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- Personal info Born: 19.12.1974 in Poprad, Slovakia, married, one child
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Publishing Track Record: 125 items, 2415 citations, h index 26 (Scopus)
- 11/2012-present **National Institute of Rheumatic Diseases, Piešťany, Slovakia**
General director 01/07/2017 – 30/06/2022
Center coordinator for DevelopAKUre FP7 project aimed at developing a treatment for rare metabolic disorder alkaptonuria
- coordination of multidisciplinary team for SONIA1 (EudraCT 2012-005340-24) and SONIA2 (EudraCT 2013-001633-41) clinical trials at Piešťany site and other FP7 project-related tasks
 - coordination, communication and reporting on a regular basis with ethical committee, national competent authority, investigators, monitor, project board
- 01/2003-present **Institute of Clinical and Translational Medicine, Biomedical Research Center, Slovak Academy of Sciences, head of department**
Research in neuroendocrine regulations of immunity and metabolism
- Junior and staff scientist, from 07/2007 chief of laboratory
 - Research in neuroendocrine regulations in rheumatic diseases, functional tests of the hypothalamic-pituitary and the autonomic nervous systems; functional genomics of rheumatoid arthritis
 - Multiparametric analysis in complex datasets of patients with rheumatoid arthritis (genetic, clinical, serology and cell-phenotype interactions)
 - Analyses of steroid hormones, effects of steroids on the immune system in vivo and in vitro
 - Research in neuroendocrine regulations of sugar and lipid metabolism using insulin clamp methods, microdialysis and biopsies of subcutaneous fat
 - Research metabolic aspects of multiple sclerosis including mitochondrial dysfunction hypothesis
- 2014-2020 **National Delegate Horizon 2020 - Societal Challenges 1**
2021-present **National Delegate Horizon Europe - Health**
- 09/2016-07/2017 **Internal medicine residency training, 1st Department of Internal Medicine, Medical Faculty, Comenius University, Bratislava**
- 01/2005-01/2008 **Clinical Neurocardiology Section, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, USA**

Research in neurological autoimmune syndromes

- Detections and isolation of antibodies against neuronal acetylcholine receptors, epitope analyses
- Clinical evaluations and autonomic function testing in patients with autoimmune autonomic gangliopathy
- Planning, monitoring and patient management of experimental treatment with plasma exchange and anti-CD20+ monoclonal antibody in autoimmune autonomic gangliopathy

Research in autonomic disorders in subjects with alpha-synucleinopathies (Parkinson disease, Shy-Drager syndrome)

- Effects of toxic catecholaldehydes on catecholaminergic cell apoptosis
- Clinical testing of the autonomic nervous system, skeletal muscle microdialysis
- Neurochemical, positrone emission tomography and physiological data analyses

01/2004-06/2004 **Neuroendocrine Immunology Lab., Dept. of Pharmacology, Free University of Brussels, Belgium**

Research in effects of prolactin and cortisol on the immune system

- Effects of prolactin and cortisol on apoptosis, cytokine and adhesive molecules expression in T cells and macrophages

Education

2015 Doctor of Science (D.Sc.), Slovak Academy of Sciences (thesis: "Neuroendocrine Metabolic and Immune Interactions in the Pathogenesis of Autoimmunity")

2001-2003 Ph.D. study, Institute of Experimental Endocrinology, Slovak Academy of Sciences (thesis: „Interactions between hypothalamus-pituitary-adrenal and lactotrophic axes in the pathogenesis of rheumatoid arthritis “)

1995-2001 Faculty of Medicine, Comenius University, Bratislava, Slovakia (M.D.)
General medicine

1993-1995 Faculty of Natural Sciences Comenius University, Bratislava, Slovakia,
chemistry / biochemistry

Honors

2022 Crystal Wing Award

2021 Scientist of the year 2021

2017 - present Coordinator of Neuroendocrine Immune Study Group at the American College of Rheumatology

2006 Nominated by Slovak Ministry of Health for Ministry of Education Award for Young Scientist of Year

2004 Jonas Bohumil Guoth Award of the Slovak Medical Society Presidium

2003 European League Against Rheumatism (EULAR) Training Bursary

2003 Award
Slovak Society of Rheumatology Award

Selected invited lectures

2018 Rare Diseases: The wait for new alkaptonuria treatment may soon be over Slovak Liaison Office for Research and Development (SLORD) and the Permanent Representation of the Slovak Republic to the EU, Brussels

2016 DHEA insufficiency in chronic inflammation: need for substitution? American College of Rheumatology (ACR) 2016, Washington D.C.

2011 Implementation of Personalized Medicine Approaches to eHealth Infrastructure, Personalised Medicine for the European Citizen – towards more precise medicine for the diagnosis, treatment and prevention of disease (iPM), The Hague, October 19, 2011, From Population Health to Personal Health (PHGENII), Rome 17-20 April 2012, Max Planck Institute of Molecular Genetics Berlin, December 6 2011

2010 Hypothalamic-pituitary-adrenal function in rheumatoid arthritis. 8th Central European Congress of Rheumatology. 23rd–25th September 2010, Sopron, Hungary

2009 An endocrinologist's view on relative adrenocortical insufficiency in rheumatoid arthritis. NeuroEndocrine Immunology in Rheumatic Diseases – Translation from Basics to Clinics. 08-10.5, 2009 Genova, Italy

2009 Mobilita slovenských vedcov medzi akademickým sektorom a priemyslom z pohľadu akademického sektoru. Vedomostná spoločnosť v praxi: HI-TECH SLOVENSKO. 3.4.2009 Bratislava, Slovakia

2005 Hypoglycemia and the sympathetic nervous system. Neuroendocrine Immune Basis of the Rheumatic Diseases. 10-12.9.2005 Santa Margherita Ligure, Genova, Italy

Research Projects History

ERA4Health, Fostering a European Research Area for Health Research (HORIZON-HLTH-2022-DISEASE-03), INSTITUTO DE SALUD CARLOS III (ISCI3), Spain, 2022-2029

Role: Co-investigator

DevelopAKUre Clinical Development of Nitisinone for Alkaptonuria (FP7 HEALTH 2012.2.4.4-1), L Ranganath (PI), 2012-2019

Role: Piestany site Center co-coordinator for SONIA 1 and SONIA 2 trials

ClinicalTrials.gov Identifier: NCT01828463, NCT01916382

APVV-21-0261 Turčáni (PI) 2021-2026
Effects of GLP-1 Analog on Multiple Sclerosis (GAMS)
Role: Co-Investigator

MZ 2018/ Turčáni (PI) 2018-2021
The use of GLP-1 analogs in the multiple sclerosis treatment (MSGLP)
Role: Co-Investigator
ClinicalTrials.gov Identifier: NCT01444833

APVV-15-0228 Imrich (PI) 2016-2020
Multiple Sclerosis: The Role of Mitochondrial Dysfunction in IR Resistance (MS-MIDY)
Role: Principal Investigator
ClinicalTrials.gov Identifier: NCT03052595

SK095 EEA/Norway Grants 2009-2011
Development of the Centre for Molecular Medicine of the Slovak Academy of Sciences as a
unique modern clinical research unit in Slovakia
Role: Principal Scientific Coordinator

ATMOS N00024 2009-2012
Rheumatoid arthritis susceptibility genes in Austrian and Slovak population (RASGENAS)
Role: Principal Scientific Coordinator

Pfizer grant, Effects of Growth Hormone Supplementation to Adults With Growth
Hormone Deficient on Metabolism and Adipose Tissue Molecular Phenotype (GHAT),
Ukropec (PI), 2012-2015
Role: Co-Investigator
ClinicalTrials.gov identifier: NCT01616095

Central Europe Research to Innovation Models (CERIM), Werp (PI), 09/2009-08/2011
Role: Co-Investigator

03-N-0004 Clinical Laboratory Evaluation of Primary Chronic Autonomic Failure
Principal Investigator: David.S. Goldstein, MD, PhD.
Role: Co-Investigator
ClinicalTrials.gov Identifier: NCT00059033

06-N-0209 Plasma Exchange for Autoimmune Autonomic Failure
Principal Investigator: David.S. Goldstein, MD, PhD.
Role: Co-Investigator
ClinicalTrials.gov Identifier: NCT00359346

08-D-0018 Clinical and Laboratory Evaluation of the Autonomic Nervous System in Primary
Sjogren's Syndrome
Principal Investigator: Nikolay Nikolov, MD, PhD.
Role: Co-Investigator

ClinicalTrials.gov Identifier: NCT00565526

VEGA 2/0187/09, 2009-2011

Single Nucleotide Polymorphism C1858T in PTPN22 Gene in Slovak Population of Patients with Rheumatoid Arthritis

Role: Principal Investigator

VEGA 2/0084/12, 2012-2014

Interaction of neuroendocrine and metabolic factors in critically ill patients.

Role: Principal Investigator

VEGA 2/6157/26, 2006-2008

Adrenals and sympathetic nervous system in pathogenesis of rheumatic diseases

Role: Principal Investigator

VEGA 2/7178/27 Radikova (PI) 2007-2009

Development of endocrine and metabolic risk factors in young patients with essential hypertension in relation to therapy

Role: Co-Investigator

MZ 2005/20-NURCH-04 Rovensky (PI) 2005-2008

Effects of chronic inflammation on metabolism in patients with rheumatic diseases

Role: Co-Investigator

MZ 2008/ Zorad (PI) 2008-2011

Changes After Angiotensin Converting Enzyme (ACE) Inhibitor Replacement by Angiotensin II Receptor Type I (AT1) Blocker (ADIRAS)

Role: Co-Investigator

ClinicalTrials.gov Identifier: NCT01444833

APVT 21-008602 Rovensky (PI) 2002 – 2005 Agency for Support of Science and Technique Interactions between Central and Local Hormonal and Immune Factors in Pathogenesis of Rheumatoid Arthritis

Role: Co-Investigator

APVT 51-0406/02 Gasperikova (PI) 2002 – 2005

Hormonal Regulation of Lipid Metabolism Gene Expression in Adipose Tissue of Obese and Insulin Resistant Subjects

Role: Co-Investigator

QRLT-2000-00488 (PCBRISK) FP5-LIFE QUALITY, 2000-2003

Evaluating human health risk from low-dose and long-term PCB exposure.

Role: Co-Investigator

RAPS / CLUE Masi (PI), University of Illinois, College of Medicine at Peoria, Illinois, USA

Role: Consultant

Selected *in extenso* papers

1. **Imrich R**, Rovensky J, Cervenakova Z, Ksinantova L, Kvetnansky R, Koska J: Hyperprolactinemia does not influence hypothalamic-pituitary-adrenocortical function during hypoglycemia in women. *Int J Tissue React* 2002; 24(2): 73-78
2. **Imrich R**: The role of neuroendocrine system in the pathogenesis of rheumatic diseases. *Endocr Regul* 2002; 36(2): 95-106
3. **Imrich R**, Rovensky J: Reumatoidna artritida: neuroendokrinne aspekty chronickeho zapalu. (In Slovak), *Reumatologia* 2002; 16(3): 147–154
4. Rovensky J, **Imrich R**, Koska J, Kovalancik M, Killinger Z, Payer J, Vigas M, Jezova D: Cortisol elimination from plasma in premenopausal females with rheumatoid arthritis. *Ann Rheum Dis* 2003; 62(7): 674-676
5. Cebecauer L, Radikova Z, Rovensky J, Koska, **Imrich R**, Ksinantova L, Susienkova K, Vigas M, Klimes I, Langer P. Increased prevalence and coincidence of antinuclear and antithyroid antibodies in the population exposed to high levels of polychlorinated pollutants cocktail. *Endocr Regul*. 2009 Apr;43(2):75-81.
6. **Imrich R**, Bosak V, Rovensky J: Polymyalgia rheumatica and temporal arteritis: the endocrine relations and the pathogenesis. *Reumatologia* 2003; 17(1): 69-77
7. **Imrich R**: Author Response. *Endocr Regul* 2003; 37(1): 47-48
8. Langer P, Kocan A, Tajtakova M, Petrik J, Koska J, Huckova M, Hanzen E, Ksinantova L, Radikova Z, **Imrich R**, Trnovec T, Blazicek P, Sebokova E, Klimes I: Thyroid function and cholesterol level: paradoxical findings in large groups of population with high cholesterol food intake. *Endocr Regul* 2003; 37(3): 175-180
9. **Imrich R**, Tibenska E, Koska J, Rovensky J, Vigas M: Pharmacological Hyperprolactinemia Attenuates Hydrocortisone-Induced Expression of CD11b on Human CD8+ Cells In Vivo. *Neuroimmunomodulation* 2004; 11(3):133-140
10. **Imrich R**, Tibenska E, Koska J, Ksinantova L, Kvetnansky R, Bergendiova-Sedlackova K, Blazicek P, Vigas M: Repeated stress-induced stimulation of catecholamine response is not followed by altered immune cell redistribution. *Ann N Y Acad Sci* 2004; 1018: 266-272
11. **Imrich R**, Rovensky J, Zlnay M, Cervenakova Z, Macho L, Vigas M, Koska J: Hypothalamic-pituitary-adrenal axis function in ankylosing spondylitis. *Ann Rheum Dis* 2004; 63(6):671-674
12. Rovensky J, Radikova Z, **Imrich R**, Greguska O, Vigas M, Macho L: Gonadal and adrenal steroid hormones in plasma and synovial fluid of patients with rheumatoid arthritis. *Endocr Regul* 2004; 38(4): 143-149
13. Rovensky J, **Imrich R**, Bošák V, Štvrtna S, Tauchmannová H: Polymyalgia rheumatica a obrovskobuňečná arteritida. *Postgraduální medicína* 2004; 6(1): 81-87
14. Radikova Z, Koska J, Ksinantova L, **Imrich R**, Kocan A, Petrik J, Huckova M, Wsolova L, Langer P, Trnovec T, Sebokova E, Klimes I: Increased frequency of diabetes and other forms of dysglycemia in the population of specific areas of Eastern Slovakia chronically exposed to contamination with polychlorinated biphenyls (PCB). *Organohalogen Compounds* 2004; 66: 3547-3551
15. Langer P, Tajtakova M, Kocan A, Petrik J, Koska J, Ksinantova L, Radikova Z, **Imrich R**, Shishiba Y, Trnovec T, Sebokova E, Klimes I: Preliminary fundamental aspects on the thyroid volume and function in the population of long term heavily polluted area in East Slovakia. *Organohalogen Compounds* 2004; 66: 3532-3538
16. Rovensky J, **Imrich R**, Malis F, Zlnay M, Macho L, Koska J, Vigas M: Prolactin and growth hormone responses to hypoglycemia in patients with rheumatoid arthritis and ankylosing spondylitis. *J Rheumatol* 2004; 31(12): 2418-2421
17. **Imrich R**, Rovensky J, Malis F, Zlnay M, Killinger Z, Kvetnansky R, Huckova M, Vigas M, Macho L, Koska J: Low levels of dehydroepiandrosterone sulphate in plasma, and reduced sympathoadrenal response to hypoglycaemia in premenopausal women with rheumatoid arthritis. *Ann Rheum Dis* 2005; 64(2): 202-206
18. **Imrich R**, Vigas M, Rovensky J: Different threshold for prolactin response to hypoglycaemia in patients with rheumatoid arthritis? *Ann Rheum Dis* 2005; 64(3): 515
19. Rovensky J, Kvetnansky R, Radikova Z, **Imrich R**, Greguska O, Vigas M, Macho L: Hormone concentrations in synovial fluid of patients with rheumatoid arthritis. *Clin Exp Rheumatol* 2005; 23(3): 292-296
20. Rovensky J, **Imrich R**, Radikova Z, Simorova E, Greguska O, Vigas M, Macho L: Peptide hormones and histamine in plasma and synovial fluid of patients with rheumatoid arthritis and osteoarthritis. *Endocr Regul* 2005; 39(1): 1-6
21. Penesova A, Rovensky J, Zlnay M, Dedik L, Radikova Z, Koska J, Vigas M, **Imrich R**: Attenuated insulin response and normal insulin sensitivity in lean patients with ankylosing spondylitis. *Int J Clin Pharmacol Res* 2005; 25(3): 107-114
22. Radikova Z, Koska J, Huckova M, Ksinantova L, **Imrich R**, Vigas M, Trnovec T, Langer P, Sebokova E, Klimes I: Insulin sensitivity indices: a proposal of cut-off points for simple identification of insulin-resistant subjects. *Exp Clin Endocrinol Diabetes* 2006; 114(5): 249-256
23. **Imrich R**, Bosak V, Rovensky J: Polymyalgia rheumatica and temporal arteritis: The endocrine relations and the pathogenesis. Review. *Endocr Regul* 2006, 40(3): 43-49
24. Rovensky J, Raffayova H, **Imrich R**, Radikova Z, Penesova A, Macho L, Lukac J, Matucci-Cerinic M, Vigas M: Prolactin and growth hormone responses to hypoglycemia in patients with systemic sclerosis and psoriatic arthritis. *Ann N Y Acad Sci* 2006; 1069: 145-148
25. **Imrich R**: Hypoglycemia, an old tool for new findings in the adrenomedullary hormonal system in patients with rheumatic diseases. *Ann N Y Acad Sci* 2006; 1069: 98-108
26. **Imrich R**, Lukac J, Rovensky J, Radikova Z, Penesova A, Kvetnansky R, Huckova M, Vigas M, Macho L, Koska J. Lower adrenocortical and adrenomedullary responses to hypoglycemia in premenopausal women with systemic sclerosis. *J Rheumatol*. 2006 Nov;33(11):2235-41.
27. **Imrich R**, Goldstein DS, Jacobowitz DM. Prevalence of anti-locus coeruleus immunoreactivity in CSF of patients with autonomic failure. *Clin Auton Res*. 2006 Dec;16(6):401-5.
28. Goldstein DS, **Imrich R**, Peckham E, Holmes C, Lopez G, Crews C, Hardy J, Singleton A, Hallett M. Neurocirculatory and nigrostriatal abnormalities in Parkinson disease from LRRK2 mutation. *Neurology*. 2007 Jul 11

29. Goldstein DS, Holmes C, Sato T, Bernson M, Mizrahi N, **Imrich R**, Carmona G, Sharabi Y, Vortmeyer AO. Central dopamine deficiency in pure autonomic failure. *Clin Auton Res*. 2008 Mar 24;
30. Ukropec J, Penesova A, Skopkova M, Pura M, Vlcek M, Radikova Z, **Imrich R**, Ukropecova B, Tajtakova M, Koska J, Zorad S, Belan V, Vanuga P, Payer J, Eckel J, Klimes I, Gasperikova D. Adipokine Protein Expression Pattern in Growth Hormone Deficiency Predisposes to the Increased Fat Cell Size and to the Whole Body Metabolic Derangements. *J Clin Endocrinol Metab*. 2008 Mar 11;
31. Goldstein DS, Holmes C, Benthoo O, Sato T, Moak J, Sharabi Y, **Imrich R**, Conant S, Eldadah BA. Biomarkers to detect central dopamine deficiency and distinguish Parkinson disease from multiple system atrophy. *Parkinsonism Relat Disord*. 2008 Mar 4;
32. Skopková M, Penesová A, Sell H, Rádiková Z, Vlcek M, **Imrich R**, Koska J, Ukropec J, Eckel J, Klimes I, Gasperíková D. Protein array reveals differentially expressed proteins in subcutaneous adipose tissue in obesity. *Obesity (Silver Spring)*. 2007 Oct;15(10):2396-406.
33. Langer P, Kocan A, Tajtáková M, Rádiková Z, Petřík J, Koska J, Ksinantová L, **Imrich R**, Hucková M, Chovancová J, Drobná B, Jursa S, Bergman A, Athanasiadou M, Hovander L, Gasperíková D, Trnovec T, Seböková E, Klimes I. Possible effects of persistent organochlorinated pollutants cocktail on thyroid hormone levels and pituitary-thyroid interrelations. *Chemosphere*. 2007 Nov;70(1):110-8. Epub 2007 Aug 10.
34. Ukropec J, Penesova A, Skopkova M, Pura M, Vlcek M, Radikova Z, **Imrich R**, Ukropecova B, Tajtakova M, Koska J, Zorad S, Belan V, Vanuga P, Payer J, Eckel J, Klimes I, Gasperikova D. Adipokine Protein Expression Pattern in Growth Hormone Deficiency Predisposes to the Increased Fat Cell Size and to the Whole Body Metabolic Derangements. *J Clin Endocrinol Metab*. 2008 Mar 11.
35. Goldstein DS, Holmes C, Sato T, Bernson M, Mizrahi N, **Imrich R**, Carmona G, Sharabi Y, Vortmeyer AO. Central dopamine deficiency in pure autonomic failure. *Clin Auton Res*. 2008 Mar 24.
36. **Imrich R**, Eldadah BA, Benthoo O, Pechnik S, Sharabi Y, Holmes C, Grossman E, Goldstein DS. Functional effects of cardiac sympathetic denervation in neurogenic orthostatic hypotension. *Parkinsonism Relat Disord*. 2009 Feb;15(2):122-7.
37. Sharabi Y, **Imrich R**, Holmes C, Pechnik S, Goldstein DS. Generalized and neurotransmitter-selective noradrenergic denervation in Parkinson's disease with orthostatic hypotension. *Mov Disord*. 2008 Sep 15;23(12):1725-32.
38. Langer P, Kocan A, Tajtáková M, Koska J, Rádiková Z, Ksinantová L, **Imrich R**, Hucková M, Drobná B, Gasperíková D, Seböková E, Klimes I. Increased thyroid volume, prevalence of thyroid antibodies and impaired fasting glucose in young adults from organochlorine cocktail polluted area: outcome of transgenerational transmission? *Chemosphere*. 2008 Oct;73(7):1145-50. Epub 2008 Sep 14.
39. Vlcek M, Radikova Z, Penesova A, Kvetnansky R, **Imrich R**. Heart rate variability and catecholamines during hypoglycemia and orthostasis. *Auton Neurosci*. 2008 Dec 5;143(1-2):53-7.
40. **Imrich R**, Eldadah BA, Benthoo O, Pechnik S, Sharabi Y, Holmes C, Goldstein DS. Attenuated pre-ejection period response to tyramine in patients with cardiac sympathetic denervation. *Ann N Y Acad Sci*. 2008 Dec;1148:486-9.
41. Rovensky J, **Imrich R**, Penesova A, Radikova Z, Scipova A, Vlcek M, Vigas M. Adrenomedullary response to hypoglycemia in first-degree relatives of patients with rheumatoid arthritis. *Ann N Y Acad Sci*. 2008 Dec;1148:552-5.
42. Vlcek M, Rovensky J, Blazicek P, Radikova Z, Penesova A, Kerlik J, Kvetnansky R, **Imrich R**. Sympathetic nervous system response to orthostatic stress in female patients with rheumatoid arthritis. *Ann N Y Acad Sci*. 2008 Dec;1148:556-61.
43. Radikova Z, Rovensky J, Vlcek M, Penesova A, Kerlik J, Vigas M, **Imrich R**. Adrenocortical response to low-dose ACTH test in female patients with rheumatoid arthritis. *Ann N Y Acad Sci*. 2008 Dec;1148:562-6.
44. Goldstein DS, Holmes C, **Imrich R**. Clinical laboratory evaluation of autoimmune autonomic ganglionopathy: Preliminary observations. *Auton Neurosci*. 2009 Mar 12;146(1-2):18-21.
45. Langer P, Kocan A, Tajtáková M, Susienková K, Rádiková Z, Koska J, Ksinantová L, **Imrich R**, Hucková M, Drobná B, Gasperíková D, Trnovec T, Klimes I. Multiple adverse thyroid and metabolic health signs in the population from the area heavily polluted by organochlorine cocktail (PCB, DDE, HCB, dioxin). *Thyroid Res*. 2009 Mar 31;2(1):3.
46. **Imrich R**, Vernino S, Eldadah BA, Holmes C, Goldstein DS. Autoimmune autonomic ganglionopathy: treatment by plasma exchanges and rituximab. *Clin Auton Res*. 2009 Aug;19(4):259-62.
47. Kerlik J, Penesova A, Vlcek M, **Imrich R**, Starka L, Radikova Z. Effects of Endogenous and Exogenous Hypercortisolemia on Low-dose ACTH Test Outcome in Humans. *J Endocrinol Invest*. 2009 Jun 15.
48. **Imrich R**, Vigas M, Rovensky J, Aldag JC, Masi AT. Adrenal plasma steroid relations in glucocorticoid-naïve premenopausal rheumatoid arthritis patients during insulin-induced hypoglycemia test compared to matched normal control females. *Endocr Regul*. 2009 Apr;43(2):65-73.
49. Kerlik J, Penesova A, Vlcek M, **Imrich R**, Vogeser M, Radikova Z. Comparison of salivary cortisol and calculated free plasma cortisol during low-dose ACTH test in healthy subjects. *Clin Biochem*. 2010 Jun;43(9):764-7. Epub 2010
50. Rovenský J, **Imrich R**, Lazúrová I, Payer J. Rheumatic diseases and Klinefelter's syndrome. *Ann N Y Acad Sci*. 2010 Apr;1193(1):1-9.
51. **Imrich R**, Vlcek M, Aldag JC, Kerlik J, Radikova Z, Rovensky J, Vigas M, Masi AT. An endocrinologist's view on relative adrenocortical insufficiency in rheumatoid arthritis. *Ann N Y Acad Sci*. 2010 Apr;1193(1):134-8.
52. Penesova A, Cizmarova E, Belan V, Blazicek P, **Imrich R**, Vlcek M, Vigas M, Selko D, Koska J, Radikova Z. Insulin resistance in young, lean male subjects with essential hypertension. *J Hum Hypertens*. 2010 Jul 15
53. Langer P, Kocan A, Drobná B, Susienková K, Radikova Z, Huckova M, **Imrich R**, Ksinantova L, Klimes I. Polychlorinated biphenyls and testosterone: age and congenere related correlation approach in heavily exposed males. *Endocr Regul*. 2010 Jul;44(3):109-14.
54. Rovenský J, Vlcek M, **Imrich R**. [Cardiovascular diseases in rheumatoid arthritis]. *Vnitř Lek*. 2010 Jul;56(7):721-3.
55. Langer P, Kocan A, Drobná B, Huckova M, Radikova Z, Susienkova K, **Imrich R**, Ukropec J. Alpha-fetoprotein, carcinoembryonic antigen and beta2-microglobulin in adult population highly exposed to organochlorinated pollutants (PCB, DDE and HCB). *Endocr Regul*. 2011 Jul;45(3):149-55.

56. Killinger Z, Payer J, Lazúrová I, **Imrich R**, Homérová Z, Kužma M, Rovenský J. Arthropathy in acromegaly. *Rheum Dis Clin North Am*. 2010 Nov;36(4):713-20. Review.
57. **Imrich R**, Rovenský J. Hypothalamic-pituitary-adrenal axis in rheumatoid arthritis. *Rheum Dis Clin North Am*. 2010 Nov;36(4):721-7. Review.
58. **Imrich R**. [Activity of the hypothalamic-pituitary-adrenal axis in patients with rheumatoid arthritis]. *Vnitr Lek*. 2010 Dec;56(12):1271-3. Review..
59. Kerlik J, Rovenský J, Vogeser M, Vlcek M, **Imrich R**, Penesová A, Rádiková Z. [Evaluation of 11beta-hydroxysteroid dehydrogenase type 1 activity in female patients with rheumatoid arthritis]. *Vnitr Lek*. 2010 Dec;56(12):1274-8..
60. Langer P, Kocan A, Drobna B, Huckova M, Radikova Z, Susienkova K, **Imrich R**, Ukropec J. Alpha-fetoprotein, carcinoembryonic antigen and beta2-microglobulin in adult population highly exposed to organochlorinated pollutants (PCB, DDE and HCB). *Endocr Regul*. 2011 Jul;45(3):149-55.
61. Laukova M, Vargovic P, Csaderova L, Chovanova L, Vlcek M, **Imrich R**, Krizanova O, Kvetnansky R. Acute stress differently modulates Beta 1, Beta 2 and Beta 3 adrenoceptors in T cells, but not in B cells, from the rat spleen. *Neuroimmunomodulation*. 2012;19(2):69-78.
62. Vlcek M, Rovensky J, Eisenhofer G, Radikova Z, Penesova A, Kerlik J, **Imrich R**. Autonomic Nervous System Function in Rheumatoid Arthritis. *Cell Mol Neurobiol*. 2012 Feb 5.
63. **Imrich R**, Nikolov NP, Bebris L, Alevizos I, Goldstein DS, Holmes CS, Illei GG. Adrenomedullary Response to Glucagon in Patients with Primary Sjögren's Syndrome. *Cell Mol Neurobiol*. 2012 Feb 18.
64. Langer P, Kocan A, Drobna B, Susienkova K, Radikova Z, Huckova M, **Imrich R**, Klimes I. Blood testosterone in middle aged males heavily exposed to endocrine disruptors is decreasing more with HCB and p,p'-DDE related to BMI and lipids, but not with Σ15PCBs. *Endocr Regul*. 2012 Apr;46(2):51-9.
65. Penesova A, Galusov A, Vigas M, Vlcek M, **Imrich R**, Majek M. The role of endocrine mechanisms in ventilator-associated lung injury in critically ill patients. *Endocr Regul*. 2012 Jul;46(3):161-6.
66. Penesova A, Radikova Z, Vlcek M, Kerlik J, Lukac J, Rovensky J, **Imrich R**. Chronic inflammation and low-dose glucocorticoid effects on glucose metabolism in premenopausal females with rheumatoid arthritis free of conventional metabolic risk factors. *Physiol Res*. 2012 Nov 22
67. Budaj M, Poljak Z, Duriš I, Kaško M, **Imrich R**, Kopáni M, Maruščáková L, Hulín I. Microparticles: a component of various diseases. *Pol Arch Med Wewn*. 2012 Dec 7;122 Suppl 1:24-9.
68. Bertok T, Klukova L, Sediva A, Kasák P, Semak P, Micusik M, Omastova M, Chovanová L, Vlček M, **Imrich R**, Vikartovska A, Tkac J. Ultrasensitive impedimetric lectin biosensors with efficient antifouling properties applied in glycoprofiling of human serum samples. *Anal Chem*. 2013 Aug 6;85(15):7324-32.
69. Chovanova L, Vlcek M, Krskova K, Penesova A, Radikova Z, Rovensky J, Cholujova D, Sedlak J, **Imrich R**. Increased production of IL-6 and IL-17 in lipopolysaccharide-stimulated peripheral mononuclears from patients with rheumatoid arthritis. *Gen Physiol Biophys*. 2013 Sep;32(3):395-404.
70. Kurdiová T, Balaz M, Vician M, Maderova D, Vlcek M, Valkovic L, Srbecky M, **Imrich R**, Kyselovicova O, Belan V, Jelok I, Wolfrum C, Klimes I, Krssak M, Zemkova E, Gasperikova D, Ukropec J, Ukropcova B. Are Skeletal Muscle & Adipose Tissue Fndc5 Gene Expression and Irisin Release Affected by Obesity, Diabetes and Exercise? In vivo & in vitro studies. *J Physiol*. 2014 Jan 13.
71. Penesova A, Cizmarova E, Belan V, Blazicek P, **Imrich R**, Vlcek M, Vigas M, Selko D, Koska J, Radikova Z. Insulin resistance in young, lean male subjects with essential hypertension. *J Hum Hypertens*. 2014 Mar;28(3):212.
72. Lakshminarayan RR, Milan AM, Hughes AT, Dutton JJ, Fitzgerald R, Briggs MC, Bygott H, Psarelli EE, Cox TF, Gallagher JA, Jarvis JC, van Kan C, Hall AK, Laan D, Olsson B, Szamosi J, Rudebeck M, Kullenberg T, Cronlund A, Svensson L, Junestrand C, Ayoob A, Timmis OG, Sireau N, Le Quan Sang KH, Genovese F, Braconi B, Santucci A, Nemethova M, Zatkova A, McCaffrey J, Christensen P, Ross G, **Imrich R**, Rovensky J. Suitability Of Nitisinone In Alkaptonuria 1 (SONIA 1): an international, multicentre, randomised, open-label, no-treatment controlled, parallel-group, dose-response study to investigate the effect of once daily nitisinone on 24-h urinary homogentisic acid excretion in patients with alkaptonuria after 4 weeks of treatment. *Ann Rheum Dis* 2014;0:1-6.
73. Mravcova M, Chovanova L, Paulikova L, Vlcek M, Rovensky J, Killinger Z, Wendl J, **Imrich R**. Genetics of Neuroendocrine Factors in Rheumatoid Arthritis. *Horm Metab Res*. 2014 Dec 12
74. **Imrich R**, Alevizos I, Bebris L, Goldstein DS, Holmes CS, Illei GG, Nikolov NP. Predominant Glandular Cholinergic Dysautonomia in Patients with Primary Sjögren's Syndrome. *Arthritis Rheumatol*. 2015 May;67(5):1345-52.
75. Rovenský J, Blažičková S, Imrich R, Lazúrová I, Payer J. Reumatické ochorenia a Klinefelterov syndróm. *Rheumatologia*. 2014; 28(4): 129-136.
76. Rovenský J, **Imrich R**. Liek na chorobu čiernych kostí. *Quark*, 2015; 1:44-45.
77. Nemethova M, Radvanszky J, Kadasi L, Ascher DB, Pires DE, Blundell TL, Porfirio B, Mannoni A, Santucci A, Milucci L, Sestini S, Biolcati G, Sorge F, Aurizi C, Aquaron R, Alsbou M, Marques Lourenço C, Ramadevi K, Ranganath LR, Gallagher JA, van Kan C, Hall AK, Olsson B, Sireau N, Ayoob H, Timmis OG, Le Quan Sang KH, Genovese F, **Imrich R**, Rovensky J, Srinivasaraghavan R, Bharadwaj SK, Spiegel R, Zatkova A. Twelve novel HGD gene variants identified in 99 alkaptonuria patients: focus on 'black bone disease' in Italy. *Eur J Hum Genet*. 2015
78. Penesova A, Vlcek M, **Imrich R**, Vernerova L, Marko A, Meskova M, Grunnerova L, Turcani P, Jezova D, Kollar B. Hyperinsulinemia in newly diagnosed patients with multiple sclerosis. *Metab Brain Dis*. 2015 Aug;30(4):895-901.
79. Bajer B, Vlcek M, Galusova A, **Imrich R**, Penesova A. Exercise associated hormonal signals as powerful determinants of an effective fat mass loss. *Endocr Regul*. 2015;49(3):151-63.
80. Galusova A, Pauliny M, Majek M, Mackova J, Meskova M, Vlcek M, **Imrich R**, Penesova A. Dynamic neuroendocrine changes in critically ill patients with polytrauma. *Neuro Endocrinol Lett*. 2015;36(5):498-503
81. Vernerova L, Spoutil F, Vlcek M, Krskova K, Penesova A, Meskova M, Marko A, Raslova K, Vohnout B, Rovensky J, Killinger Z, Jochmanova I, Lazurova I, Steiner G, Smolen J, Imrich R. A Combination of CD28 (rs1980422) and IRF5 (rs10488631) Polymorphisms Is Associated with Seropositivity in Rheumatoid Arthritis: A Case Control Study. *PLoS One*. 2016 Apr 19;11(4):e0153316.

82. Vlcek M, Penesova A, Imrich R, Meskova M, Mravcova M, Grunnerova L, Garafova A, Sivakova M, Turcani P, Kollar B, Jezova D. Autonomic Nervous System Response to Stressors in Newly Diagnosed Patients with Multiple Sclerosis. *Cell Mol Neurobiol*. 2017 Jun 21. doi: 10.1007/s10571-017-0511-3
83. Vernerova L, Mravcova M, Paulikova L, Vlcek M, Marko A, Meskova M, Penesova A, Rovensky J, Wendl J, Raslova K, Vohnout B, Jochmanova I, Lazurova I, Killinger Z, Steiner G, Smolen J, Imrich R. Contribution of Genetic Factors to Lower DHEAS in Patients with Rheumatoid Arthritis. *Cell Mol Neurobiol*. 2017 Jul 15.
84. Masi AT, Imrich R, Cutolo M. Hypothesis: Can neuroendocrine immune (NEI) testing of individual RA patients guide benefits to harms ratio in glucocorticoid therapy? *Arthritis Care Res (Hoboken)*. 2017 Oct 26
85. Chocholova E, Bertok T, Jane E, Lorencova L, Holazova A, Belicka L, Belicky S, Mislovicova D, Vikartovska A, Imrich R, Kasak P, Tkac J. Glycomics meets artificial intelligence - Potential of glycan analysis for identification of seropositive and seronegative rheumatoid arthritis patients revealed. *Clin Chim Acta*. 2018 Jun;481:49-55
86. Penesová A, Dean Z, Kollár B, Havranová A, Imrich R, Vlček M, Rádiková Ž. Nutritional intervention as an essential part of multiple sclerosis treatment? *Physiol Res*. 2018 Aug 16;67(4):521-533.
87. Braconi D, Giustarini D, Marzocchi B, Peruzzi L, Margollicci M, Rossi R, Bernardini G, Millucci L, Gallagher JA, Le Quan Sang KH, Imrich R, Rovensky J, Al-Sbou M, Ranganath LR, Santucci A. Inflammatory and oxidative stress biomarkers in alkaptonuria: data from the DevelopAKUre project. *Osteoarthritis Cartilage*. 2018 Aug;26(8):1078-1086.
88. Gronesova P, Cholujova D, Kozic K, Korbuly M, Vlcek M, Penesova A, Imrich R, Sedlak J, Hunakova L. Effects of short-term Pilates exercise on selected blood parameters. *Gen Physiol Biophys*. 2018 Jul;37(4):443-451.
89. Radikova Z, Penesova A, Vlcek M, Havranova A, Sivakova M, Siarnik P, Zitnanova I, Imrich R, Kollar B, Turcani P. LDL and HDL lipoprotein subfractions in multiple sclerosis patients with decreased insulin sensitivity. *Endocr Regul*. 2018 Jul 1;52(3):139-145.
90. Ranganath LR, Milan AM, Hughes AT, Khedr M, Davison AS, Shweihdi E, Norman BP, Hughes JH, Bygott H, Luangrath E, Fitzgerald R, Psarelli EE, van Kan C, Laan D, Olsson B, Rudebeck M, Mankowitz L, Sireau N, Arnoux JB, Le Quan Sang KH, Jarvis JC, Genovese F, Braconi D, Santucci A, Glasova H, Stančík R, Imrich R, Rhodes NP, Gallagher JA. Homogentisic acid is not only eliminated by glomerular filtration and tubular secretion but also produced in the kidney in alkaptonuria. *J Inher Metab Dis*. 2019 Oct 14
91. Bajer B, Rádiková Ž, Havranová A, Žitňanová I, Vlček M, Imrich R, Sabaka P, Bendžala M, Penesová A. Effect of 8-weeks intensive lifestyle intervention on LDL and HDL subfractions. *Obes Res Clin Pract*. 2019 Nov - Dec;13(6):586-593.
92. Sivakova M, Siarnik P, Filippi P, Vlcek M, Imrich R, Turcani P, Zitnanova I, Penesova A, Radikova Z, Kollar B. Oxidative stress in patients with newly diagnosed multiple sclerosis: any association with subclinical atherosclerosis? *Neuro Endocrinol Lett*. 2019 Nov 1;40(3):135-140.
93. Rádiková Ž, Penesová A, Vlček M, Havranová A, Siváková M, Šiarnik P, Žitňanová I, **Imrich R**, Turčáni P, Kollár B. Lipoprotein profiling in early multiple sclerosis patients: effect of chronic inflammation? *Lipids Health Dis*. 2020 Mar 17;19(1):49.
94. Ranganath LR, Psarelli EE, Arnoux JB, Braconi D, Briggs M, Bröijersén A, Loftus N, Bygott H, Cox TF, Davison AS, Dillon JP, Fisher M, FitzGerald R, Genovese F, Glasova H, Hall AK, Hughes AT, Hughes JH, **Imrich R**, Jarvis JC, Khedr M, Laan D, Le Quan Sang KH, Luangrath E, Lukáčová O, Milan AM, Mistry A, Mlynáriková V, Norman BP, Olsson B, Rhodes NP, Rovenský J, Rudebeck M, Santucci A, Shweihdi E, Scott C, Sedláková J, Sireau N, Stančík R, Szamosi J, Taylor S, van Kan C, Vinjamuri S, Vrtíková E, Webb C, West E, Záňová E, Zatkova A, Gallagher JA. Efficacy and safety of once-daily nitisinone for patients with alkaptonuria (SONIA 2): an international, multicentre, open-label, randomised controlled trial. *Lancet Diabetes Endocrinol*. 2020 Sep;8(9):762-772.
95. Imrich R, Zaťková A, Lukáčová O, Lukáč J, Sedláková J, Záňová E, Maceková D, Vlček M, Penesová A, Rádiková Ž, Popracová Z, Ďurínová E, Glasová H, Ranganath LR. Alkaptonúria: nové možnosti liečby a klinický manažment. *Interná med*. 2021; 21 (10): 439-443
96. Imrich R, Zaťková A, Lukáčová O, Lukáč J, Sedláková J, Záňová E, Maceková D, Vlček M, Penesová A, Rádiková Ž, Popracová Z, Ďurínová E, Glasová H, Ranganath LR. Alkaptonúria: vzťah genotyp – fenotyp, klinický obraz a diagnostika ochorenia. *Interná med*. 2021; 21 (9): 393-397
97. Imrich R, Vlcek M, Penesova A, Radikova Z, Havranova A, Sivakova M, Siarnik P, Kollar B, Sokolov T, Turcani P, Heckova E, Hangel G, Strasser B, Bogner W. Cardiac autonomic function in patients with early multiple sclerosis. *Clin Auton Res*. 2021 Aug;31(4):553-562.
98. Harďoňová M, Šiarnik P, Siváková M, Suchá B, Vlček M, Imrich R, Turčáni P, Havranová A, Rádiková Ž, Žitňanová I, Dean Z, Penesová A, Kollár B. Autonomic Nervous System Function in Newly Diagnosed Multiple Sclerosis: Association With Lipid Levels and Insulin Resistance *Physiol Res*. 2021 Oct 30;70(6)
99. Olsson B, Ranganath L, Arnoux JB, Imrich R, Milan A, Rudebeck M. Effects of a protein-restricted diet on body weight and serum tyrosine concentrations in patients with alkaptonuria. *JIMD Rep*. 2021 Nov 9;63(1):41-49.
100. Olsson B, Ranganath L, Arnoux JB, Imrich R, Milan A, Rudebeck M. Effects of a protein-restricted diet on body weight and serum tyrosine concentrations in patients with alkaptonuria. *JIMD Rep*. 2021 Nov 9;63(1):41-49.
101. Ranganath LR, Milan AM, Hughes AT, Khedr M, Norman BP, Alsbou M, Imrich R, Gornall M, Sireau N, Gallagher JA, Jackson R. Comparing nitisinone 2 mg and 10 mg in the treatment of alkaptonuria-An approach using statistical modelling. *JIMD Rep*. 2021 Nov 11;63(1):80-92.
102. Ranganath LR, Milan AM, Hughes AT, Davison AS, Khedr M, Norman BP, Bou-Gharios G, Gallagher JA, Gornall M, Jackson R, Imrich R, Rovensky J, Rudebeck M, Olsson B. Characterization of changes in the tyrosine pathway by 24-h profiling during nitisinone treatment in alkaptonuria. *Mol Genet Metab Rep*. 2022 Feb 1;30:100846.
103. Ranganath LR, Hughes AT, Davison AS, Khedr M, Olsson B, Rudebeck M, Imrich R, Norman BP, Bou-Gharios G, Gallagher JA, Milan AM. Temporal adaptations in the phenylalanine/tyrosine pathway and related factors during nitisinone-induced tyrosinaemia in alkaptonuria. *Mol Genet Metab*. 2022 Jun 1:S1096-7192(22)00325-0.
104. Cant HEO, Chatzidaki I, Olsson B, Rudebeck M, Arnoux JB, Imrich R, Eddowes LA, Ranganath LR. Improving the clinical accuracy and flexibility of the Alkaptonuria severity score index. *JIMD Rep*. 2022 May 10;63(4):361-370.

105. Ranganath LR, Milan AM, Hughes AT, Davison AS, Khedr M, Imrich R, Rudebeck M, Olsson B, Norman BP, Bou-Gharios G, Gallagher JA. Comparing the Phenylalanine/Tyrosine Pathway and Related Factors between Keratopathy and No-Keratopathy Groups as Well as between Genders in Alkaptonuria during Nitisinone Treatment. *Metabolites*. 2022 Aug 22;12(8):772.
106. Ranganath LR, Milan AM, Hughes AT, Davison AS, M K, Norman BP, Bou-Gharios G, Gallagher JA, Imrich R, Arnoux JB, Rudebeck M, Olsson B. Determinants of tyrosinaemia during nitisinone therapy in alkaptonuria. *Sci Rep*. 2022 Sep 27;12(1):16083.
107. Imrich R, Sedláková J, Úlehlová M, Gornall M, Jackson R, Olsson B, Rudebeck M, Gallagher J, Lukáčová O, Mlynáriková V, Stančík R, Vrtíková E, Záhová E, Zaťková A, Arnoux JB, Rovenský J, Luangrath E, Bygott H, Khedr M, Ranganath LR. Radiological evolution of spinal disease in alkaptonuria and the effect of nitisinone. *RMD Open*. 2022 Oct;8(2):e002422.
108. Ranganath LR, Hughes AT, Davison AS, Khedr M, Imrich R, Rudebeck M, Olsson B, Norman BP, Bou-Gharios G, Gallagher JA, Milan AM. Revisiting Quantification of Phenylalanine/Tyrosine Flux in the Ochronotic Pathway during Long-Term Nitisinone Treatment of Alkaptonuria. *Metabolites*. 2022 Sep 29;12(10):920.
109. Zatkova A, Olsson B, Ranganath LR, Imrich R. Analysis of the Phenotype Differences in Siblings with Alkaptonuria. *Metabolites*. 2022 Oct 19;12(10):990.
110. Braconi D, Geminiani M, Psarelli EE, Giustarini D, Marzocchi B, Rossi R, Bernardini G, Spiga O, Gallagher JA, Le Quan Sang KH, Arnoux JB, Imrich R, Al-Sbou MS, Gornall M, Jackson R, Ranganath LR, Santucci A. Effects of Nitisinone on Oxidative and Inflammatory Markers in Alkaptonuria: Results from SONIA1 and SONIA2 Studies. *Cells*. 2022 Nov 18;11(22):3668.
111. Imrich R, Zatkova A, Lukacova O, Sedlakova J, Zanova E, Vlcek M, Penesova A, Radikova Z, Havranova A, Ranganath L. Nutritional interventions for patients with alkaptonuria: A minireview. *Endocr Regul*. 2023 Mar 26;57(1):61-67.
112. Imrich R, Štofko J, Boča R, Rajnák C. Electronic structure and molecular properties of nitisinone and mesotrione in water. *J Mol Model*. 2023 Nov 13;29(12):370. doi: 10.1007/s00894-023-05780-5.
113. Boča R, Štofko J, Imrich R. Effect of Solvation on Glycine Molecules: A Theoretical Study. *ACS Omega*. 2023 Jul 25;8(31):28577-28582.
114. Hardonova M, Siarnik P, Sivakova M, Sucha B, Penesova A, Radikova Z, Havranova A, Imrich R, Vlcek M, Zitnanova I, Krastev G, Kiacikova M, Kollar B, Turcani P. Endothelial Function in Patients with Multiple Sclerosis: The Role of GLP-1 Agonists, Lipoprotein Subfractions, and Redox Balance. *Int J Mol Sci*. 2023 Jul 6;24(13):11162.
115. Boča R, Štofko J, Imrich R. Ab initio study of molecular properties of l-tyrosine. *J Mol Model*. 2023 Jul 13;29(8):245.

Books and book chapters

1. Vigaš M, Rovenský J, Imrich R: Stres a endokrinné ochorenia. In: Reumatológia v teórii a praxi VI. Osveta, Martin, 2004, str. 116-124
2. Rovenský J, Leeb BF, Štvrtinová V, Imrich R, Duda J: Polymyalgia rheumatica and giant cell arteritis - an overview with a focus on important factors contributing to the severity of the disease. In: Polymyalgia Rheumatica and Giant Cell Arteritis. SAP, Bratislava, 2007, str. 7-32
3. Rovenský J, Imrich R: Cytokines in polymyalgia rheumatica and giant cell arteritis. In: Polymyalgia Rheumatica and Giant Cell Arteritis. SAP, Bratislava, 2007, str. 53-55
4. Rovenský J, Ferencík M, Imrich R: Patogenéza, klinická syndromológia a liečba reumatoidnej artritídy začínajúcej vo vyššom veku. Imunologické a hormonálne faktory podieľajúce sa v priebehu fyziologického starnutia na vývoj autoimunitných chorôb. In: Rovenský J, Payer, J, Štvrtinová V: Zápalové reumatické choroby vo vyššom veku. SAP, Bratislava 2008, str. 7-52
5. Imrich R. Poruchy autonómneho nervového systému pri Parkinsonovej chorobe. In: Benetin J, Valkovic P, eds. Parkinsonova choroba. Bratislava: Herba; 2009.
6. Rovensky J, Leeb BF, Bird H, Stvrtinova V, Imrich R. (editors) Polymyalgia Rheumatica and Giant Cell Arteritis. Wien, New York: Springer, 2010.
7. Imrich R, Rovensky J, Radikova Z. Rare Complications of Alkaptonuria: Haemolysis and Amyloidosis. In: Alkaptonuria and Ochronosis: Rovenský, J., Urbánek, T., Boldišová, O., Gallagher, J.A. (Eds.). pp 117-119. Springer International Publishing 2015
8. Imrich R: Minimunológia. SAP 2022