Tick-borne encephalitis (TBE) is a viral tick-borne infectious disease caused by Flaviviridae that occurs in endemic areas across large regions of Europe and Asia and still is a public health problem in these parts of the world. The total annual number of cases is estimated to be up to 10,000 in Russia and about 3,000 in European countries and constantly increases. TBE may take various courses: Meningitis, meningoencephalitis, meningoencephalomyelitis or eningo-encephalo-radiculitis. Severe courses of TBE infection with higher mortality and long lasting sequelae often affect the patient’s quality of life and also influence on society. Other known arthropod-borne Flaviviridae which may affect nervous system are: Yellow fever virus, Dengue virus, West Nile virus and Japanese encephalitis virus. In recent decades, many researchers tried to find reasons for increasing number of human TBE cases in endemic regions even if there is a vaccination against TBE on the market. Among potential reasons for the increasing reported incidence of TBE are: Increased mobility of humans increased travelling to endemic areas, climate and socio-economic changes, variations of habitat structure and wildlife community, greater public awareness, better diagnostic methods, vaccination rates and improved reporting. The aim of this lecture is a better understanding of factors influencing on the current epidemiological situation of TBE across Europe and Russia (climatic, environmental and socio-economic changes), characterization of clinical course of the disease and comparison of all these factors in reference to other vector-borne diseases, especially caused by viruses belonging to Flaviviridae.

Bioography
Joanna Zajkowska is currently working at Medical University of Białystok, Poland and carries Clinical Research on infectious diseases, especially on tick-borne diseases and nervous system diseases. She is an expert in internal medicine, infectious diseases, public health and epidemiology. She is a Member of ISW-TBE, Wien Austria (International Scientific Working group on Tick-Borne Encephalitis and ESGBOR (ESCMID-European Society of Clinical Microbiology and Infectious Diseases). She has published more than 200 papers in reputed journals and serving as a Reviewer in many journals.

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