Antiretroviral resistance testing in HIV infected patients improves health and saves costs

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During HIV treatment resistance mutations of the virus to antiretroviral drugs may occur and the treatment regimen become less effective. In the present study the authors compared the cost-effectiveness of genotypic antiretroviral resistance testing versus expert opinion for treatment optimization in HIV infected patients with treatment failure.

The study is based on data from the Swiss HIV Cohort Study (www.shcs.ch), which is one of the largest cohort studies on HIV disease including patients from all University Clinics and two state hospitals in Switzerland. In this study, both health care costs and productivity costs, i.e. costs due to absence from work because of ill-health, were included in the analysis. Using most recent scientific methods, the authors could show that antiretroviral resistance testing not only increases life expectancy and quality-of-life, but also results in cost savings to society.

"This is the first study that shows that resistance testing not only improves the health of the patients but is also beneficial to the society at large when job productivity changes are considered," said Pedram Sendi, first author and principal investigator, from the Clinic of Infectious Diseases & Hospital Epidemiology of the Basel University Hospital. "We are convinced that our study will be noticed in many countries as it also documents the clinical benefit of antiretroviral resistance testing," comment Manuel Battegay from the Basel University Hospital and Huldrych Günthard from the Zurich University Hospital, co-principals

of this cost-effectiveness study.

In times of increasing pressures to contain health care costs cost-effectiveness analyses are an important source of information to evaluate whether health interventions represent "value for money." This may help to prioritize resource allocation in health care by finding those health technologies that offer the most health outcomes for the resources invested. To date the Swiss HIV Cohort Study has conducted several cost-effectiveness analyses and has contributed to a better understanding of important cost-effectiveness issues in HIV disease.

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