



BULGARIAN-SWISS COOPERATION PROGRAMME
БЪЛГАРО-ШВЕЙЦАРСКА ПРОГРАМА ЗА СЪТРУДНИЧЕСТВО

Design of modified immunoglobulin preparations with additionally induced polyspecificity for passive immunotherapy of sepsis

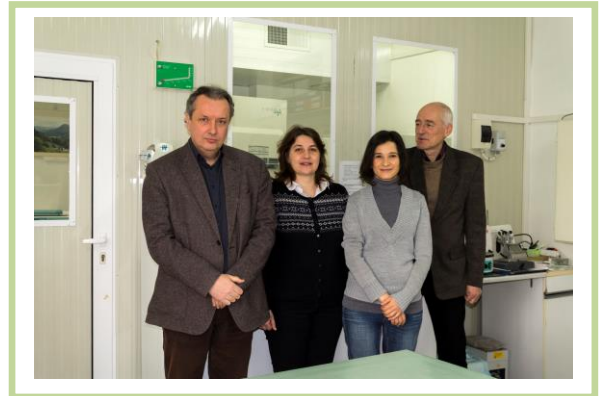
Starting Date 01.11.2012

Duration 36 Months

Discipline Immunology,
Immunotherapy

Main Goals

- To design, develop and test a series of “next-generation” immunoglobulins for treatment of experimental sepsis and related severe inflammatory syndromes.
- To characterize the cellular and mechanisms of action of these modified preparations and to analyze them according the Pharmacopoeia requirements for pooled therapeutic human immunoglobulins.
- To teach 3 Ph.D. students.



Activities

- Modification by commercially available pooled human IgG preparations for intravenous administration.
- Analysis of the effects of treatment using these preparations in experimental models of sepsis and aseptic severe inflammation.
- Study of the cellular and molecular mechanisms of the therapeutic activity observed.
- Analysis of these preparations according to Pharmacopoeia requirements.

Expected results

- Developing new agents for passive immunotherapy of sepsis and related inflammatory syndromes.
- An understanding of the mechanisms of action of the constructed modified immunoglobulin preparations.
- Three PhD researchers (two in Switzerland, one in Bulgaria) will get their degrees specializing in this topic.
- Establishing a long-lasting cooperation between the Swiss and the Bulgarian partners

Swiss Coordinator

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