

**LATVIA – THE NEXT RICHEST COUNTRY TO THE U.S.A.!?**

(the **XIV** International Congress  
 "HIV Drug Therapy",  
 X, 2018, Glasgow)

*(translated from Latvian)*

Glasgow congress still remains the most welcoming one to community educators.

The congress exhibition hall is not crowded as less companies are still in the AIDS field – with only "Gilead", "ViiV", "MSD" and "Janssen" presented.

AIDS geography has not yet changed with **HIV rates still rising in E Europe (including Baltics)** and C Asia. As the president of IAS Linda G. Bekker (S. Africa) has put it: "...This is sub-Saharan Africa happening all over again...a whole region where the virus is actually on the increase...**The leadership is missing here. The political will is missing here**".

Statistically: virally suppressed are 92%, 78% and 74% of patients in Western, Central and E Europe respectively (*keynote lecture KL2*).

Anyway, this congress is on **HIV drugs**. So, about the novel ones:

There are two ongoing Phase III trials, investigating the efficacy of the following ones for heavily treatment- experienced, multi- drug resistant and difficult-to-treat populations:

1) **Fostemsavir (FTR)** in a combination therapy was well tolerated, demonstrated durability of virological response and a notable improvement in CD4+ counts! (*oral O344*);

2) **Ibalizumab (IBA)** (*intravenous injections fortnightly with an optimized background regimen*) was also well tolerated and led to substantial viral load (VL) reductions. It is already approved by the U.S. FDA (O345);

And one more Phase III trial:

3) **Bictegravir (B)** – a novel, potent integrase strand transfer inhibitor (*in a single- tablet combination*) showed a good tolerability and safety profile, with no emergent resistance, and led to VL<50 in 100% of cases. CD4+ counts rose by 11% (*similar to Dolutegravir arm in this trial*). *Bictegravir* single- tablet combination is licensed by the U.S. and European regulators (O211).

### **Treatment simplification**

Triple therapy (TT) is still a standard in all the main guidelines.

Though, some **two drug combinations (DT – dual therapy)** are now recommended as alternative in guidelines for use in specific contexts (*poster P068*).

For example, 42,5% of 1526 HIV patients older than 65 years in Italy were taking DT in 2017 [*combinations with Dolutegravir (DTG) being the most popular*] (P155).

*Dolutegravir* was approved for triple combinations. However, very early physicians started to use *DTG* within different regimens, including DT (P098).

This time I shall not draw any tables comparing DT to TT – the table would be too long.

Enough to say that around 16 oral and poster presentations on cohorts, studies and a meta- analysis showed non- inferiority of DT compared to TT, with less adverse events and saving toxicity and future options, as stressed in several presentations (O144, O145, O213; P021, P071, P094, P096, P098, P101, P104, P113, P155, P297, P311, P313).

Even a cohort study (*Nobel Prize Laureate C. Katlama, Pitié- Salpêtrière Hospital*) of DTG mono- therapy (not recommended by any guidelines) at week 96 showed viral suppression in 95% of patients, reducing drug exposure and long- term toxicity (P095).

There were only two poster presentations in which TT was prioritized:

A cohort analysis has shown that TT (*in a single tablet*) has a greater treatment

persistence (*while adherence is much lower*) compared to DT (P087).

Anyway, there is no need for a switch unless there is a good reason for that, as dr P. Cahn (Buenos Aires) quoted during a post- congress webinar.

### **Tenofovir switch**

As some clinical cohorts and a study have shown – while switching from *TDF (tenofovir disoproxil fumarate)* to *TAF (tenofovir alafenamide)* worsens the lipid profile, it improves renal parameters (P206, P187, P188).

### **Cure research**

was covered in a couple of presentations.

Most experts agree that a remission (*preventing HIV replication in the absence of any therapy*) could be easier to achieve. Recent advances in using novel immunotherapies to reduce and control cancer cells gives inspiration to investigators (O216).

### **Poly- pharmacy**

- considered as an intake of ≥5 non- ARV medications – is still an issue. E.g., in Madrid area it was observed in 32% of HIV- positives and only in 22% of HIV- negatives (P211).

### **STI's**

incidence, both bacterial (*Chlamydia, gonorrhea etc.*) and viral (*hepC, hepA and human papillomaviruses*) is increasing worldwide, especially in MSM: due to less consistent use of condoms (O131).

E.g., syphilis co- infection has dramatically increased in Germany's HIV population, especially in younger MSM. Regular screening is extremely important as >1/2 of syphilis cases miss symptoms of infection. Decrease of absolute CD4 cell count could serve as one of the indicators (P214).

### **Dose reductions**

Lowering the dose of *Efavirenz (EFV)* has benefits in terms of side- effects and cost. The ENCORE1 study showed that *EFV400mg* was non- inferior to *EFV600mg* (see *info-sheets #27/2013, #28/2014*).

EFV400 was finally recommended as an alternative option for first- line treatment by WHO in 2016.

The NAMSAL ANRS 12313 study compared EFV400 and DTG based regimens.

It showed that both are equally effective, with less resistance in *DTG* regimen (O342).

### **But what about Dolutegravir price?**

And here we come to the guess of this info- sheet's title.

Latvia is the next in the list of *DTG* price worldwide after the U.S.A., leaving behind Norway, Switzerland, U.K., Australia, Canada, Japan and the rest of countries where *DTG* is cheaper!

In the SINGLE trial, DTG showed fewer adverse events than EFV as first- line treatment, but no difference in virological suppression, quality of life or survival.

In switching studies (*NEAT 022, SWORD, STRIVING*), DTG led to significantly higher rates of adverse events and no virological benefit. Yet, in upper- income countries, e.g., U.K., *DTG* costs £ 6068/year compared to £108 for *EFV* (P275).

Disregarding the similar efficacy profile (with moderate improvements in tolerability of DTG vs EFV), clinical guidelines from several high income countries (HICs) have downgraded EFV from a preferred option to an alternative treatment option.

While the patent of *EFV* has expired, *DTG* is sold at high prices due to ongoing patent restrictions. The prices of *DTG* seen in HICs and upper- middle ICs are likely set by pharma to gain substantial profits from a wealthier subset of the global population.

The higher prices of DTG may be a result of confidential agreements or ineffective price negotiations due to incomplete information of policymakers. Countries should use reported prices from other countries as a benchmark to negotiate lower prices of DTG ("Journal of Virus Eradication", #4/2018, pages 230-237).

Sorry for being over-serious - Unrevocably yours - A. Kalnins, AGIHAS