

Subgroup analysis of DUAL clinical trial (GESIDA-8014-RIS-EST45)

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DUAL-GESIDA-8014-RIS-EST45 Study Group

INTRODUCTION

Dual therapy with a boosted protease inhibitor and Lamivudine can have advantages in terms of toxicity and costs

OLE¹, SALT² and ATLAS-M³ have demonstrated that dual therapy (DT) with Lamivudine (3TC) and Lopinavir/r or Atazanavir/r is non inferior to triple therapy (TT) with 2 nucleos(t)ides and Lopinavir/r or Atazanavir/r for maintenance of virological suppression

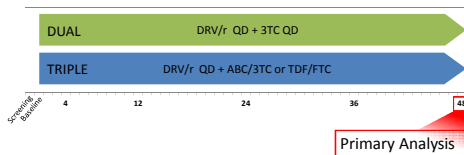
Boosted Darunavir is currently the preferred protease inhibitor in most international guidelines of HIV therapy. Switching to lamivudine and Darunavir/r (DRV/r) has been tested in a clinical trial (DUAL Study⁴), showing that switch to 3TC+DRV/r is non-inferior to maintenance of triple therapy with 2 nucleos(t)ides and DRV/r, in patients with suppressed viral load.

Here we present a subgroup analysis of the DUAL study results.

- 1- The Lancet Infectious Diseases 2015. 15:785-792.
- 2- Journal of Antimicrobial Chemotherapy 2017. 72:246-253.
- 3- Journal of Antimicrob Chemotherapy 2017. 72:1163-1171.
4. HIV Drug Therapy / Glasgow 2016. 23-26 October 2016, Glasgow, UK #0331

DUAL STUDY DESIGN

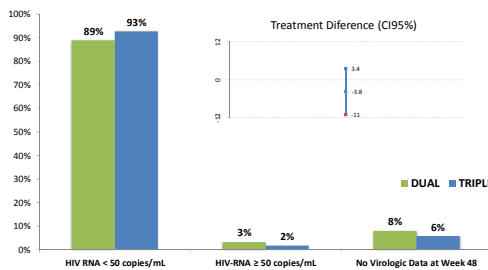
- VL < 50 c/mL > 6 months
- No resistance to DRV/r o 3TC
- On treatment with DRV/r + ABC/3TC or TDF/FTC ≥ 2 months
- HBsAg negative
- Randomized 1:1. Stratified by baseline nucleos(t)ides



PRIMARY ENDPOINT

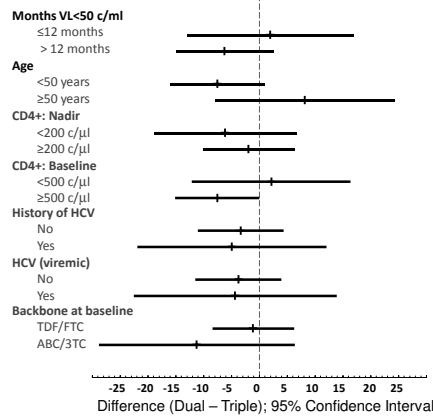
Proportion of patients with suppressed viral load (HIV-RNA < 50 copies/mL) after 48 weeks of follow-up according to the FDA snapshot algorithm in the ITT exposed population.

PRIMARY ENDPOINT: Snapshot, ITT-e population



SUBGROUP ANALYSIS

	TOTAL N = 249	Virological Success		Difference of Proportions (95%CI)	Interaction p-value
		DUAL N = 126	TRIPLE N = 123		
Months VL<50 c/ml					
≤12	61	37/40 93%	19/21 90%	2.0 (-13.0;17.0)	0.367
>12	186	73/84 87%	95/102 93%	-6.2 (-15.0;2.5)	
Unknown	2				
Age					
<50 ys	190	77/89 87%	95/101 94%	-7.5 (-16.0;0.9)	0.078
≥50 ys	59	35/73 95%	19/22 86%	8.2 (-7.9;24.3)	
CD4+: Nadir					
<200 cell/mm3	101	39/46 85%	50/55 91%	-6.1 (-19.0;6.7)	0.757
≥200 cell/mm3	145	71/77 92%	64/68 94%	-1.9 (-10.1;6.3)	
Unknown	3				
CD4+: Baseline					
<500 cell/mm3	92	40/46 87%	39/46 85%	2.2 (-12.1;16.4)	0.107
>500 cell/mm3	156	71/79 90%	75/77 97%	-7.5 (-15.1;0.0)	
Unknown	1				
History of HCV					
No	189	85/94 90%	89/95 94%	-3.3 (-11.0;4.4)	0.985
Yes	60	27/32 84%	25/28 89%	-4.9 (-21.9;12.1)	
HCV (viremic)					
No	214	95/107 89%	99/107 93%	-3.7 (-11.5;4.0)	0.929
Yes	35	27/32 89%	15/16 94%	-4.3 (-22.5;13.9)	
Backbone at baseline					
Tenofovir/emtricitabine	186	86/93 92%	87/93 94%	-1.1 (-8.4;6.3)	0.444
Abacavir/lamivudine	63	26/33 79%	27/30 90%	-11.2 (-28.8;6.4)	



RESULTS

There were no significant differences in efficacy when different subgroups were analyzed:

- time with viral load < 50 c/mL: > or < 12 months;
- Age: > or < 50 ys;
- CD4+ nadir: > or < 200;
- Baseline CD4+: > or < 500;
- HCV seropositivity;
- HCV replication; and
- Baseline nucleosides: (TDF/FTC or ABC/3TC).

In the whole population, switching to DT was not associated with significant changes in e-GFR and TC/HDL ratio relative to maintaining TT.

At baseline, patients treated with TDF/FTC had significantly:

- lower total-cholesterol (tC): 178 vs 202 mg/dl,
 - lower LDL-cholesterol: 109 vs 122 mg/dl,
 - lower triglycerides (Tg): 127 vs 146 mg/dl,
- but similar tC/HDL ratio: 4 vs. 4.

In those patients switching from TDF/FTC, there was a non-significant trend towards higher increases in tC, LDL and Tg, without changes in Tc/HDL ratio.

Changes in the estimated glomerular filtrate, or the proportion of patients with proteinuria, or pathologic uric acid or phosphate excretion between arms were not different when patients with TDF/FTC or ABC/3TC at baseline were compared.

CONCLUSIONS

Switching to 3TC+DRV/r dual therapy in patients with suppressed viral load for more than 6 months maintains similar efficacy to triple therapy irrespective of the length of undetectability, age, nadir or baseline CD4+ count, HCV coinfection or baseline nucleosides.

No differences were seen in changes of lipids or renal function between patients switching from TDF/FTC or ABC/3TC.

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Patients
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