

HIV, WOMEN AND ART ADHERENCE



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Gender and adherence

- Literature Review: January 2000 – June 2011
 - Proportional adherence by sex: 57 articles
 - 68.2% presented lower adherence among women
 - Of those reporting significance, 90% reported lower adherence among women

Objectives:

- To identify if there is a significant difference in proportional adherence between men and women accessing ART in BC between 1996 and 2010, based on:
 - Length of time on therapy
 - Calendar year

Objectives (continued):

- To identify whether differences in adherence are a result of confounding due to:
 - Injection drug use
 - Aboriginal ethnicity

HAART Observational Medical Evaluation and Research (HOMER) cohort

- Established in 1996
- Population-based cohort
- HIV+ men and women who initiated HAART
- HAART given out free of charge
- Study size: 4162 (3375 men and 787 women) people who initiated HAART from 1996 to 2010

HAART Observational Medical Evaluation and Research (HOMER) cohort

- Men

- n=3279
- Injection drug use:
35.4%
- Aboriginal ethnicity:
17.3%

- Women

- n=760
- Injection drug use:
60.1%
- Aboriginal ethnicity:
45.0%

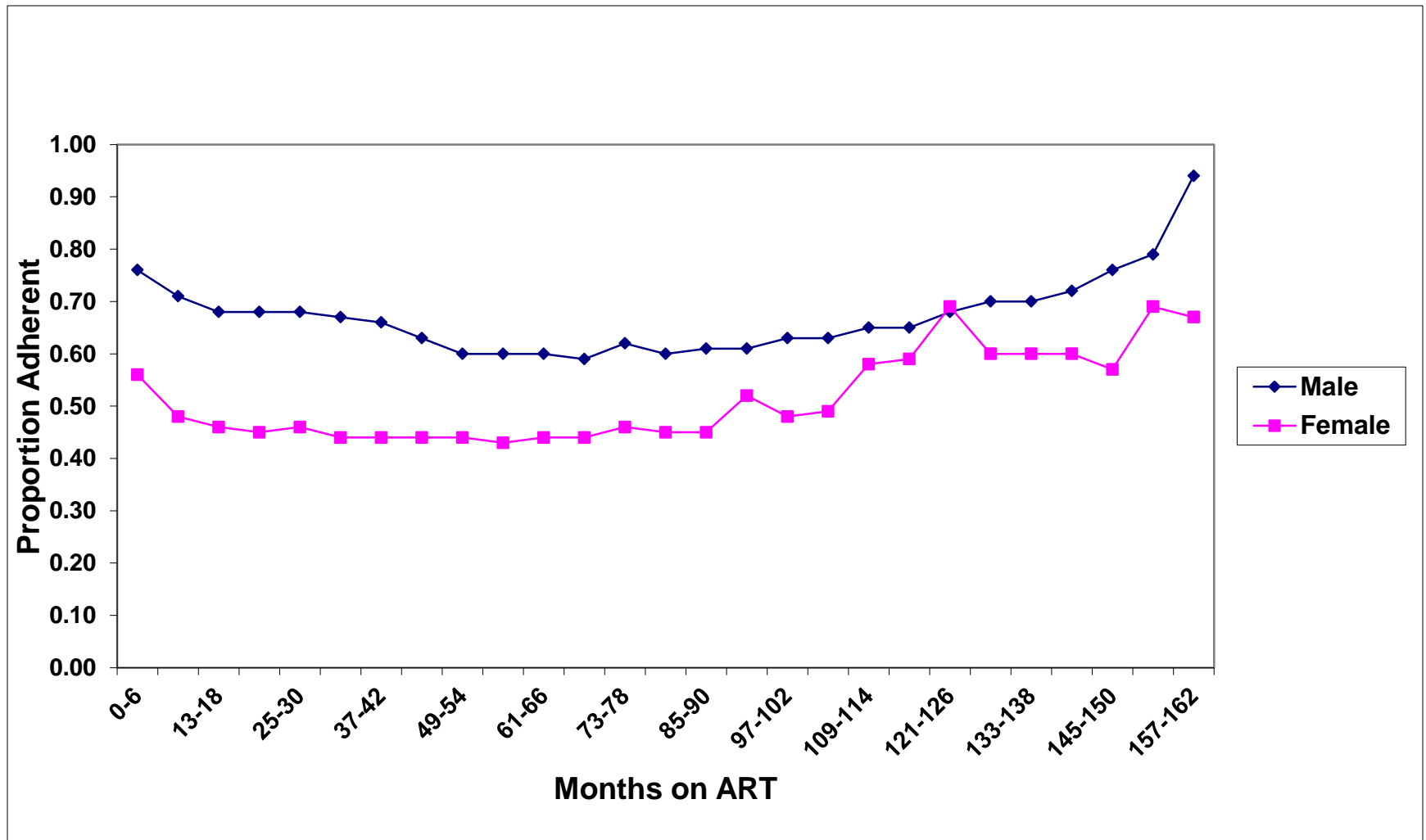
Adherence measurement

- Adherence: $\geq 95\%$ adherence during 6 month periods
 - Assessed by time on therapy and calendar year
 - Pharmacy refill data
- Comparison: Chi-squared test
- Subgroup analysis:
 - IDU/Non-IDU
 - Aboriginal Ethnicity/Non-Aboriginal Ethnicity

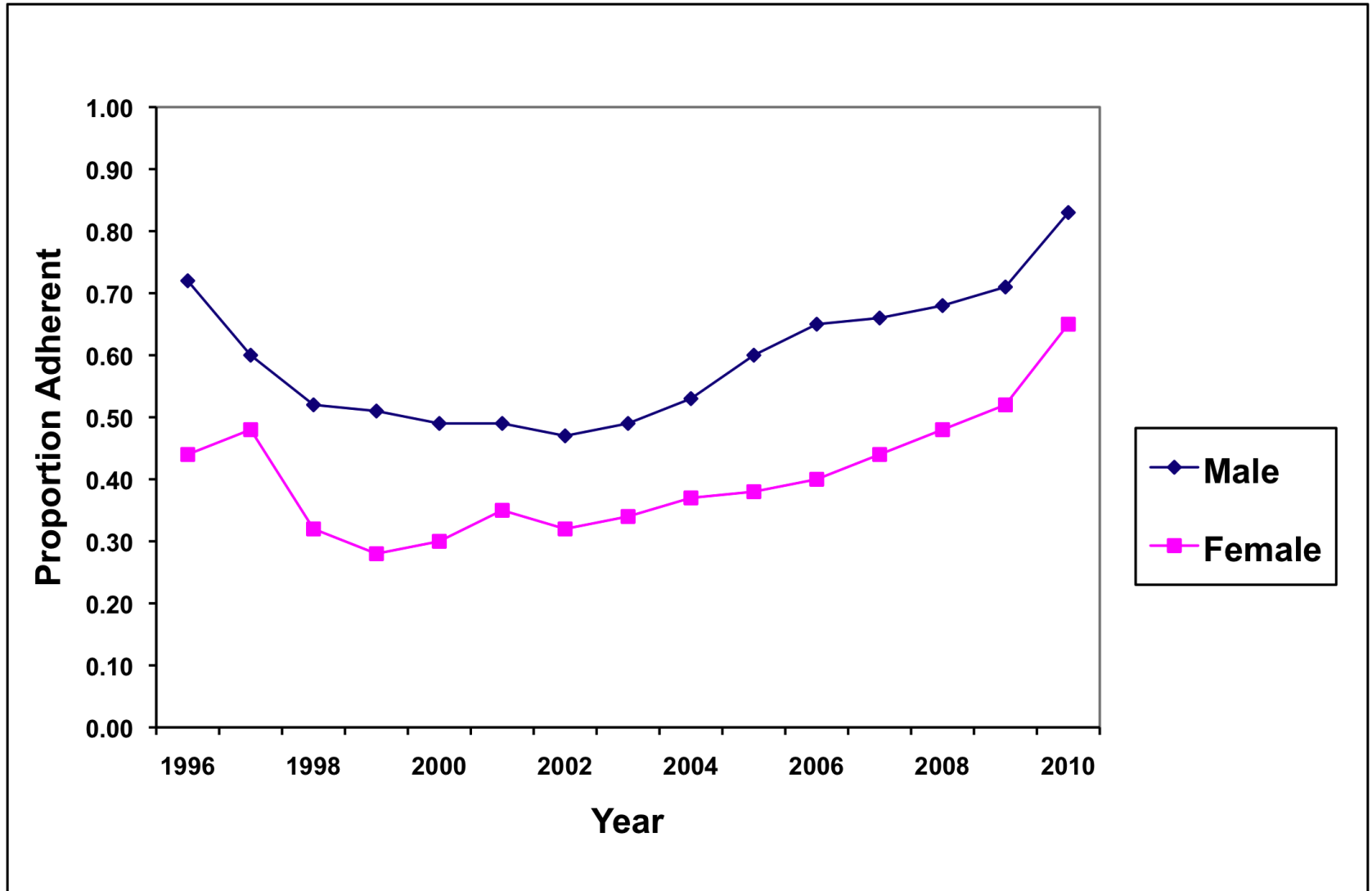
Results

1. A significantly lower proportion of women are adherent to ART up to 9.5 years on therapy
2. Three groups with like adherence emerged:
 - a) Non-IDU Men and Non-Aboriginal Men
 - b) Non-IDU Women, Non-Aboriginal Women, IDU Men, and Aboriginal Men
 - c) IDU Women and Aboriginal Women
3. All categories show improved adherence with increasing calendar years
4. Significant gender difference in adherence remains with increasing calendar years

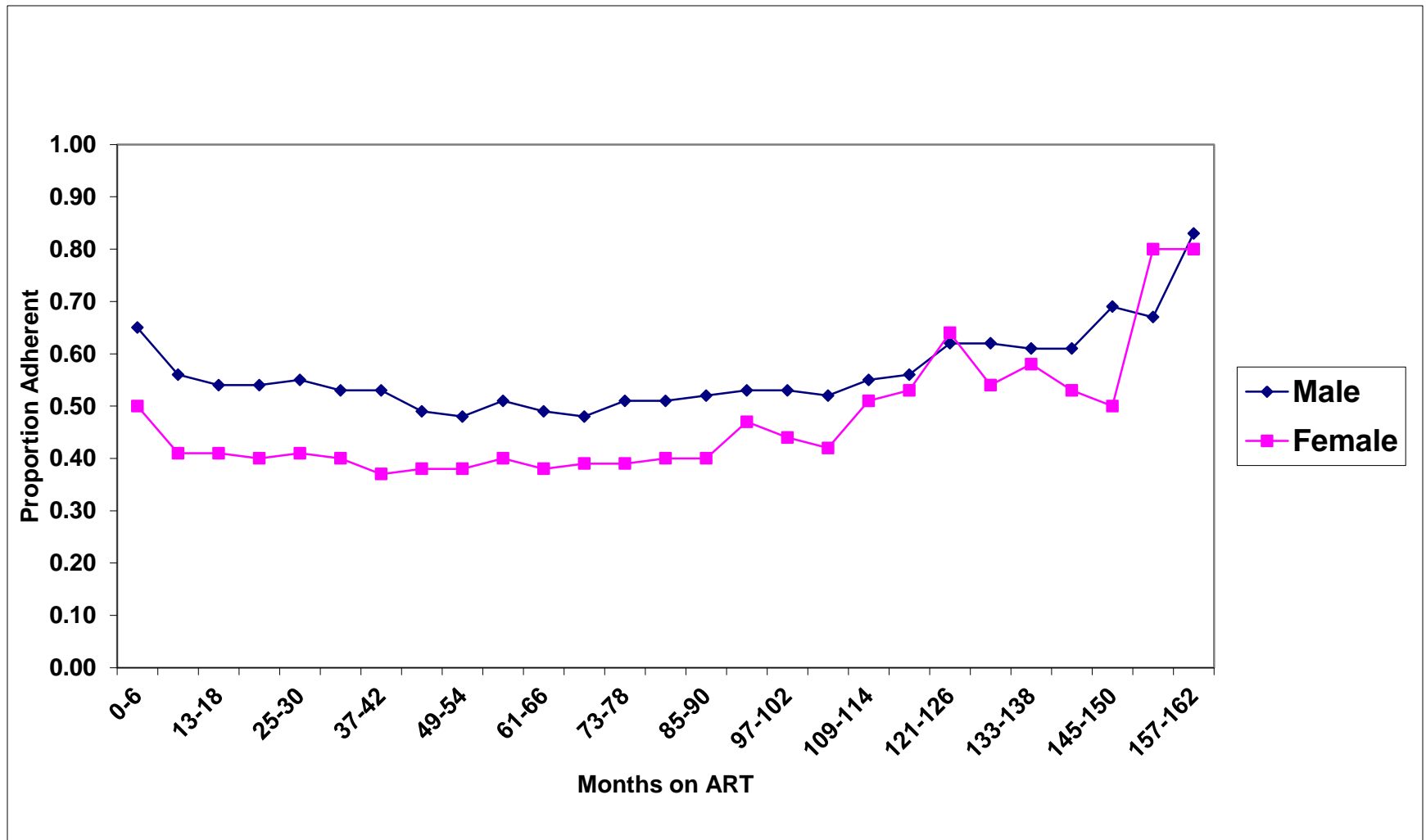
Adherence by time on therapy



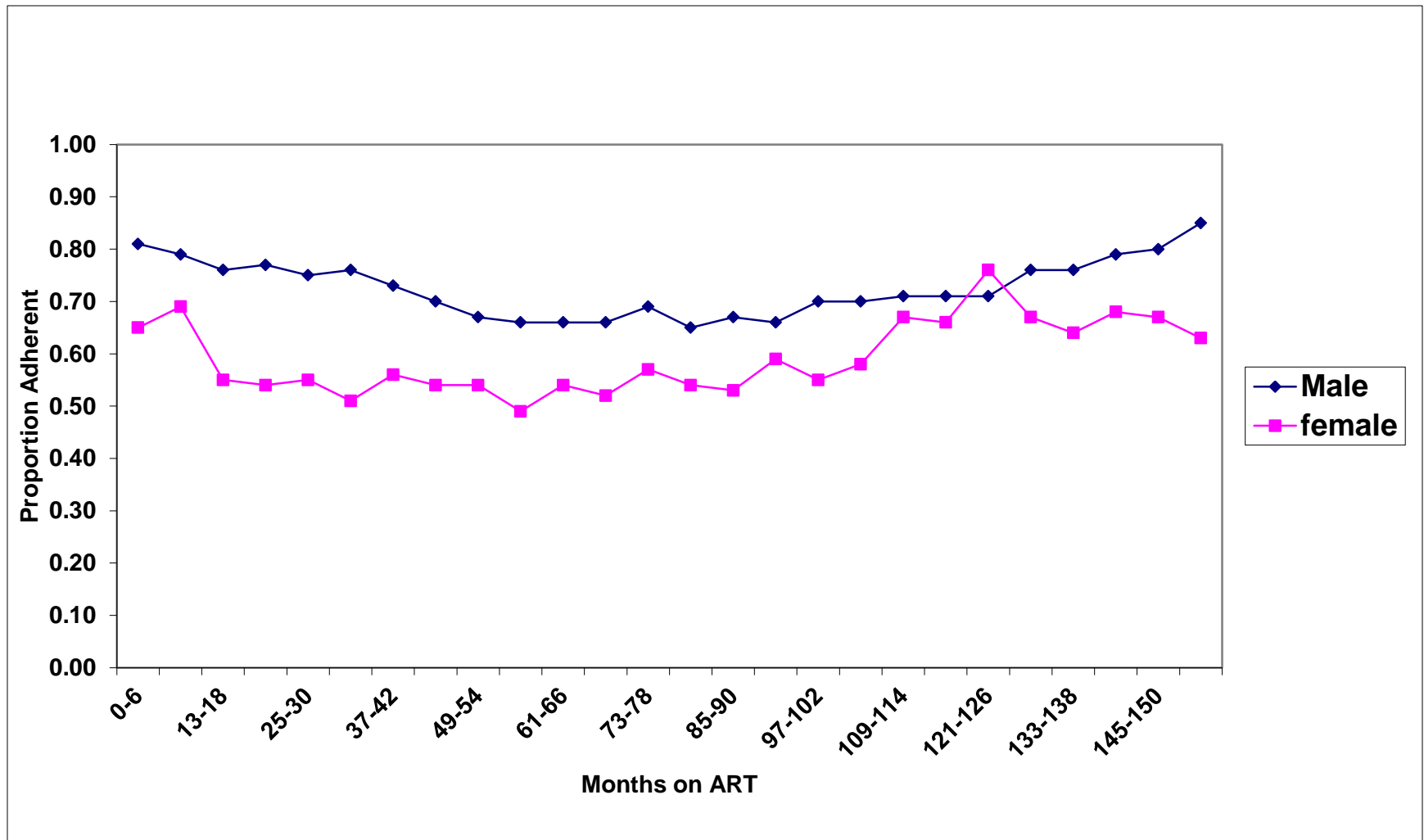
Adherence by calendar year



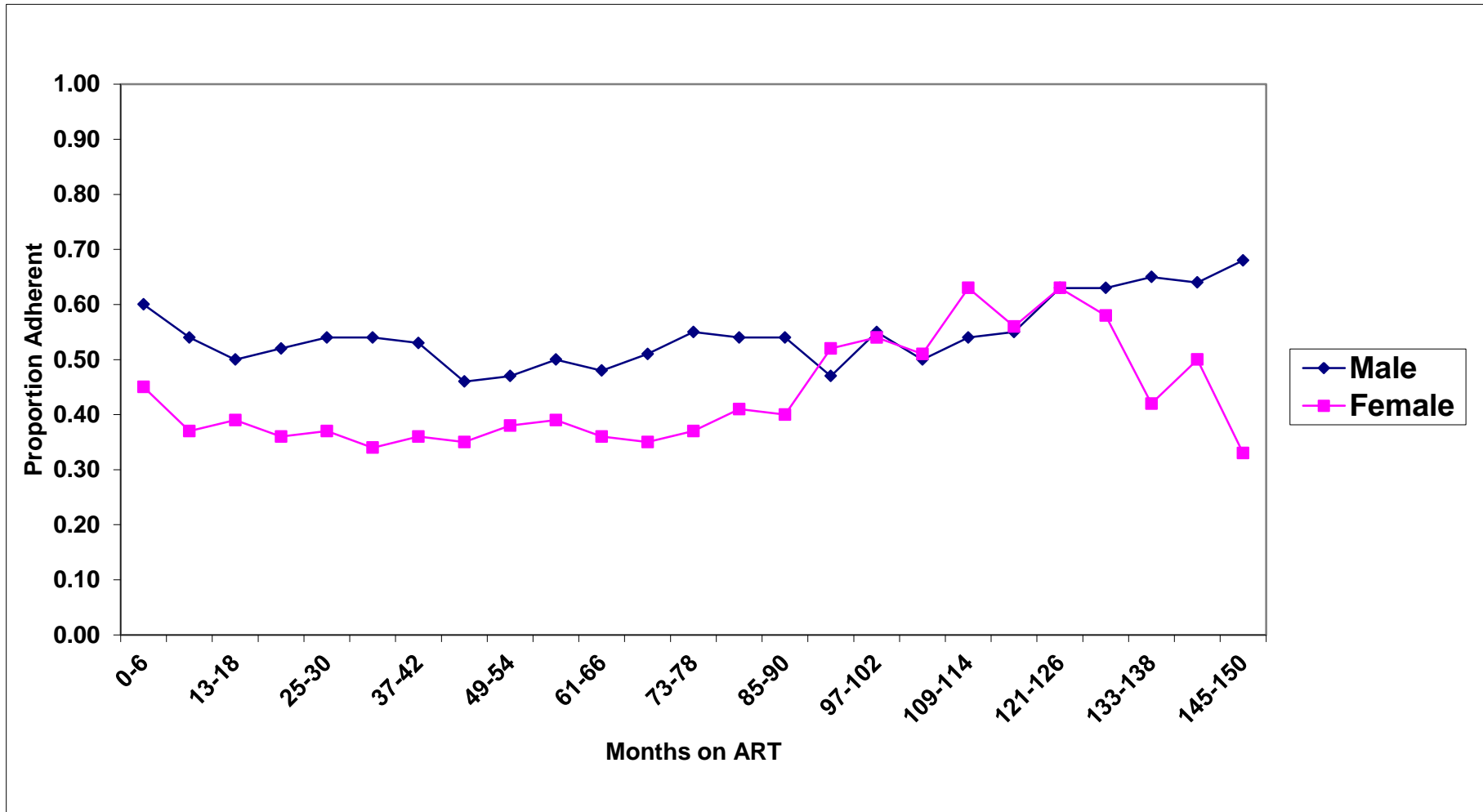
Adherence among IDUs



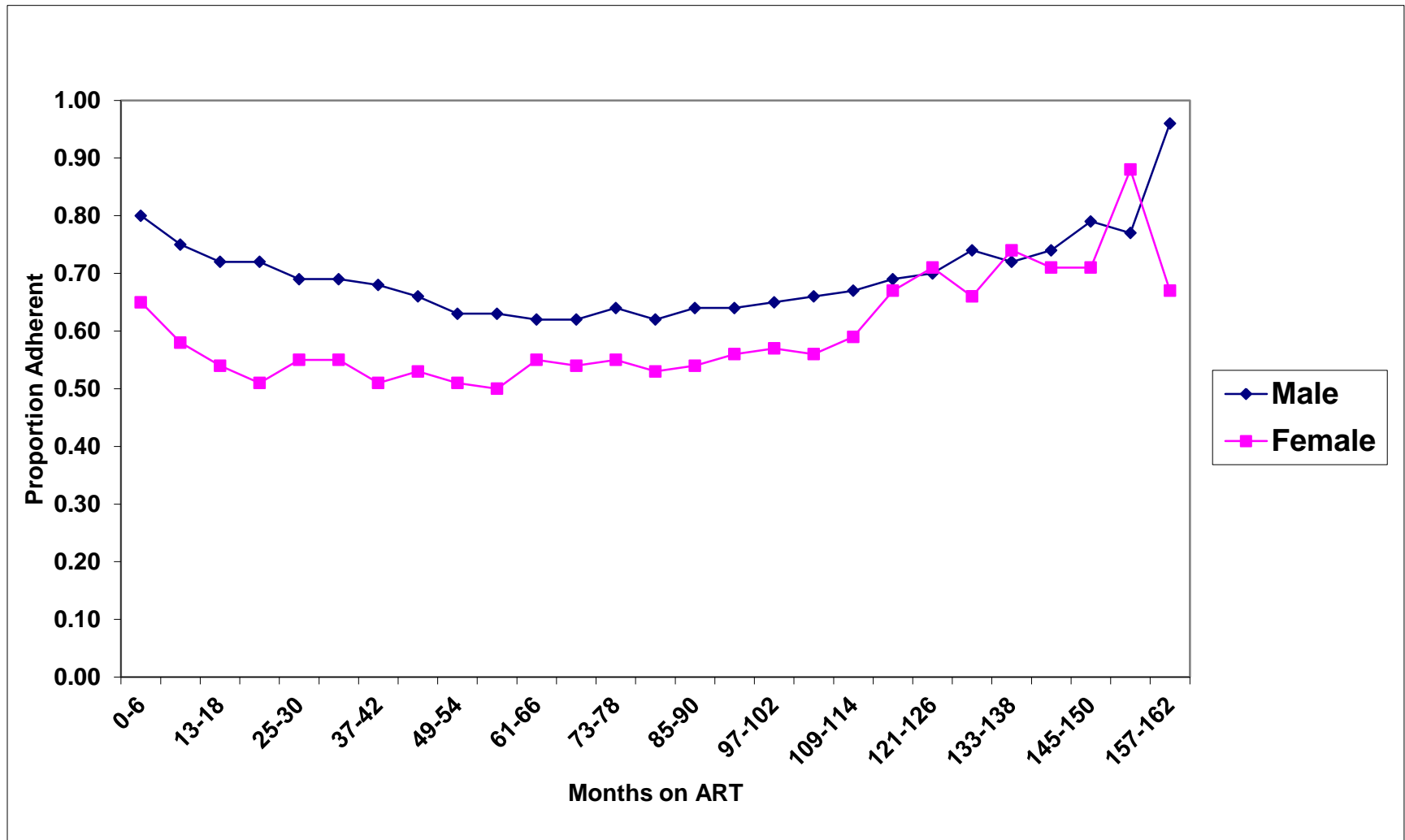
Adherence among non-IDUs



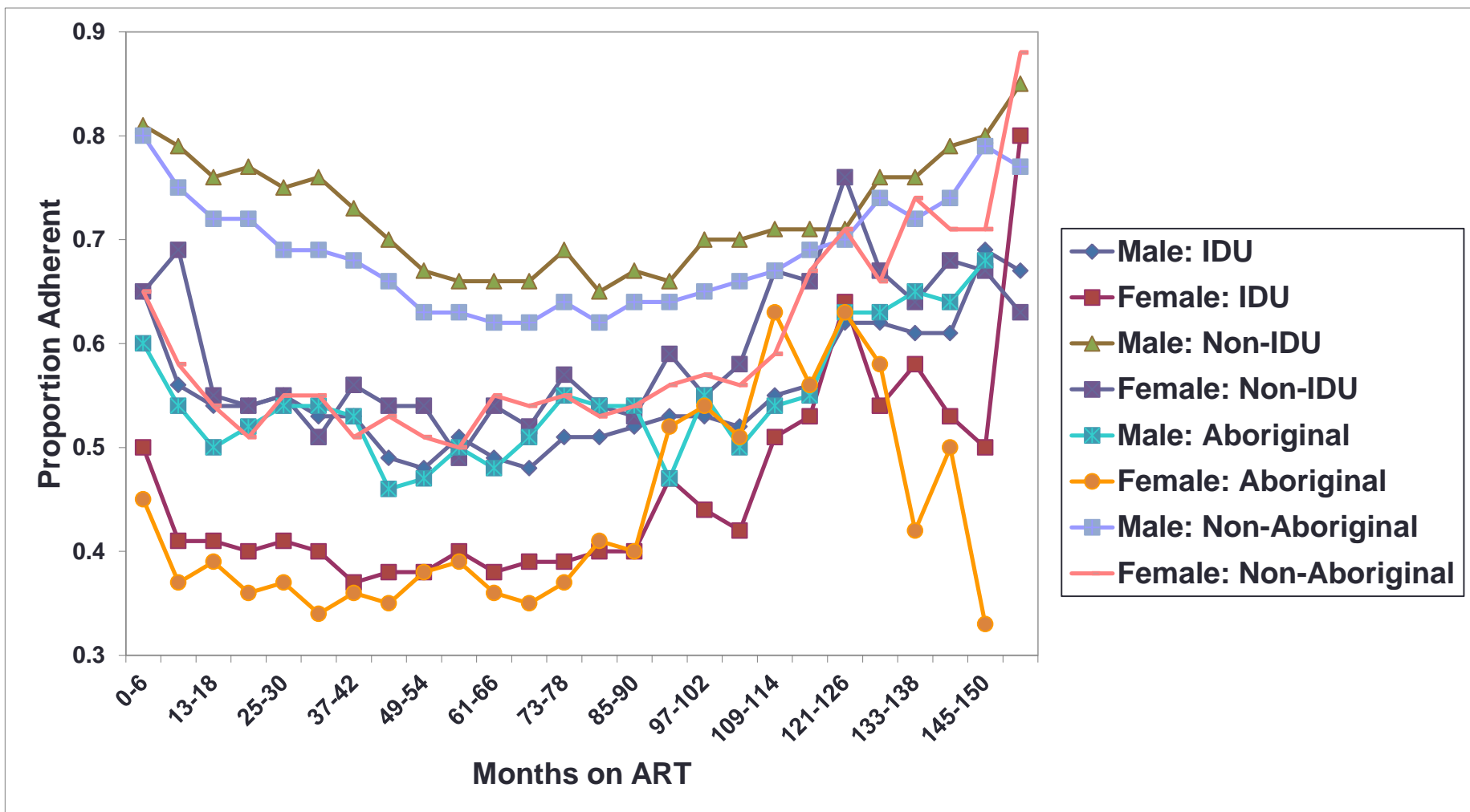
Adherence among Aboriginal peoples



Adherence among non-Aboriginals



Adherence by category



Adherence in British Columbia

		1 year	3 years	5 years	7 years	9 years	11 years
Entire	Men	71% (n=3279)	67% (n=2391)	60% (n=1716)	60% (n=1239)	63% (n=910)	70% (n=587)
	Women	48% (n=760)	44% (n=555)	43% (n=391)	45% (n=268)	49% (n=187)	60% (n=97)
	P-value	P<0.001	P<0.001	P<0.001	P<0.001	P<0.001	P=0.037
IDU	Men	56% (n=1160)	53% (n=881)	51% (n=651)	51% (n=465)	52% (n=349)	62% (n=234)
	Women	41% (n=457)	40% (n=350)	40% (n=243)	40% (n=169)	42% (n=106)	54% (n=54)
	P-value	P<0.001	P<0.001	P=0.003	P=0.017	P=0.080	P=0.263
Non-IDU	Men	79% (n=2119)	76% (n=1510)	66% (n=1065)	65% (n=774)	70% (n=561)	76% (n=353)
	Women	69% (n=303)	51% (n=205)	49% (n=148)	54% (n=99)	58% (n=81)	67% (n=43)
	P-value	P<0.001	P<0.001	P<0.001	P=0.021	P=0.032	P=0.225
Aboriginal Ethnicity	Men	54% (n=327)	54% (n=250)	50% (n=179)	54% (n=132)	50% (n=102)	63% (n=70)
	Women	37% (n=199)	34% (n=144)	39% (n=97)	41% (n=71)	51% (n=47)	58% (n=19)
	P-value	P<0.001	P<0.001	P=0.093	P=0.079	P=0.904	P=0.693
Non-Aboriginal Ethnicity	Men	75% (n=1568)	69% (n=1303)	63% (n=1048)	62% (n=808)	66% (n=611)	74% (n=410)
	Women	58% (n=243)	55% (n=210)	50% (n=157)	53% (n=114)	56% (n=81)	66% (n=50)
	P-value	P<0.001	P<0.001	P=0.002	P=0.046	P=0.057	P=0.250

Limitations

- Adherence measures based on pharmacy refill data
- Categorical overlap
- Sexual orientation has not been considered
- Does not indicate gender-based barriers to therapy initiation

Conclusions

- Sex differences in adherence do exist at a significant level in British Columbia.
 - There is a need to identify and address barriers to adherence specific to women.
- These differences exist regardless of IDU or Aboriginal ethnicity.
 - There is a need to identify and address barriers to adherence specific to people with a history of IDU and Aboriginal peoples.

Acknowledgements

- BC Centre for Excellence in HIV/AIDS
- Faculty of Health Sciences, Simon Fraser University
- Participants in LISA and HOMER cohorts