P-10

Starting a multiple-tablet regimen in HIV naive patients: a cost-saving strategy (the START study)

Piter Oosterhof[1-2], Karin Grintjes[2], Matthijs van Luin[3], Reinout van Crevel[2] and David Burger[2]

1 OLVG hospital, Amsterdam, The Netherlands; 2 Radboud university medical center/Radboud Institute for Health Sciences, Nijmegen, The Netherlands; 3 Rijnstate hospital, Arnhem, The Netherlands

Background

In 2017, in the Netherlands, half of the patients newly diagnosed with HIV, started antiretroviral therapy (ART) within one month after the initial diagnosis. Many treatment naive patients are prescribed so called single tablet regimens (STRs).

However, use of STRs is associated with considerable expenses. In order to reduce costs, we decided to start newly diagnosed patients with a multi-tablet regimen (MTR) instead of a single-tablet regimen (STR). The MTR consisted of the backbone tenofovir disoproxil fumarate/emtricitabine (TDF/FTC) and dolutegravir (DTG) or raltegravir (RTG) as an integrase inhibitor.

Objectives

- To study compliance to the new policy by prescribers
- To study time till discontinuation of initial treatment
- To study reasons for discontinuation of initial treatment
- To investigate cost-saving of the new policy

Methods

From January to December 2018, all treatment naive HIV-infected patients who started combination antiretroviral therapy (cART) in the Radboudumc, were eligible for this study. Patients were prescribed first-line antiretroviral therapy (ART) with currently recommended or alternative regimens according to the DHHS Guidelines.

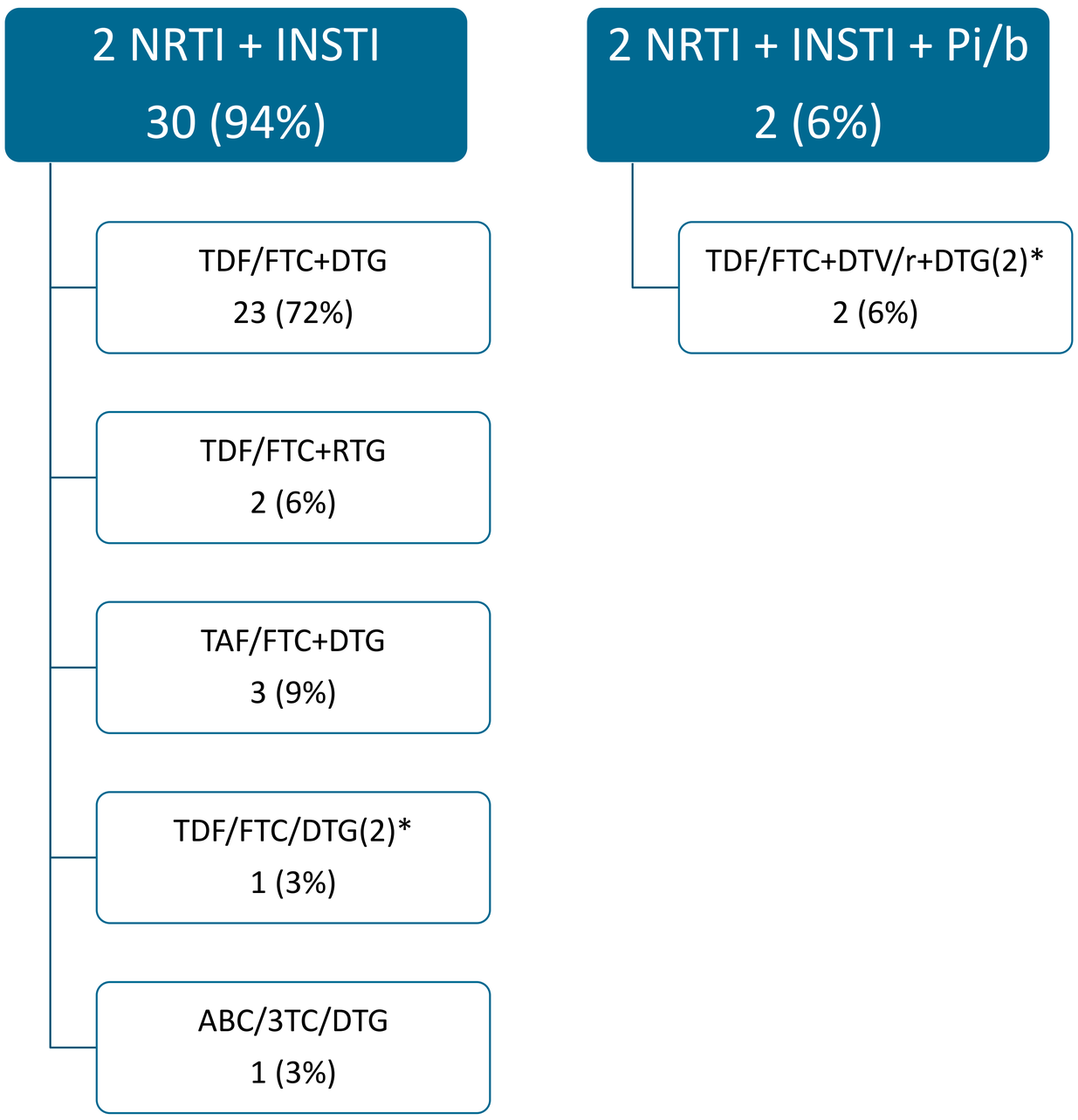
An MTR was preferred, although deviation was possible. Patient data were collected from the electronic patient files. Cost savings were calculated using Dutch drug prices. This first analysis reports on the compliance rates of starting an MTR, time and reasons for discontinuation of initial treatment and costs savings.

Results

A total of 32 patients were included in the study; demographic data of the respondents are shown in table 1 and treatment characteristics in figure 1. Twenty-six of the 32 patients (81%) started with the preferred MTRs, only 1 patient (=3%) started with an STR. The reasons for deviation were divers. Comorbidities (i.e. renal disease prohibitive for TDF treatment) were the main cause.

Discontinuation of the initial regimen are shown in table 2. Ten of the 26 patients (38%) stopped the initial prescribed MTR regimen, mainly due to simplification (n=5). In the total group (n=26), up to now, drug expenses were **€89.650** lower by using an MRT instead of an STR.

Figure 1: treatment characteristics



*** 2 stands for two tablets**

Table 2: treatment discontinuation

Treatment continuation n=26	
Discontinuation from initial regimen	
TDF/FTC+DTG	10 (38%)
TDF/FTC+RTG	0 (0%)
Time till discontinuation from initial regimen (months)	
Median (IQR)	7.5 (3.25-10)
Reason for discontinuation	
Tubular toxicity	2 (20%)
Simplification	5 (50%)
Comorbidity	3 (30%)

Table 1: demographics characteristics

Demographics n=32	
Gender, n(%)	
Male	29 (91%)
Female	3 (9%)
Mean age, years	41.3

Conclusion

Our new policy for starting an MTR in new HIV-infected patients was successful. Our data show a large cost saving in a small population. Sixty percent of the patients still use their MTR, after almost 2 years. Based on these data, it could be considered to further implement our START strategy in the Netherlands.

Presented at 12th edition of the Netherlands conference on HIV pathogensis, epidemiology, prevention and treatment; 2019, Amsterdam

Piter Oosterhof
Department of Pharmacy
OLVG Hospital
Oosterpark 9
1091 AC Amsterdam
The Netherlands
p.oosterhof@olvg.nl

olvg

Institute for Health Sciences
Radboudumc