2014)1329–1342; DOI 10.1007/s00424-013-1366-1
- 119. M. Drobná, A. Misak, T. Holland, F. Kristek, M. Grman, L. Tomasova, A. Berenyiova, S. Cacanyiova, K. Ondrias.**
Captopril partially decreases the effect of H₂S on rat blood pressure and inhibits H₂S-induced nitric oxide release from S-nitrosoglutathione. Physiol Res. 64 (2015) 479-486.
- 120. Andrea Berenyiova, Marian Grman, Ana Mijuskovic, Andrej Stasko, Anton Misak, Peter Nagy, Elena Ondriasova, Sona Cacanyiova, Vlasta Brezova, Martin Feelisch, Karol Ondrias.**
The reaction products of sulfide and S-nitrosoglutathione are potent vasorelaxants.
Nitric Oxide 46 (2015) 123–130; <http://dx.doi.org/10.1016/j.niox.2014.12.008>
- 121. Lenka Tomasova, Michaela Pavlovicova, Lubica Malekova, Anton Misak, Frantisek Kristek, Marian Grman, Sona Cacanyiova, Milan Tomasek, Zuzana Tomaskova, Alexis Perry, Mark E. Wood, Lubica Lacinova, Karol Ondrias, Matthew Whiteman.**

Effects of AP39, a novel triphenylphosphonium derivatised anethole dithiolethione hydrogen sulfide donor, on rat haemodynamic parameters and chloride and calcium Cav3 and RYR2 channels.
Nitric Oxide 46 (2015) 131–144; <http://dx.doi.org/10.1016/j.niox.2014.12.012>

- 122. Miriam M. Cortese-Krott, Gunter G. C. Kuhnle, Alex Dyson, Bernadette O. Fernandez, Marian Grman, Jenna F. DuMond, Mark P. Barrow, George McLeod, Hidehiko Nakagawa, Karol Ondrias, Péter Nagy, S. Bruce King, Joseph E. Saavedra, Larry K. Keefer, Mervyn Singer, Malte Kelm, Anthony R. Butler, and Martin Feelisch.**

Key bioactive reaction products of the NO/H₂S interaction are S/N-hybrid species, polysulfides, and nitroxyl. Proc Natl Acad Sci U S A. 112 (2015) E4651-4660. doi: 10.1073/pnas.1509277112. Epub 2015 Jul 29. PMID: 26224837.
www.pnas.org/cgi/doi/10.1073/pnas.1509277112

- 123. Cacanyiova S, Berenyiova A, Kristek F, Drobna M, Ondrias K, Grman M.**
The adaptive role of nitric oxide and hydrogen sulphide in vasoactive responses of thoracic aorta is triggered already in young spontaneously hypertensive rats. J Physiol Pharmacol 2016, 67, 4, 501-512; IF=2,8

- 124. Lenka Tomasova, Leszek Dobrowolski, Halina Jurkowska, Maria Wróbel, Tomasz Huc, Karol Ondrias, Ryszard Ostaszewski, Marcin Ufnal.**

Intracolonic hydrogen sulfide lowers blood pressure in rats.

Nitric Oxide 60 (2016) 50-58; IF=3,5

<http://dx.doi.org/10.1016/j.niox.2016.09.007>

IF=4,181

- 125. Marian Grman, Muhammad Jawad Nasim, Roman Leontiev, Anton Misak, Veronika Jakusova, Karol Ondrias, Claus Jacob.**

Inorganic Reactive Sulfur-Nitrogen Species: Intricate Release Mechanisms or Cacophony in Yellow, Blue and Red?

Antioxidants 2017, 6, 14; doi:10.3390/antiox6010014

IF=4,14

- 126. Adrian Drapala, Dominik Koszelewski, Lenka Tomasova, Ryszard Ostaszewski, Marian Grman, Karol Ondrias and Marcin Ufnal.**

Parenteral Na₂S, a fast-releasing H₂S donor, but not GYY4137, a slow-releasing H₂S donor, lowers blood pressure in rats.

Acta Biochim Pol. 2017;64(3):561-566. doi: 10.18388/abp.2017_1569.

IF=1,396

- 127. S. Cacanyiova, A. Berenyiova, P. Balis, F. Kristek, M. Grman, K. Ondrias, J. Breza, J. Breza Jr.**

Nitroso-sulfide coupled signaling triggers specific vasoactive effects in the intrarenal arteries of patients with arterial hypertension.

J Physiol Pharmacol 2017, 68, 4, 527-538; IF=2,8

IF=2,478

- 128. Čačányiová, S., Berényiová, A., Cebová, M., (...), Ondriaš, K., Grman, M.**

Compensatory effects of nitric oxide and hydrogen sulfide in thoracic aorta in conditions of essential hypertension. [Kompenzačné účinky oxidu dusnatého a sírovodíka v hrudníkovej aorte v podmienkach esenciálnej hypertenzie] *Cardiology Letters* 2018, 27(4), pp. 185-191; IF= 0.185

129. Anton Misak, Marian Grman, Zuzana Bacova, Ingeborg Rezuchova, Sona Hudecova, Elena Ondriasova, Olga Krizanova, Vlasta Brezova, Miroslav Chovanec, Karol Ondrias.

Polysulfides and products of H₂S/S-nitrosoglutathione in comparison to H₂S, glutathione and antioxidant Trolox are potent scavengers of superoxide anion radical and produce hydroxyl radical by decomposition of H₂O₂.

Nitric Oxide 76 (2018) 136-151.

<https://doi.org/10.1016/j.niox.2017.09.006>

IF= 3,371

130. Breza J Jr, Soltysova A, Hudecova S, Penesova A, Szadvari I, Babula P, Chovancova B, Lencesova L, Pos O, Breza J, Ondrias K, Krizanova O.

Endogenous H₂S producing enzymes are involved in apoptosis induction in clear cell renal cell carcinoma.

BMC Cancer. 2018 May 24;18(1):591. doi: 10.1186/s12885-018-4508-1.

IF=1,336

131. Kharma A, Grman M, Misak A, Domínguez-Álvarez E, Nasim MJ, Ondrias K, Chovanec M, Jacob C.

Inorganic Polysulfides and Related Reactive Sulfur–Selenium Species from the Perspective of Chemistry.

Molecules. 2019 Apr 6;24(7). pii: E1359. doi: 10.3390/molecules24071359.

IF=3,06

132. Misak A, Kurakova L, Goffa E, Brezova V, Grman M, Ondriasova E, Chovanec M, Ondrias K.

Sulfide (Na₂S) and Polysulfide (Na₂S₂) Interacting with Doxycycline Produce/Scavenge Superoxide and Hydroxyl Radicals and Induce/Inhibit DNA Cleavage.

Molecules. 2019 Mar 22;24(6). pii: E1148. doi: 10.3390/molecules24061148.

IF=3,06

133. Szadvari I, Hudecova S, Chovancova B, Matuskova M, Cholujova D, Lencesova L, Valerian D, Ondrias K, Babula P, Krizanova O.

Sodium/calcium exchanger is involved in apoptosis induced by H₂S in tumor cells through decreased levels of intracellular pH.

Nitric Oxide. 2019 Jun 1;87:1-9. doi: 10.1016/j.niox.2019.02.011. Epub 2019 Mar 5.

IF=3,376

134. Kristek F, Ondrias K, Grman M.

In Vivo Measurement of H₂S, Polysulfides, and “SSNO– Mix”-Mediated Vasoactive Responses and Evaluation of Ten Hemodynamic Parameters from Rat Arterial Pulse Waveform.

Methods Mol Biol. 2019; 2007:109-124. doi: 10.1007/978-1-4939-9528-8_8.
PMID: 31148109; In book: Vascular Effects of Hydrogen Sulfide

- 135. Ammar Kharma, Anton Misak, Marian Grman, Vlasta Brezova, Lucia Kurakova, Peter Baráth, Claus Jacob, Miroslav Chovanec, Karol Ondrias, Enrique Domínguez-Álvarez.**
Release of reactive selenium species from phthalic selenoanhydride in the presence of hydrogen sulfide and glutathione with implications for cancer research.
New J. Chem., 2019, 43, 11771-11783.
DOI: 10.1039/c9nj02245g
IF=3,288
- 136. Veronika Liskova, Sona Hudecova, Lubomira Lencesova, Filippo Iuliano, Marta Sirova, Karol Ondrias, Silvia Pastorekova, Olga Krizanova.**
Type 1 Sodium Calcium Exchanger Forms a Complex with Carbonic Anhydrase IX and Via Reverse Mode Activity Contributes to pH Control in Hypoxic Tumors.
Cancers 2019, 11, 1139;
doi:10.3390/cancers11081139
IF = 5,968
- 137. Marian Grman, Anton Misak, Lucia Kurakova, Vlasta Brezova, Sona Cacanyiova, Andrea Berenyiova, Peter Balis, Lenka Tomasova, Ammar Kharma, Enrique Domínguez-Álvarez, Miroslav Chovanec, Karol Ondrias.**
Products of sulfide/selenite interaction possess antioxidant properties, scavenge superoxide-derived radicals, react with DNA, modulate blood pressure and tension of isolated thoracic aorta.
Oxidative Medicine and Cellular Longevity. Volume 2019, Article ID 9847650, 15 pages.
<https://doi.org/10.1155/2019/9847650>
IF=5,076
- 138. Lucia Kurakova, Anton Misak, Lenka Tomasova, Sona Cacanyiova, Andrea Berenyiova, Elena Ondriasova, Peter Balis, Marian Grman, Karol Ondrias.**
Mathematical relationships of patterns of 35 rat haemodynamic parameters for conditions of hypertension resulting from decreased nitric oxide bioavailability. Experimental Physiology. 2020;105:312–334. <https://doi.org/10.1113/EP088148>
IF=2,969
- 139. Anton Misak, Lucia Kurakova, Andrea Berenyiova, Lenka Tomasova, Marian Grman, Sona Cacanyiova, Karol Ondrias.**
Patterns and Direct/Indirect Signaling Pathways in Cardiovascular System in the Condition of Transient Increase of NO.
BioMed Research International. Vol. 2020, Article ID 6578213,
<https://doi.org/10.1155/2020/6578213>
IF=3,411

- 140. Lenka Tomasova, Anton Misak, Lucia Kurakova, Marian Grman, Karol Ondrias.**
Characterization of Rat Cardiovascular System by Anacrotic/Dicrotic Notches in the Condition of Increase/Decrease of NO Bioavailability.
Int. J. Mol. Sci. 2020, 21, 6685; doi:10.3390/ijms21186685
IF=4,556
- 141. Anton Misak, Vlasta Brezova, Marian Grman, Lenka Tomasova, Miroslav Chovanec, Karol Ondrias.**
BMPO-OOH Spin-Adduct as a Model for Study of Decomposition of Organic Hydroperoxides and the Effects of Sulfide/Selenite Derivatives. An EPR Spin-Trapping Approach.
Antioxidants 2020, 9, 918; doi:10.3390/antiox9100918
IF=5,95
- 142. Tomasova, Lenka.; Grman, Marian.; Misak, Anton.; Kurakova, Lucia.; Ondriasova, Elena.; Ondrias, Karol.**
Cardiovascular “Patterns” of H₂S and SSNO⁻-Mix Evaluated from 35 Rat Hemodynamic Parameters.
Biomolecules 2021, 11(2), 293. <https://doi.org/10.3390/biom11020293>
IF = 4,879; Q1.
- 143. Lenka Tomasova, Marian Grman, Karol Ondrias, Marcin Ufnal.** The impact of gut microbiota metabolites on cellular bioenergetics and cardiometabolic health.
Nutr Metab (Lond) (2021) 18:72. <https://doi.org/10.1186/s12986-021-00598-5>
IF=4,169; Q1.
- 144. Misak, A.; Brezova, V.; Chovanec, M.; Luspai, K.; Nasim, M.J.; Grman, M.; Tomasova, L.; Jacob, C.; Ondrias, K.** EPR Study of KO₂ as a Source of Superoxide and •BMPO-OH/OOH Radical That Cleaves Plasmid DNA and Detects Radical Interaction with H₂S and Se-Derivatives.
Antioxidants 2021, 10, 1286. <https://doi.org/10.3390/antiox10081286>
IF=6,312; Q1.