

# HIV: dalla ricerca alla clinica

## CASO CLINICO 2011-2014

Progetto Pandora

*Osp. San Paolo, 12 maggio 2014*



**Stefano Rusconi**

*Clinica Malattie Infettive, Osp.L.Sacco, Milano - UNIMI*

# ANAMNESI

- SESSO M
- ETA' 52 aa
- razza caucasica
- HIV-Ab positivo noto dal 1986

- EPIDEMIOLOGIA: ex-TD

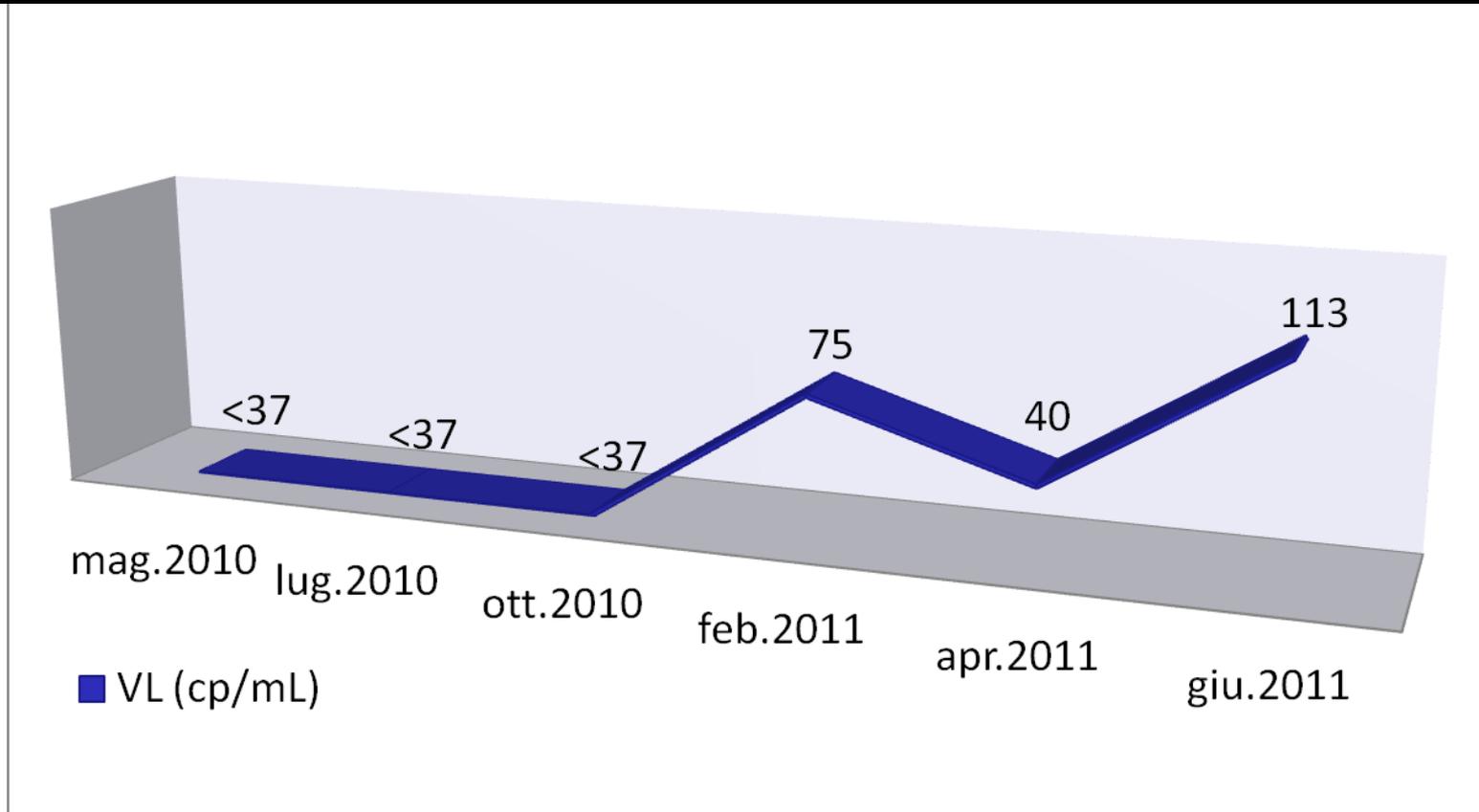
- Anamnesi patologica:
  - condilomatosi anale
  - epatopatia HCV correlata (genotipo 1b)  
→ tentativo trattamento 2006 / 2007

## Regimi terapeutici utilizzati 1993/2010

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
AZT	mar.1993	giu.1996	/	/	/	/	
AZT + ddl	giu.1996	apr.1997	200	535	/	9520	VL
d4T + 3TC	apr.1997	gen.1998	535	650	9520	7435	VL
d4T + 3TC + IDV	gen.1998	dic.2000	650	1059	7435	<80	semplificazione
d4T + 3TC + EFV	dic.2000	set.2002	1059	1127	<80	<50	formicolii arti, gonfiore add.
AZT + 3TC + EFV	set.2002	apr.2003	1127	849	<50	<50	intolleranza EFV
AZT + 3TC + TDF	apr.2003	gen.2004	849	696	<50	17814	STI
LPV/r + NVP	mag.2004	giu.2004	524	798	218183	952	intolleranza a tpARV
NVP + NFV	giu.2004	apr.2005	798	776	952	<50	sospensione ↑ tran.
3TC + EFV + LPV/r	mag.2005	ott.2005	635	720	485175	<50	tossicità terapia
fAPV + ATV/r + TDF + FTC	ott.2005	feb.2006	720	748	<50	<50	tossicità fAPV
SQV + ATV/r + TDF + FTC	feb.2006	mag.2010	748	886	<50	<37	sospetta tossicità TDF

# 2010 / 2011

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
ATV/r + RAL	mag.2010	...	886	...	<37	...	...



**Resistance associated RT Mutations: K70R, E138A, T215S\*Y**

**Nucleoside and Nucleotide RT Inhibitors**

**Resistance Interpretation**

abacavir (ABC)	No Evidence of Resistance
didanosine (ddI)	No Evidence of Resistance
lamivudine (3TC)/emtricitabine (FTC)	No Evidence of Resistance
stavudine (d4T)	<b>Resistance</b>
tenofovir (TDF)	No Evidence of Resistance
zidovudine (AZT)	<b>Resistance</b>

**NonNucleoside RT Inhibitors**

**Resistance Interpretation**

efavirenz (EFV)	No Evidence of Resistance
etravirine (ETR)	<b>Possible Resistance</b>
nevirapine (NVP)	No Evidence of Resistance

**Resistance associated PR Mutations: No relevant mutations detected.**

**Protease Inhibitors**

- atazanavir (ATV)  
ATV/r \*\*
- darunavir + ritonavir (DRV/r)
- fosamprenavir (FPV)  
FPV/r \*\*
- indinavir (IDV)  
IDV/r \*\*
- lopinavir + ritonavir (LPV/r)
- nelfinavir (NFV)
- saquinavir + ritonavir (SQV/r)
- tipranavir + ritonavir (TPV/r)

**II. Substitutions**  
(relative to the reference strain HXB2)

Integrase:	G123S, A124NT, R127K, M154I
------------	-----------------------------

**III. Rules-based resistance analysis**

Drug	Prediction	Scored Mutations
RAL	susceptible	
EVG	susceptible	

**IV. Predicted resistance (beta version)**

Drug	Prediction	Scored Mutations
RAL	1.8	154I, 124N
EVG	1.2	154I

giugno  
2011

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
ATV/r + TDF + FTC	set.2011	ott.2011	1232	985	123	<37	ipofosfatemia
ATV/r + ddI + 3TC	ott.2011	...	/	...	/	...	...

Relevant RT Mutations: **M41L**, D67N, K70R, **M184V\***, T215Y\*

**Nucleoside and Nucleotide RT Inhibitors**

**Resistance Interpretation**

zidovudine	Resistance
didanosine	Resistance
zalcitabine	Resistance
lamivudine	Resistance
stavudine	Resistance
abacavir	Resistance
→ tenofovir	Resistance
foscarnet	Insufficient Evidence

**NonNucleoside RT Inhibitors**

**Resistance Interpretation**

nevirapine	No Evidence of Resistance
delavirdine	No Evidence of Resistance
efavirenz	No Evidence of Resistance

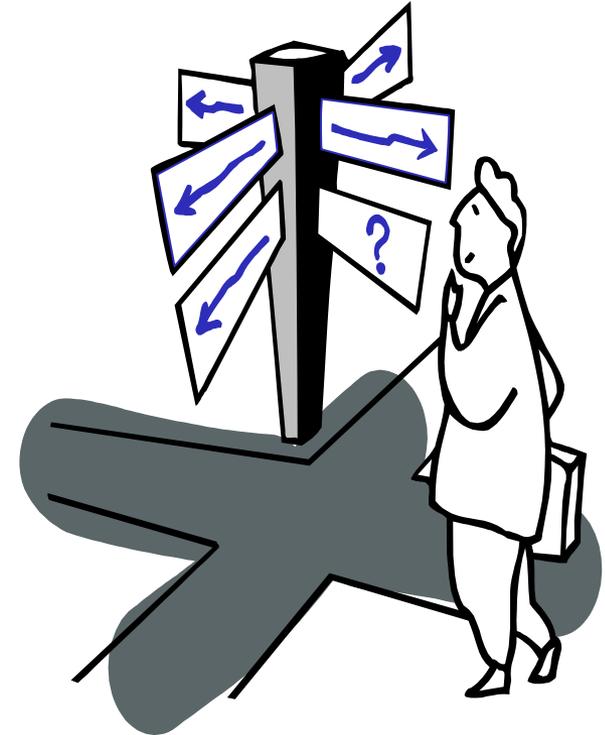
Relevant Protease Mutations: No relevant mutations detected.

**Protease Inhibitors**

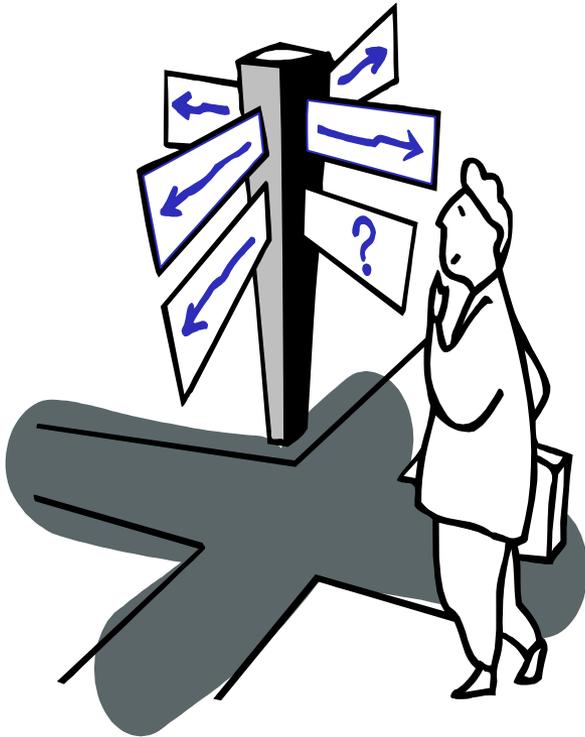
**Resistance Interpretation**

saquinavir	No Evidence of Resistance
indinavir	No Evidence of Resistance
( ritonavir )	No Evidence of Resistance
nelfinavir	No Evidence of Resistance
→ amprenavir	No Evidence of Resistance
lopinavir + ritonavir	No Evidence of Resistance
→ atazanavir	Insufficient Evidence

a sorpresa ....  
ottobre 2003

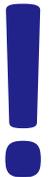


**18 Novembre 2011**



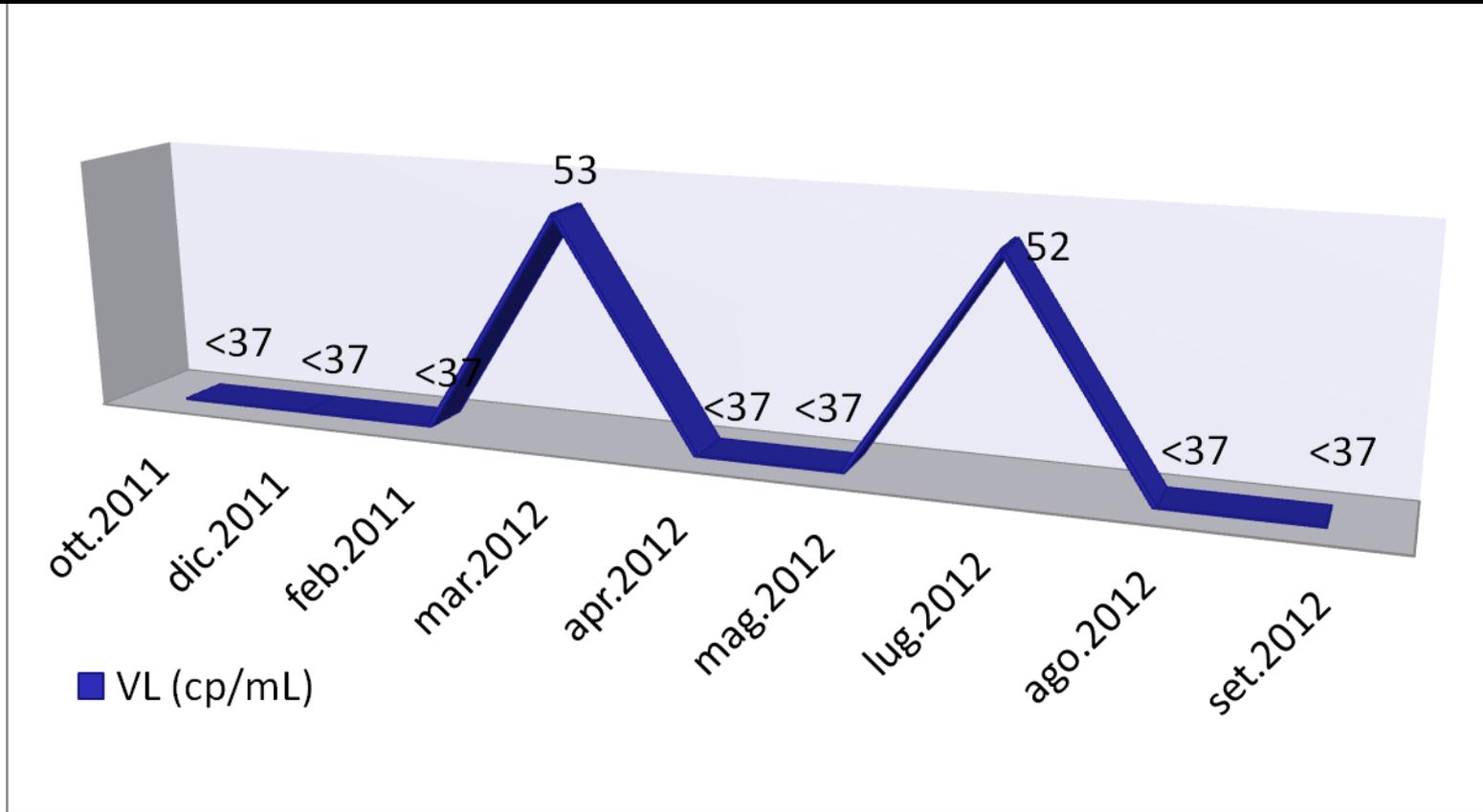
**....e vedere di nascosto  
l'effetto che fa.....**

**poi  $DRV 800/r+ETR$  qd**



# 2011 / 2012

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
ATV/r + ddl + 3TC	ott.2011	sett.2012	985	1078	<37	<37	neuropatia arti inf.



# 2011 / 2012

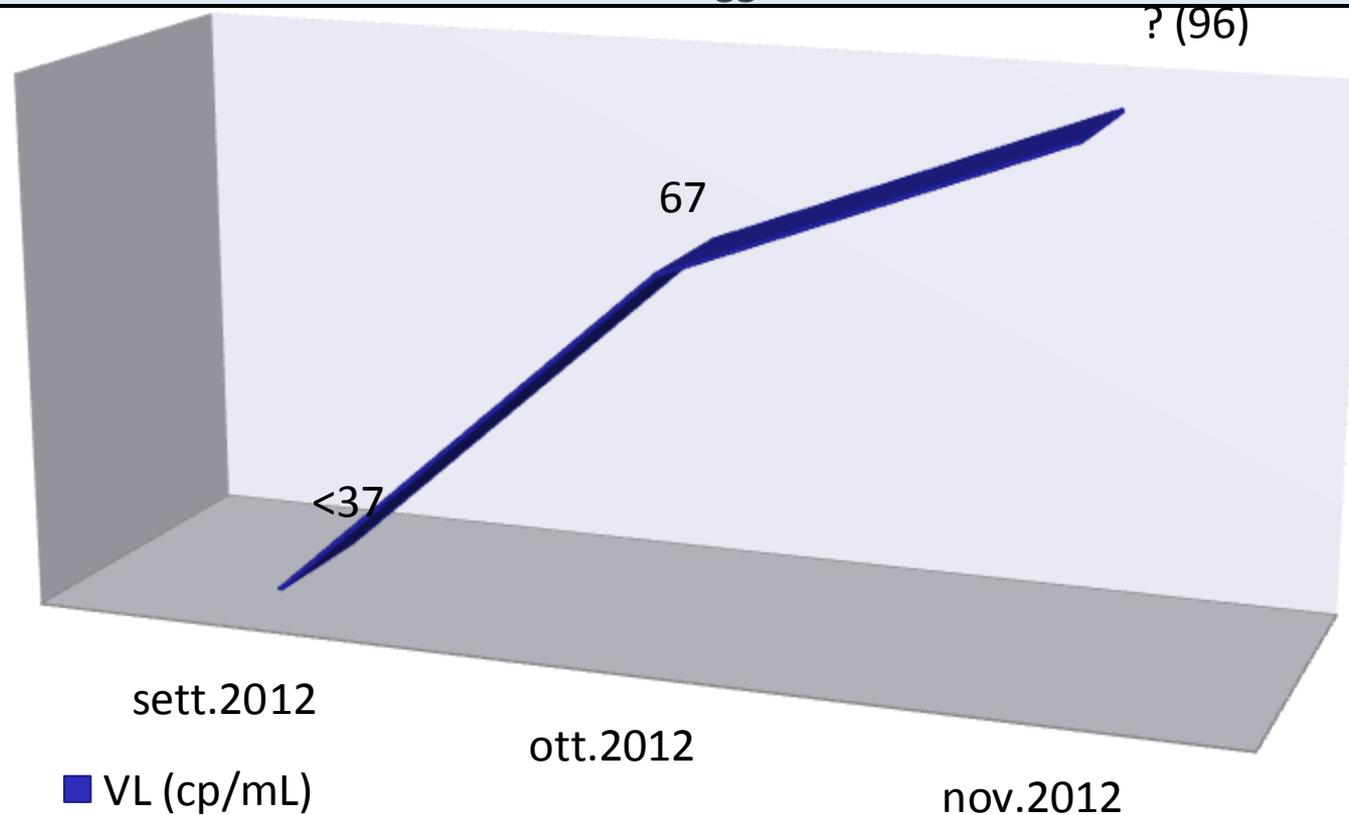
TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
ATV/r + ddl + 3TC	ott.2011	sett.2012	985	1078	<37	<37	neuropatia arti inf.

Resistance associated RT Mutations: K70R, E138A, T215S*/Y	
Nucleoside and Nucleotide RT Inhibitors	Resistance Interpretation
abacavir (ABC) didanosine (ddI) lamivudine (3TC)/emtricitabine (FTC) stavudine (d4T) tenofovir (TDF) zidovudine (AZT)	No Evidence of Resistance No Evidence of Resistance
Relevant RT Mutations: M41L, D67N, K70R, M184V*, T215Y*	
Nucleoside and Nucleotide RT Inhibitors	Resistance Interpretation
efavirenz (EFV) etravirine (ETR) nevirapine (NVP)	
Resistance associated PR Mutations: No	
zidovudine didanosine zalcitabine lamivudine stavudine abacavir → tenofovir foscarnet	Resistance Resistance Resistance Resistance Resistance Resistance Resistance Insufficient Evidence

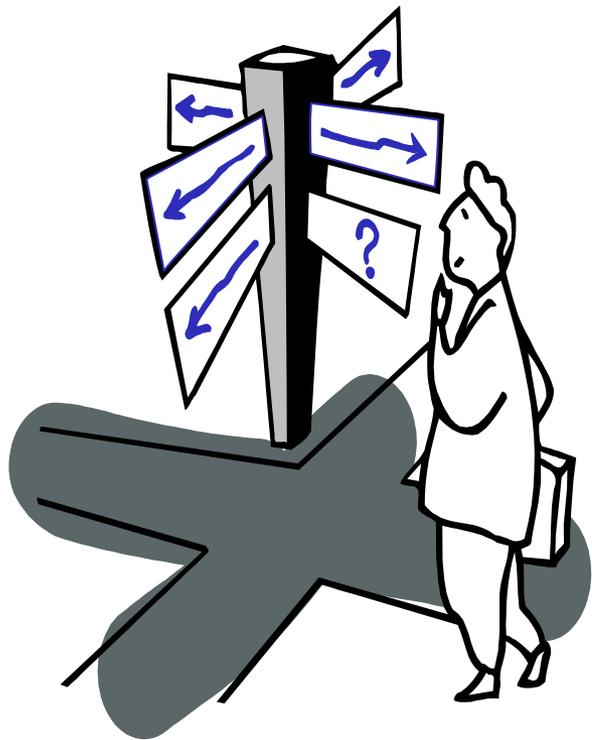
# Novembre 2012

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
ATV/r	sett.2012	oggi	1078	850	<37	96	VL / monoTp

? (96)



# 5 Novembre 2012

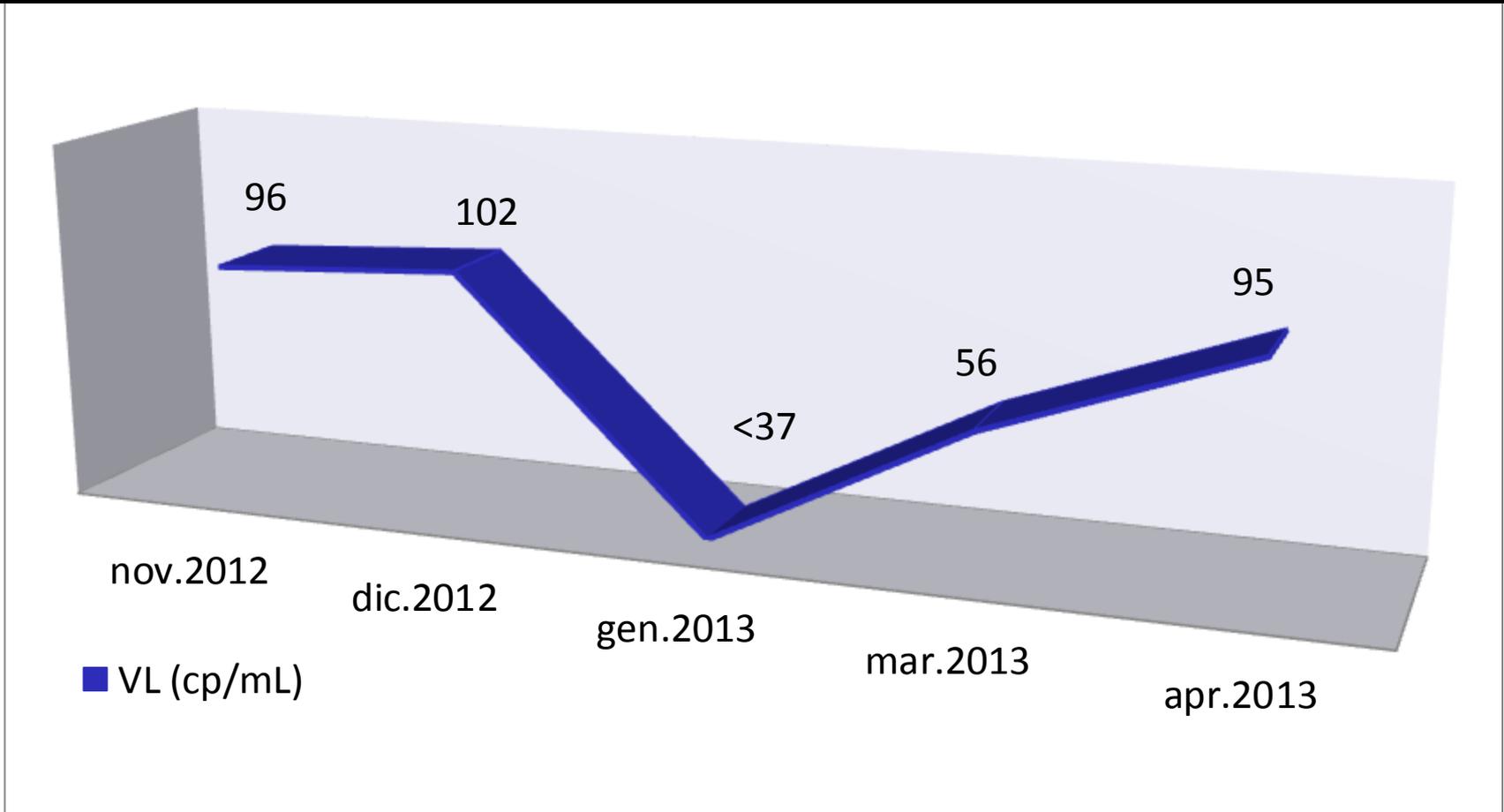


....non rischiare:  
passare a  
DRV 800/r+ETR od  
per ~2 mesi,  
poi con VL neg  
passare a monoTp con DRV/r



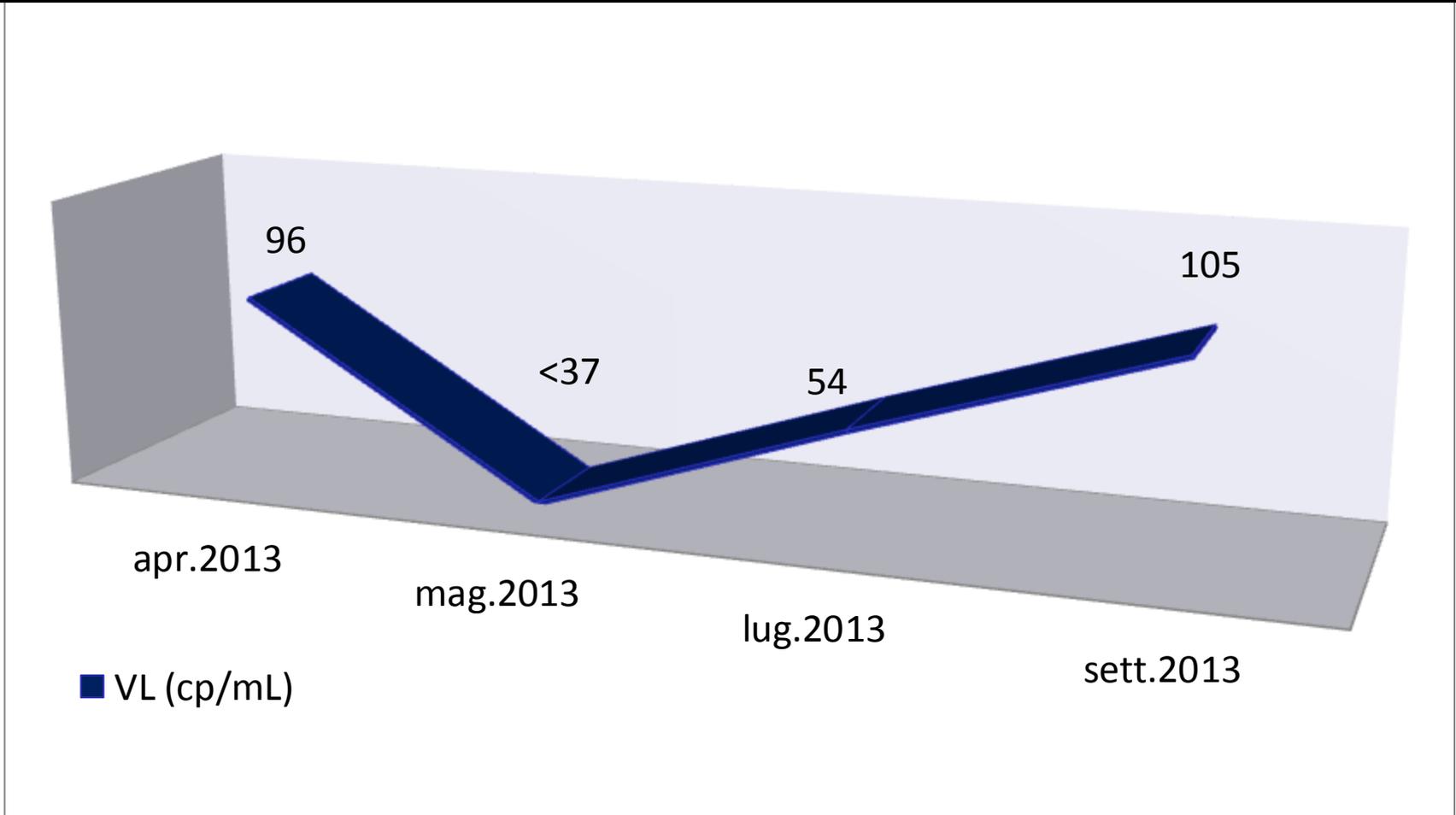
# 2012 / 2013

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
DRV/r+ETR	nov.2012	...	850	...	96	...	...



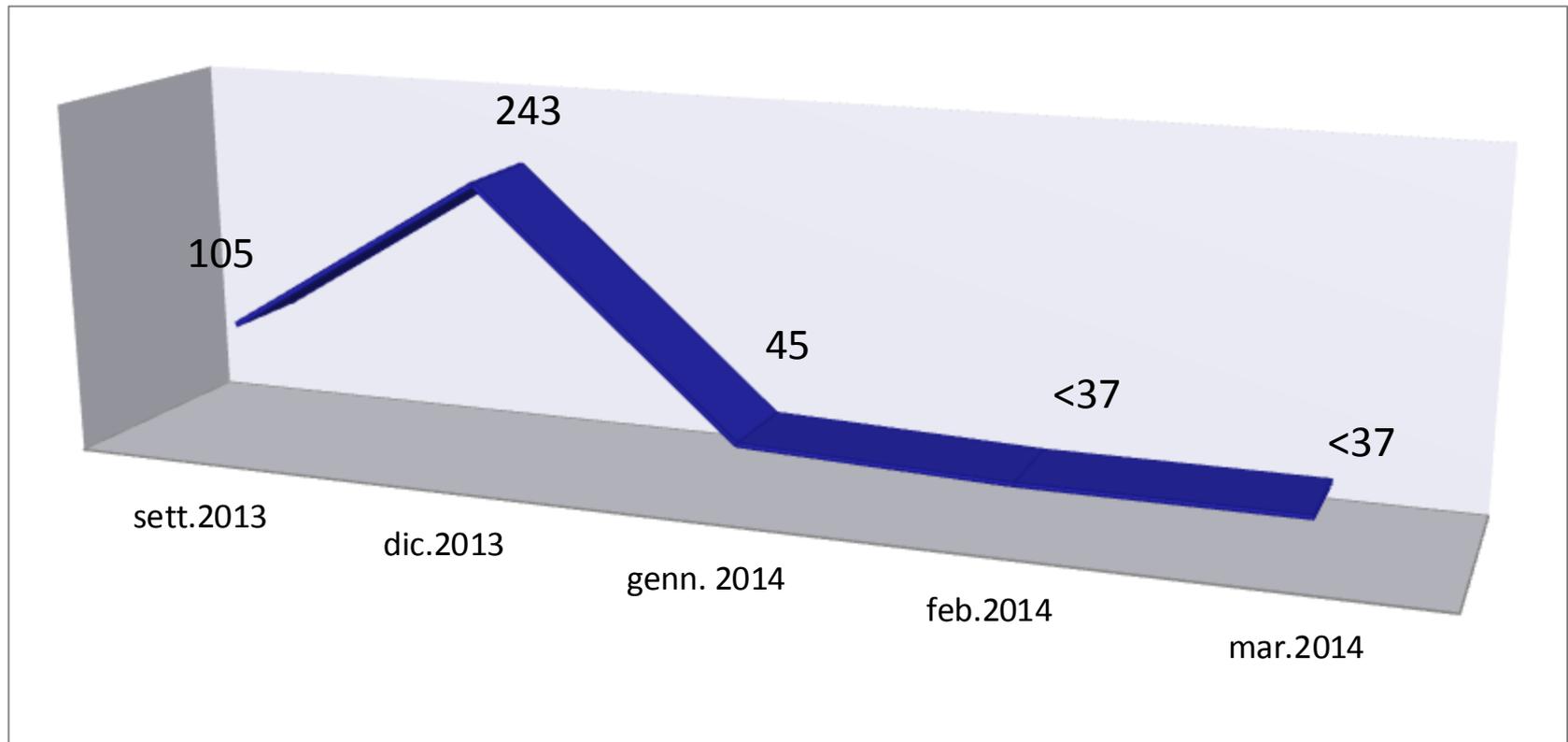
# 2013

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
DRV/r+ETR	nov.2012	apr.2013	850	1154	96	95	VL pos
DRV/r+ETR+RAL	mag.2013	...	1154	...	95	...	...



# ..... dalla seconda metà 2013 ad oggi

TERAPIA	DATA INIZIO	DATA FINE	SPL INIZIO	SPL FINE	VL INIZIO	VL FINE	MOTIVO CAMBIAMENTO
DRV/r+ETR+RAL	mag.2013	sett.2013	1154	952	95	105	VL pos
DRV/r+NVR	sett.2013	dic.2013	952	971	105	243	VL pos
DRV/r +RAL	dic.2013	....	971	...	243	...	....



# OGGI

- ✓ Paziente asintomatico
- ✓ Aderenza riferita 100%
- ✓ Controlli ematobiochimici nella norma ad eccezione di:
  - ✓ Colesterolo Totale (261mg/dL)
  - ✓ Trigliceridi (304 mg/dL)

**HIV-RNA = 111 cp/mL**