WILL IT BE STEM CELLS?

(the XV CROI: Conference on RETROVIRUSES and OPPORTUNISTIC INFECTIONS, Boston, II. 2008)

(translated from Latvian)

CROI is one of the most important annual AIDS scientific meetings.

This year it was preceded by a CHAMP (Community HIV/AIDS Mobilization Project) workshop on prevention. It confirmed the fact that **no drug** has been found **to prevent HIV**. Some practical advice was given for a **safer sex**: to urinate, wash and dry after an intercourse!

CROI started with a Memorial lecture, which affirmed the famous Russian biologist M. Supotnitski's standpoint that there are insurmountable barriers to **vaccine** development, and only fundamental new insights into genetic and antigenic diversity will permit the development of an effective vaccine (abstract #6).

It has been well known that likelihood of **superinfection** (with 1 or more strains of HIV-1 among partners in **seroconcordant couples** who acquired HIV-1 from an individual other than their current partner) is appreciable and should be considered when counseling seropositive individuals. The researcher points out that the risk of superinfection in seroconcordant couples with a long-term relationship is unknown (#344).

Similarly to what was stressed at the "HIV in Europe, 2007" Brussels conference, the abstract #8 underlines the potential need to consider an **earlier ART initiation** due to the manifold evidence for a link between HIV and the risk of serious non AIDS- specific diseases.

The symposium "Individualizing Patient Management" revealed expectations that the new <u>genome</u>- wide approaches will profoundly change the landscape of knowledge in the near future, allowing for better individualization of drug prescriptions (#156).

Resistance, as it was pointed out during the Memorial lecture, is less common in patients consulted by <u>experienced doctors</u> (#6)!

This leads to a discussion on the need of HIV doctors in regional towns of Latvia.

Since *thymidine analogues (TA)* (both <u>d4T and AZT</u>) have been associated with **lipoatrophy**, they are not recommended as an initial therapy.

Switching from a *TA* to <u>Tenofovir</u> in individuals with lipoatrophy is associated with an improvement in limb fat and maintenance of virological control. Switching from Combivir to Truvada in persons receiving EFV:

-]preserves limb fat and leads to limb fat recovery (earlier switch results in greater limb fat increase) and
- preserves bone mineral density (#938).

The symposium "**Aging and AIDS**" revealed that older subjects reported **better adherence** than younger ones (#106).

Multiple studies have shown that virological response to ART is better in all the older age groups. In patients around 50 this also translates into a better immunologic recovery. With older age, however, CD4 cell count increases tend to weaken. But non- HIV mortality accounts for an increasingly larger proportion in the total mortality experienced (#108).

Mortality rates for HIV- infected persons have become much closer to general mortality rates since the introduction of HAART. HIV- infected persons in developed countries in the first 5 years from infection now appear to experience similar rates to their uninfected counterparts, though a mortality excess remains as HIV infection duration lengthens (#14).

As we all know, a proper **diet and exercise** stimulates weight gain. Abstract #944 recommends <u>Rosiglitazone</u> for better results.

And now, the long- awaited news.

In the past, first approaches to decelerate HIV-1 disease by **stem cell** transplantations failed. Finally, there is the first successful performance in an HIV+ patient. In his case, although HAART has been discontinued since more than 200 days, HIV-1- load could not be detected either in peripheral blood, bone marrow or rectal mucosa. His data (Germany) is leading to a disruption of virus replication (#719). Even if this works in a longer run, it is unlikely to become a treatment given the current technology – the reasons being difficulties in matching donors; stem cells transplantation costs and complications.

At the close of the CROI, SFAC ("Search for AIDS Cure") organized a perfect 1,5 hour long **American TV** broadcast with leading conference presenters, interviewed by AIDS community advocates.

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