

HIV Case-Based surveillance in CAREC Member Countries: Technical aspects

Dr Ward Schrooten

*Serving
23 Member Countries
in the English and Dutch
Speaking Caribbean*

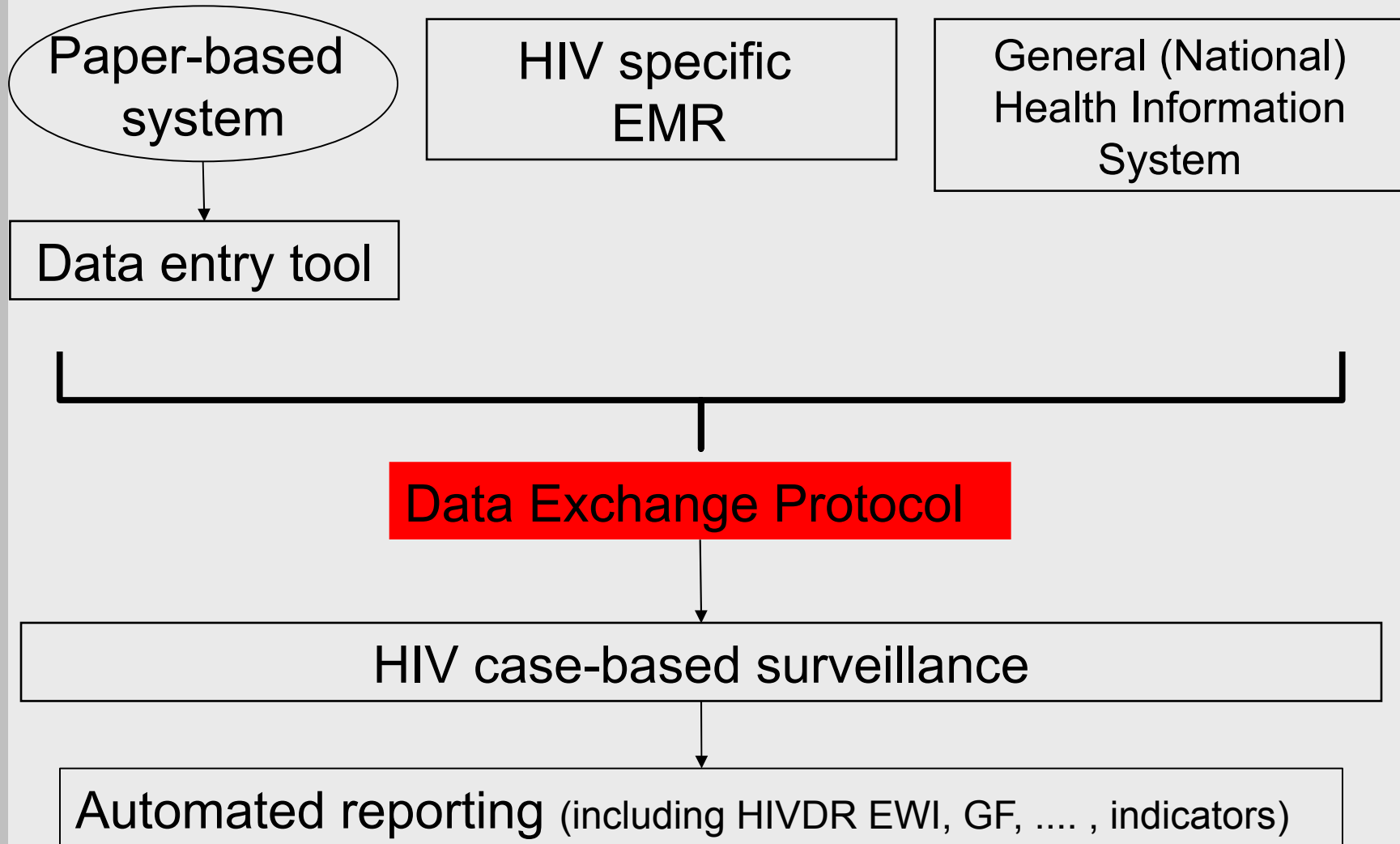
(CAREC)
PAHO/WHO



HIV case-based surveillance: 2 data sources

1. Data obtained at moment of HIV testing
 - Data collection at time of first positive HIV test
 - One time data collection
 - Limited number of variables
 - Multiple sites
2. Data obtained during follow-up in HIV clinic
 - = HIV patient monitoring system
 - = clinical cohort (vs interval based cohort)
 - Longitudinal follow-up: multiple data collection moments
 - Larger number of variables
 - Limited number of sites (only HIV clinics)

General concept



ID: 74 Birthday: 15-jun-68 Date enrolment: 04-jun-98 Date drop-out: Reason drop-out:

Code: EN Age: 42 Gender: F Transfer In:

Patient visit:

Date visit: today Date next visit:

Specification: Additional notes:

Result:

Record: of 25

- Baseline
- ART**
- CD4
- Viral load
- OI
- Hospitalisation
- Clin Meas
- Pregnancies
- Other Medication
- Adverse Events
- Lab
- Other diseases
- Additional Information
- Allergies

Current ART

Drug:	StartDate:	StopDate:	MainStop:
nevirapine	06-jul-02	<input type="text"/>	<input type="text"/>
lamivudine	06-jul-02	<input type="text"/>	<input type="text"/>
zidovudine	23-jul-03	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Record: of 3

Start ART: **06-jul-02**

Start ART after enrolment

Previous ART

Drug:	StartDate:	StopDate:	MainStop:
stavudine	06-jul-02	23-jul-03	Lipodystrophy

Record: of 1

Overview ART combinations:

06-jul-02	23-jul-03	lamivudine + nevirapine + stavudine	Lipodystrophy
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Add CD4 measurement

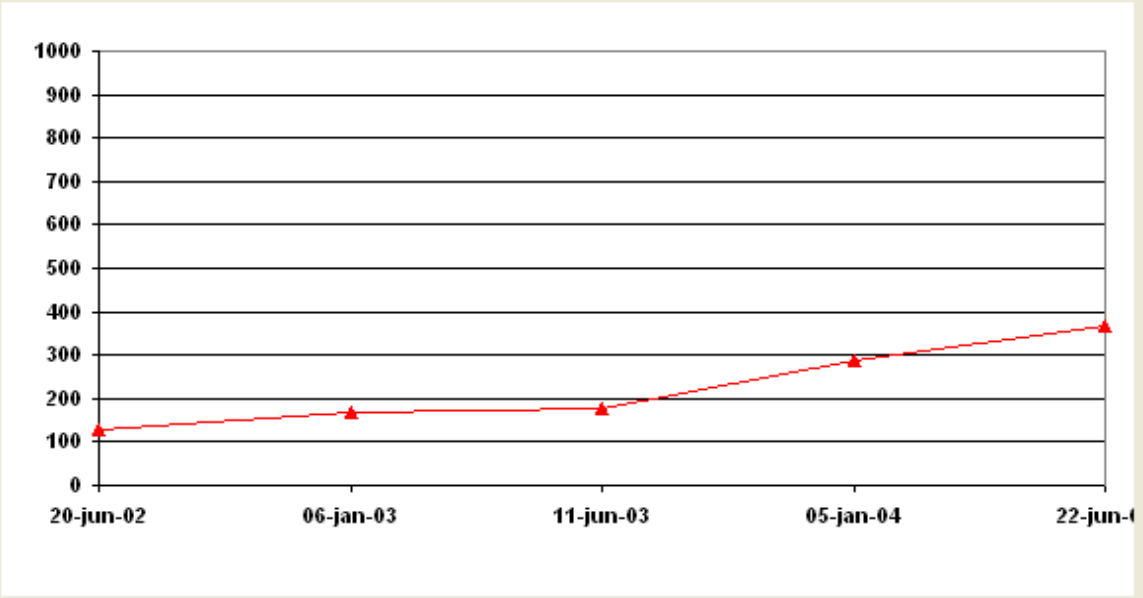
Overview CD4

CD4 value: Date:

Record: of 6

Date:	Value:
20-jun-02	<input type="text" value="127"/>
06-jan-03	168
11-jun-03	176
05-jan-04	286
22-jun-04	369

Record: of 5 (Filtered)



Demo data : 6 CMC's (N = 2583; 1656 started ART)

Gender	Freq.	Percent	Cum.
F	726	43.84	43.84
M	930	56.16	100.00
Total	1,656	100.00	

Year ART started	Freq.	Percent	Cum.
1994	1	0.06	0.06
1997	3	0.18	0.24
1998	1	0.06	0.30
1999	7	0.42	0.72
2000	6	0.36	1.09
2001	18	1.09	2.17
2002	183	11.05	13.22
2003	186	11.23	24.46
2004	168	10.14	34.60
2005	196	11.84	46.44
2006	209	12.62	59.06
2007	201	12.14	71.20
2008	223	13.47	84.66
2009	146	8.82	93.48
2010	108	6.52	100.00
Total	1,656	100.00	



Demo data : 6 CMC's (N = 2583; 1656 started ART)

CD4 at start ART	Freq.	Percent
0-50	203	12.26
050-100	138	8.33
100-200	235	14.19
200-300	189	11.41
300-500	167	10.08
500+	65	3.93
missing	659	39.79
Total	1,656	100.00

Age at start ART	Freq.	Percent	Cum.
0-15	25	1.51	1.51
15-25	161	9.72	11.23
25-35	466	28.14	39.37
35-45	577	34.84	74.21
45-55	296	17.87	92.09
55-65	103	6.22	98.31
65+	28	1.69	100.00
Total	1,656	100.00	

**Settings:**Outcome x years after start ART:

Start ART during period:

From: To: **Data:****View data:****Calculate tables:**Number of days: **HIV Drug Resistance Early Warning Indicators:****Outcome indicators:**

(1) Patient did not return to the ART site within 90 days after the last missed clinical consultation.

(2) No patient contact (clinical consultation, CD4 or VL measurement) since x number of days (x = user defined).

Outcome report

center name

Antiretroviral Treatment start between: 01-jan-07 and 01-jan-08

Evaluation: 1 year after start Antiretroviral Treatment

Survival:

Survival status at 1 year(s) after start ART:	Number of patients:	%
In followup	153	80,1
Deceased	13	6,8
LTFU	25	13,1
Total number of patients:	191	

Antiretroviral Treatment start between: 01-jan-07 and 01-jan-08

Evaluation: 1 year after start Antiretroviral Treatment

CD4 and VL measurements done during clinical follow-up:

Number of CD4 measurements done during evaluation period*	Number of patients:	%
0	29	15,2
1	32	16,8
2	33	17,3
3	35	18,3
4	38	19,9
5	16	8,4
6	4	2,1
7	3	1,6
8	1	0,5
Total number of patients:	191	

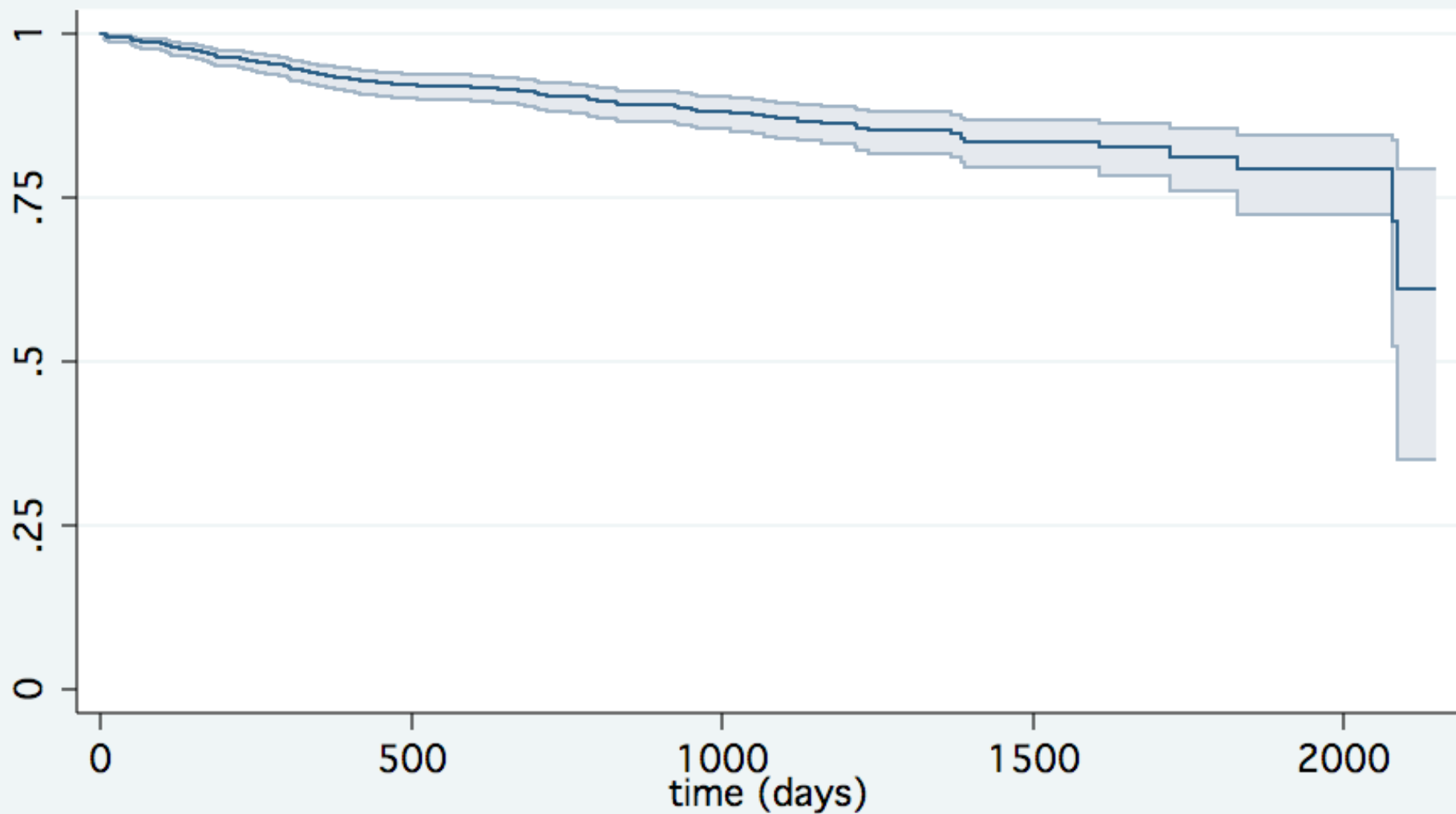
CD4 outcomes

CD4 level	At enrollment in HIV clinic			At 1 year(s) after start ART		
	Number of patients	%	% *	Number of patients	%	% *
<50 cells/mm ³	30	15,7	22,1	10	5,2	8,6
50-200 cells/mm ³	52	27,2	38,2	27	14,1	23,3
200-350 cells/mm ³	24	12,6	17,6	27	14,1	23,3
>350 cells/mm ³	30	15,7	22,1	52	27,2	44,8
no CD4 measurement	55	28,8		75	39,3	
Total number of patients:	191			191		

* Percentage on available cases only.

Kaplan-Meier survival estimate

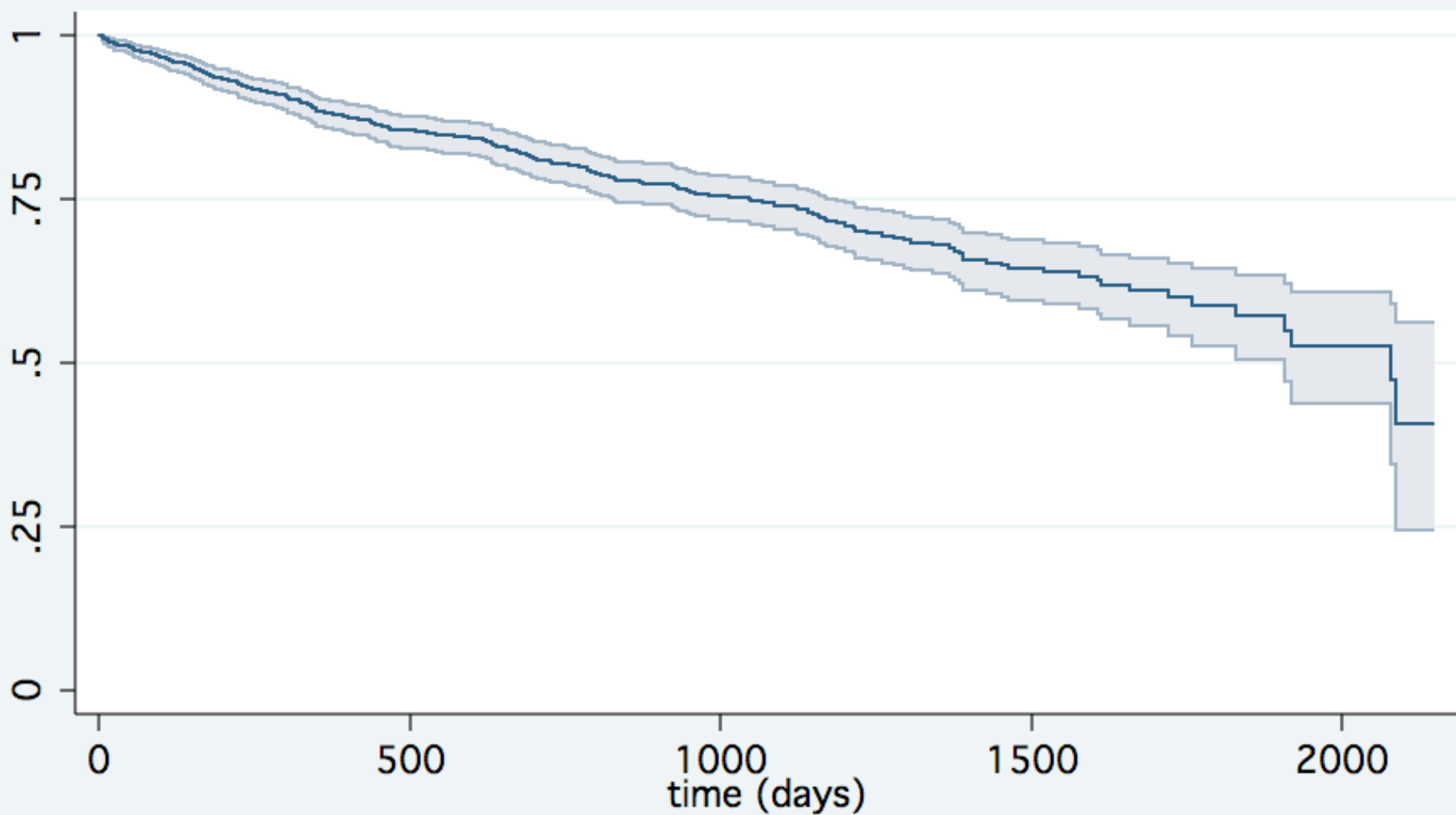
Failure = deceased



95% CI Survivor function

Kaplan-Meier survival estimate

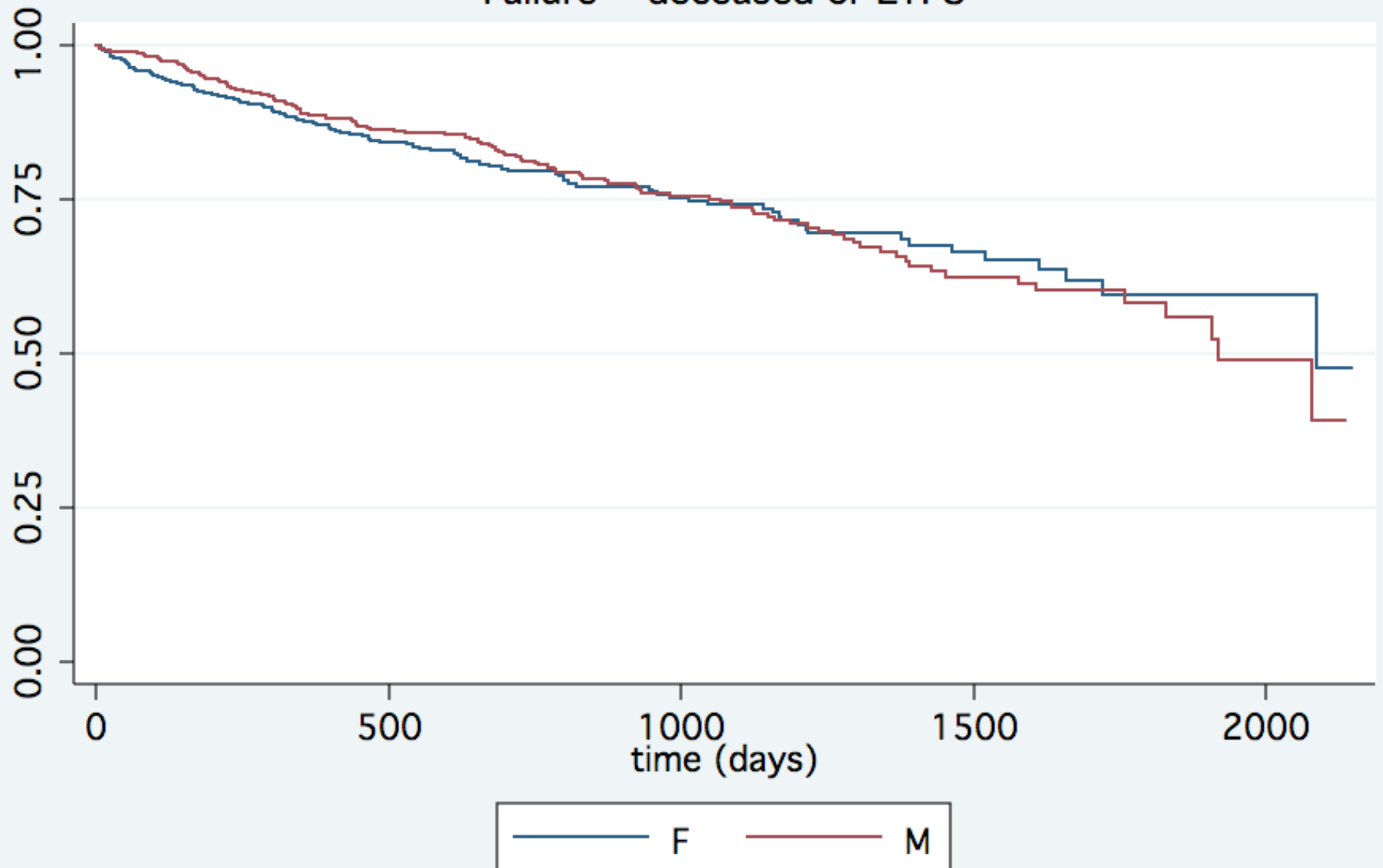
Failure = deceased or LTFU



95% CI Survivor function

Kaplan-Meier survival estimates

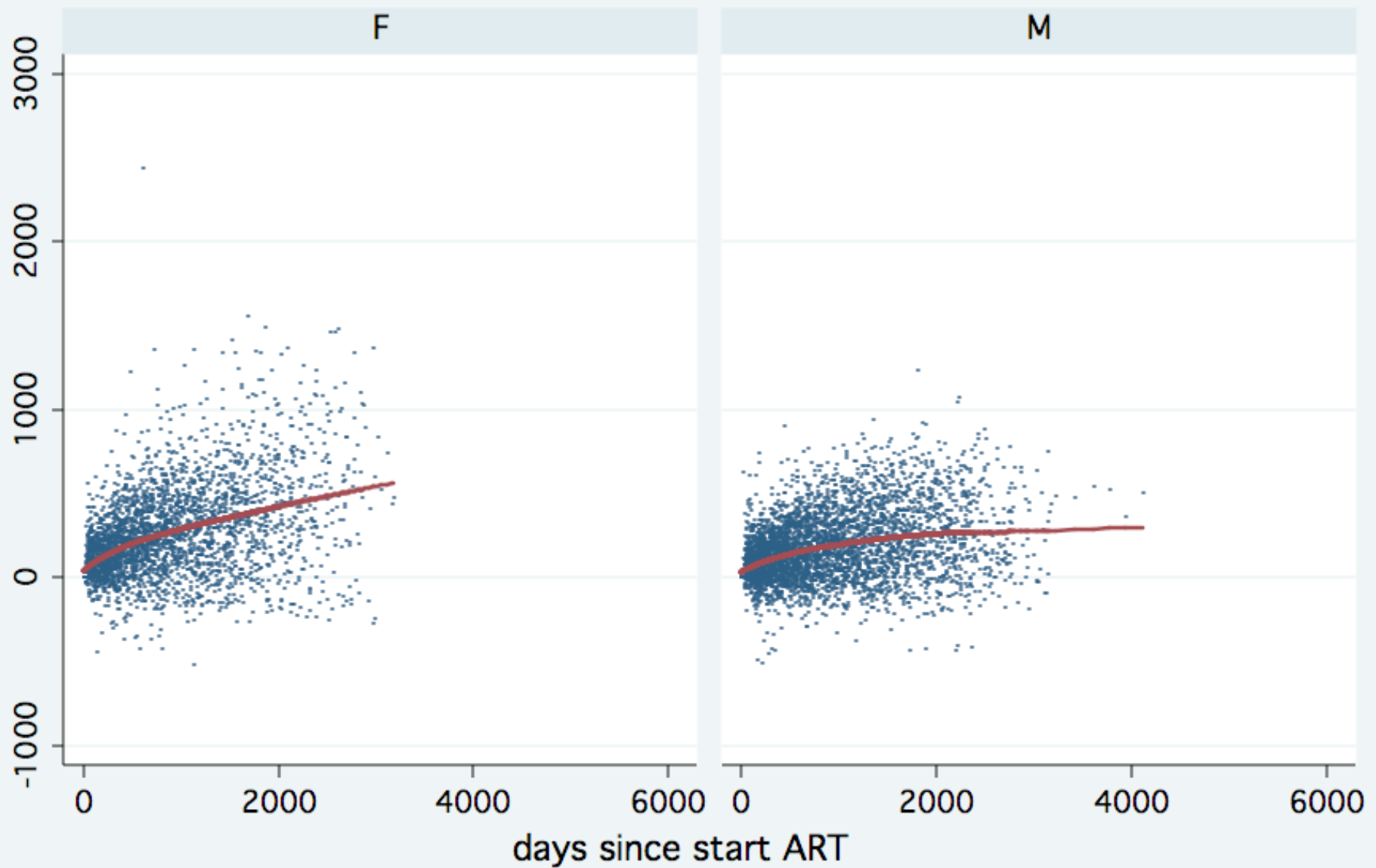
Failure = deceased or LTFU



CD4 difference compared to CD4 at start ART

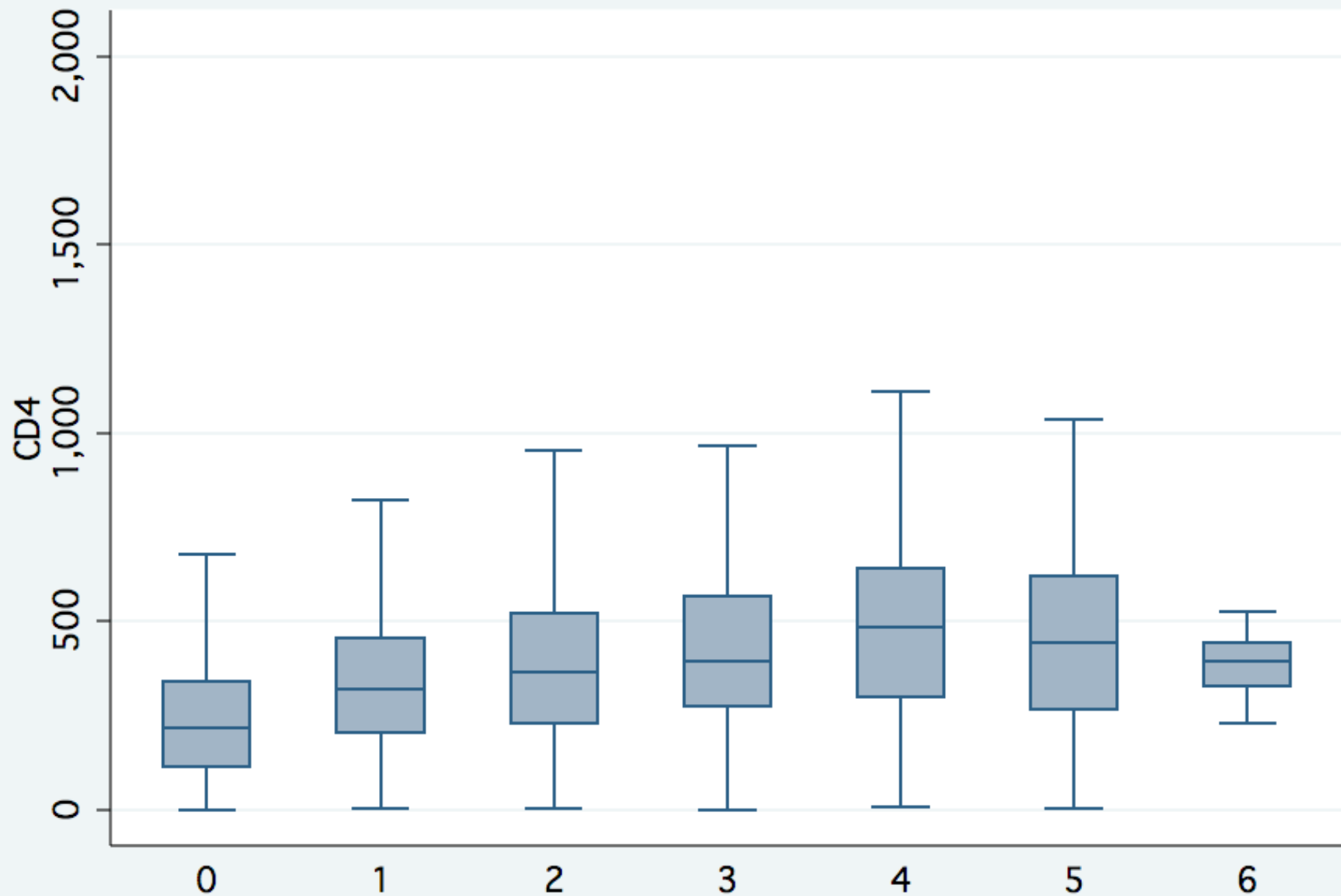


CD4 difference compared to CD4 at start ART

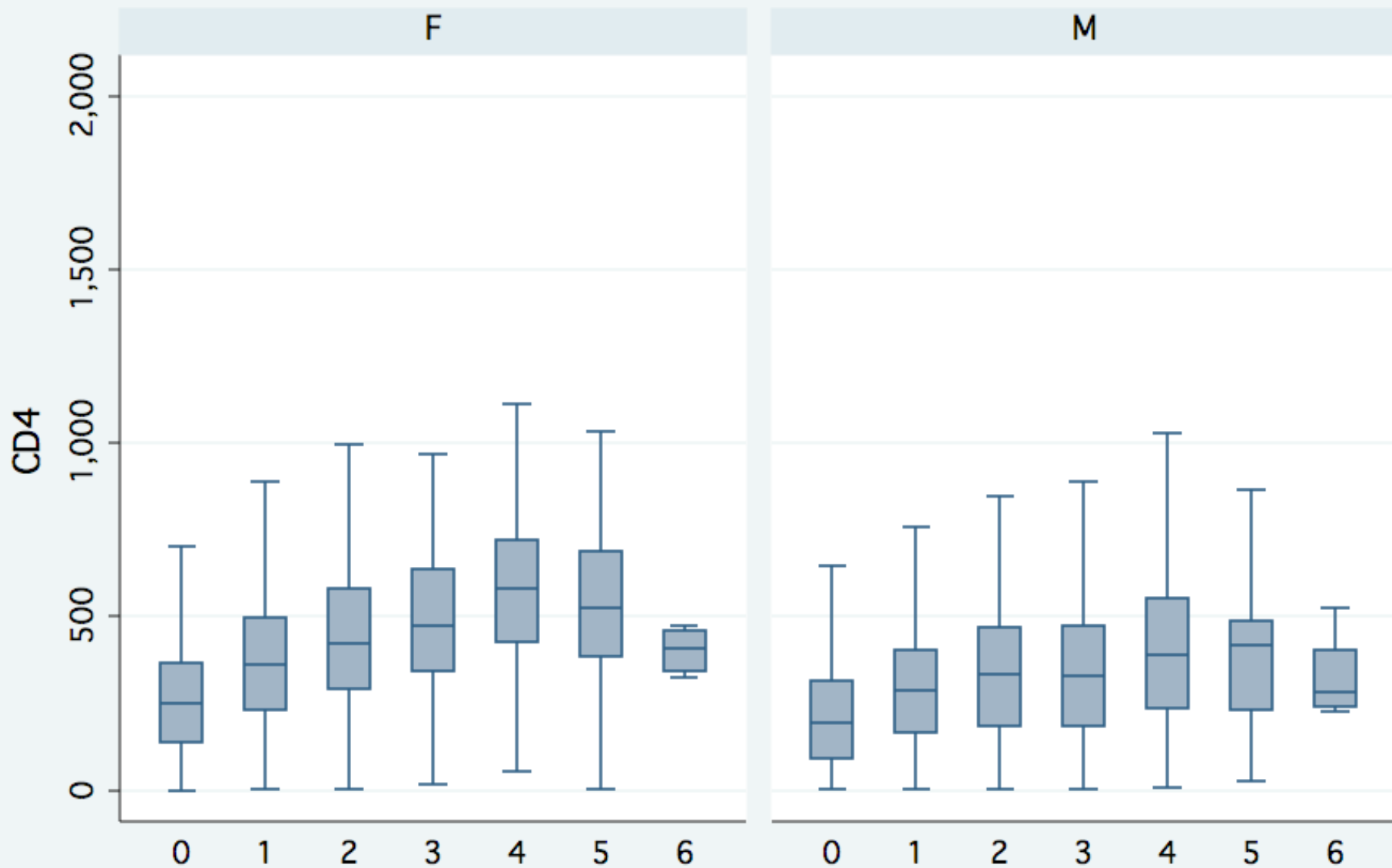


Graphs by Gender

Evolution CD4 per year after start ART



Evolution CD4 per year after start ART



Graphs by Gender

Questions and discussion

Thank you

