

## BASIC IMMUNPATHOLOGY

**Elective subject** for third to fifth-year students of the Faculty of Medicine.

**Teacher in charge of the course:** Prof. habil. Mihály Boros, M.D., Ph.D., D.Sc., Head of Department.

**Educational advisor:** Dr. Tamás Jánosy retired associate professor  
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**Course code:** AOK-KA10231

**Credits:** 2

**Prerequisite of registration:** Completion of Immunology (AOK-KUA101).

**The aim of the subject:** Teaching fundamentals of immunopathology necessary for medical doctors to facilitate understanding of immunological pathomechanisms of certain diseases as well as the bases of immunotherapeutic interventions and clinical immunology.

**Method:** Lectures (7 x 2 hours)

### Topics of the lectures

1. Introduction to immunopathology. Transplantation immunology: transplantation antigens, allogeneic recognition, effector mechanisms of graft rejection
2. Immunological aspects of organ transplantation. Immunology of bone marrow transplantation: graft-versus-host disease. Immunological aspects of xenogeneic transplantation.
3. Histocompatibility testing. Immunological investigations before and after transplantation. Immunosuppressive therapy.
4. Reproductive immunology.
5. Tumor immunology: tumor antigens, anti-tumor immune responses. Evasion of immune responses by tumors. Immunotherapy for tumors.
6. Immunological tolerance. Self tolerance: central and peripheral tolerance. Mechanisms of T and B cell tolerance.
7. Pathomechanisms of autoimmunity: failure of self tolerance, genetic factors, role of infections, other factors; effector mechanisms. Immunological bases of systemic and organ-specific autoimmune diseases.

**Criteria for completing the course:** Attendance of lectures.

**Evaluation:** End semester examination (five grade) by a written multiple choice test exam.