

# Use of generic drugs in HIV: acceptance, adherence, quality of life and cost-effectiveness : the FUEL project P-17

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## Background

Combination antiretroviral therapy (cART) is used by an increasing number of HIV-infected individuals, for increasing lengths of time. As cART makes up a large proportion of chronic HIV-care costs, introduction of generic ART could lead to significant cost reduction. Generic substitution of cART has gained limited interest in The Netherlands so far. In our opinion, generic substitution in HIV-infected patients should be implemented with close monitoring, since life-long patient adherence is essential for continuous viral suppression.

## Objectives

- To study patient acceptance of generic HIV-medication substitution
- Whether switching from branded product to generics influences adherence
- To study quality of life in HIV-infected patients switching to generic cART
- To investigate cost-effectiveness of generic HIV-substitution

## Methods

All HIV-infected patients on branded nevirapine-extended-release (Viramune MVA<sup>®</sup>) and/or abacavir+lamivudine (Kivexa<sup>®</sup>) in the HIV treatment centers of Radboudumc and Rijnstate Hospital were included (February-August 2017). Patients were proposed by health care providers to switch to generic products ("opt-out"). An electronic validated questionnaire was sent to study patient acceptance, self-reported drug adherence and quality of life (SF12). If patients refused to switch to generic, the reason was documented, but the patient continued participation in the study. After 3 and 12 months questionnaires will be repeated. This first analysis reports on the acceptance rates of the generic switch, baseline data for patients' views on their current medication, and initial costs savings.

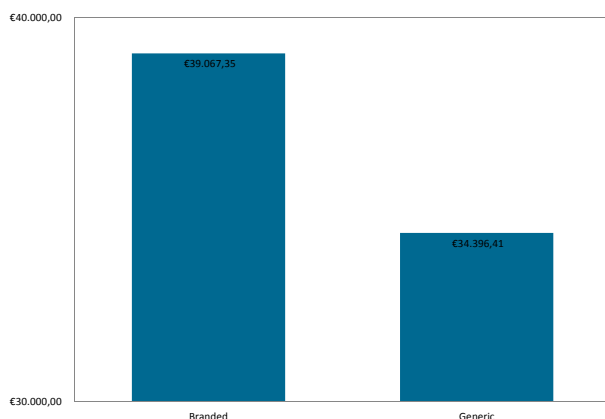
## Results

A total of 36 patients were included in the study; demographic, disease and treatment characteristics of the respondents are shown in table 1. Thirty-five of 36 patients (97%) agreed to switch to generic; the patient that refused gave as reason a bad previous experience. In the first 3 months of follow-up, 3 out of 35 (=9%) patients switched back to branded medication due to perceived side-effects (all abacavir+lamivudine). Baseline results of questionnaires (n=27) showed a high acceptance for the satisfaction about the HIV treatment: all patients scored maximal or sub-maximal satisfaction for 6 out of 10 questions. During this 3 months of follow-up drug expenses were 4670 € lower than in the 3 months prior to switch.

Table 1: demographics characteristics

Demographics n=36	
<b>Gender, n(%)</b>	
Male	28 (78%)
Female	8 (22%)
Mean age, years	54.9
<b>Health status</b>	
<i>HIV duration, years</i>	
Range	2-32
Mean	11.5
<b>Treatment status</b>	
<i>Treatment duration, years</i>	
Range	2.0-20.6
Mean	9.9
<i>Current treatment duration, years</i>	
Range	0.7-12.6
Mean	4.0
<i>Current daily number of tablets/capsules for cART</i>	
2	18 (50%)
3	18 (50%)
<i>Current number for other medications</i>	
None	7 (19%)
Only 1	5 (14%)
Between 2-3	15 (42%)
Between 4-6	4 (11%)
Between 7-9	11 (14%)
<i>Switched to generic (n=35)</i>	
Nevirapine MVA	8 (23%)
Abacavir/lamivudine	22 (63%)
Nevirapine + abacavir/lamivudine	5 (14%)

Figure 1 : first results on cost savings for generic prescribing in three months (n=35)



## Study continuation

- Including patients on emtricitabine/tenofovir disoproxil
- Including patients on emtricitabine/tenofovir disoproxil/efavirenz
- Implement FUEL-study protocol to other Dutch HIV-centers
- Investigate possibilities to split single tablet regimens (STR) into 1 or 2 generic cART

## Conclusion

- A pro-active policy for substituting HIV-infected patients on branded HIV-medication to generic at baseline was highly successful.
- First data show a high patients acceptance of treatment at baseline
- Only 9% of patients switched back to branded medication within 3 months after substitution.
- Patients infected with HIV appear to be open for changing branded medication to generic.

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