

**Threat to success in women: toxicity
and failure. Long-term-results from the
Chilean AIDS Cohort (ChiAC)**

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(for the ChiAC)



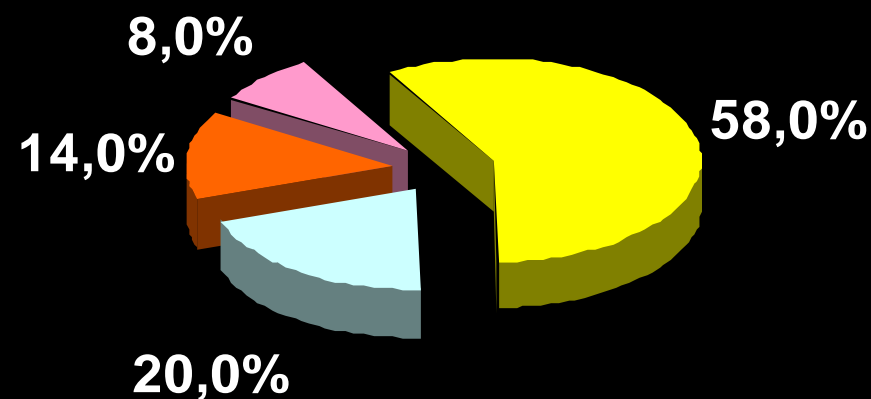
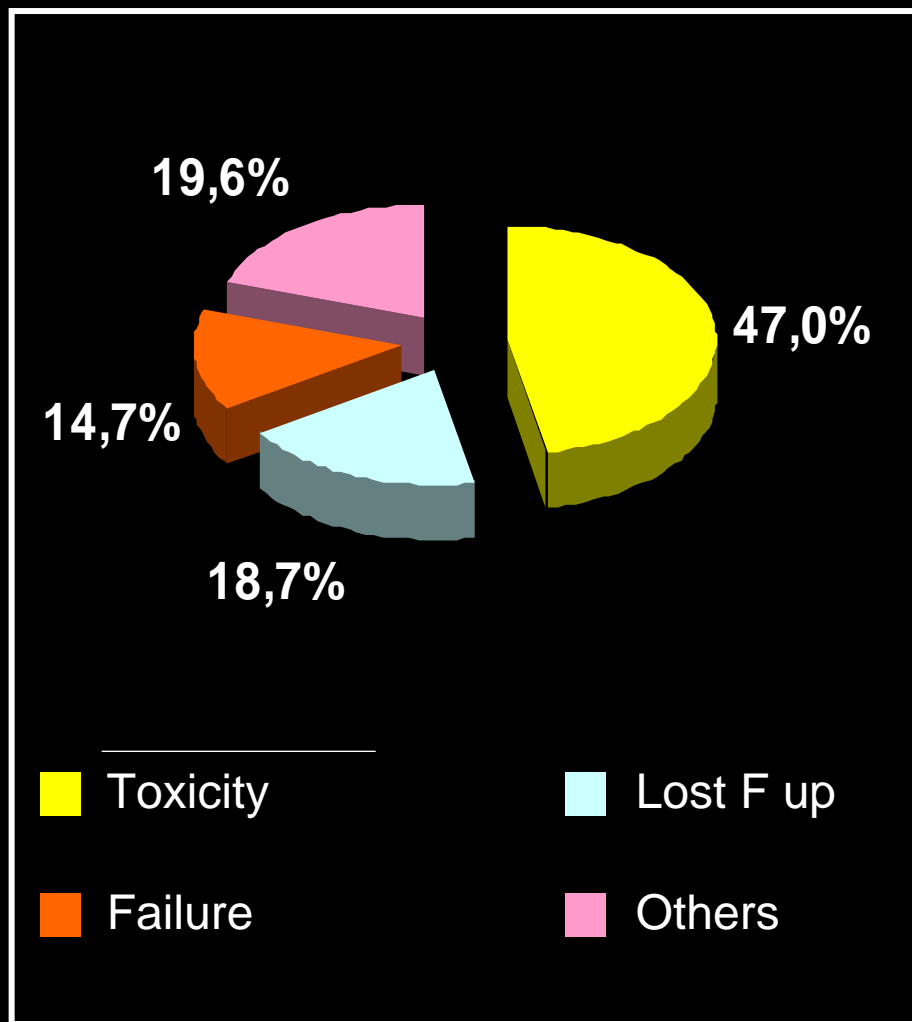
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Background:

- Very high survival rates have been reported in randomized clinical trials as well as in cohort studies, even those conducted in resource limited countries (RLC). Main reason for change of first HAART is toxicity in most cohort studies, followed by HAART failure.

- Women are underrepresented in randomized trials and specific results by gender are not always evident in cohort studies and often contradictory. Aim of the study: to compare rates and types of toxicity and rates of failure between men and women in a large cohort study from a single RLC.

Main causes of HAART D/C similar Chile - Europe (excluding death)



d'Arminio A, et al.
AIDS. 2000;14:499-507

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Methods for the study:

- 5,120/ 7,007 patients nationwide initiating HAART between 2001 and 2007 were prospectively followed up (FU) until December 2008 by ChiAC
- 18,159 patient/year with average 3.6 years FU per pt
- Female in ChiAC : 818 (16%)
- Overall survival :90.9%
- We determined OR and CI95 for toxicity and failure by gender through univariate and multivariate adjusted analysis for each variable (age, CD4, clinical stage, VL, and third drug).
(Failure defined as ≥ 2 consecutive VL > 80 copies/ml with no VL < 80 afterwards)

Chilean AIDS Cohort characteristics

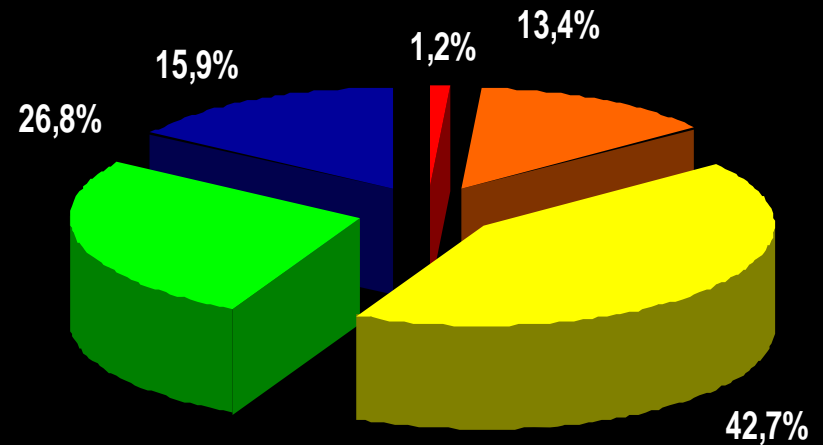
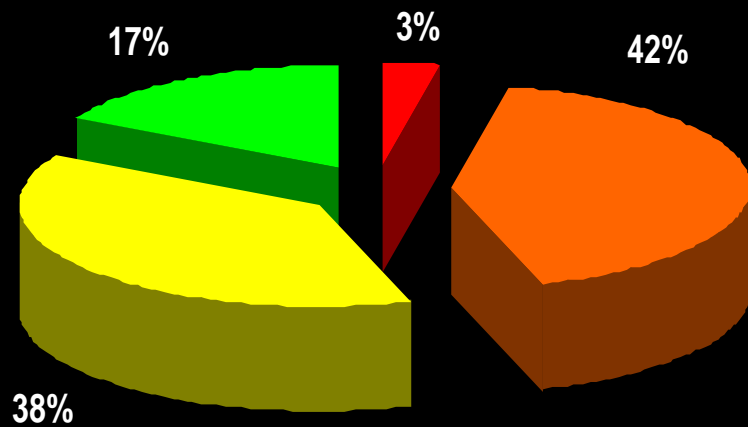
- Observational cohort made up of patients managed by a Public System Network of HIV- care providers
- Central Database with data verification (Wolff et al. *JAIDS* 2005;40:551-7)
- Multicenter: 29/ 33 country centers with > 95% HAART initiated prospectively FU
- ITT analysis without inclusion bias: mandatory inclusion of all HAART initiated in participating centers
- HAART according to National Guidelines
- The largest number of patients in a single RLC cohort



HIV epidemics in Chile: characteristics

- Estimated prevalence in general population: 0.2-0.3 % (40,000 people)
- Very high incidence of late presentation to care
- Transmission route: mainly sexual (MSM), but heterosexual transmission increasing
- Male: Female ratio 5:1
- Most cases between 20-49 years old.
- Santiago, Port of Valparaiso and Arica (Northern city bordering with Peru) with the highest incidence
- Relationship to poverty not relevant

Educational level in general population and in HIV/ AIDS in Chile



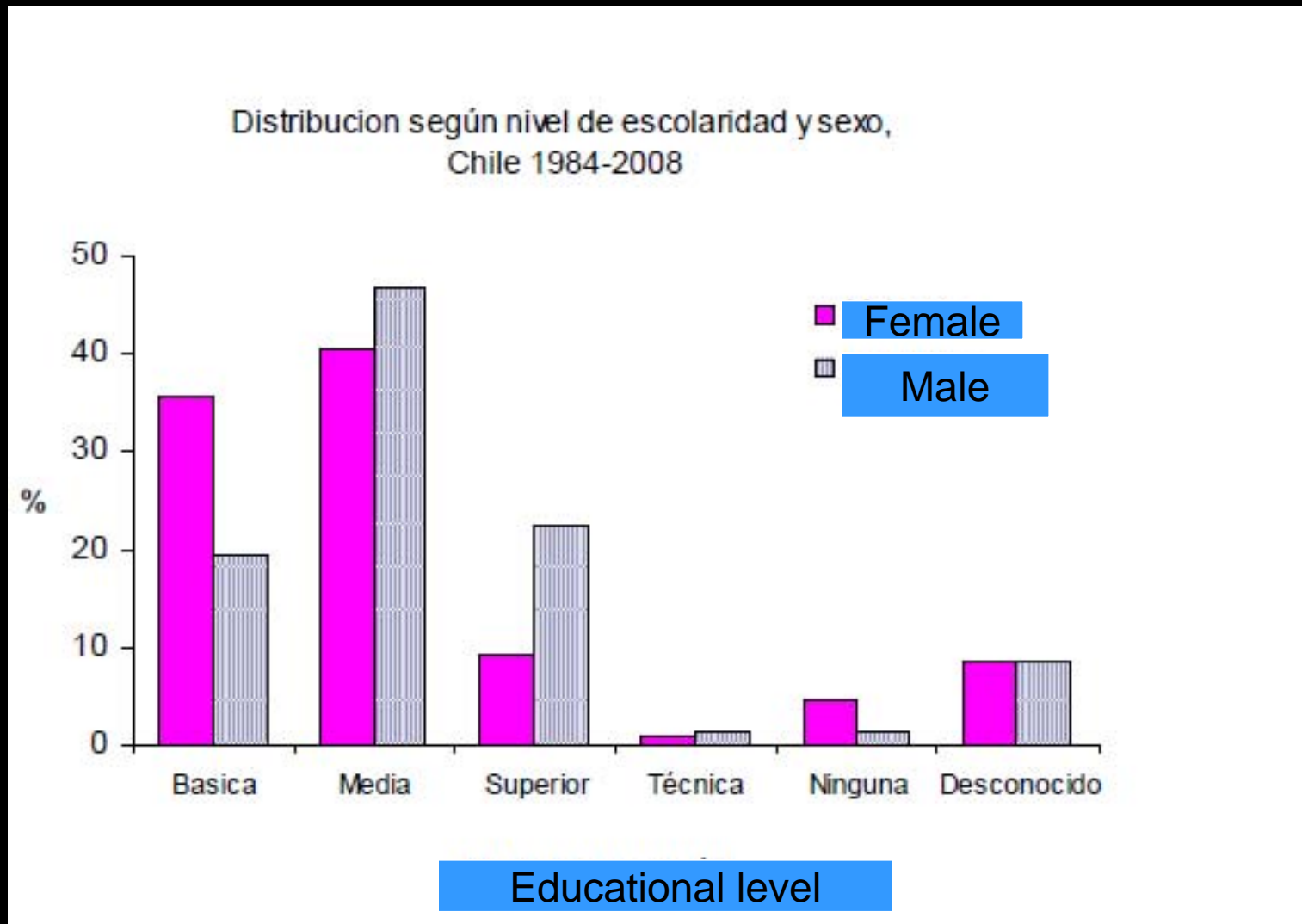
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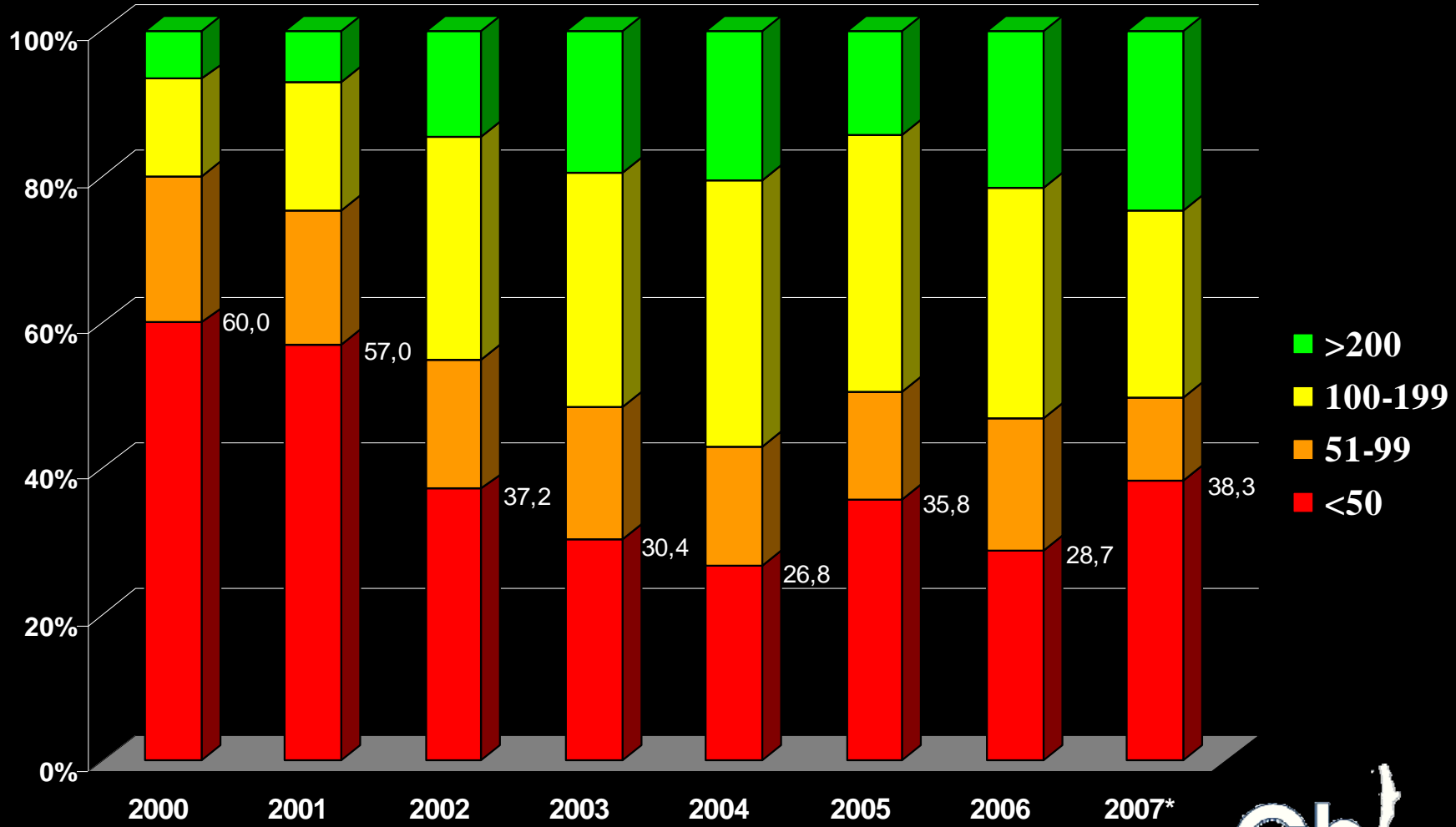
Source: DEIS / MINSAL 2010

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Educational level by gender in HIV/AIDS

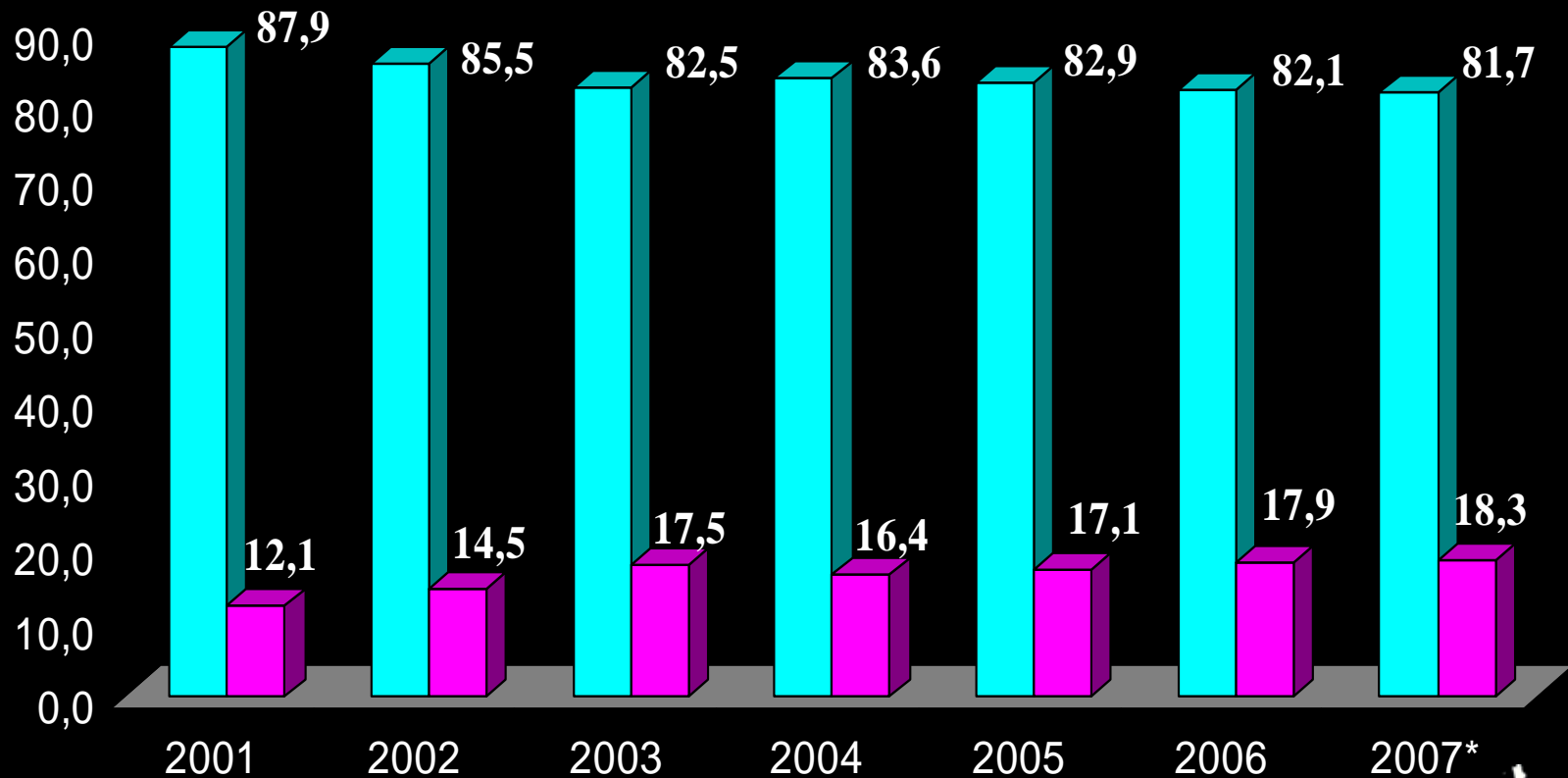


CD4 count per year of HAART initiation



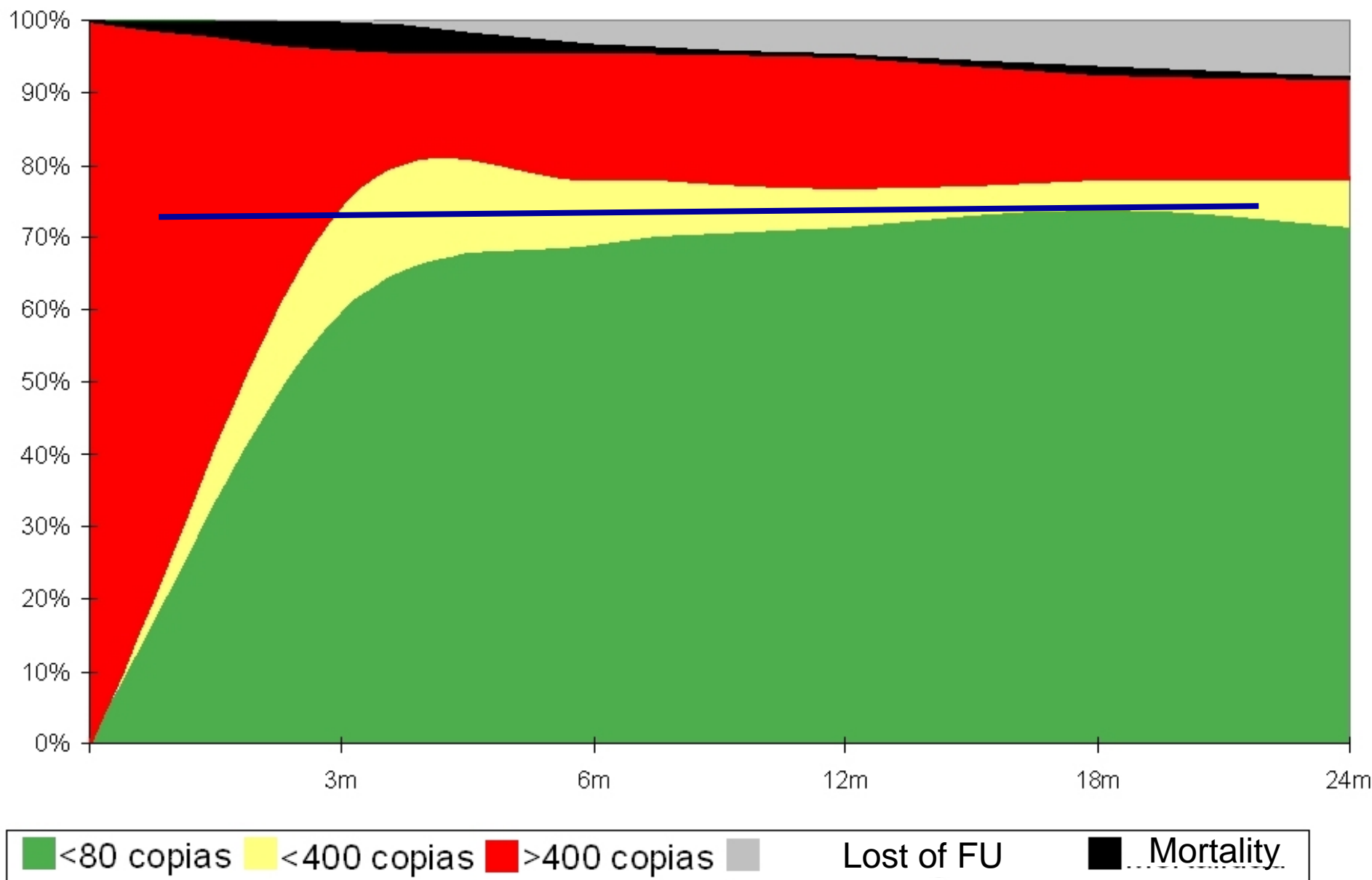
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Gender by year of HAART initiation



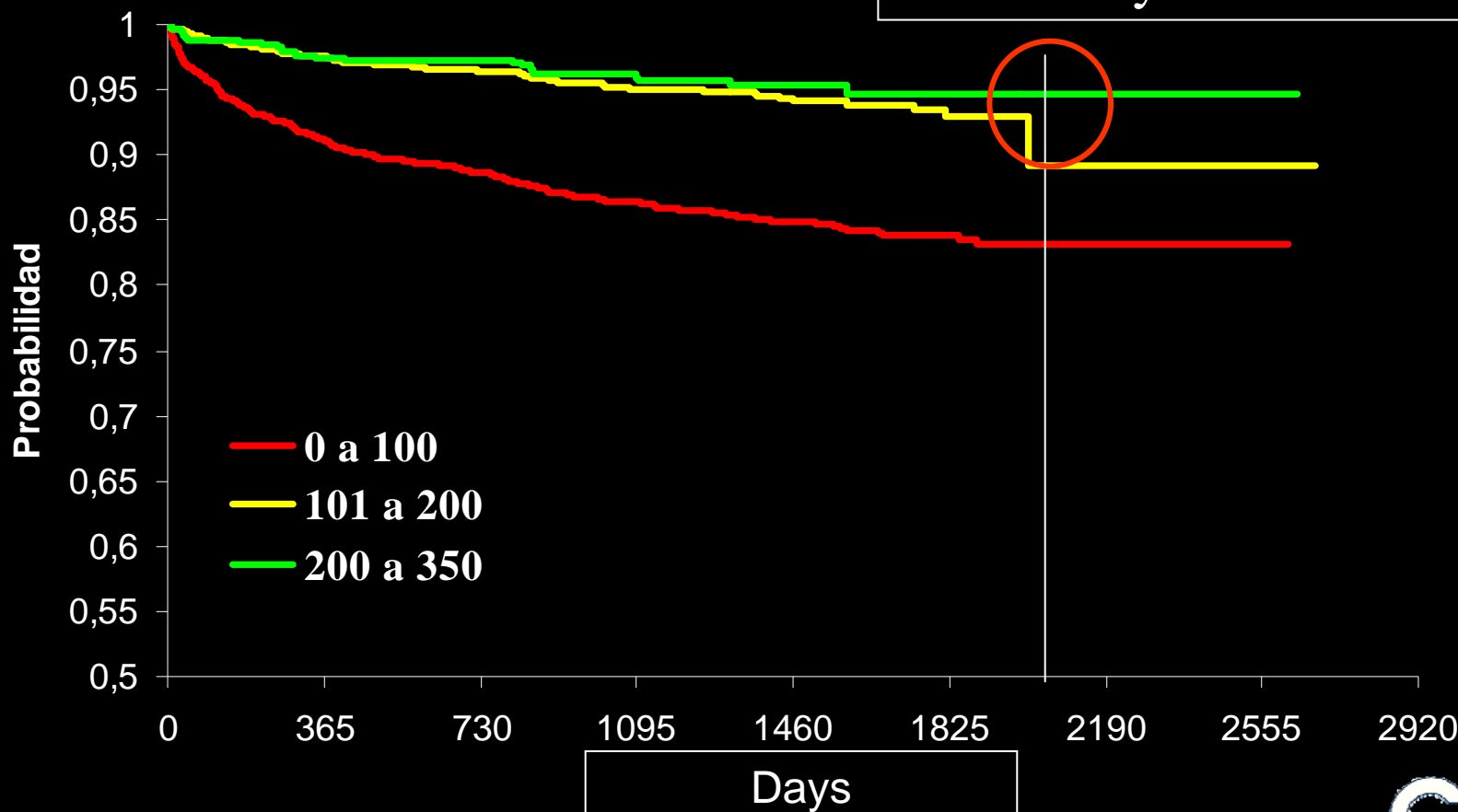
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Virological efficacy of HAART in Chile



Long term survival by baseline CD4 cell count

Overall 6 years survival: 90%

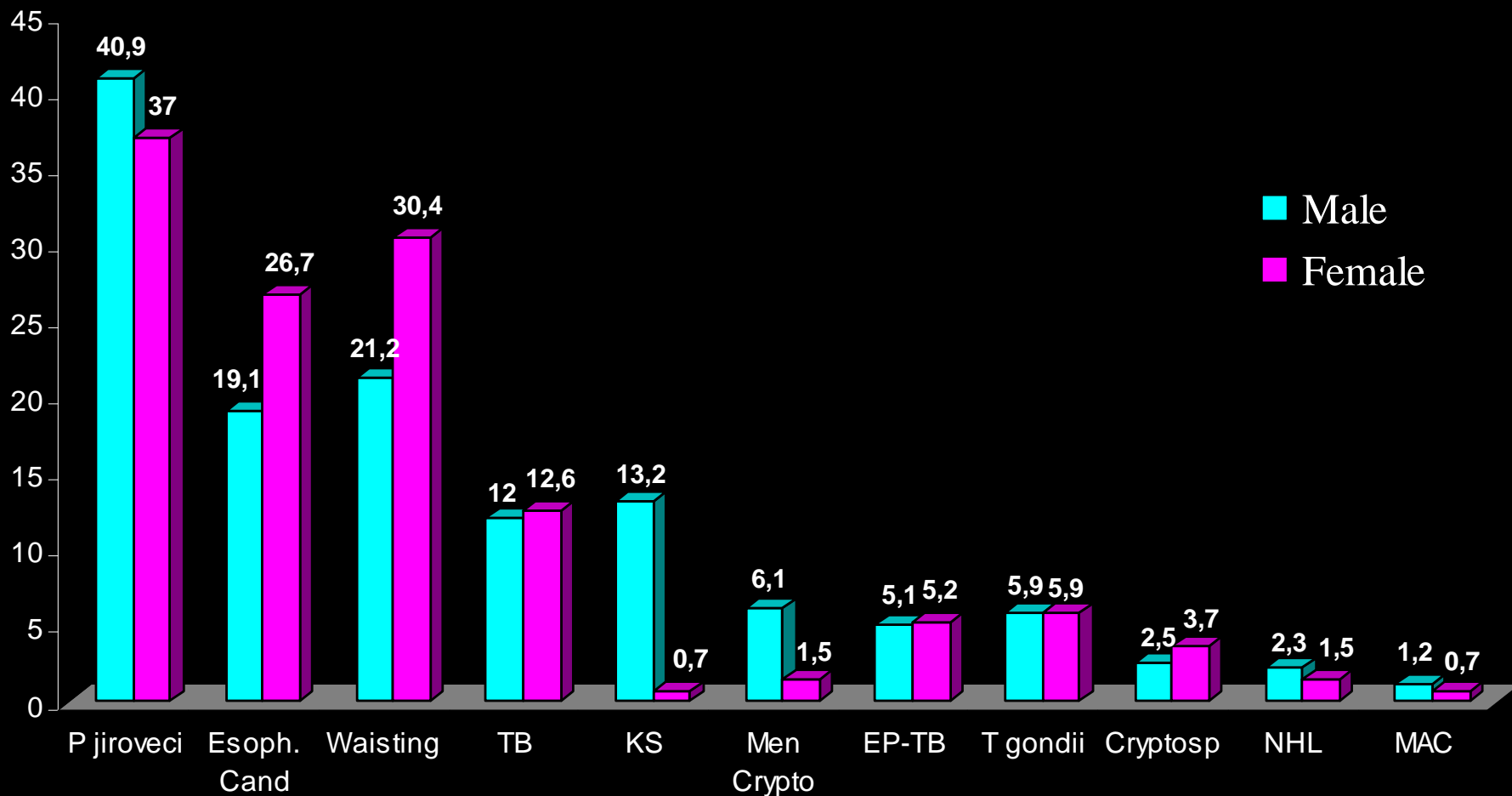


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Differences by gender and CDC classification

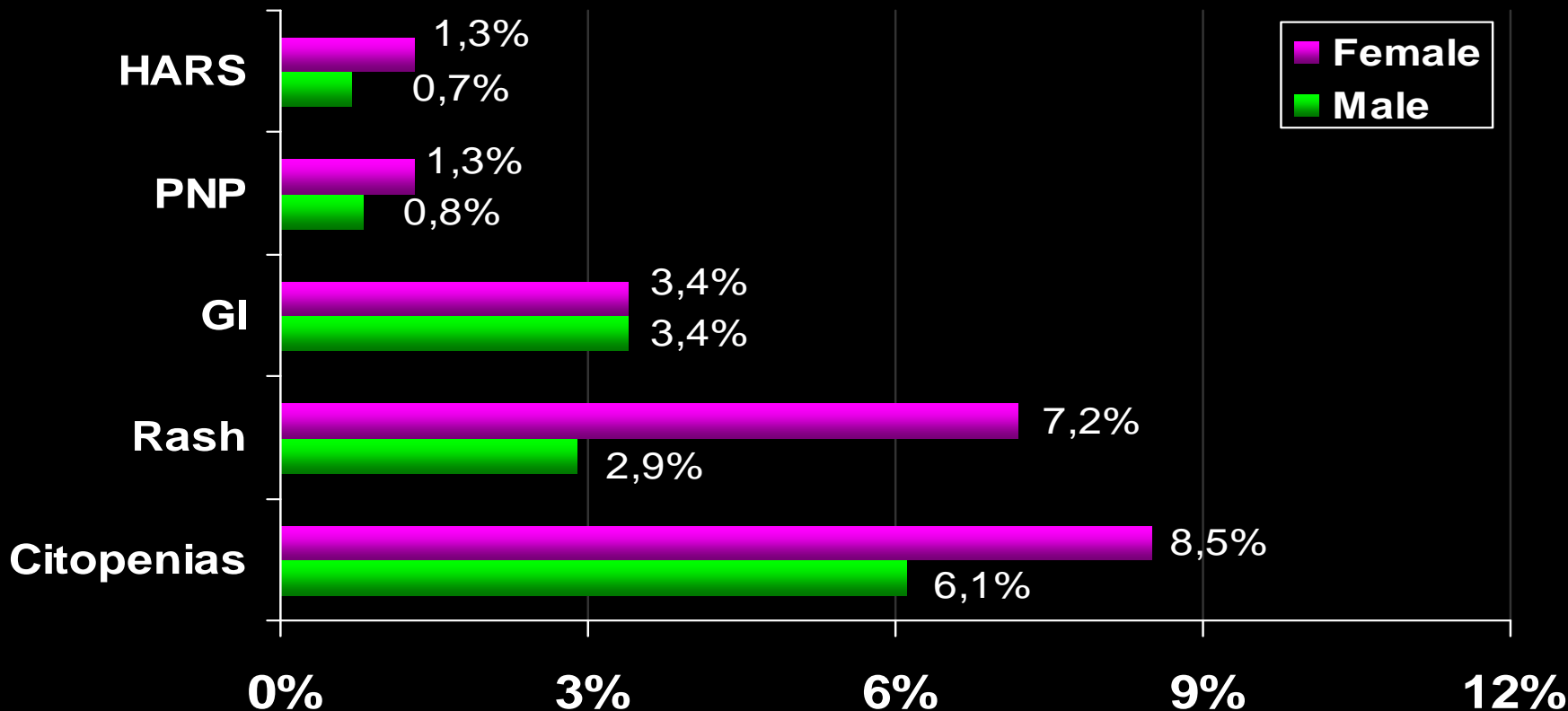
	Female	Male	p
A	36,7%	21,3%	<0,0001
C	35,9%	48,6%	<0,0001
<55.000	42,6%	28,2%	<0,0001

AIDS defining diseases by gender



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Main toxicities by gender



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Results by gender

- Late presentation to HAART was higher among men (48.6% vs 35.9% stage C).
- 2,121 discontinued HAART (deaths not included)
- 44.9% of them for toxicity (18.9% of all patients) and 11.4% for failure, even though 18.0% met criteria of failure
- Toxicity more likely in women (21.8% vs 18.0% - $p=0.01$)
- Rash, anemia and neutropenia were more frequent in women
- Risk for failure was not related to late presentation and **significantly higher** among women in multivariate analysis (OR 1.35 CI 1.03-1.75)

Conclusions

- In this RLC population-based study, we found a high rate of virological success in naïve patients in spite of a large percentage of late presenters.
- Risk for failure and for toxicity was significantly higher among women, even though late presentation was more frequent in men.
- More studies are needed to look into the reasons for the high risk of failure and toxicity in women

Acknowledgements

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Primer Encuentro de Mujeres (WFPA)

