

Cervical cancer up to 20 years-old and under 25 years-old in two developed regions from Brazil: 12-years study

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Brazil



Disclosures

- This study was partially supported by
GlaxoSmithKline Biologicals S.A (*EPI-HPV-047 BOD BR SUPP*)
*The funders had no role in study design, data collection, analysis, or
preparation of this presentation*
- Authors do not have any other financial relationships or conflict of
interest to disclose



Regions studied



Brazil – Cervical cancer

Screening opportunistic / cytology each 3y / 25-64y

Coverage 40-50% → → 16,340 new cases/2016

	<u>Cities</u>	<u>Population</u>	<u>HDI</u>
Campinas (Sao Paulo State)	82	5 million	0.805 (28º)
Curitiba (Parana State)	95	5 million	0.823 (10º)

0.8-1.0 = Very high human development

- ✓ Regional Cancer Center Hospital
- ✓ Health Public System (cover 50% of population)
- ✓ Hospital-Based Cancer Registries (HCR) system

Objective

to evaluate → cervical cancer rate
→ cancer stage (FIGO)
→ histologic type

In youngers...
Increasing rate ?
↑ advanced stage ?
↑ adenocarcinoma ?

according to age-group

up to 20 years-old and under 25yo

X

25-29yo, 30-34yo and ≥35yo



Methods

- Data about cervical cancer registered from HCR of two regions
- Period 2001-2012
- Analyzed by year of diagnostic, age-group, stage and cancer histology
- Statistical analysis assessed the pooled data and by region
- Chi-square for linear trend test and *p-values* <0.05 for significance
- This study was approved by IRB and Ethics Committee from each Hospital



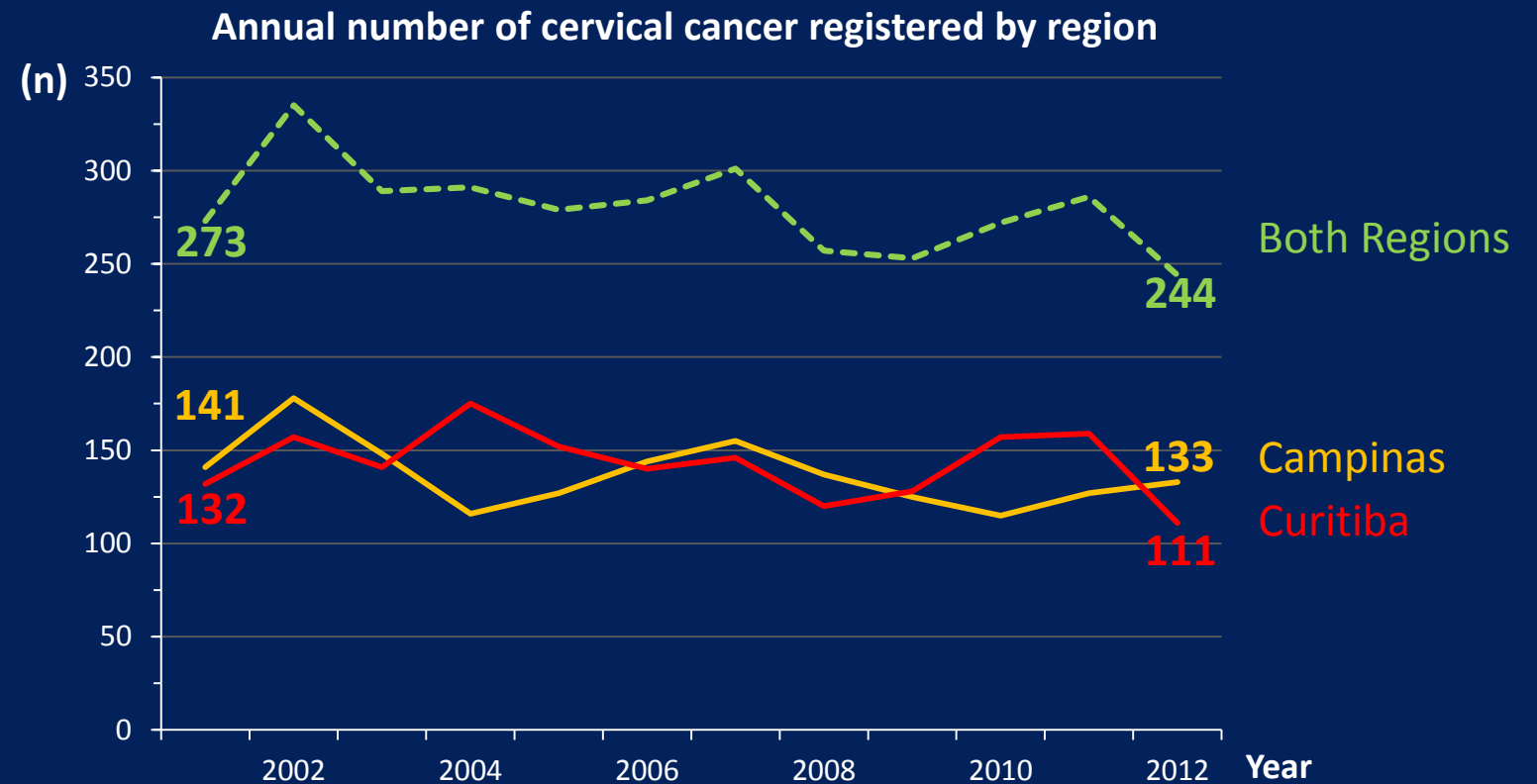
Results

n= 3363 registries analyzed

→ Campinas= 1646 (49%)

→ Curitiba= 1717 (51%)

(slight drop)



Results

Age-group distribution (2001-2012)

Age-group	Cases (%)		
	Both regions	Campinas	Curitiba
15-24y	52 (1.5)	25 (1.5)	27 (1.6)
<i>up to 20y</i>	<i>7 (0.2)</i>	<i>5 (0.3)</i>	<i>2 (0.1)</i>
25-29y	166 (4.9)	74 (4.5)	92 (5.4)
30-34y	272 (8.1)	116 (7.0)	156 (9.1)
≥35y	2873 (85.5)	1431 (86.9)	1442 (84.0)



Results

→ Cancer rate

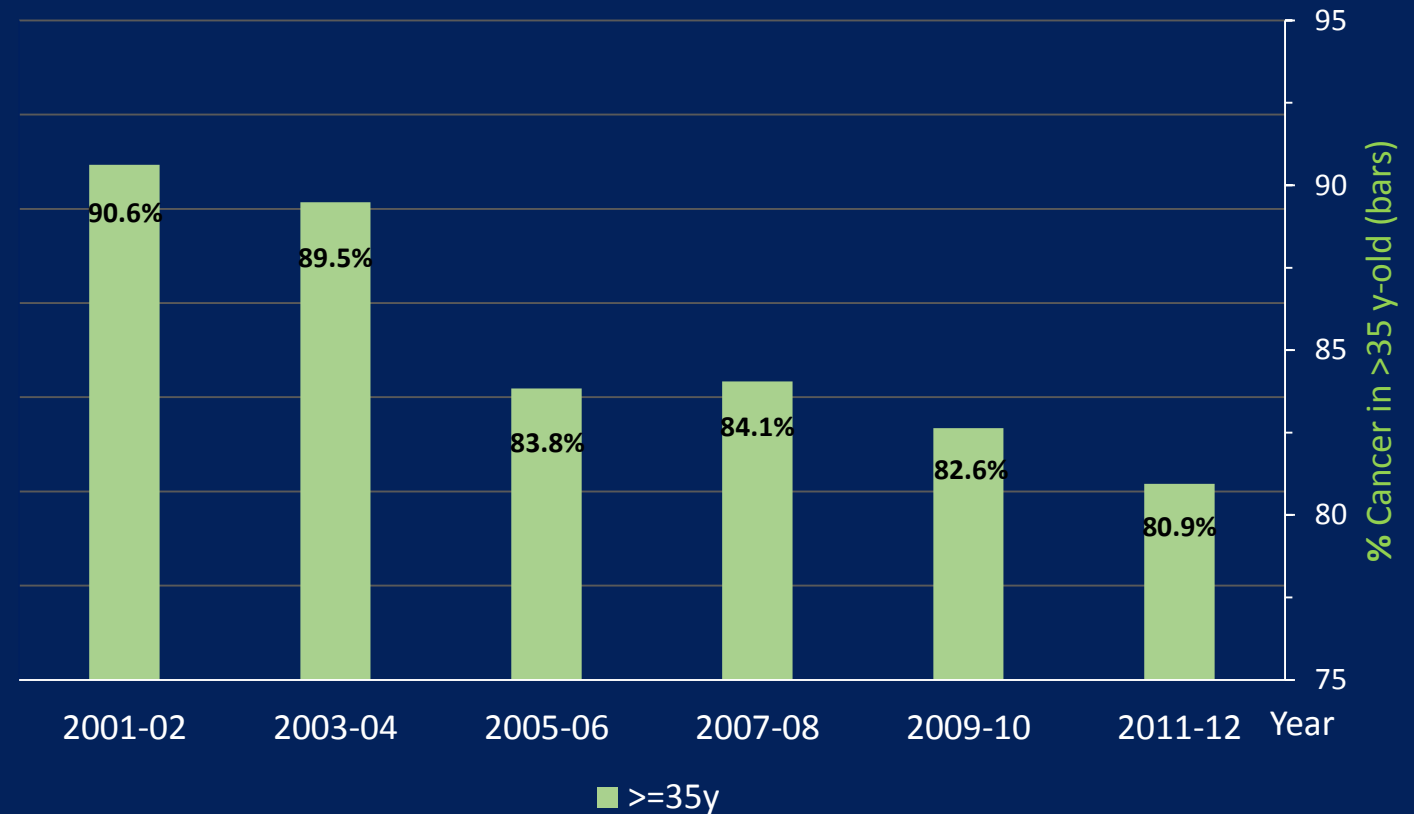
by age-group (both regions/pooled)

1. Age ≥ 35 y (*bars*)

→ decreasing proportion ($p=0.363$)

90.6% (2001-02) to 80.9% (2011-2012)

Two-year cervical cancer registered by age-group for both regions



Results

→ Cancer rate

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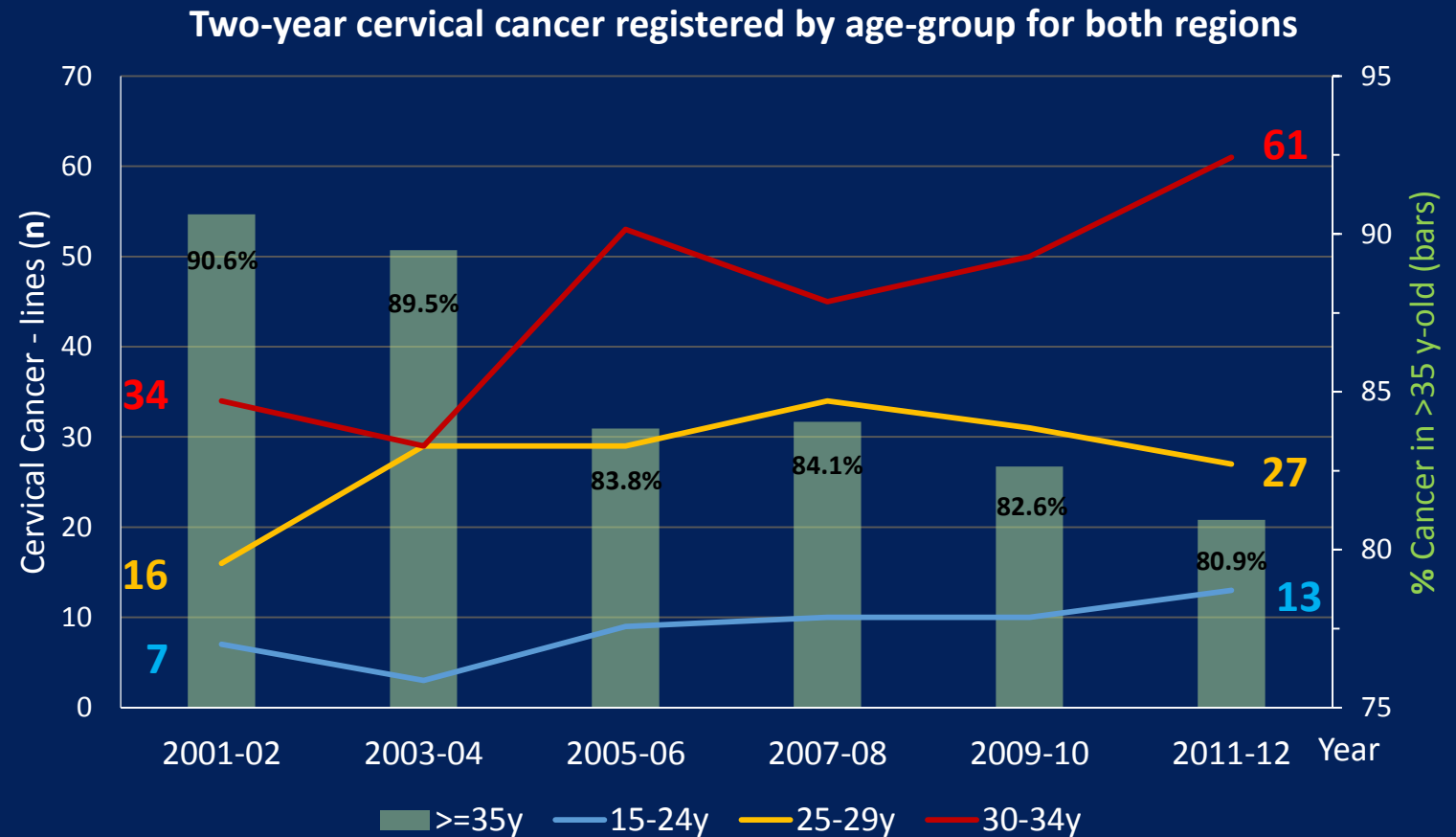
2. Age $<35y$ (lines)

→ Increasing trend:

15-24y → $p=0.004$

25-29y → $p=0.253$

30-34y → $p=0.043$



Results

→ Cancer under 35 y

Age-group	Trend (p) Campinas	Trend (p) Curitiba
15-24y	↑ (0.034)	↔ (0.379)
25-29y	↑ (0.017)	↔ (0.790)
30-34y	↑ (0.002)	↔ (0.053)

Campinas region showed increased proportion of cancer in younger age-groups, but unchanged for Curitiba region



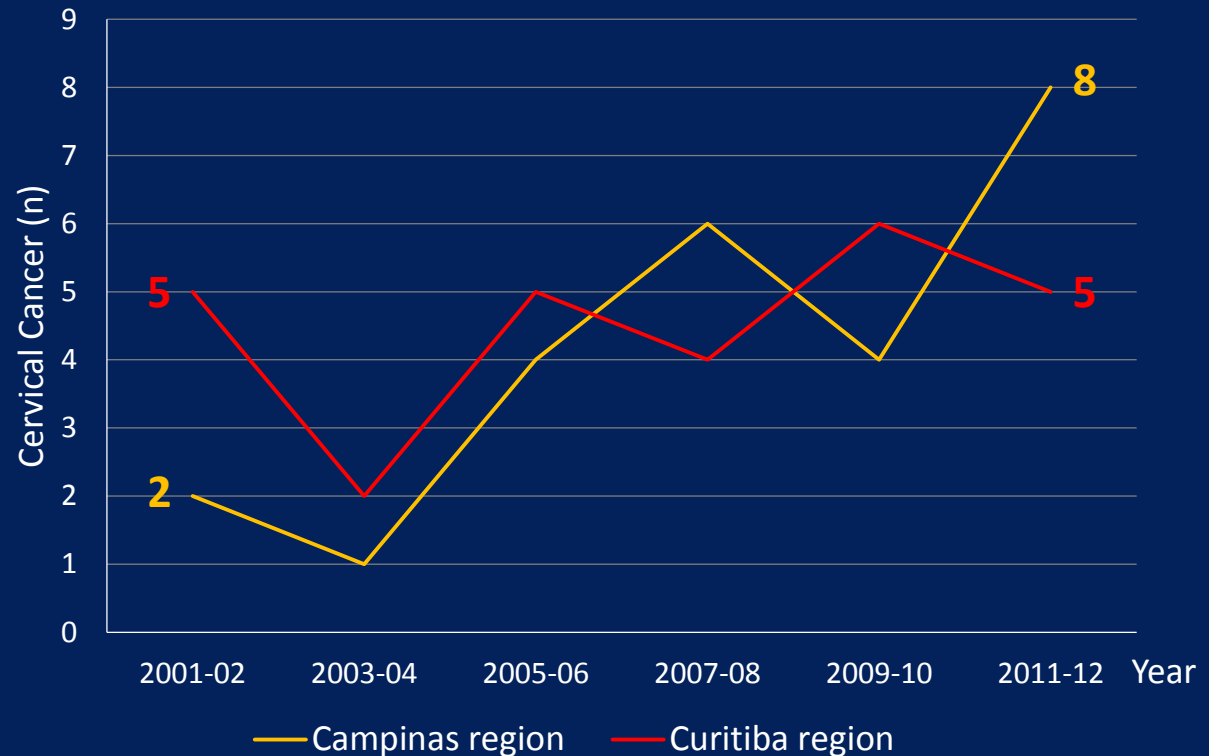
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Two-year cervical cancer registered by 15-24 years and region



Results

Cancer Stage

1. Stage I

15-24y vs. 35y or more

55.6%

30.8%

(38% microinvasive cancer, IA)



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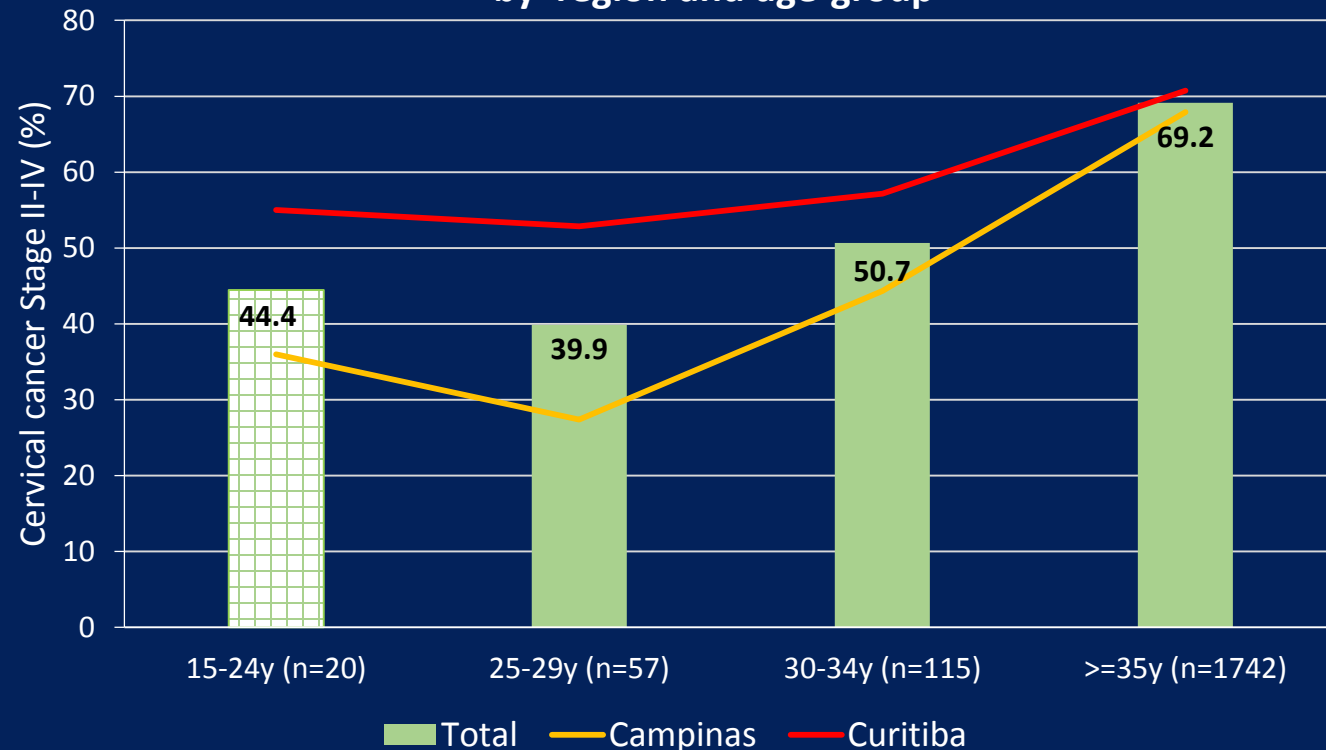
2. Advanced stage (II-IV)

ref. 15-24y → 44.4%

vs. 25-29y → 39.9% ($p=0.585$)

vs. $\geq 35y$ → 69.2% ($p<0.001$)

Proportion of advanced stage (II to IV) of cervical cancer registered by region and age-group



Results

Histologic types

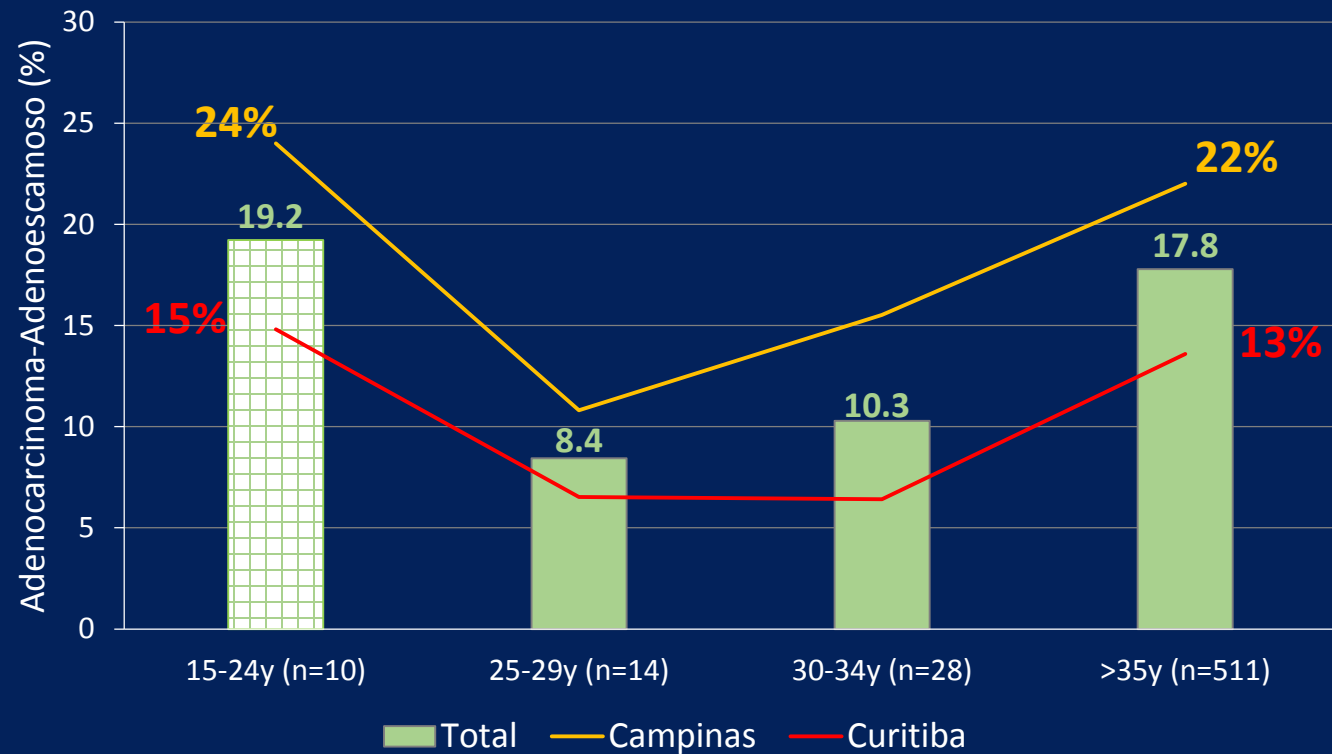
Higher proportion of diagnoses
Adenocarcinoma or
carcinoma adenosquamous
was in women 15-24y

19.2% (10/52)
(2/7 cases at age up to 20y)

vs.

8.4 – 17.8% for the 25y+

Proportion of glandular histologic type of cervical cancer registered
by region and age-group.



Conclusion

- ✓ 1.5% of all cervical cancer were in age-group under 25 years
- ✓ There was an increasing trend for cervical cancer diagnosed in age under 25 years, more evident for Campinas region, although there was few cases in age up to 20 years
- ✓ 55% of women at age under 25 years had Stage I cervical cancer against 30% for women ≥ 35 years (~70% of advanced stage)
- ✓ Cervical cancer with glandular histology was more frequent in women under 25 years than women ≥ 35 years

