

Marián Grman

LIST OF PUBLICATIONS

(updated on July 08, 2022)

1. KUREKOVÁ, Simona - ŠEVČÍKOVÁ TOMÁŠKOVÁ, Zuzana - ANDELOVÁ, Natália - MACEJOVÁ, Dana - ČERVENKOVÁ, Michaela - BRTKO, Július - FERKO, Miroslav - **GRMAN, Marián** - MACKOVÁ, Katarína. The effect of all-trans retinoic acid on the mitochondrial function and survival of cardiomyoblasts exposed to local photodamage. In *Cell Biology International*, 2022, vol. 46, no. 6, p. 947-964.
2. TOMÁŠOVÁ, Lenka - **GRMAN, Marián** - ONDRIAŠ, Karol - UFNAL, Marcin. The impact of gut microbiota metabolites on cellular bioenergetics and cardiometabolic health. In *Nutrition & Metabolism*, 2021, vol. 18, no. 1, art. no. 72.
3. MIŠÁK, Anton - BREZOVÁ, Vlasta - CHOVANEC, Miroslav - LUSPAI, Karol - NASIM, J. - **GRMAN, Marián** - TOMASOVA, Lenka - JACOB, Claus - ONDRIAŠ, Karol. 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. In *Antioxidants*, 2021, vol. 10, iss. 8, art. no. 1286.
4. TOMÁŠOVÁ Lenka - **GRMAN Marián** - MIŠÁK Anton - KURÁKOVÁ Lucia - ONDRIAŠOVÁ Elena - ONDRIAŠ Karol. Cardiovascular “patterns” of H₂S and SSNO⁻-mix evaluated from 35 rat hemodynamic parameters. In *Biomolecules*, 2021, vol. 11, no. 2, no. 293.
5. MIŠÁK Anton - BREZOVÁ Vlasta - **GRMAN Marián** - TOMÁŠOVÁ Lenka - CHOVANEC Miroslav - ONDRIAŠ Karol. 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. In *Antioxidants*, 2020, vol. 9, no. 10, art. no. 918.
6. TOMÁŠOVÁ Lenka – MIŠÁK Anton - KURÁKOVÁ Lucia - **GRMAN Marián** - ONDRIAŠ Karol. Characterization of rat cardiovascular system by anacrotic/dicrotic notches in the condition of increase/decrease of NO bioavailability. In *International Journal of Molecular Sciences*, 2020, vol. 21, no. 18, art. no. 6685.
7. KURÁKOVÁ Lucia - MIŠÁK Anton - TOMÁŠOVÁ Lenka - ČAČÁNYIOVÁ Soňa - BERÉNYIOVÁ Andrea - ONDRIAŠOVÁ Elena - BALIŠ Peter - **GRMAN Marián** - ONDRIAŠ Karol. Mathematical relationships of patterns of 35 rat haemodynamic parameters for conditions of hypertension resulting from decreased nitric oxide bioavailability. In *Experimental Physiology*, 2020, vol. 105, no. 2, p. 312-334.
8. BERÉNYIOVÁ Andrea - **GRMAN Marián** - MIŠÁK Anton - GOLAS Samuel - ČUCHOROVÁ Justína - ČAČÁNYIOVÁ Soňa. The possible role of the nitroso-sulfide signaling pathway in the vasomotoric effect of garlic juice. In *Molecules*, 2020, vol. 25, no. 3, art. no. 590, 15 p.
9. MIŠÁK Anton - KURÁKOVÁ Lucia - BERÉNYIOVÁ Andrea - TOMÁŠOVÁ Lenka - **GRMAN Marián** - ČAČÁNYIOVÁ Soňa - ONDRIAŠ Karol. Patterns and direct/indirect signaling pathways in cardiovascular system in the condition of transient increase of NO. In *BioMed Research International*, 2020, vol. 2020, art.no. 6578213.

10. GULAČ Patrik - ARNOLD Maria R. - **GRMAN Marián** - CARREL Thierry P. - LONGNUS Sarah L. - STANKOVIČOVÁ Tatiana - TOMÁŠOVÁ Lenka. Olanzapine-mediated cardiotoxicity is associated with altered energy metabolism in isolated rat hearts. In *Acta Biochimica Polonica*, 2020, vol. 67, no. 1, p. 15-23.
11. **GRMAN Marián** - MIŠÁK Anton - KURAKOVÁ Lucia - BREZOVÁ Vlasta - ČAČÁNYIOVÁ Soňa - BERÉNYIOVÁ Andrea - BALIŠ Peter - TOMÁŠOVÁ Lenka - KHARMA Ammar - DOMÍNGUEZ-ÁLVAREZ Enrique - CHOVANEC Miroslav - ONDRIAŠ Karol. Products of sulfide/selenite interaction possess antioxidant properties, scavenge superoxide-derived radicals, react with DNA, and modulate blood pressure and tension of isolated thoracic aorta. In *Oxidative medicine and cellular longevity*, 2019, vol. 2019, art. no. 9847650.
12. KHARMA Ammar - MIŠÁK Anton - **GRMAN Marián** - BREZOVÁ Vlasta - KURAKOVÁ Lucia - BARÁTH Peter - JACOB Claus - CHOVANEC Miroslav - ONDRIAŠ Karol - DOMÍNGUEZ-ÁLVAREZ Enrique. Release of reactive selenium species from phthalic selenoanhydride in the presence of hydrogen sulfide and glutathione with implications for cancer research. In *New Journal of Chemistry*, 2019, vol. 43, no. 29, p. 11771-11783.
13. KRISTEK František - **GRMAN Marián** - ONDRIAŠ Karol. In vivo measurement of H₂S, polysulfides, and “SSNO⁻ Mix”-Mediated vasoactive responses and evaluation of ten hemodynamic parameters from rat arterial pulse waveform. In *Vascular Effects of Hydrogen Sulphide : Methods and Protocols*. - Springer Nature, 2019, p. 109-124.
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15. MIŠÁK Anton - KURÁKOVÁ Lucia - GOFFA Eduard - BREZOVÁ Vlasta - **GRMAN Marián** - ONDRIAŠOVÁ Elena - CHOVANEC Miroslav - ONDRIAŠ Karol. Sulfide (Na₂S) and Polysulfide (Na₂S₂) Interacting with Doxycycline Produce/Scavenge Superoxide and Hydroxyl Radicals and Induce/Inhibit DNA Cleavage. In *Molecules*, 2019, vol. 24, no. 6, p. 1148.
16. MIŠÁK Anton - **GRMAN Marián** - BAČOVÁ Zuzana - REŽUCHOVÁ Ingeborg - HUDECOVÁ Soňa - ONDRIAŠOVÁ Elena - KRIŽANOVÁ Oľga - BREZOVÁ Vlasta - CHOVANEC Miroslav - ONDRIAŠ Karol. 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. In *Nitric Oxide : Biology and Chemistry*, 2018, vol. 76, p. 136-151.
17. ČAČÁNYIOVÁ Soňa - BERÉNYIOVÁ Andrea - CEBOVÁ Martina - KRISTEK František - DROBNÁ Magdaléna - ONDRIAŠ Karol - **GRMAN Marián**. Compensatory effects of nitric oxide and hydrogen sulfide in thoracic aorta in conditions of essential hypertension. In *Cardiology Letters*, 2018, vol. 27, no. 4, p. 185-191.
18. CHOVANCOVÁ Barbora - HUDECOVÁ Soňa - LENČEŠOVÁ Ľubomíra - BABULA Peter - REŽUCHOVÁ, Ingeborg - PENESOVÁ Adela - **GRMAN Marián** – MORAVČÍK Roman - ZEMAN Michal – KRIŽANOVÁ Oľga. Melatonin-induced changes in cytosolic calcium might be responsible for apoptosis induction in tumour cells. In *Cellular Physiology and Biochemistry*, 2017, vol. 44, p. 763-777.
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20. TOMÁŠEK Milan - MIŠÁK Anton - **GRMAN Marián** - TOMÁŠKOVÁ Zuzana. Subconductance states of mitochondrial chloride channels: implication for functionally-coupled tetramers. In *FEBS Letters*, 2017, vol. 591, no. 15, p. 2251-2260.
 21. **GRMAN Marián** - NASIM Muhammad Jawad - LEONTIEV Roman - MIŠÁK Anton - JAKUŠOVÁ Veronika - ONDRIAŠ Karol - JACOB Claus. Inorganic reactive sulfur-nitrogen species: Intricate release mechanisms or cacophony in yellow, blue and red? In *Antioxidants*, 2017, vol. 6, iss. 1, p. 14.
 22. DRAPALA Adrian - KOSZELEWSKI Dominik - TOMÁŠOVÁ Lenka - OSTASZEWSKI Ryszard - **GRMAN Marián** - ONDRIAŠ Karol - UFNAL Marcin. Parenteral Na₂S, a fast-releasing H₂S donor, but not GYY4137, a slow-releasing H₂S donor, lowers blood pressure in rats. In *Acta Biochimica Polonica*, 2017, vol. 64, no. 3, p. 561-566.
 23. ČAČÁNYIOVÁ Soňa - BERÉNYIOVÁ Andrea - KRISTEK František - DROBNÁ Magdaléna - ONDRIAŠ Karol - **GRMAN Marián**. The adaptive role of nitric oxide and hydrogen sulphide in vasoactive responses of thoracic aorta is triggered already in young spontaneously hypertensive rats. In *Journal of Physiology and Pharmacology : formerly Acta Physiologica Polonica*, 2016, vol. 67, no. 4, p. 501-512.
 24. CORTESE-KROTT Miriam M. - KUHNLE Gunter G.C. - DYSON Alex - FERNANDEZ Bernadette O. - **GRMAN Marián** - DUMOND Jenna F. - BARROW Mark P. - MCLEOD George - NAKAGAWA Hidehiko - ONDRIAŠ Karol - NAGY Péter - KING Bruce S. - SAAVEDRA Joseph E. - KEEFER Larry K. - SINGER Mervyn - KELM Malte - BUTLER Anthony - FEELISCH Martin. Key bioactive reaction products of the NO/H₂S interaction are S/N-hybrid species, polysulfides and nitroxyl. In *Proceedings of the National Academy of Sciences of the United States of America*, 2015, vol. 112, iss. 34, p. E4651-E4660.
 25. BERÉNYIOVÁ Andrea - **GRMAN Marián** - MIJUSKOVIC Ana - STAŠKO Andrej - MIŠÁK Anton - NAGY Peter - ONDRIAŠOVÁ Elena - ČAČÁNYIOVÁ Soňa - BREZOVÁ Vlasta - FEELISCH Martin - ONDRIAŠ, Karol. The reaction products of sulfide and S-nitrosoglutathione are potent vasorelaxants. In *Nitric Oxide : Biology and Chemistry*, 2015, vol. 46, p. 123-130.
 26. TOMÁŠOVÁ Lenka - PAVLOVIČOVÁ Michaela - MÁLEKOVÁ Ľubica - MIŠÁK Anton - KRISTEK František - **GRMAN Marián** - ČAČÁNYIOVÁ Soňa - TOMÁŠEK Milan - TOMÁŠKOVÁ Zuzana - PERRY Alexis - WOOD Mark E. - LACINOVÁ Ľubica - ONDRIAŠ Karol - WHITEMAN Mathew. Effects of AP39, a novel triphenylphosphonium derivatised anethole dithiolethione hydrogen sulfide donor, on rat haemodynamic parameters and chloride and calcium Cav3 and RyR2 channels. In *Nitric Oxide : Biology and Chemistry*, 2015, vol. 46, p. 131-144.
 27. DROBNÁ Magdaléna - MIŠÁK Anton - HOLLAND T. - KRISTEK František - **GRMAN Marián** - TOMÁŠOVÁ Lenka - BERÉNYIOVÁ Andrea - ČAČÁNYIOVÁ Soňa - ONDRIAŠ Karol. Captopril partially decreases the effect of H₂S on rat blood pressure and inhibits H₂S-induced nitric oxide release from S-nitrosoglutathione. In *Physiological Research*, 2015, vol. 64, p. 479-486.
 28. CORTESE-KROTT Miriam M. - FERNANDEZ Bernadette O. - SANTOS José L. T. - MERGIA Evanthia - **GRMAN Marián** - NAGY Péter - KELM Malte - BUTLER Anthony - FEELISCH

- Martin. Nitrosopersulfide (SSNO⁻) accounts for sustained NO bioactivity of S-nitrosothiols following reaction with sulfide. In *Redox Biology*, 2014, vol. 2 no., p. 234-244.
29. MIŠÁK Anton - **GRMAN Marián** - MÁLEKOVÁ Ľubica - NOVOTOVÁ Marta - MARKOVÁ Jana - KRIŽANOVÁ Oľga - ONDRIAŠ Karol - TOMÁŠKOVÁ Zuzana. Mitochondrial chloride channels: electrophysiological characterization and pH induction of channel pore dilation. In *European Biophysics Journal with Biophysics Letters*, 2013, vol. 42, no. 9, p. 709 -720.
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