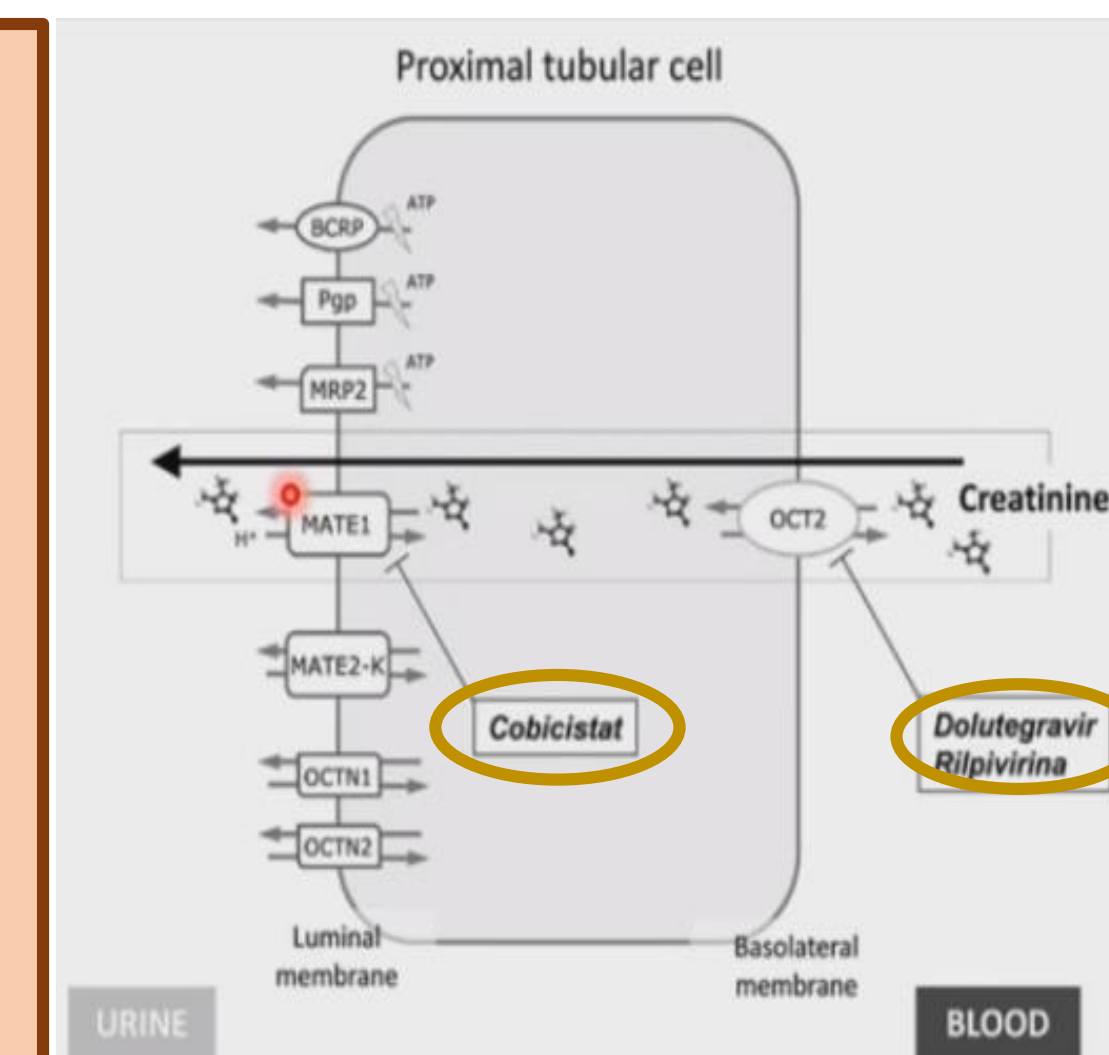


# Evolution of renal function in patients starting simultaneous therapy with DRV/c and DTG

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## INTRODUCTION

Dual therapy with DRV/c-DTG an attractive option for antiretroviral treatment in some cases, due to high genetic barrier, simplicity and absence of analogues. Patients on ART are progressively older and have an increasing comorbidity. Many of them have some degree of renal failure, or risk factors for development. DTG and DRV/c inhibit tubular secretion of creatinine at different levels, resulting in elevations in creatinine serum values, and decrease in estimated glomerular filtration rate (eGFR) by conventional methods. It is unknown if this effect is additive.



→ The objective of this study was to evaluate changes in renal function in patients starting simultaneous treatment with DRV/c-DTG.

## MATERIAL AND METHODS

Retrospective study that included all patients under treatment with DRV/c-DTG. Presence of other drugs in the scheme was allowed. Creatinine levels and eGFR (CKD-EPI) previous to dual therapy were compared with those available in the first control and at 24 weeks. Treatment scheme immediately prior to dual therapy was recorded, as well as presence of TDF.

The variation of renal function was compared with that described in the literature, and observed in two previous own series:

- one of patients who start DRV/c as a simplification from DRV/r,
- another one of naïve patients who start DTG.

## RESULTS:

Table 1: baseline characteristics of patients

Baseline characteristic	n=49
Age, y (m±DE)	49,96 ± 9,62
Male gender (n, %)	22 (61,1%)
Risk group(n,%)	
- IDU	18 (50%)
- HSH	9 (25%)
- HTX	7 (19,4%)
- Other	2 (5,6%)
DTG-DRV/c indication	
- Salvage therapy VF/LLV	13 (36,1%)
- Simplification/toxicity	23 (63,9%)
Length HIV infection, y (m±DE)	19,75 ± 9,15
Time on ART, a (m±DE)	13,58 ± 7,22
Previous CDC-C event/AIDS (n,%)	22 (61,1%)
CD4 nadir <200cels/μl (n, %)	29 (80,5%)

Tabla 2: evolution of renal function

	Baseline	1 <sup>st</sup> control	Δ (baseline)	p (IC 95%)	24 s	Δ (1 <sup>st</sup> control)	p (IC 95%)
Cr, mg/dL (m±DE)	0,93 ± 0,27	0,99 ± 0,3	<b>0,06</b>	<b>0,03</b> (0,006 - 0,11)	1,01 ± 0,39	0,01*	0,7 (-0,07 - 0,05)
eGFR, ml/min (m±DE)	89,21 ± 23,35	85,16 ± 23,53	<b>- 4,05</b>	<b>0,06</b> (-0,19 - 8,28)	82,06 ± 23,54	-1,64	0,24 (-1,15 - 4,43)

→ An increase of 0.06 mg/dL (6.45%) in creatinine levels was observed after the onset of DRV/c-DTG (p = 0.03).

→ At the same time, a decrease of 4.05 ml/min/1.73m<sup>2</sup> in the eGFR was observed, although did not reach statistical significance (p = 0.06).

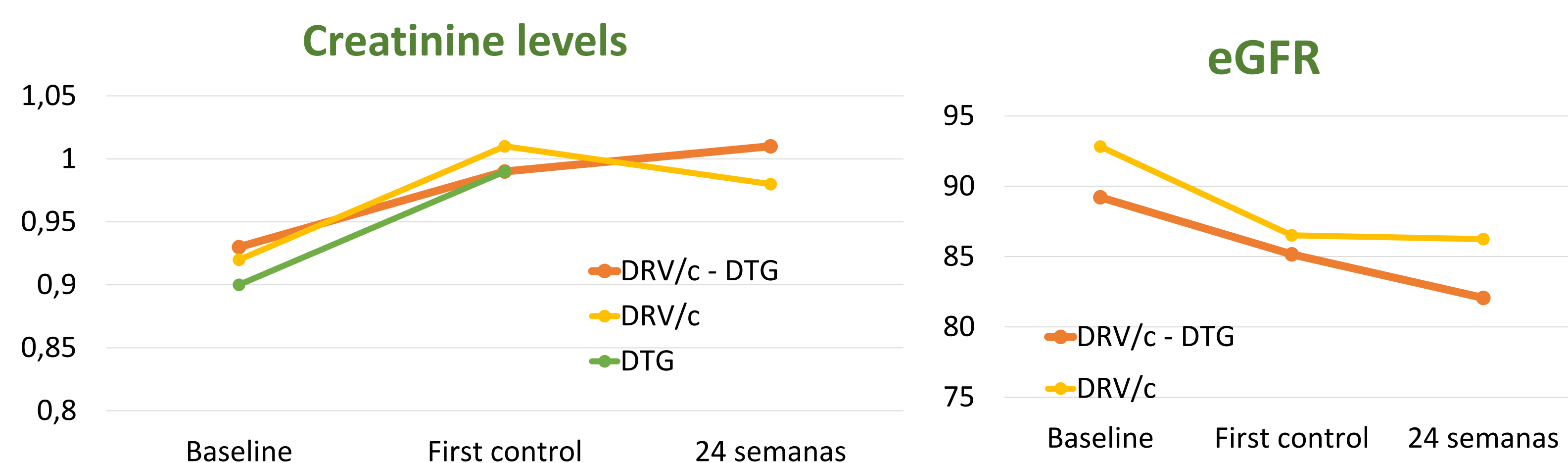


Figure 1: Changes on renal function

Table 3: Changes on renal function according to previous ARV

Previous ARV	N=36	Baseline Cr, me	Control Cr, me	Baseline eGFR	Control eGFR
Not DTG, not cobicistat	16 (44,4%)	0,87	0,98	88,7	89,9
DTG	7 (19,4%)	0,73	0,73	101,7	103,0
Cobicistat	15 (65,2%)	0,87	0,96	98,0	89,8
DTG + cobicistat	3 (8,3%)	0,70	1,1	99,0	71,4*
Boosted PI (n,%)	28 (77,8%)	0,91	0,95	88,45	88,02
TDF (n,%)	13 (36,1%)	0,99	1,04	83,83	80,71

## CONCLUSION:

In patients on treatment with DRV/c and DTG, a slight initial increase in serum creatinine levels was observed, with the decrease in eGFR, non-progressive and similar to previously described with DRV/c and DTG separately.