INTRODUCTION

This event is one of the most prestigious conferences worldwide about a single global health issue, and it is a unique forum for the interaction of science, health promotion and human rights. The motto of this edition, “Breaking barriers, building bridges” refers to the need for AIDS programs to be accessible to all people living with HIV in any environment or any country in the world, without distinction and without stigmas. In the literature, studies that investigate the official content of congresses as an indicator of quality are few [1].

Of all the presentations made in this congress, we have selected those topics that can modify or influence during the daily clinical practice regarding novelties in antiretroviral treatment and prevention of HIV infection. In the first issue, we have highlighted the GEMINI and DIAMOND studies. In the second one, we have chosen the second part of the PARTNER study and the presentation of the real-life results of pre-exposure prophylaxis in France.

GEMINI-1 and -2: Dual-Therapy With DTG Plus 3TC Non-inferior to DTG Plus FTC/TDF in Treatment-Naive Patients at Week 48: multicenter, parallel-group, double-blind, randomized phase III non-inferiority trials

This study, published by Cahn et al [2], showed that the virologic efficacy of a 2-drug regimen of dolutegravir (DTG) plus lamivudine (3TC) is non-inferior to 3-drug regimen of DTG plus emtricitabine (FTC)/tenofovir disoproxil fumarate (TDF) in treatment-naive patients at Week 48 (91% vs 93% with HIV-1 RNA < 50 copies/mL, respectively). These results are summarized in the figure 1.
Risk of HIV transmission through condomless sex in gay couples with suppressive ART: The PARTNER2 study extended results in gay men

This prospective, observational, multicenter study assessed HIV transmission risk in serodifferent men who have sex with men (MSM) couples reporting condomless sex when HIV-positive partner virologically suppressed [4-6]. PARTNER2 followed MSM from 2014-2018 (included some MSM couples from PARTNER1). Ninety seventy-two couples MSM were recruited, of whom 783 contributed 1.596 eligible couple-years of follow up (CYFU). The main finding of the study was that no within-couple HIV transmissions were observed among 783 serodifferent MSM couples who reported condomless (CL) sex while the HIV-positive partner was receiving suppressive ART. Nevertheless, 15 HIV-negative men acquired HIV infection during follow-up, although none of these infections was phylogenetically linked to the HIV-positive partner. During almost 77,000 within-couple CL sex acts, upper 95% CI for rate of transmission between MSM was 0.23/100 CYFU. This data shows, with more statistical certainty than in the PARTNER1 study, that the risk of HIV transmission from an HIV-positive partner who has undetectable HIV-1 RNA is effectively zero.

Incidence of HIV-Infection in the AVRS Prevenir Study in the Paris Region with daily or On Demand PrEP with TDF/FTC

Molina et al. [7] showed the real-life data of the PrEP (pre-exposure prophylaxis) application in Paris. PREVENIR is a multicenter, open-label, prospective cohort study in Paris that includes HIV-negative adults at high risk of HIV infection with inconsistent condom use. At the beginning of the study, participants choose between daily or on demand prophylaxis, being able to change their arm during the course of the same. A total of 1,594 participants were enrolled, 98% MSM. The primary endpoint was a ≥ 15% reduction in new HIV diagnoses among MSM in Paris vs rate reported by National Surveillance network in 2016. Secondary endpoints were to analyse PrEP adherence, sexual behaviour, and safety. At an average follow-up of 7 months, the incidence of HIV in both groups
was 0, and it was estimated that 85 HIV infections had been prevented. Regarding safety, 11 participants were diagnosed of viral hepatitis, including 7 cases of hepatitis C. Among the groups, the incidence of the first viral hepatitis was 1.1/100 patient-years for daily PrEP and 1.2/100 patients-year for PrEP on demand. In the adherence analysis, it was observed a high rate of correct PrEP use in daily and on-demand groups, being both of 96%. In terms of sexual behaviour, daily PrEP users reported higher numbers of condomless sex acts, and sexual partners at baseline.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

REFERENCES

2. Cahn P, Sierra Madero J, Arribas J. Non-inferior efficacy of dolutegravir (DTG) plus lamivudine (3TC) versus DTG plus tenofovir/emtricitabine (TDF/FTC) fixed-dose combination in antiretroviral treatment-naïve adults with HIV-1 infection - 48-week results from the GEMINI studies. Program and abstracts of the 22nd International AIDS Conference; July 23-27, 2018; Amsterdam, the Netherlands. Abstract TUAB0106LB.