DO NOT REGRET GROWING OLDER!

(the XI International Congress "Drug Therapy in HIV Infection", Glasgow, XI.2012)

(translated from Latvian)

The congress exhibition hall starts with the biggest pharma stall – that of the "Gilead". This small company has become a giant in AIDS field.

There is a new trend in exhibitions' settings – no more souvenirs – instead, rather, relaxing experiences. E.g., "Abbott" offers mini- contests among any two participants: each of them should get as relaxed as possible, while the level of relaxation gets visibly measured indicating *alpha* and *theta* brain waves. The most relaxed – the one getting the ball on his side – is the winner!

It's nice to see that three Latvian doctors are congress participants as well. Just the new hospital's administration does see their attendance as their private (!) affair, and for increasing professional knowledge they have to use their vacations' days!

Among presenters there is one nurse as well. Of course, she is not from Latvia. None of our AIDS nurses has ever attended an international AIDS conference... Even during presentations we feel being in the UK. Good British humour accompanies the scientific contents.

A new trend has established during nowadays presentations. Each listener is given a device for voting. Speakers sometimes ask for the opinion of auditorium, and comment its results shown on the screen.

But the tragic goes along this time. On the second day the session gets interrupted by the police. A high standing BMS- Thailand lady has got killed by somebody...A previous event occurred in Bangkok during the XV WAC, 2004 opening when three participants got trumpled under the elephants' feet...

The congress starts with keynote lectures. C. Perno from the University of Rome enlightens us that different retroviruses have attacked humans for millions of years, and that HIV will remain forever in the infected body. The chances of getting rid of HIV infection and being biologically cured are very limited. So, the option offered by the so- called "functional cure" is different. Its target is that viral genomes are no longer able to harm the body for an indefinite period of time. Patients do remain infected, but the progression of the disease is interrupted. This is where clinical research is directing its efforts today. The final target of eradication is to keep HIV under control without ART (KL2).

The central discussion during the congress seemed to be among M. Saag (O112) and Jens Lundgren (O113) on "when to start?":

ASAP	NOT SO FAST
M.Saag , University of Alabama	Jens Lundgren, Copenhagen University Hospital
(speaks on efficacy)	(speaks on harm vs benefit)
(much stronger scientifically)	
The biology of viral replication (1 to 10 billion viruses/day) screams that we should be starting early	Even if initiation at CD4>500 shows dramatic benefit, it is still low risk in 2012 to wait until CD4=350. That supports equipoise on benefit of ASAP. Deferring to 350 is strongly supported by a large body of evidence.
Resultant inflammation from unchecked replication is associated with earlier onset of multiple co- morbid conditions	There are more non- AIDS illnesses with starting earlier. The overwhelming majority of HIV- related events are avoided by starting at 350. Prescription of any type of medicine is guided by the principle of "Do no harm!" ("Primum, non nocere!")
Public health benefit: treatment is prevention	More suicides with starting earlier
Immunity (CD4) restoration is better	Lack of solid ASAP evidence from randomized controlled trials. Analyses on large observational studies have shown inconsistent results, which is low-quality evidence.
Less resistances	Earlier treatment may well be better on individual level; but on a population level it will leave a significant % of individuals at risk of resistance and/ or toxicity.
Economically	CD4<350 should be adhered to until further evidence
advantageous	has emerged.

(Some community activists have doubts that starting early may be lobbying pharma interests).

A community session was held during the congress as well. In his presentation "**Treatment as prevention**" Brian West (Scotland) indicated that PLWHA taking ARV are >20x less likely to infect their partners than untreated persons. He stressed that promotion of condom use alone is not working, and we need extra tools!

Monotherapy w/boosted PIs as simplified ART- sparing regimen has gained interest in recent years. PI mono could lower costs and preserve future treatment options. Scientists from Barcelona concluded that monotherapy with *darunavir/ r* or *lopinavir/ r* as **simplification strategy** appears to be effective and safe in subjects with virological suppression in clinical practice (P304). Italian scientists compared findings from COMPACT study on adherence in HIV+ pts treated with **single tablet regimens** and multi- pill regimens, concluding that

pts on STR experienced also higher rates of attained VL<50 and CD4>500 (P14).

Speaking of heart matters, HIV-1 infected pts are thought to be at higher risk of cardiovascular events. By using Framingham risk score doctors from Brighton concluded that age alone is a significant predictive factor, and **HIV infection does not contribute to increased cardiovascular risk** (P218)! Their colleagues from Bristol discovered that <u>heart age</u> deviation increases with age and is greater for smokers. On average a 45 yr- old male smoker has a heart age of 60 yrs (P27).

An interesting presentation "My favourite 10 publications of 2011-2012" was given by congress scholarship recipient P. Cahn from Buenos Aires, who summarized that long term in **HAART exposure does not seem to induce harm** (O321).

One of the capturing posters was by Sydney Hospital doctors: "Currently available medications may not be sufficient for lifelong treatment of HIV" (O132). Their mathematical model unveiled that the median time until exhaustion of currently available treatment options is 43 yrs. However, the model predicts that 10% of PWA will use up all currently available ART options after just 23 yrs. British scientists studied life expectancy (LE) in HIV1+ individuals (O133). It appeared that lifestyle factors may account for 8 out of 11 yrs difference in HIV+ vs HIV-. Besides, there was no difference in mortality between those with attained 350<CD4<499 and CD4>500. On starting ART, male LE at exact age 35 was 36; 44 and 42 yrs for attained CD4<200; 200-349 and >350. After 5 yrs on ART, it was 22; 42 and 46 yrs. The difference in LE between suppressed vs unsuppressed pts was ~11 yrs. Individuals that attain viral suppression at CD4>350 within 1 yr of ART start have a normal LE with 35 yr olds estimated to live over 80 yrs on average.

A nice ending to my info- sheet could be the following quote: "Do not regret growing older. It is a privilege denied to many!"

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