Evaluation of data accuracy of the Prostate Cancer Registry at the Singapore General Hospital

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Outline

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Singapore

South-east Asia 682.7km^2 4 million people (2000 census)

Main island of Singapore & several offshore islands

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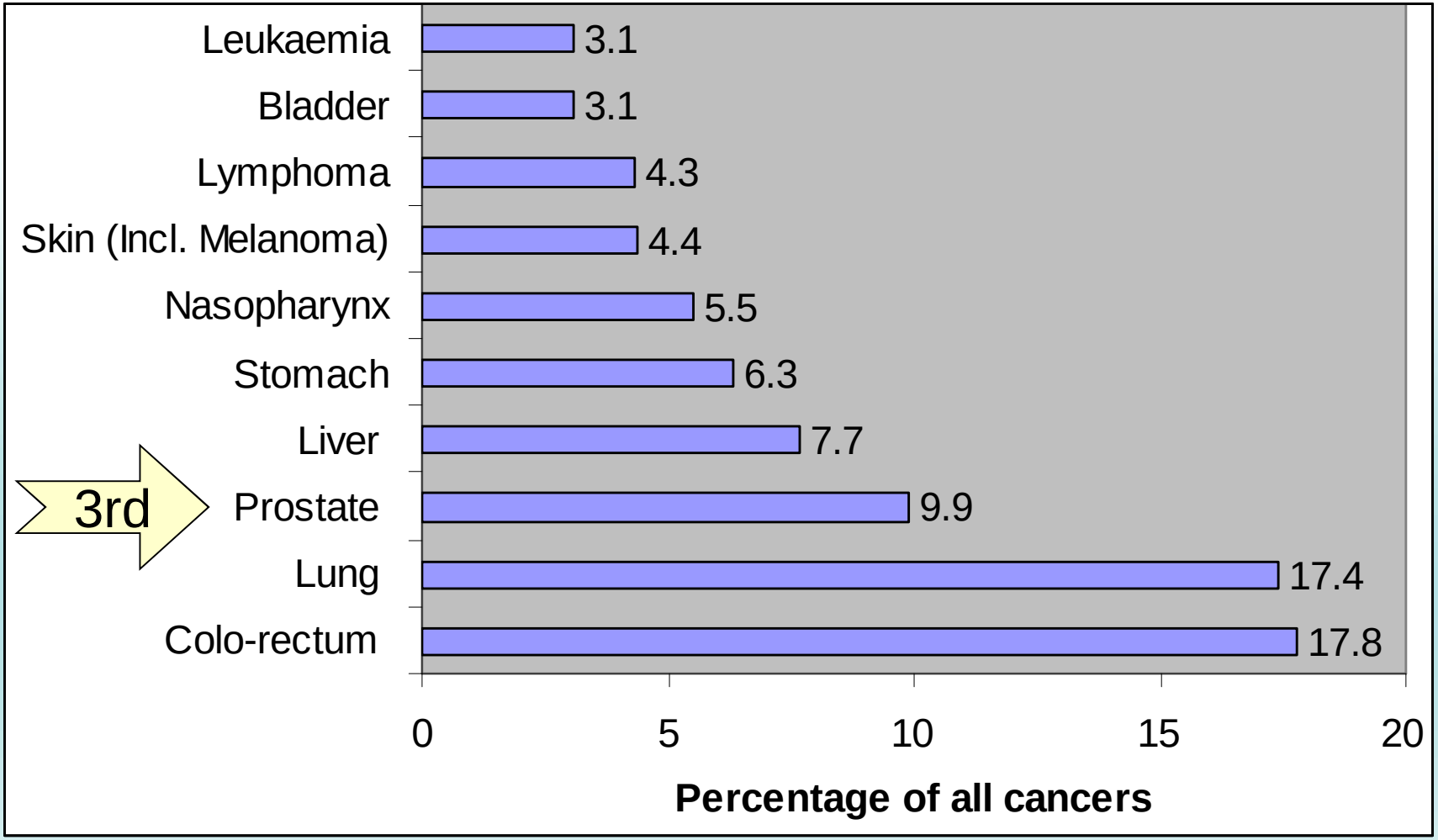
Ten Most Frequent Cancers in Males in Singapore, 2003 -2007



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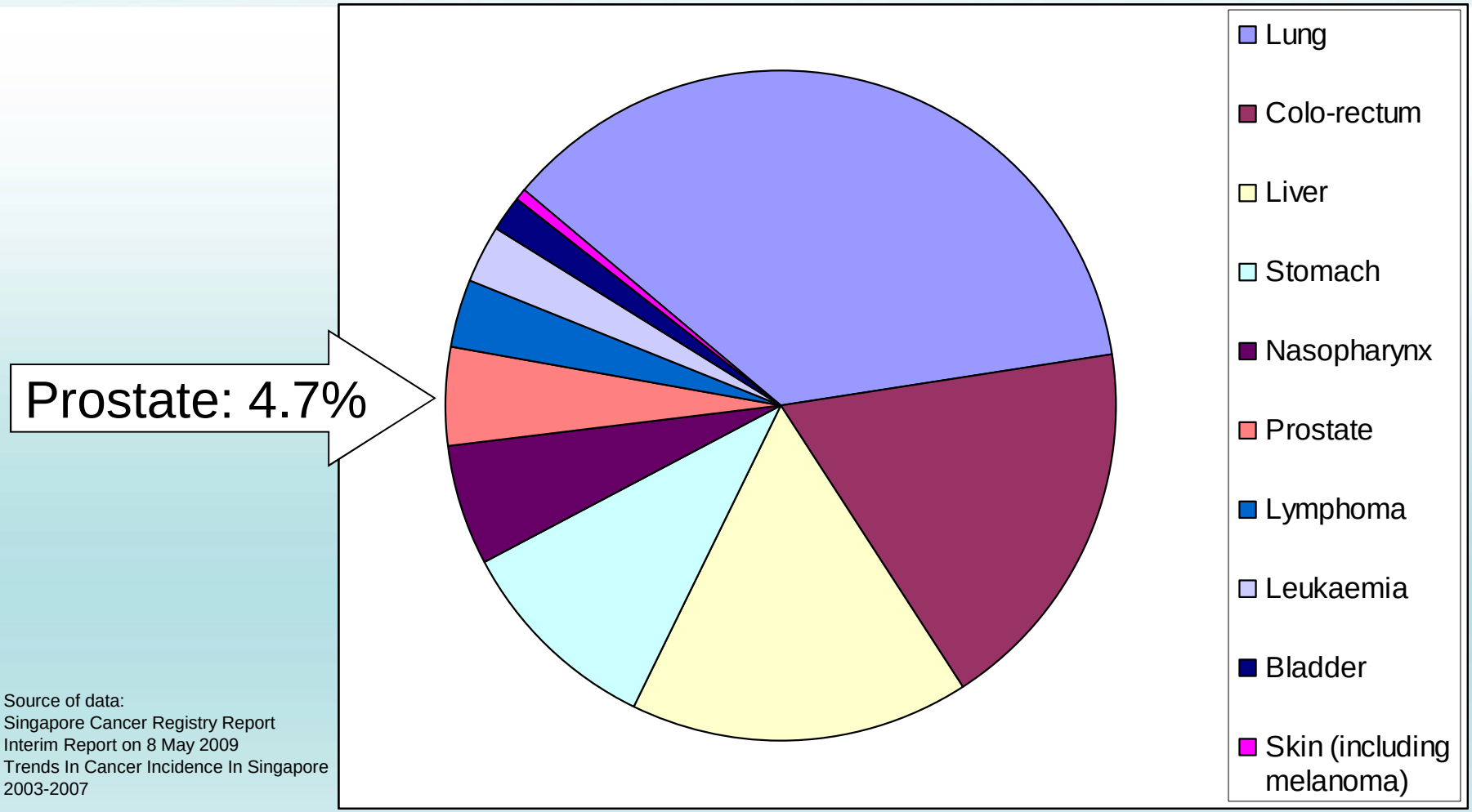
Mortality Rates for Ten Most Frequent Cancers in Males in Singapore, 2003 -2007



Source of data:
Singapore Cancer Registry Report
Interim Report on 8 May 2009
Trends In Cancer Incidence In Singapore
2003-2007

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Development of the Prostate Cancer Registry

- Department of Urology Uro-oncology database since 1980's

- Standardized the prostate cancer dataset in Year 2008

  - ➢Standards: CoC & NAACCR

- Started data quality control exercises from Year 2009

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Evaluation of data accuracy

Objectives:

- To estimate rates of data accuracy of the prostate cancer registry
- To evaluate its compliance to CoC standards
- To identify problems in data collection and interpretation

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Evaluation of data accuracy

Methods:

- Re-abstracting audits
- By an Urologist and a CTR who are not the original abstractors

Table 1: Define the scope of the evaluation

Total prostate cancer cases from 1980 to 2007	No of cases evaluated	% of caseload evaluated	CoC minimum requirement
2360	257	10.9%	10.0%

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Evaluation of data accuracy

Results:

Table 2: Data accuracy of the prostate cancer registry at Department of Urology, SGH (1980 to 2007)

Data item	UCR performance	CoC recommendations
Date of birth	99.6%	90.0%
Date of diagnosis	98.8%	90.0%
Pre-op PSA	96.5%	90.0%
Gleason score at 1st positive biopsy for prostate cancer	94.6%	90.0%
Clinical staging	88.3%	90.0%
Cancer status at last follow-up	97.3%	90.0%
Survival status	100.0%	90.0%

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Evaluation of data accuracy

Conclusions:

- Majority of accuracy rates: exceeded the CoC requirement
- Clinical staging: not meet the CoC requirement
  - Not Urologists' staging
  - Abstractors: not trained in staging
  - No full time cancer registry staff (inconsistency)

Evaluation of data accuracy

Improvements:

- Urologists' staging (collaborations)
  - Biopsy reports
  - Operation reports
- CTR
- Full time cancer registrars
- Education
  - Qualifications of Cancer Registrars (MBBS)
  - Principles of Oncology for Cancer Registry Professionals
  - Cancer Registry conferences and workshops

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100% accuracy rate

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Summary

Key points to achieve high data accuracy rates:

- Collaborations
  - HOD / Director of Oncology / Director of Research
  - Urologists, Radiation / Medical Oncologists
  - Cancer Registrars
- Full time cancer registrars
- Education & Qualifications of Cancer Registrars

Thank you

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