

2nd International Conference on**Retroviruses and Novel Drugs**

June 30-July 01, 2016 Cape Town, South Africa

Is a dogme that HIV was transmitted to humans from apes in Africa over the last 35-50 years ago true?Vladimir Zajac¹, Ciernikova S¹, Adamcikova Z¹, Wachsmannova L¹, Števrkova V¹ and Krcmery V²¹Cancer Research Institute, Slovak Academy of Sciences, Bratislava, Slovakia²Saint Elizabeth University of Health and Social Sciences, Bratislava, Slovakia

AIDS currently represents one of the most serious healthy and social problems. It is therefore necessary to find new therapeutic targets. There is increasing evidence, pointing out that the main place of HIV infection and CD4+T cells loss is in the GIT and other mucosal tissue, and not in the blood. These findings go along with new studies about the role of bacterial translocation in the gut as central driver of AIDS pathogenesis. We have identified HIV-like sequences and HIV-like proteins in bacteria and yeast in a cohort of 80 HIV positive patients from Slovakia, USA, Kenya and Cambodia. DNA testing of bacteria and yeasts: a) from intestinal tract of American and Slovak HIV-positive patients; b) from respiratory tract of Cambodian and Kenyan HIV-positive children has detected sequences 90% homologous with the corresponding sequences of HIV-1. HIV-like proteins using monoclonal antibodies (MAB) against HIV-1 antigens p17, p24, gp41 and p55 were identified in bacterial extracts of all patient's cohorts. HIV-like protein of size 95 kDa was detected by MAB against gp120 only in *Candida* species of Cambodian and Kenyan samples. Specific properties of patient's microbes were detected by infection of HL-60 cells and also the reducing the viral load in AIDS patients after administration of probiotics *E. coli* Nissle 1917. Based on these results may be hypothetically explained that bacteria and yeasts serve as a natural host of HIV sequences since the beginning of mankind. Thanks to countless epidemics individuals carrying the pathogenic microbes with HIV sequences, largely extinct. However, administration of antibiotics, drugs and anal intercourse was induced intestinal dysbiosis and pathogenic bacteria are re-propagated. Pathogenic microbes bearing HIV sequences moved to the majority, penetrate from the intestinal tract into the blood, invade the lymphocyte, infected/lyse them and the process of immunodeficiency may start. Presented hypothesis answer to many until now unanswered questions: origin of HIV, large scale HIV positivity in Africa, connection of AIDS with TBC in Africa, absence of "gold standard" in Africa, the presence of HIV reservoirs after antiretroviral therapy, atypical course of disease in comparison with other retroviral infections, the rarity of complete viral particles detection in the material from AIDS patients, but detection of HIV sequences and the HIV-like proteins herein. According to our results there is a strong objection again dogma that HIV was transmitted to humans from apes in Africa about 35-50 years ago on the route of accidental contacts. And that's a good news for Africa.

Biography

Vladimir Zajac has completed his PhD. in 1982 at the Cancer Research Institute of Slovak Academy of Sciences in Bratislava (Slovakia), where he worked as the Head of Department of Cancer Genetics from 1996 to 2010. He joined the Medical Faculty of the Comenius University as Associate Professor of Genetics in 2007. He has published 67 papers mostly in reputed journals and he is editor of the book "Bacteria, viruses and parasites in AIDS process" (InTech, 2011).

roth@rutgers.edu**Notes:**