



**„Immunology for All”**

**FIFTH NATIONAL CONGRESS OF  
IMMUNOLOGY**



**25 – 28 October 2018  
Imperial Hotel & SPA, Plovdiv**



**PROGRAM**

**Bulgarian Society of Immunology  
Bulgarian Association of Clinical Immunology**

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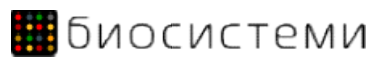


ФОНД  
НАУЧНИ  
ИЗСЛЕДВАНИЯ

МИНИСТЕРСТВО НА ОБРАЗОВАНИЕТО И НАУКАТА

**Supported by the National Science Fund  
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**WEDNESDAY, 24 OCTOBER**

**5<sup>TH</sup> BLACK SEA INTERNATIONAL IMMUNOLOGY SCHOOL**

16.00 - 19.00 Registration; Opening

**19.00**

***Dinner***

20.00 - 22.00 Students Poster session and Discussion

**THURSDAY, 25 OCTOBER**

**8.30 - 17.30**

**5<sup>TH</sup> BLACK SEA INTERNATIONAL IMMUNOLOGY SCHOOL**

9.00 - 9.30 An overview of the complement system: its role in defense and immune regulation. ***Anna Erdei, Hungary***

9.30 - 10.00 Context- and mucosa-specific regulation of type 2 immunity by regulatory T cells. ***Tobias Bopp, Germany***

10.00 - 10.30 How to define an antibody network. ***Joseph Prechl, Hungary***

**10.30 - 11.00**

***Coffee break***

11.00 - 11.30 Human Fc-receptor biology. ***Gustav Vidarsson, Netherlands***

11.30 - 12.00 Immunopathogenesis of the antinuclear antibodies. ***Dobroslav Kyurkchiev, Bulgaria***

12.30 - 13.00 Discussion

**13.00 - 14.00**

***Lunch***

14.00 - 14.30 Immune cell metabolic programming. ***Ivanka Tsacheva, Bulgaria***

14.30 - 15.00 Adaptive immunity between cure and destruction. ***Hannes Stockinger, Austria***

15.00 - 15.30 Mechanisms and markers of immunosenescence. ***Maria Nikolova, Bulgaria***

**15.30 – 16.00**

***Coffee break***

- 16.00 – 16.30 Hemocyanins – the source of anti-tumor vaccines. ***Andrey Tchorbanov, Bulgaria***
- 16.30 – 17.00 Reanimation of human blood microbiome. ***Stefan Panajotov, Bulgaria***
- 17.30 – 18.00 Presentation of Marie Skłodowska-Curie Research Fellowship Programme and Marie Curie Alumni Association - Bulgaria Chapter. ***Antoaneta Mateeva, Anife Ahmedova, Bulgaria***
- 18.00 – 18.30 Discussion and closure
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**19.00 – 20.00**

**CONGRESS OPENING**

***Chairs: E. Naumova, M. Nikolova, A. Tchorbanov***

**WELCOME ADRESSES**

**KEYNOTE LECTURE**

Interplay between age, immunity, cancer and CMV. ***Graham Pawelec, Germany***

**VIRTUAL PHOTO EXHIBITION**

***by Andrey Tchorbanov***

**20.30**

***Dinner***

**FRIDAY, 26 OCTOBER**

**9.00 – 11.00**

**- SESSION 1-**

**MECHANISMS AND REGULATION OF IMMUNE RESPONSE - I**

*Chairs: V. Sarafian, R. Alexandrova*

- 9.00 - 9.20 Regulation of human B cell responses by innate elements. **Anna Erdei, Hungary**
- 9.20 - 9.40 IgG glycosylation in human immune responses and significance. **Gestur Vidarsson, Netherlands.**
- 9.40 - 10.00 The role of vitamin/vitamin D receptor circuit in human pathology. **Mario Clerici, Italy.**
- 10.00 - 10.20 Role of apoptosis in human pathology. Molecular mechanisms and methods of investigation. **Krasimira Ikonomova, Bulgaria**
- 10.20 - 10.30 Immunogenetics of aging. **Milena Ivanova, Bushra Al Hadra, Tsvetelin Lukanov, Reem Ameen, Michela Mazzoco, Nicoletta Sacchi, Ileana Constantinescu, Lisa Creary, Tamara Vayntrub, Velizar Shivarov, Elissaveta Naumova, Bulgaria**
- 10.30 – 10.40 A case of immunoglobulin G4-related disease – a challenge for clinicians with key role for immunologists. **Dora Popova, Elena Elefterova-Florova, Izabela Petkova, Bulgaria.**
- 10.40 – 10.50 Wheat (*Triticum aestivum*) and alternative crops: protein digestibility - immunological pros and cons. **Kristiyana Georgieva, Ivanka Tsacheva, Denitsa Teofanova, Bulgaria**

**11.00 – 11.30**

**Coffee break**

**11.30 – 13.30**

**- SESSION 2-**

**MECHANISMS AND REGULATION OF IMMUNE RESPONSE II**

*Chairs: A. Erdei, I. Tsacheva*

- 11.30 – 11.50 Targeting novel suppressor macrophages by special nanodevices for treating inflammatory diseases. **Hannes Stockinger, Austria**

- 11.50 – 12.10 Appropriate food for right immune response. **Maurizio Mattei, Italy**
- 12.10 – 12.30 An exposome perspective: nutrition, plant small RNAs and human health. **Clara Montesano, Italy**
- 12.30 – 12.50 Immunity and miRNA – the unexpected link. **Victoria Sarafian, Bulgaria**
- 12.50 – 13.00 Noradrenaline effects on immunological reactivity among different professional groups in stress. **Mariya Ivanovska, Petya Gardjeva, Dora Terzieva, Nonka Mateva, Marianna Murdjeva, Bulgaria**
- 13.00 – 13.10 Chimeric protein-engineered molecules - new approach for selective elimination of allergen-specific B lymphocytes. **Nikola Ralchev, Nikolina Mihaylova, Nikola Kerekov, Andrey Tchorbanov, Bulgaria**

**13.30 – 14.30**

**Lunch**

**14.30 – 16.00**

**- SESSION 3 -**

**IMMUNOLOGY OF REPRODUCTION**

**Chairs: T Oreshkova, V Terzieva**

- 14.30 – 14.50 Pregnancy as a model for transplantation tolerance. **Frans Claas, Netherlands.**
- 14.50 – 15.00 Regulatory T cells – *conditio sine qua non* for pregnancy development. **Velislava Terzieva, Bulgaria**
- 15.00 – 15.10 Placental factors regulate the expression of adhesion molecules in the decidual niche. **Tsvetelina Oreshkova, Bulgaria**
- 15.10 – 15.20 Correlation between the serum progesterone dynamics and the expression of  $\alpha\beta 3$ -integrin and LIF in the endometrial tissue. A potential predictive model for endometrial receptivity and determination of the window of implantation. **Borislav Mateev, Bulgaria**
- 15.20 - 15.40 Complex inflammasome signalling in Sertoli cells revealed, following innate immunity challenge in damp associated context: Implications for male infertility. **Soren Hayrabyan, Bulgaria**



**16.00 – 16.30**

***Coffee break***

**16.30 – 18.00**

**- SESSION 4-**

**INFECTIONS AND IMMUNITY**

***Chairs: H. Stockinger, M. Nikolova***

- 16.30– 16.50 Immunology of tuberculosis infection: contemporary diagnostic challenges. ***Maria Nikolova, Bulgaria***
- 16.50 -17.00 Cytokine profile and efficacy of cellular immune response against *M. tuberculosis*. ***Yana Todorova, Bulgaria***
- 17.00 -17.10 Cytokine profile in crevicular fluid of children with plaque-induced gingivitis – effect of tooth paste and Bulgarian propolis. ***Marianna Murdjeva, Bulgaria***
- 17.10 -17.20 Frequency and clinical significance of late presentation of HIV infected populations in the region of Plovdiv, Bulgaria. ***Mariana Stoycheva, Bulgaria***
- 17.20 -17.30 Factors affecting immunological recovery in virally suppressed long term treated HIV+ patients. ***Radoslava Emilova, Bulgaria***
- 17.30 -17.40 Targeting of influenza viral epitopes to antigen presenting cells by genetically engineered chimeric molecules in humanized NSG transgenic model. ***Nikolina Mihaylova, Bulgaria***

**18.00 – 18.30**

**GSK SYMPOZIUM**

HIV and Inflammation, ***Denitsa Simeonova, GSK Bulgaria***

**19.30**

***Dinner***

**SATURDAY, OCTOBER 27**

**8.30 - 10.30**

**- SESSION 5-**

**AUTOIMMUNITY I**

*Chairs: J. Prechl, A. Tchorbanov*

- 8.30 - 8.50 Autoantigenicity of C1q - the contribution of the globular domains.. **Ivanka Tsacheva, Nadezhda Todorova, Miroslav Rangelov, Vishnya Stoyanova, Ginka Nikolova, Hristo Georgiev, Safa Mohedin, Vanya Bogoeva, Bulgaria**
- 8.50 - 9.10 Immunosuppressive cytokines secreted by mesenchymal stem cells. **Dobroslav Kyurkchiev, Bulgaria**
- 9.10 - 9.20 Anti-TNF therapy and changes in Th17 and Treg populations in patients with ulcerative colitis. **Ekaterina Ivanova-Todorova, Zoya Spasova, Tsvetelina Velikova, Maria Petkova, Ekaterina Kurteva, Kalina Tumangelova-Yuzeir, Lyudmila Vladimirova, Dobroslav Kyurkchiev, Bulgaria**
- 9.20 - 9.30 Clinical cases of lupus erythematosus. **Kyrill Pramatarov, Snejina Vassileva, Bulgaria**
- 9.30 - 9.40 Down-modulation of autoreactive B-cells by protein-engineered chimeric molecules in a mouse model of Type 1 Diabetes. **Iliyan Manoylov, Gabriela Boneva, Nikolina Mihaylova, Iринi Doytchinov, Andrey Tchorbanov, Bulgaria**
- 9.40 - 9.50 Protein-engineered molecules carrying GAD65 epitopes and targeting CR1 selectively downmodulate disease-associated human B lymphocytes. **Iliyan Manoylov, Gabriela Boneva, Iринi Doytchinova, Nikolina Mihaylova and Andrey Tchorbanov, Bulgaria**

**10.15 - 10.45**

**Coffee break**

**10.45 - 12.30**

**- SESSION 6 -**

**IMMUNO-ONCOLOGY I**

*Chairs: M. Minchev, A. Pashov*

- 10.45 - 11.05 From marker expression to cancer vaccine. **Thomas Kieber-Emmons, USA**

- 11.05 - 11.25 Metabolic communication in the tumor microenvironment. **Tobias Bopp, Germany**
- 11.25 - 11.45 Immune profiles and molecular characteristics of the tumor, clinical presentation, treatment response and patient survival in breast cancer. **Vessela Kristensen, Norway**
- 11.45 - 12.05 The IgM IgOme: A treasure throve of biomarkers. **Anastas Pashov, Maya Hadjieva, Velizar Shivarov, Victor Kostov, Milena Todorova, Dilyan Ferdinandov, Eivind Hovig, Bulgaria**
- 12.05 - 12.15 *In vitro* antitumor activity and immunophenotypic effects of selected S-triazine compounds. **Desislava Kolchakova, Balik Dzhambazov, Tsvetelina Batsalova, Bulgaria**

**12.30 - 13.30**

**Lunch**

**13.30 - 14.00**

**MSD SYMPOZIUM**

How immunology grew up and became friend of oncology  
**Asya Konsulova – Vazova, Oncology Clinic, Varna Medical University**

**14.00 - 15.30**

**- J PROJECT SESSION -**

**PRIMARY IMMUNE DEFICIENCIES**

**Chairs: M. Murdjeva, S. Stefanov**

- 14.00 - 14.20 Genetic characteristics of patients in the national register of primary immune deficiencies. **Snezhina Kandilarova, Elisaveta Naumova, Bulgaria.**
- 14.20 - 14.40 What's new in pediatric rheumatology – autoinflammation, biological therapy, clinical-therapeutic standarts. Problems in Bulgaria. **Stefan Stefanov, Bulgaria.**
- 14.40 - 14.50 Evaluation of serum concentration of IgG subclasses in the Bulgarian population and in patients with different diseases. **Spaska Lesichkova,**

*Marta Baleva, Nevena Gesheva, Snezhina Mihaylova, Petya Yankova, Anastasiya Mihaylova, Elisaveta Naumova, Bulgaria.*

14.50 - 15.00 Clinical course and treatment of children with primary immune deficiencies in the pediatric oncohematology unit, UMHAT "Sv. Georgi", Medical University Plovdiv. **Hasan Burnusuzov**, *Mariya Spasova, Angelina Stoyanova, Ivan Mumdzhiev, Liliya Ivanova, Neofit Spasov, Mariana Murdjeva, Elisaveta Naumova, Bulgaria*

15.10 - 15.20 Complement C3 deficiency associated with a novel variant in the C3 gene (p.Gly924Cys): case reports. **Nevena Gesheva**, *Spaska Lesichkova, Snejina Mihailova, Petya Yankova, Lubka Roumenina, Veronique Fremeaux-Bacchi, Anastasiya Mihaylova, Elisaveta Naumova, Bulgaria, France*

**15.30 - 17.00**  
**- SESSION 8-**

**TRANSPLANT IMMUNOLOGY**

**Chairs:** *E. Naumova, A. Slavcev*

15.30 - 15.50 Rejection risk evaluation in organ transplant recipients. **Antonij Slavcev**, **Czech Republic**

15.50 - 16.10 Immunogenetics of transplantation in the era of NGS technology. *Milena Ivanova, Tsvetelin Lukanov, Elisaveta Naumova, Bulgaria*

16.10 - 16.30 Alloimmune response in transplantation – our experience. **Anastasiya Mihaylova**, *Elisaveta Naumova, Bulgaria*

16.30 - 16.40 Immunological approaches for assessment of the risk for development/diagnostics of BK virus infections in renal transplant patients. **Yana Krasteva**, *Atanaska Georgieva, Snezhina Mihaylova, Emil Paskalev, Elisaveta Naumova, Bulgaria*

**17.00 - 17.30**  
**Coffee break**

**17.30 - 19.00**

**- SESSION 9 -**  
**TRANSFUSION IMMUNOLOGY**  
*Chairs: F. Martinova, M. Minchev*

- 17.30 - 17.50 Improving blood donor screening by nucleic acid technology. **Fani Martinova, Bulgaria.**
- 17.50 - 18.10 Advanced automated blood processing system for blood components and cellular transfusion therapy. **Fani Martinova, Bulgaria.**
- 18.10 - 18.20 RhD typing challenges – our experience in daily activity and clinical consequences. **Krasimira Terzieva, Rumen Popov, Elisaveta Grancharova, Bulgaria.**
- 18.20 - 18.30 How polyvinyl chloride influences the development of transfusion medicine. **Elisaveta Grancharova, Krasimira Terzieva, Rumen Popov, Bulgaria.**
- 18.30 - 18.40 Transfusion therapy - supportive therapy in a case of autoimmune hemolytic anemia after hematopoietic stem cell transplantation. **Krasimira Terzieva, Rumen Popov, Poly Stoyanova, Bulgaria.**

**20.00: GALLA**  
**Best Poster Award**

**SUNDAY, OCTOBER 28**

**9.00 – 10.30**  
**- SESSION 10-**  
**AUTOIMMUNITY II**  
*Chairs: I. Altankova, D. Kyurkchiev*

- 9.00 - 9.20 Network approach and its applications for the description of antibody-mediated immunity. **Joseph Prechl, Hungary**
- 9.20 - 9.40 B and T cell engagement during systemic lupus erythematosus development **Andrey Tchorbanov, Bulgaria**
- 9.40 - 9.50 Systemic cytokine profile in patients with systemic lupus erythematosus. **Irena Manolova, Lyuba Miteva, Mariana Ivanova Goycheva, Rumen Stoilov, Spaska Stanilova, Bulgaria**

9.50-10.00 Modulation the cytokine secretion of regulatory B lymphocytes by epigenetic modification of genome. **Kalina Nikolova-Ganeva, Andrey Tchorbanov, Bulgaria**

10.10 - 10.10 Functional elimination of autoreactive T and B cells by anti-annexin A1 antibody therapy in MRL/lpr murine model of systemic lupus erythematosus. **Silviya Bradyanova, Nikolina Mihaylova, Petroslav Chipinski, Stela Chausheva, Yordan Manasiev, Melinda Herbáth, Dobroslav Kyurkchiev, Jozsef Prechl, Andrey Tchorbanov, Bulgaria**

### 10.30 - 11.00

#### Ewopharma SYMPOZIUM

T-spot CMV test in Transplant recipients. **William Cruikshank, Oxford Immunotec**

### 11.30 - 13:30

#### - SESSION 11 -

#### IMMUNO-ONCOLOGY II

**Chairs: M. Guenova, D. Popova**

11.30 - 11.50 Chimeric Antigen Receptor (CAR) T-Cell and NK Cell Therapy - manufacturing and regulation. **Lubomir Arseniev, Germany**

11.50 - 12.10 A New Mechanism for Bispecific T-Cell engagers Reactivating Tumor-Selective T Cells in AML & ALL. **Juan Ballesteros, Spain**

12.10 - 12.30 Chronic lymphocytic leukemia - evolution of flow cytometry assessed criteria. **Dora Popova, Elena Vikentieva, Rossitsa Vladimirova-Andreeva, Bulgaria**

12.30 - 12.50 Tumor microenvironment and check-point inhibitors in immunotherapy of hematological malignancies. **Milcho Mincheff, Bulgaria**

12.50 - 13.10 Contemporary immune therapy of cancer - activities of oncologists focusing immunology. **Milen Milev, Bulgaria**

13.10 - 13.20 Influence of Glioblastoma multiforme cell cultures on Tregs, Th17 and monocytes isolated from healthy donors. **Kalina Tumangelova-Yuzeir, Ekaterina Ivanova-Todorova, Ekaterina Kurteva, Tsvetelina Velikova, Georgi Vasilev, Emanuil Naydenov, Sevdalin Nachev, Dobroslav Kyurkchiev, Bulgaria**

13.20 – 13.30 MICA associations with oral squamous cell carcinoma. **Bushra N. Al Hadra**, Tsvetelin Lukanov, Elitza Deliverska, Hristo Stoianov, Antoaneta Nedialkova, Velizar Shivarov, Elissaveta Naumova, Milena Ivanova. University Hospital Alexandrovska, **Bulgaria**

**14:00**  
**CONGRESS CLOSURE**

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PARALLEL PROGRAM (SMALL HALL)

**FRIDAY, 26 OCTOBER**

**11.30 - 13.30**

**- POSTER SESSION 1 -**

**Chairs:** *R Alexandrova, N. Mihaylova, Gestur Vidarsson*

- P1.1. Immunosuppressive effect of mesenchymal stem cell conditioned media on monocytes from patients with rheumatoid arthritis. **Georgi Vasilev**, *Mariana Ivanova, Ekaterina Ivanova-Todorova, Kalina Tumangelova-Yzheir, Ekaterina Kurteva, Rada Gancheva, Rumen Stoilov, Dobroslav Kyurkchiev*
- P1.2. Effects exerted by human adipose-derived mesenchymal stem cells on Th17 and Treg cell subsets in patients with systemic sclerosis **Ekaterina Kurteva**, *Ekaterina Ivanova-Todorova, Kalina Tumangelova-Yuzeir, Georgi Vassilev, Vladimira Boyadzhieva, Nikolay Stoilov, Rumen Stoilov, Dobroslav Kyurkchiev*
- P1.3. Effect of the levels of vitamin D upon T cells subsets in patients with diabetes mellitus type 2. **Vergina Mateva**, *Emil Slavov, Kr. Nancheva, A. Avramova*
- P1.4. TGFb1 and TGFb2 promoter polymorphisms in relapsing-remitting multiple sclerosis. **Antonia Grigorova**, *Anastasiya Trenova, Spaska Stanilova*
- P1.5. YKL-40 and IL-6 in systemic sclerosis. *Rositsa Karalilova, Maria Kazakova, Valentin Dichev, Marco Matucci-Cerinic, Anastas Batalov, Victoria Sarafian*
- P1.6. Altered differentiation of bone marrow cells in complement-depleted arthritic mice. **Petya Ganova**, *Nina Ivanovska,*
- P1.7. Role of anti-C3 and anti-C4 auto-antibodies for evaluation of the activity and severity of lupus nephritis. *Vasil Vasilev, Galya Mihaylova, Desislava Ivanova, Marie Daugan, Remi Noe, Marie-Agnes Dragon-Durey, Lubka Roumenina, Maria Radanova*
- P1.8. Biofunctionalized nanoparticles: potential application in diagnostic assays for autoimmune diseases and participation in autoantigen-specific immune reactions. **Tsvetelina Batsalova**, *Dzhemal Moten, Borislav Mateev, Balik Dzhambazov*
- P1.9. Higher serum IL-17A along with anti-TTG antibodies for prediction of refractory celiac disease. **Tsvetelina Velikova**, *Zoya Spassova, Kalina Tumangelova-Yuzeir, Ekaterina Kurteva, Ekaterina Ivanova-Todorova, Dobroslav Kyurkchiev, Iskra Altankova*
- P1.10. Overlap syndrome in a patient with pemphigus foliaceus - clinical case. **Rumiana Drenska**, *Vera Popova, Doroslava Abadjieva, Victoria Milanova.*
- P1.11. Effect of collagenase-induced osteoarthritis (CIOA) on the tubulin and actin cytoskeleton of mouse oocytes. **Ralitsa Zhivkova**, *Anton Kolarov, Valentina Hadzhinesheva, Irina Chakarova, Stefka Delimitreva, Nina Ivanovska, Maya Markova.*



- P1.12. Frequency and diagnostic value of zinc transporter 8 autoantibodies (ZNT8 ab) in Bulgarian population with type 1 diabetes mellitus patients. **Gergana Todorova-Nikolova**, Greta Grozeva, Nevena Chakarova, Rumiana Dimova, Tzvetalina Tankova, Silvia Stanchovska, Elena Bahteva, Iliyana Atanasova Borisova.
- P1.13. Oral cancer-associated miRNAs and immunity. **Nikolay Mehterov**, Boryana Deleva, Konstantin Tonchev, Boyan Vladimirov, Victoria Sarafian.
- P1.14. Association of cellular immunity with molecular response in chronic myeloid leukemia patients on tyrosine kinase inhibitors therapy. **Margarita Guenova**, Rositsa Vladimirova, Maria Muhtarova, Milan Jagurinoski, Valentina Madjarova, Siyana Ivanova, Branimir Spassov, Zhanin Stoyanova, Gueorgui Balatzenko
- P1.15. B-cell population recovery in patients with hematological malignancies undergoing autologous stem cell transplantation. **Lidia Gartcheva**, Penka Ganeva, Georgi Arnaudov, Branimir Spassov, Margarita Guenova

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**16.00 – 17.30**

**- POSTER SESSION 2 -**

**Chairs:** A. Mihaylova, I.Manolova, Maurizio Mattei

- P2.1. NKT-like cells in peripheral blood from pregnant women as a possible predictor for pregnancy failure, **Gabriel Elmadjian**, Antonina Kirova, Roumen Roussev.
- P2.2. Intralipid® provides successful pregnancy outcome in cases with elevated NK cells and activity, **Gabriel Elmadjian**, Antonina Kirova, Roumen Roussev.
- P2.3. Morphological and structural changes of MAPK3 in CD25 subsets of natural regulatory T cells, **Rumyana Susurkova**, Andrey Velichkov, Maria Muhtarova, Margarita Guenova, Antoaneta Mihova, Elena Stoyanova<sup>1</sup>, Iskra Antonova, George Nikolov, Velislava Terzieva.
- P2.4. EZH2 in the epigenetic control of FOXP3 in women with unsuccessful pregnancy, **Andrey Velichkov**, Rumyana Susurkova, Antoaneta Mihova, Margarita Guenova, Iskra Antonova, Dessislava Staneva, Milena Georgieva, George Nikolov, George Miloshev, Velislava Terzieva

- P2.5. Matrix metalloproteinases 2 and 9 activity and concentration in follicular fluids from women undergoing controlled ovarian hyperstimulation and their relationship to oocyte and embryo's quality. **Nina Ayvazova**, Danail Martinov, D. Gincheva, Milena Atanasova, Emiliana Konova.
- P2.6. Solubility properties of non-species-specific ovarian antigens reacting with sera of infertile women. **Venera Nikolova**, Stefka Delimitreva, Ralitsa Zhivkova, Dimitrina Dimitrova-Dikanarova, Maya Markova.
- P2.7. Investigation of quality of oogenesis in mice with congenital systemic Lupus. **Irina Chakarova**, Valentina Hadzhinesheva, Ralitsa Zhivkova, Maya Markova, Anton Kolarov, Stefka Delimitreva, Gabriela Boneva, Kalina Nikolova-Ganeva, Andrey Tchorbanov.
- P2.8. Investigation of quality of oogenesis in mice with experimentally induced systemic lupus. **Stefka Delimitreva**, Irina Chakarova, Valentina Hadzhinesheva, Ralitsa Zhivkova, Maya Markova, Kalina Nikolova-Ganeva, Gabriela Boneva, Andrey Tchorbanov; Sofia, Bulgaria.
- P2.9. Research on Herpes virus carrier and local immune response in endometrial biopsys in women with reproductive failure, **Svetla Blazheva**, S. Pachkova, D. Gincheva, P. Ivanov, I. Gencheva, Tzvetan Lukanov, Emiliana Konova;
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- P2.10. Variations in cytokines profiles of mesenchymal stem cells cultured in 2D and in 3D conditions, Milena Kostadinova, **Radko Sotirov**, Snejana Kestendjieva, Shina Pashova, Elena Stoyanova, Kamelya Petkova, Ivan Bochev, Tsvetelina Oreshkova, Milena Mourdjeva
- .
- P2.11. Innate immunity tlr4 and nod1 receptor signaling modulates Sertoli cells inflammasome and metabolic profile. **Leyla Sezer**, Elina Avramaska, Krassimira Todorova, Soren Hayrabedian.
- P2.12. Flow cytometric analysis of the production of hydrogen peroxide and superoxide anion in human spermatozoa of infertile and potentially fertile men. **Danail Martinov**, Nina Ayvazova, Svetla Blazheva, Sava Petrov, Milena Atanasova, Emiliana Konova; Pleven, Bulgaria.
- P2.13. Up-regulation of natural killer cells proliferation by cytokine stimulation. **Magdalena Pencheva-Demireva**, El-Darawish Y. M., Kavaldzhieva K. K.1, Mladenov N. Y.1, Lazarov V. V., Dimitrova-Dikanarova D. K., Markova T. P., Okamura H.

P2.14. Osteophyte formation and TGF- $\beta$  expression in the joints of estradiol-treated mice with osteoarthritis. **Lyudmila Belenska-Todorova**, *Petya Ganova, Nina Ivanovska.*

**SATURDAY, 27 OCTOBER**

**11.30 - 13.00**

**- POSTER SESSION 3-**

**Chairs:** *K. Halacheva, E. Konova, T.Bopp*

- P3.1. Relationship between inflammation and prognostic models in traumatic brain injury **Valentin Dichev**, *Maria Kazakova, Georgi Pavlov, Kiril Simitchiev, Pavel Timonov, Chavdar Stefanov, Victoria Sarafian.*
- P3.2. Alteration in salivary cytokine levels in oral lichen planus patients after low level laser therapy. *Milena Draganova-Filipova, Maria Mutafchieva, Svetlana Bachurska, Georgi T. Tomov, Plamen I. Zagorchev.*
- P3.3. Comparative study of the expression of small heat shock proteins in human embryo and fetus **K Kavaldzhieva**, *V. Lazarov, I. Buteva-Hristova, D. Marinova, N.Mladenov, M. Pencheva-Demireva, D. Dimitrova-Dikanarova.*
- P3.4. Assessment of sCD30 and the regulatory T-cells for achieving immune tolerance in patients who have underwent solid organ transplantation – pilot study. **Velislava Terzieva**, *Antoaneta Mihova, Tsvetelina Velikova, Jordanka Uzunova, Andrey Goncharov, Nonka Jurukova, Victoria Georgieva, Emilia Yordanova, Metodiya Sekulovsky, Ognian Chalamanov, Iskra Altankova, Lubomir Spassov.*
- P3.5. Results from autologous stem cell transplantation in University Hospital “Sv.Georgi”, Medical University - Plovdiv. **Veselina Goranova-Marinova**, *Emil Spasov, Mariana Murdzheva, Janko Jankov, Vasko Grykkanov, Hasan Burnusuzov, Zhanet Grudeva-Popova, Stefan Goranov.*
- P3.6. Clinical case of a child with trisomy 8, immune deficiency and myelodysplastic syndrome. **Veneta Milenova**, *Hadil Kathom, Daniela Avdjieva, Elissaveta Naumova, Boriana Avramova.*
- P3.7. *Ex vivo* expanded autologous limbal stem cells – therapeutic application. *Rozalia Dimitrova, Maria Hristova, Yani Zdravkov, Ivan Tanev.*
- P3.8. Immunological approaches for evaluation of immune response and personalization of immunotherapy in renal transplant patients. **Petya Yankova**, *Tsvetelin Lukanov, Anastasiya Mihaylova, Nevena Gesheva, Valentina Atanasova, Marianka Genova, Dobrin Svinarov, Elisaveta Naumova.*

- P3.9. Post allogeneic stem cell transplantation autoimmune hemolytic anemia – case report. *Nina Petkova, **Maria Anastasova-Postadzhiyan**, Viktoria Varbanova, Elisaveta Grancharova, Aneliya Gushterova, Polja Stojanova, Ivan Nikolov, Ivan Kindekov, Antoniya Nedeva, Yordanka Kuyumdzhieva, Tatyana Kancheva, Aneliya Gotceva, Radina Andonova, Kamelya Simeonova, Julian Raynov.*
- P3.10. A case of autoimmune hemolytic anemia after allogeneic hematopoietic stem cell transplantation – immunohematological diagnosis. *Polya Stoyanova, Rumén Popov, **Krasimira Terzieva**, Galina Genova-Georgieva.*
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- P3.14. Cu(II) and Co(II) complexes with Schiff bases – influence on viability of tumor and non-tumor (macrophages, spleen lymphocytes) cells. **Lora Dyakova**, *Desislav Dinev, Abedulkadir Abudalleh, Daniela-Cristina Culita, Gabriela Marinescu, Luminita Patron, Radostina Alexandrova.*
- P3.15. Antitumor activity of gastropodan hemocyanins in murine model of colon carcinoma, *Emiliya Stoyanova, Iliyan Manoylov, Nikolina Mihaylova, Krassimira Idakieva, **Andrey Tchorbanov.***
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