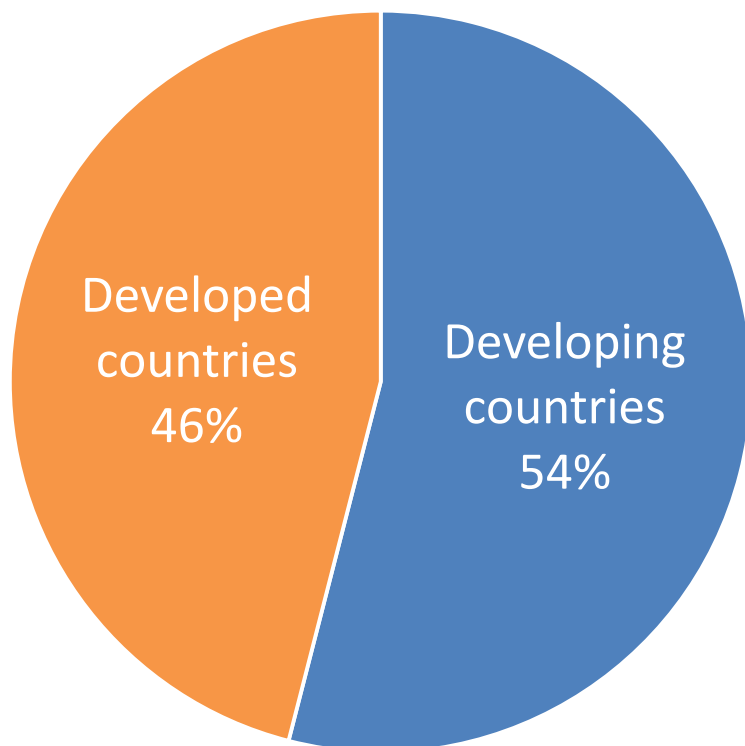


Cancer-related productivity losses in emerging economies

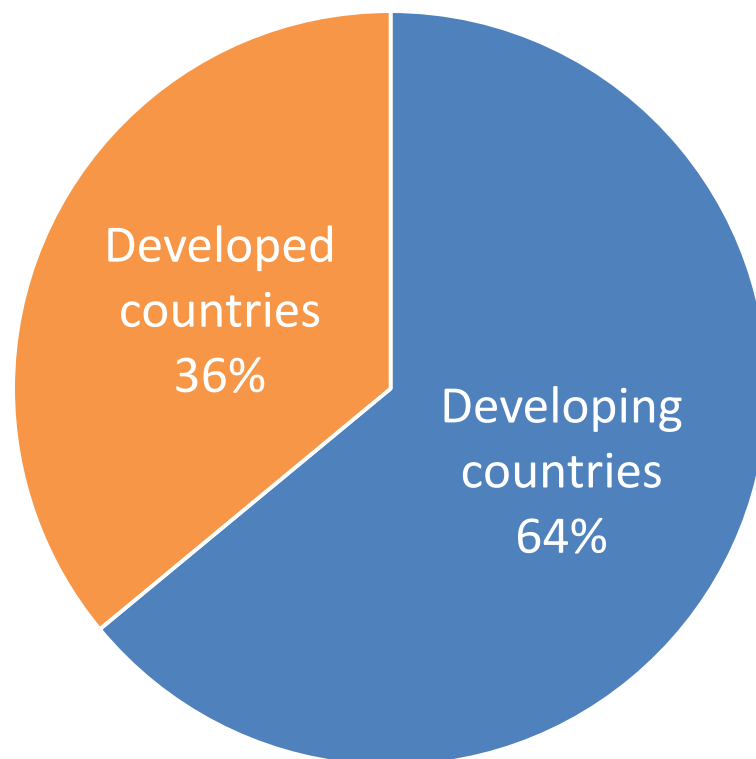
A Pearce, P Hanly, L Sharp, P
Gupta, F Bray, YL Qiao, SM
Wang, A Barchuk, I
Soerjomataram

Cancer in emerging economies

Cancer diagnoses



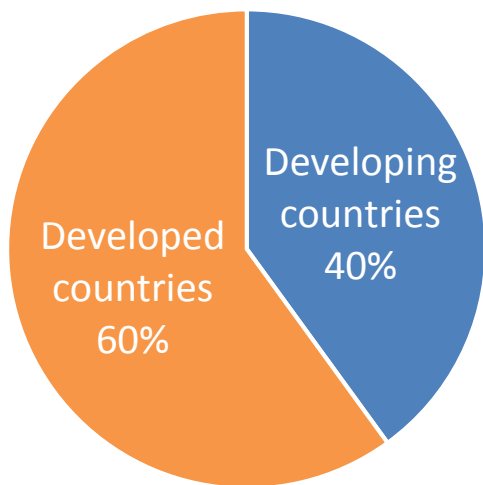
Cancer deaths



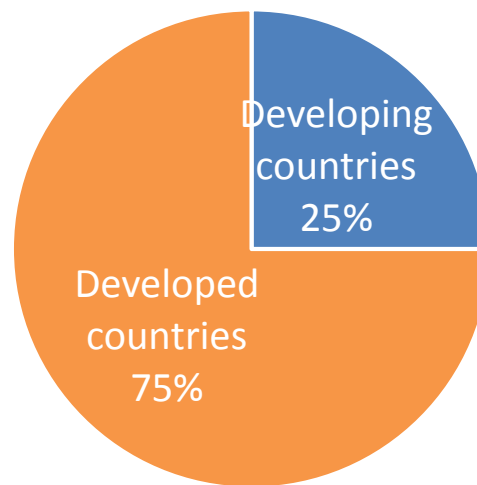
BRICS countries



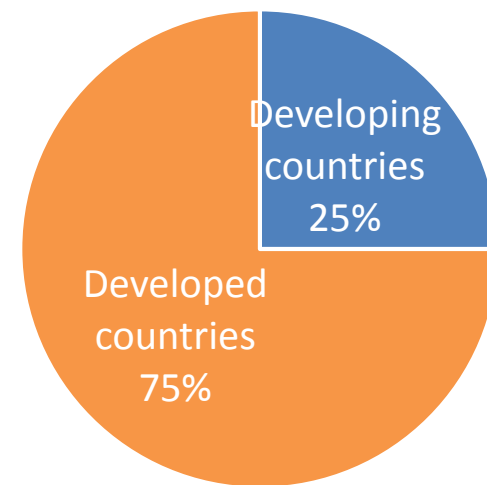
World's population



World's land area



World's GDP



Burden of cancer

Everyone's work contributes to the economy, and not working represents a loss to society



Aim

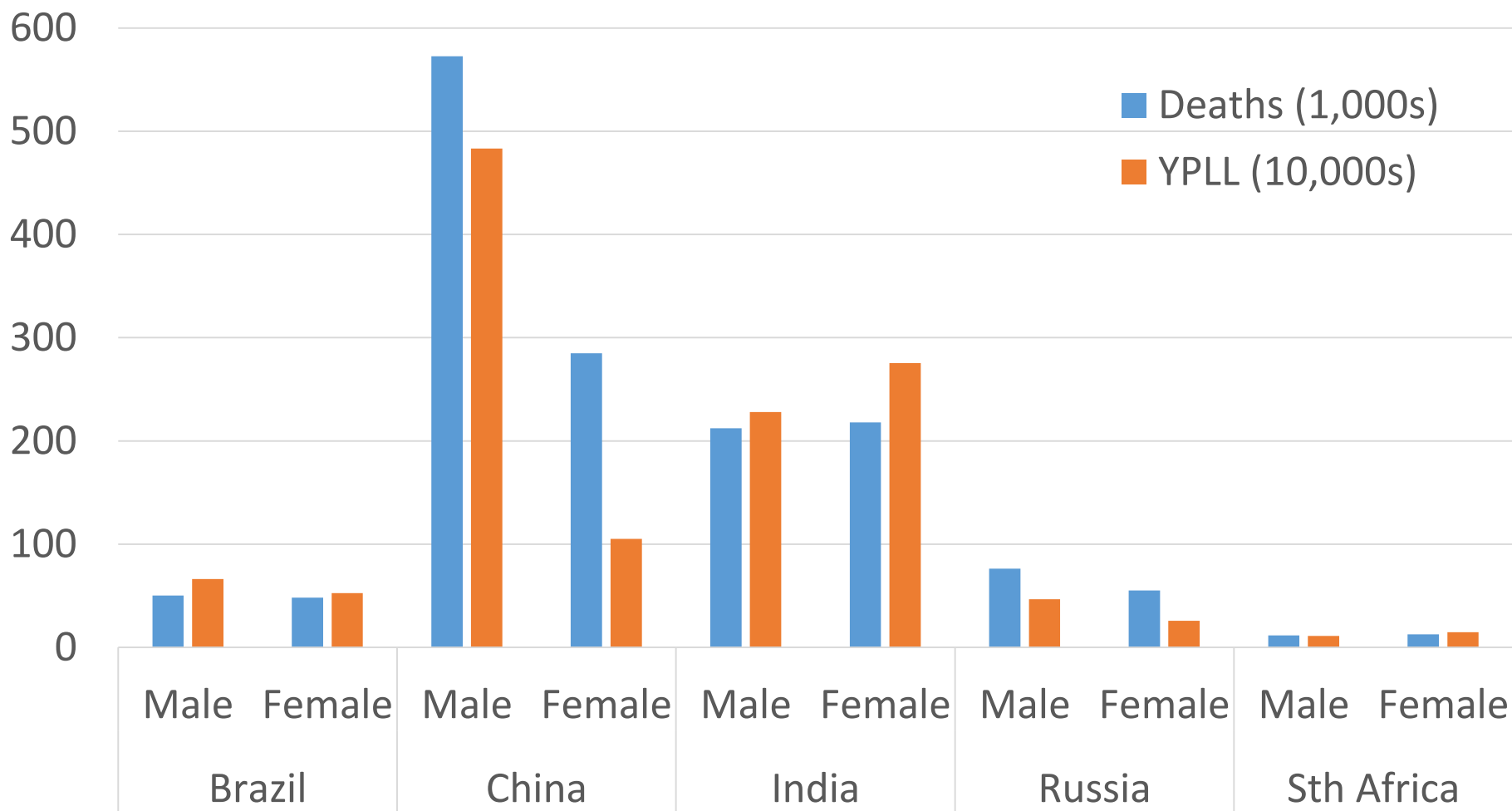
To estimate the value of lost productivity due to cancer-related premature mortality in Brazil, Russia, India, China and South Africa (BRICS)

Methods & Data

- Incidence-based, human capital approach
- GLOBOCAN data
 - Cancer mortality rates
- OECD & ILO data
 - Workforce participation & unemployment
 - Wages & future wage growth
 - Retirement ages

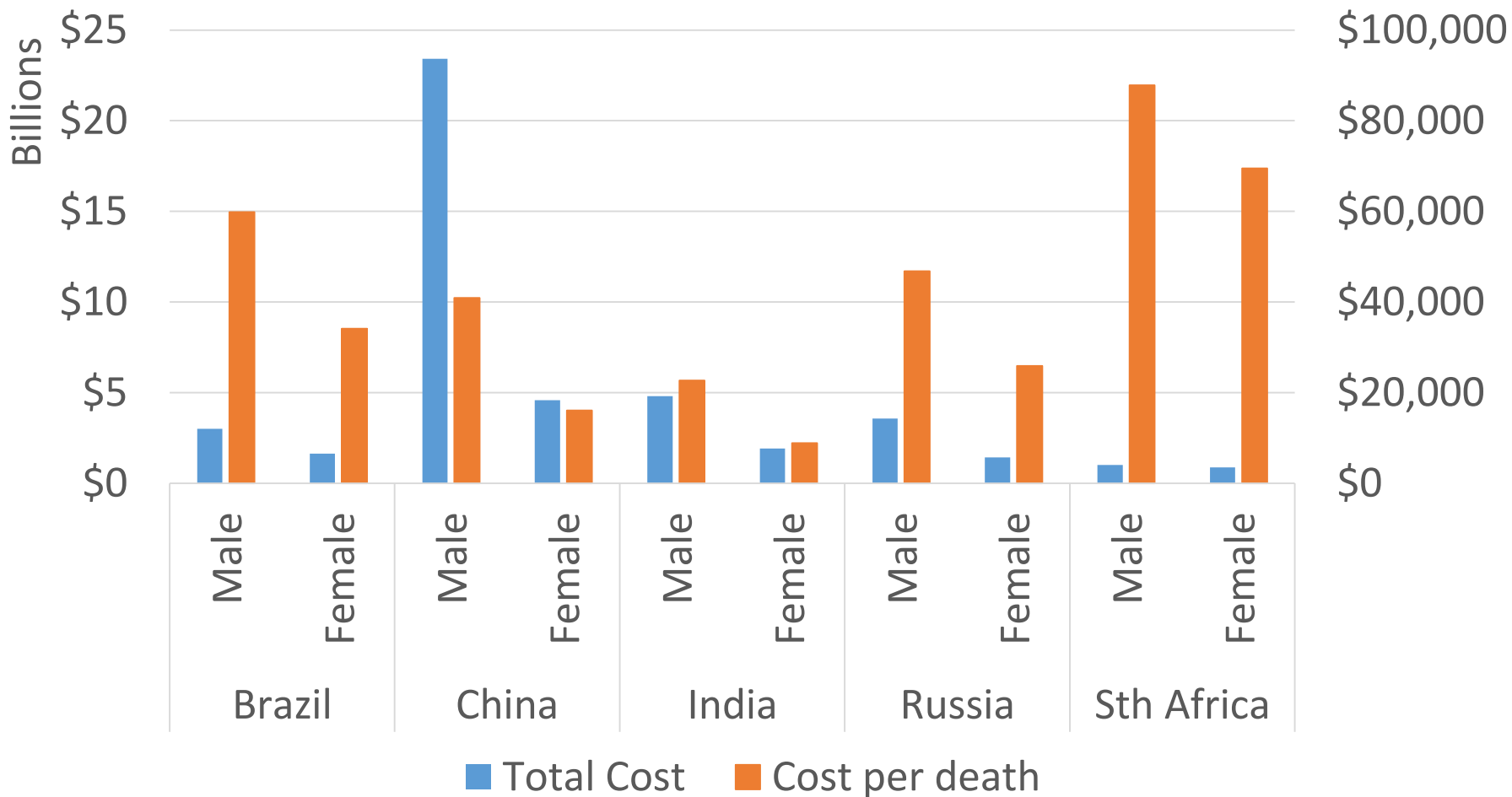
Deaths & YPLL

Deaths & Years of Productive Life Lost

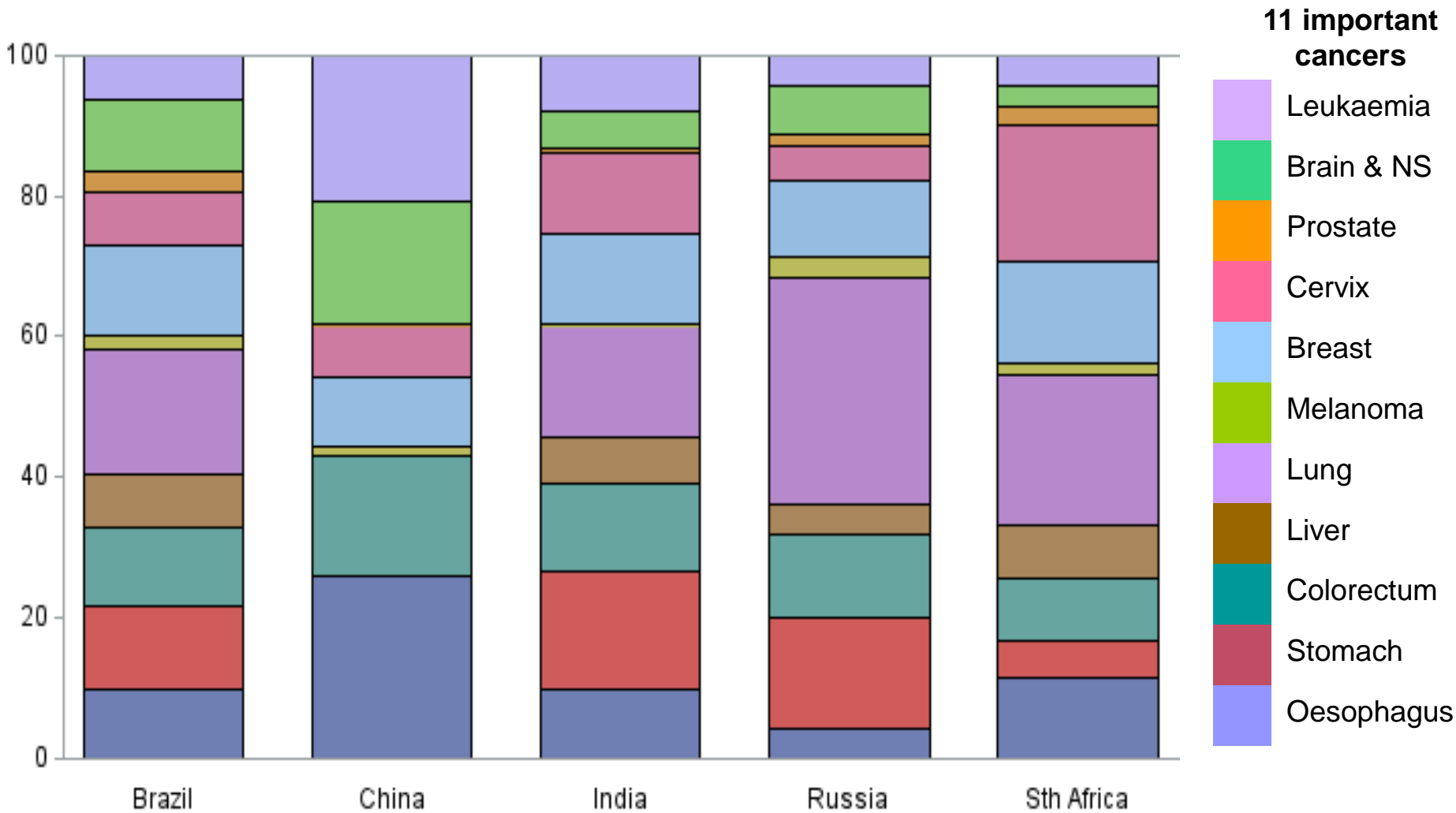


Total cost & cost per death

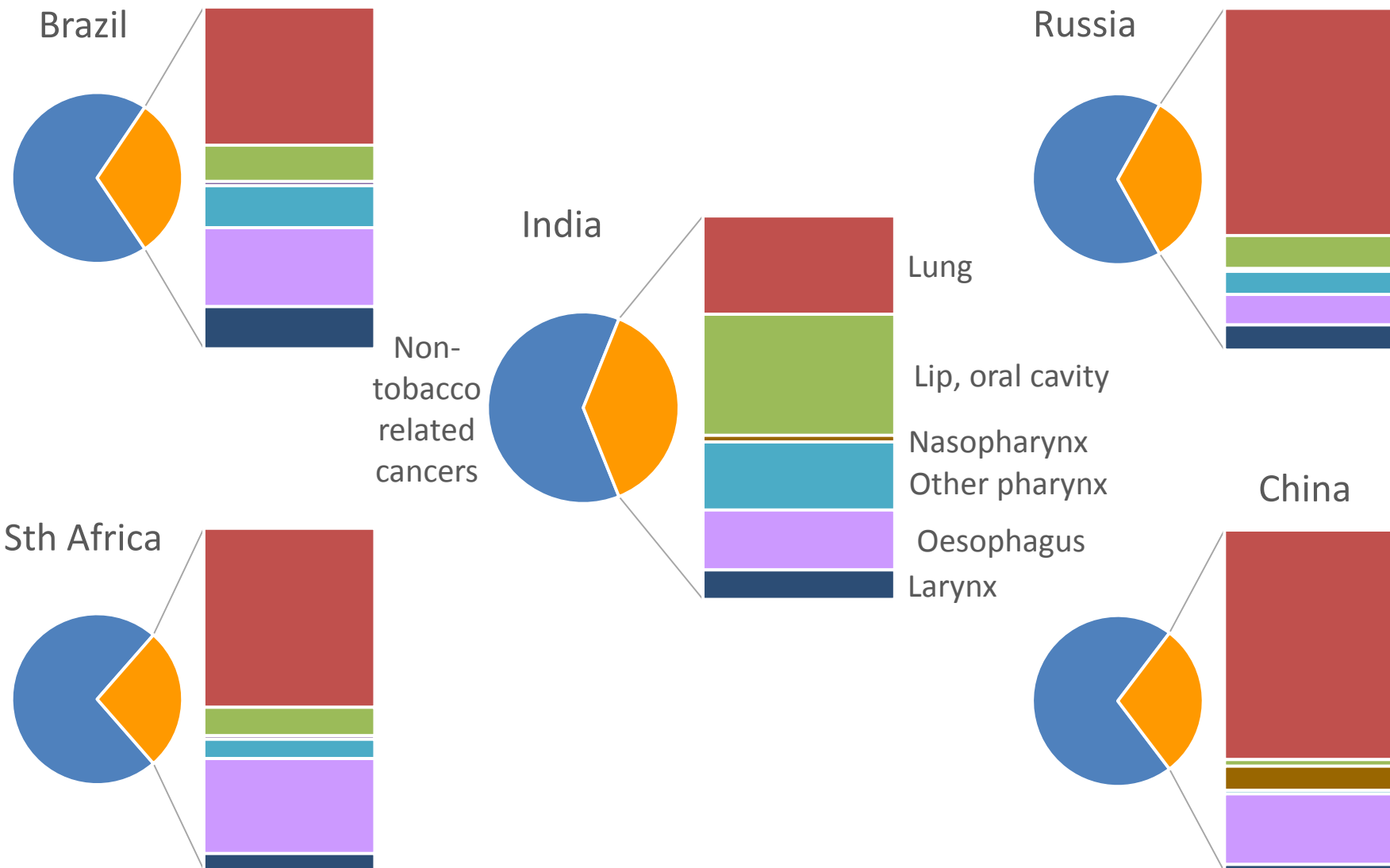
Total cost and cost per death



Results by cancer



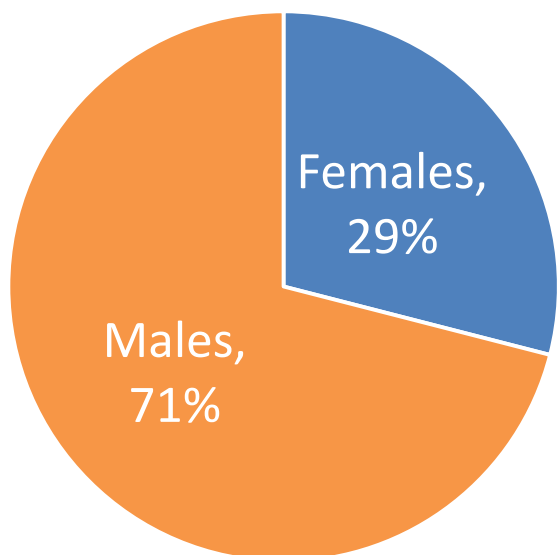
Tobacco related cancers



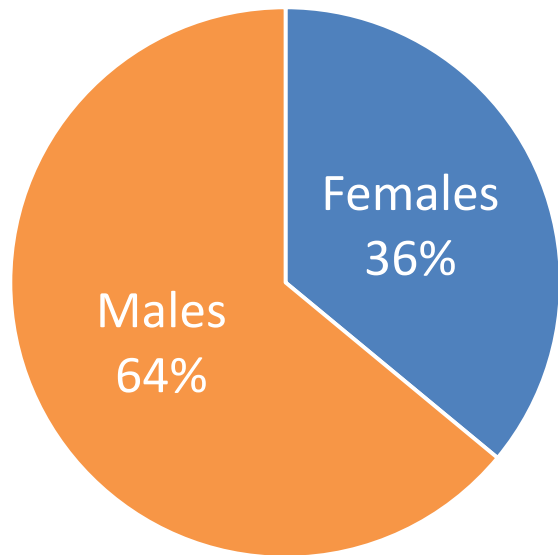
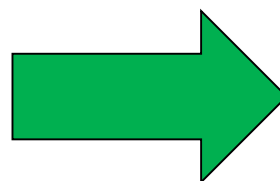
Sensitivity Analyses

- Divide Chinese data by urban and rural
- Increase retirement ages in China & Russia
- Changing growth rates & discounting
- Increase workforce participation in India

Base case



Increased female participation



Implications

- Prevention activities are important, and need to extend beyond tobacco control
- Earlier detection and improved treatment availability to reduce mortality may be economically efficient
- Potential increase in cancer burden through ageing, urbanisation and westernisation

Conclusions

- Limitations: lack of data, assumptions around employment (informal economies and household production)
- Valuing cancer related lost productivity can provide policy makers with an additional perspective when identifying priorities for cancer prevention and control

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