

Gender differences in the epidemic of HIV/AIDS in Chile at HAART initiation and in therapy outcomes



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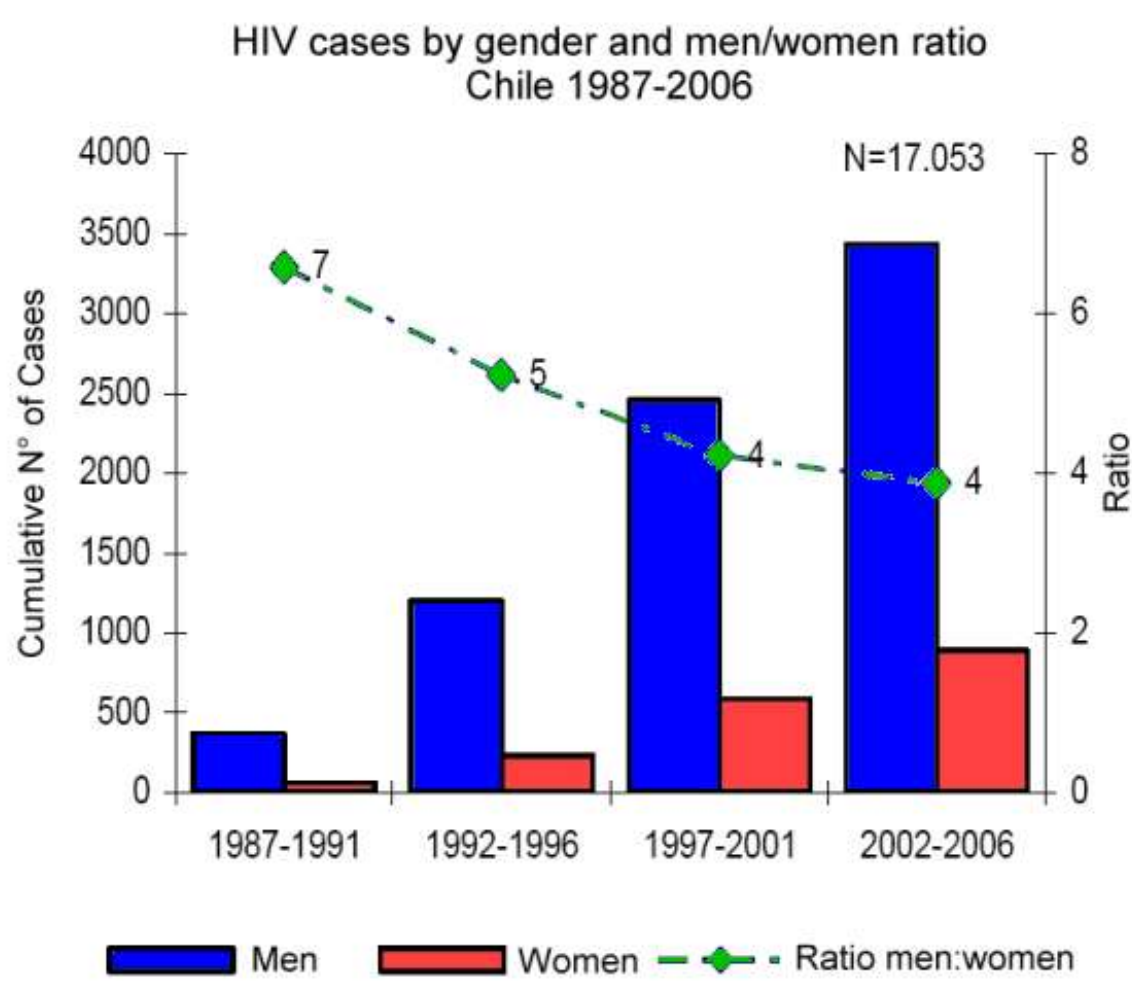
Background:

- In Chile, ~0.3% of adult population is HIV infected (35,000)
- 15% are women.
- AIDS male:female ratio was 11:1 in mid 1980s and 7:1 at present and HIV infection ratio has been 7:1 and 4:1 respectively. (Graph 1a/1b)
- 92% of cases are sexually acquired

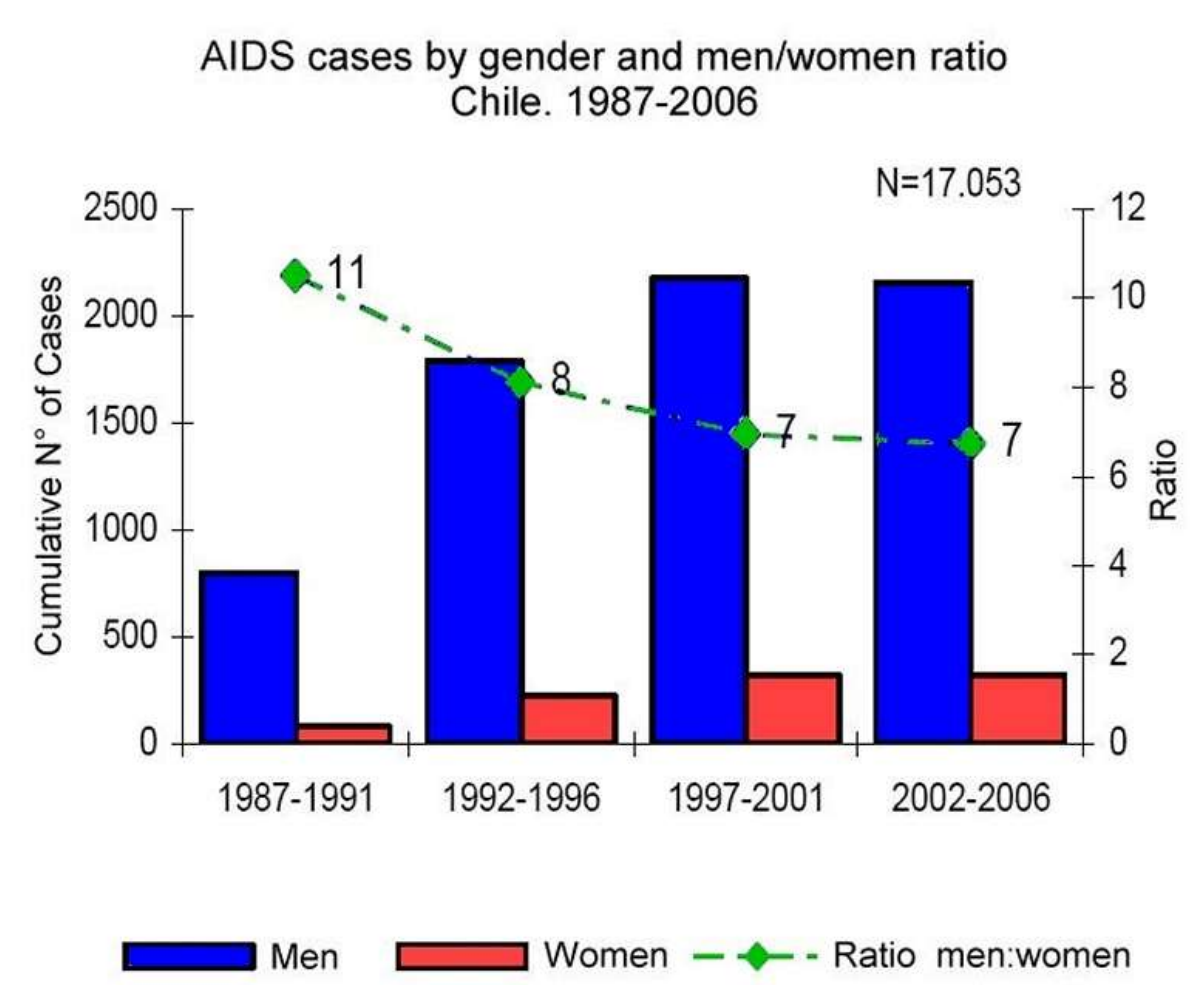
An expanded access program to HAART was initiated in 2001. The Chilean AIDS Cohort (ChiAC) prospectively follows >90% of the 8,200 patients in the expanded access program.

This study was done to compare the baseline characteristics, outcome and toxicity of HAART by gender in treatment naïve adult patients.

Graph 1a



Graph 1b



Depto de epidemiología. Diplas. Minsal. Evolución del VIH/SIDA, Chile 1987-2006. www.minsal.cl

Methods:

Information from patients enrolled in ChiAC between October 2001 and November 2006 was used.

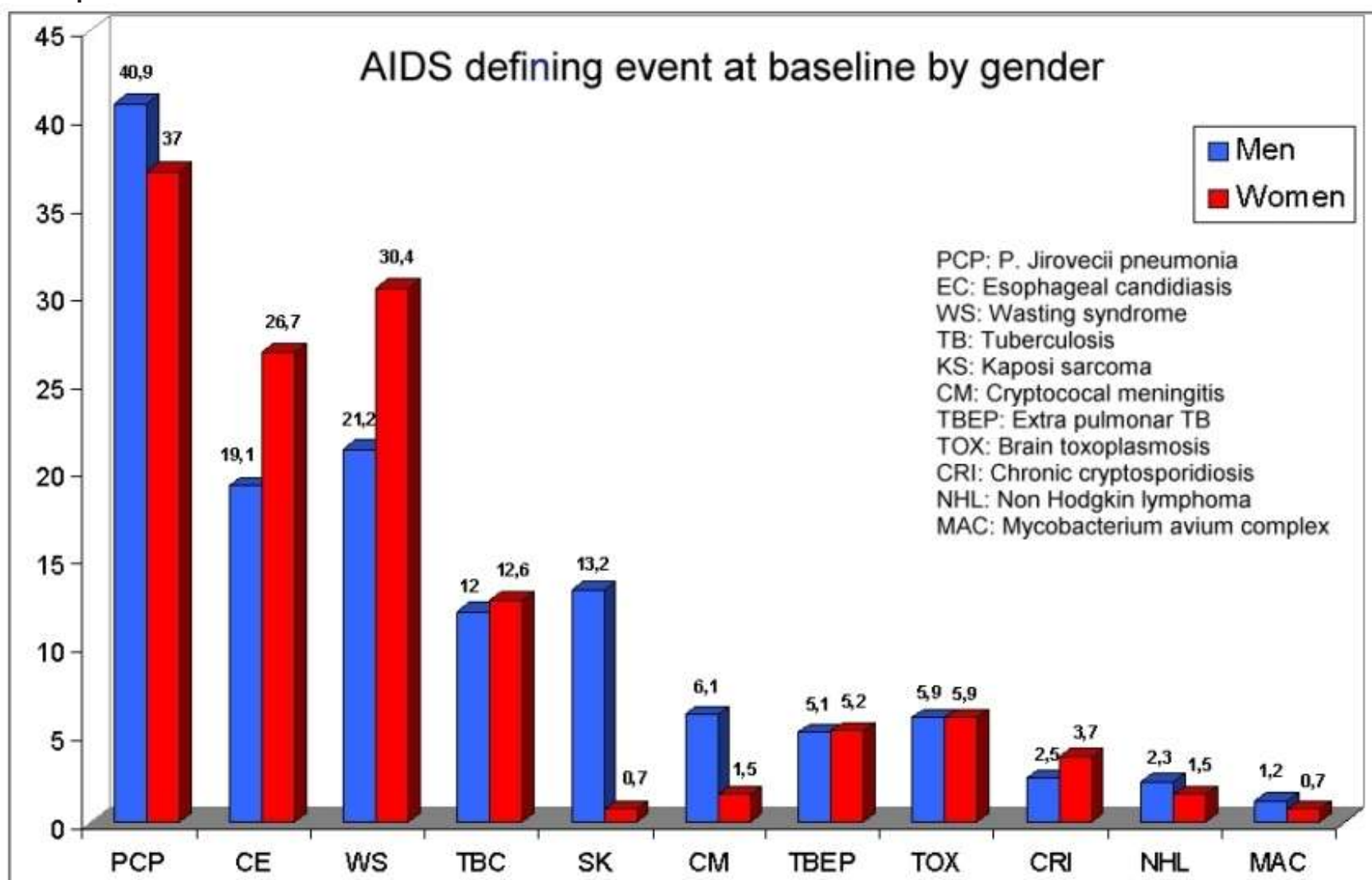
Descriptive and analytical statistics were used to evaluate gender differences for demographic and clinical data.

Results:

- 3,649 patients, 587 (16.1%) women, with 12,854 pts/year follow up were studied.
- Mean age preHAART was 36 years in both genders.
- Women vs men in C stage had: esophageal candidiasis in 26.7% and 19.1%; wasting syndrome in 30.4% and 21.2%; cryptococcal meningitis in 1.5% and 6.1%, respectively ($p < 0.05$ for all) (Graph 2)

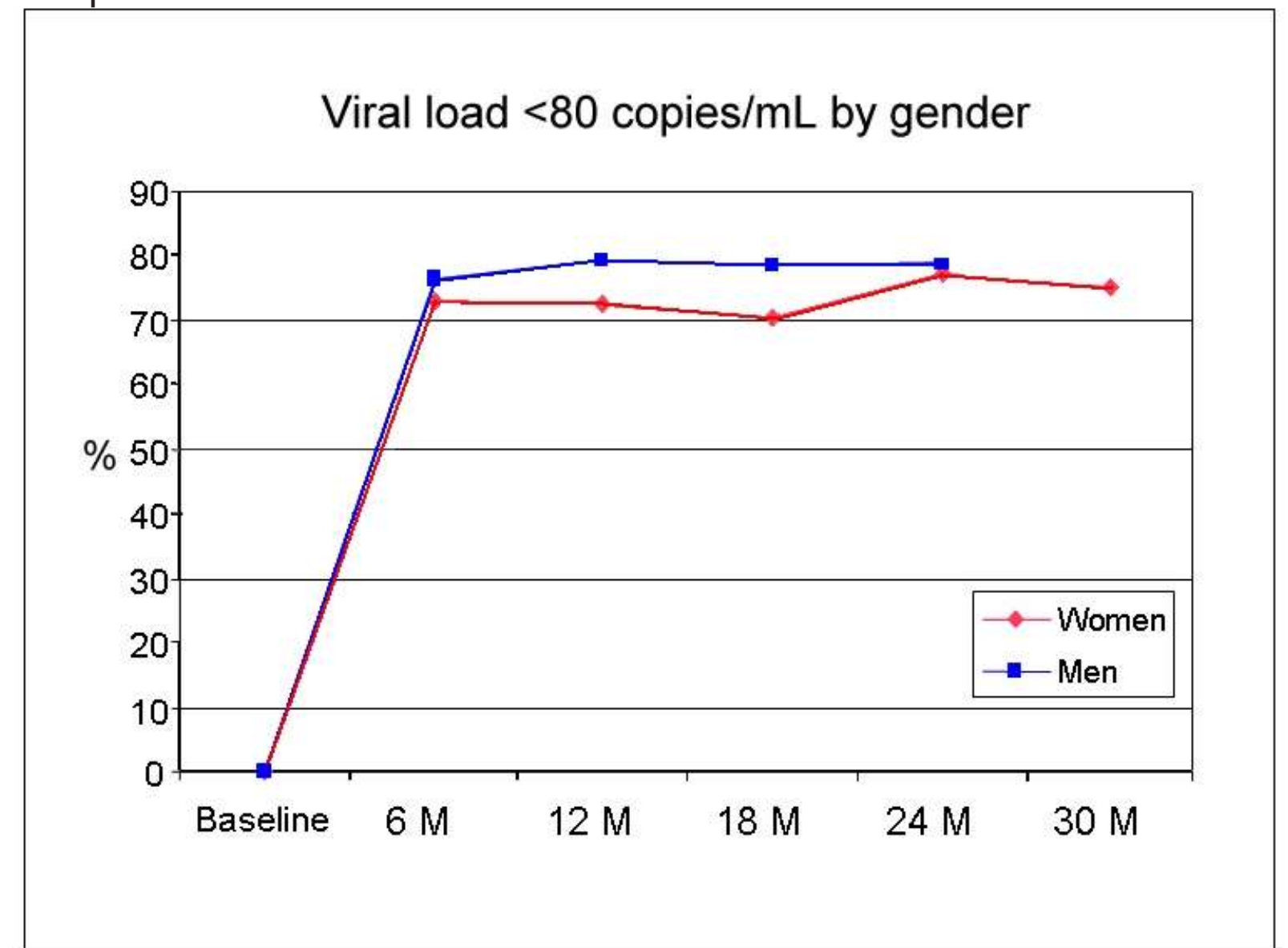
- In terms of virological response, there was no difference between genders at 2 years, but the initial response was slower in women, resulting in a longer time to reach undetectable viral load (Graph 4).

Graph 2



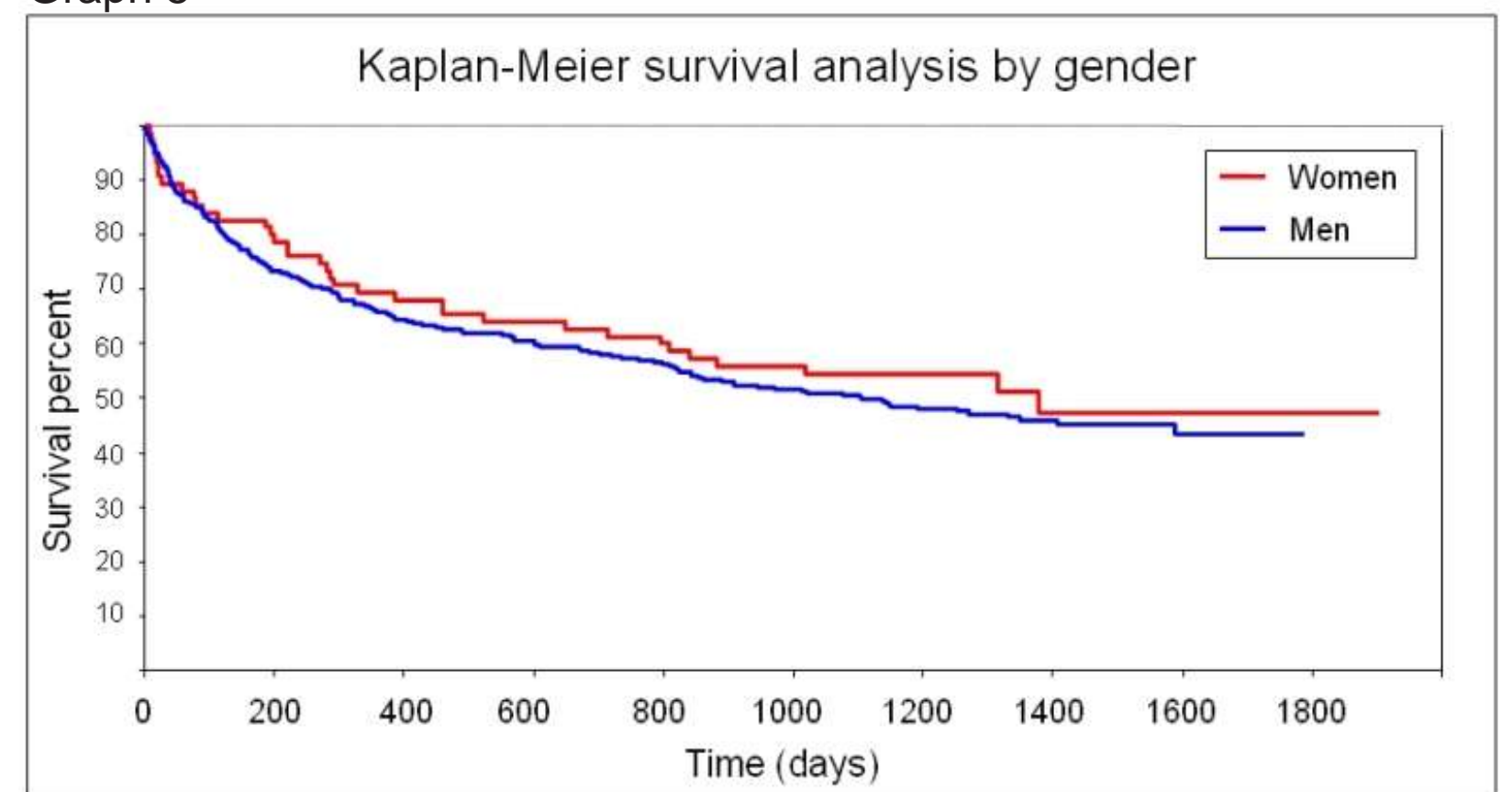
- AIDS stage at first HAART: 35.9% vs 48.6% ($p < 0.0001$), for women and men respectively.
- Percentage women vs men in CDC stage 2: 20.6% vs 15.4% ($p = 0.017$), and 78.8% vs 84.1% for stage 3 ($p = 0.012$) respectively. (Table 1).
- Median baseline CD4 cell count: 125 cells/mm in women vs 91 in men ($p < 0.005$).
- Median baseline viral load in women was log 4.97 vs 5.14 in men

Graph 4



- Survival at 2 and 5 years was 92.3% and 89.5% for women and 91.5% and 88.7% for men ($p = ns$) respectively. (Graph 5)

Graph 5



- In a subset of 2429 patients, 28.9% of women and 24.4% of men required change of HAART due to toxicity ($p < 0.05$). The proportion of the main toxicities by gender is shown in Graph 6

Graph 6

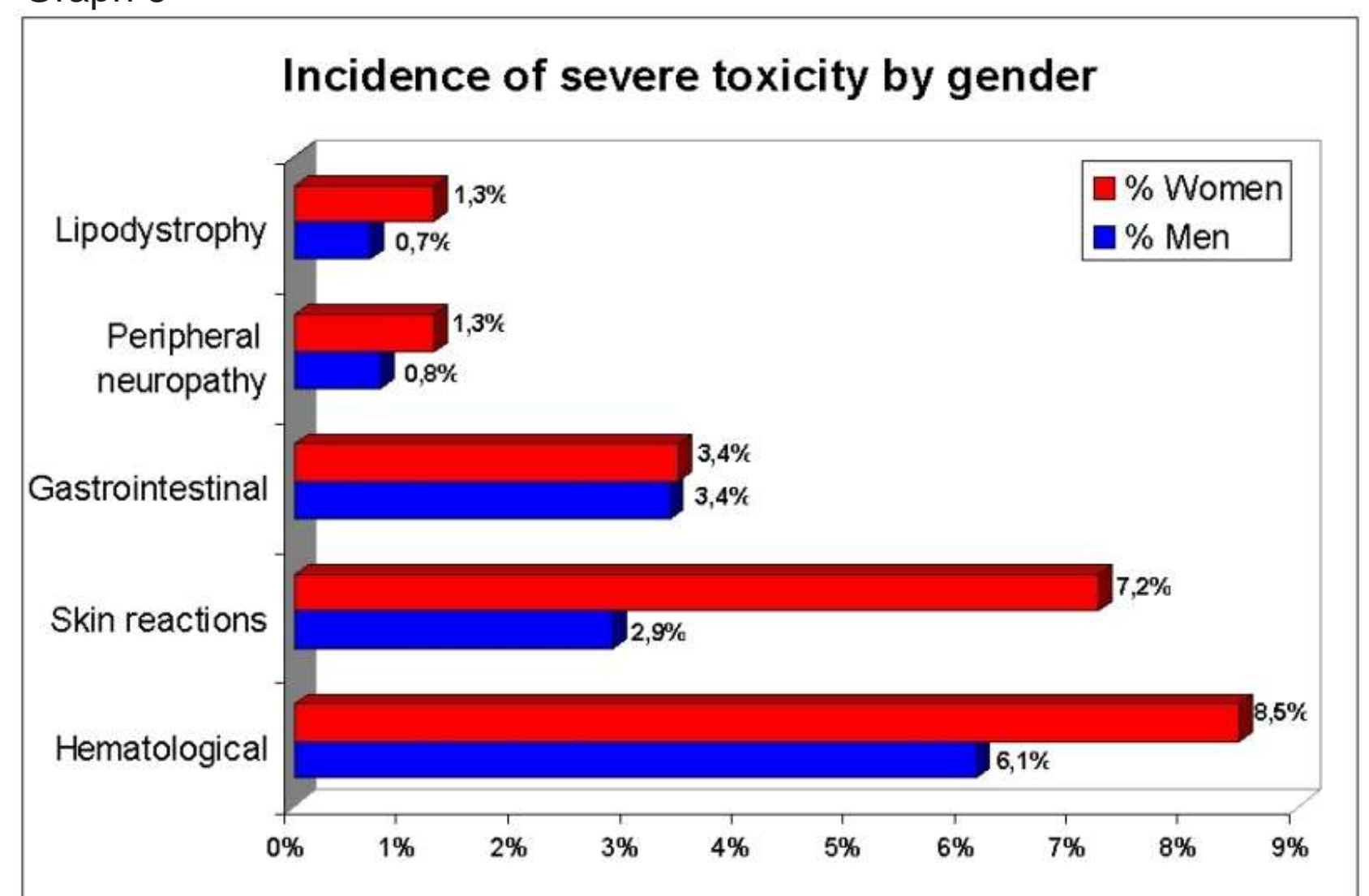


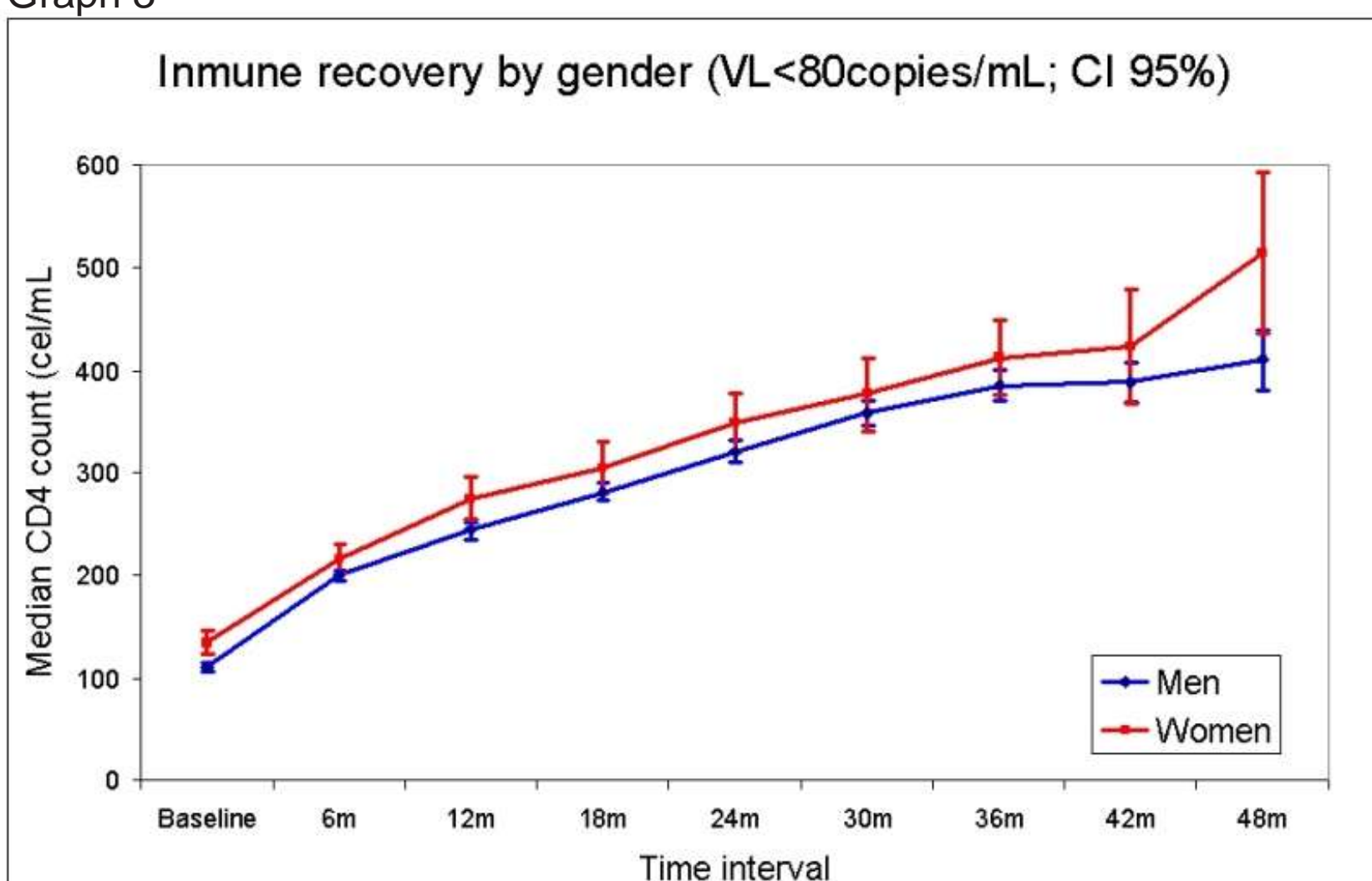
Table 1

CDC status at baseline by gender

Stage	Women	Men	p
A	36.7%	21.3%	<0.0001
B	27.4%	30.1%	=0.294
C	35.9%	48.6%	<0.0001
1	0.5%	0.5%	=1
2	20.6%	15.4%	=0.017
3	78.8%	84.1%	=0.012

- There was no statistical significant difference in immune recovery (CD4 count) between genders after 2 years of follow up (Graph 3).

Graph 3



Conclusions: The rate of HIV/AIDS in women in Chile has been increasing steadily. Baseline stage was different for both gender and although HAART was started in an earlier stage in women, the survival rate was not superior compared to men. This might be explained by the higher drug toxicity rate in women.

Study financed by

