AIDS - its therapy compared to a roller coaster
James Locke, a patient with AIDS, describes his life thus: “To live with AIDS (HIV) has been compared with a roller coaster: as soon as a therapy is applied, everything seems to go up, physically as well psychically. But when the therapy is discarded –and that happens rapidly--, it is as if one falls in a void”. In 1984 he was diagnosed with the immune deficiency and physicians gave him only three more years of life. At the 6th European Health Forum Gastein, he said that although today he has to take about 8000 pills a year, thanks to the advance in this kind of research, he is still able to live an active, good and independent life. In addition to the numerous events which the major theme “Health and Wealth” is carrying, other minor lectures and workshops are added to the main topic of the programme. Lectures from James Locke (the above mentioned patient), John Bowis (member of the European Parliament) and Dr. Anton Pozniak (AIDS specialist at Chelsea and Westminster hospitals, London), will discuss in detail world wide growing resistance of the HIV virus against medicines.

Growing resistance of the HIV virus
The AIDS specialist Dr. Anton Pozniak declared: “The constantly growing resistance of the HIV virus against medication proves to be the greater
hindrance in the medical fight against AIDS”. Why is it the AIDS virus so difficult to deal with? The HIV virus and multiplies extremely fast. Every day it reproduces itself in billions of new viruses. ARV-drugs (antiretrovirals) are capable to stop the further multiplication of it, but that brings only a partial help: HIV-viruses manage to alter their genetic structure during the process of reproduction, which allows them to create a resistance against the medicines or active drug combination, which should have stopped the multiplication process. This mutation ability forces not only the therapy to be changed constantly, but makes it always more difficult. Allegedly the majority of the about 350,000 HIV-infected patients in Western Europe are resistant to medication. The advances in the investigation in this area of AIDS are in danger due to this growing resistance. It won’t allow to treat and to live with AIDS as though with a chronic infection, but with a deadly immune deficiency.

**Facts about medication resistance**

The medication (drug) resistance can be observed in any until now available ARV-medicine; it does not matter if it is administered alone or in combination with other drugs. This resistance manifests in patients relatively fast and its pace is determined by the treatment and varies from patient to patient. That is why is so important, closely to observe the course of a therapy.

HIV-viruses that show a resistance to a certain medicine, are capable to manifest this resistance as well against medication that contain that kind of active substance, also when this substance has never been utilized before (cross-resistance). This circumstance can diminish the success any therapy or totally annihilate it. To expose the patient to the continuation of the therapy in spite of the growing virus multiplication means automatically to build a resistance. This viral resistance will accelerate its increase and will reinforce the so-called cross-resistance.

The resistance to medicaments is applied to patients who are treated with a certain medication. The patients could be already infected with a resistant virus. For these patients it will last longer, until an adequate treatment could be found for them, and finally until this treatment shows its inefficacy.

The guidelines of the International AIDS Society-USA Panel (IAS-USA), recommend, that all patients, that had been infected in the last two years, summit themselves to resistance tests, before to start with any treatment.
Result of the studies (a selection)

**Europa:** Between 1996 and 2002 a CATCH survey conducted in 17 European countries, revealed that among 1,600 HIV-positive individuals, one out of ten recently diagnosed patients carried HIV viruses resistant to medicaments.

**USA:** A similar study carried out in the USA proved that newly infected individuals, who were examined between 1999 and 2002, the medicament resistance grew up to a 16.5%. Meaning an augment of 4.6% from the last examination.

**Spain:** In 1999 a study conducted in Galicia revealed that in the almost 300 HIV-patients examined, 76% showed a resistant HIV-mutation.

**No Life without Research**
The battle against AIDS is always a race against time. The sooner and better the research the greater are the chances to prevent the fast HIV viral mutation. By the middle of the 90’s the overall aspect of the symptoms in James Locke’s case deteriorated, because also with him a medicament resistance was taken place. He explained: “During 2001 I gave it a try to an entirely new kind of medicament, namely the so-called fusion inhibitors. What it does is to inhibit the propagation of the HIV viruses in my immune-system cells. In those days that was the only way that I was left out with and is at the moment one of the possibilities to keep AIDS from advancing. Research and development of new drugs and medicines is of extreme research, in order to prolong the life of HIV patients. Otherwise we might be bound to drop back to those years before the 95’s in which the majority of the patients died.”