Use of Dolutegravir for HIV treatment in clinical practice

INTRODUCTION

The aim of this study is to analyze the situations in which Dolutegravir (DTG) was used for the treatment of HIV patients.

MATERIAL AND METHODS

• **Retrospective descriptive** study of all patients that received Dolutegravir as part of antiretroviral treatment (ART) at the Infectious Diseases Department of La Princesa Hospital (Madrid), for the period between January - July 2015

• Advanced disease: C3 category according to the CDC Classification or CD4 <200/mm3

• Treatment failure: viral load ARN > 50 copies/mL
RESULTS

73 patients

- Pretreated 56 (77%)
- Naive 17 (23%)

- Failure 14 (19%)
- Switch (<50 copies) 42 (58%)

. Men (60 patients, 81.1%)
. Mean age of 47 years (20-64 range of age)
. MSM (27 patients, 36.5%) – IDU (24 patients, 32.4%).
. HCV (24 pts, 32.4%)
. Advanced disease presentation (29 patients, 39.2%)
. Follow up: 4 months (1-8 months)

• One case of post-exposure prophylaxis
• One third had a history of resistance to other ART (23 patients, 31.1%)
• One third (20 patients, 27%) had previously abandoned treatment
- SWITCH strategy: all patients remained with undetectable HIV viral load
- Efficacy as RESCUE therapy (4 out of 6 < 50 copies/mL)
- Limitation: short follow-up
- Post-exposure prophylaxis

NO SIGNIFICANT SECONDARY EFFECTS. One discontinuation of DTG (TDF/FTC)
DTG in NAIVE PATIENTS

- **17 patients**
  - Age 42 years (25-59)
  - Male 16 (94%)
  - MSM 14 (82%), IDU 2 (12%), Heterosexuals: 1 (6%)
  - 1 co-infected HCV-HIV
  - Hypertension and dyslipidemia (2)
  - 8 patients (47%) on drugs with potential interactions with other ART

- **Mean CD4**: 254/mm³ (4-788)
  - CD4>500: 4 (23.5%); CD4 200-500: 4 (23.5%); CD4<200: 9 (53%)
  - Viral load 5.4 log (20-3.790000 copies/ml)
  - <100.000: 7 (41%); >100.000: 10 (59%)

- **Asymptomatic (8 patients, 47%)**
  - C3: P. jirovecii 3, Esophageal candidiasis 3, CMV 2, Histoplasmosis 1, Kaposi S 1, NHL 1.
DTG in NAIVE PATIENTS

17 patients
ABC/3TC/DTG: 10 (59%)
TDF/FTC + DTG: 7 (41%)

HLA-B*5701 before initiating ART: 11 (65%)

HLA-B*5701 (-): 10
ABC/3TC/DTG: 10

HLA-B*5701 (+): 1
TDF/FTC + DTG: 1

HLA-B*5701 unavailable before ART 6 (35%)

TDF/FTC + DTG: 6

HLA-B*5701 (-): 6

ABC/3TC/DTG: 4
TDF/FTC + DTG: 2

Genotypic resistance test before initiating ART 71%
(2 pt – 11.7% NNRTIs)

ALL PATIENTS CONTINUE with DTG. NO ADVERSE EFFECTS
DTG in NAIVE PATIENTS

Virological efficacy

Mean CD4 494/mm³ (56-1644)
Mean increase 240 CD4/mm³

Immunologic recovery

Mean CD4 494/mm³ (56-1644)
Mean increase 240 CD4/mm³

Average follow-up: 3.5 months
CONCLUSIONS

- DTG is safe, well tolerated and effective in all the situations analyzed for the treatment of HIV

- Favorable results in naive patients, also those with AIDS, CD4 < 200/mm3 and CV > 100,000 copies/ml

- More analysis are warranted to obtain long term results.