













# ROAD MAP

- Rationale for linking
- Linkage and collaboration
- Possibilities of data





### 1. RATIONALE FOR LINKING

- Socioeconomic and migrant background differences in cancer mortality
- ► E.g. Socioeconomic:
  - ▶ In 1980s: + association education / breast cancer mortality
  - ▶ In 1990s: no or association
    - Change in patterns of incidence or rather survival?



# 1. RATIONALE FOR LINKING

► E.g. Migrant background: lung cancer mortality rate ratios (men, aged 25-54)

Migrant background	Mortality rate ratios	95% confidence intervals
Belgian (reference)	1.00	
French, 1st gen, 0-9 years	0.68	0.40 - 1.17
French, 1 <sup>st</sup> gen, ≥ 10 years	1.46	1.22 – 1.75
French, 2 <sup>nd</sup> gen	1.55	1.18 – 2.03
Dutch, 1 <sup>st</sup> gen, 0-9 years	0.34	0.20 - 0.59
Dutch, 1 <sup>st</sup> gen, ≥ 10 years	0.79	0.57 – 1.11
Dutch, 2 <sup>nd</sup> gen	0.89	0.63 – 1.27
Moroccan, 1st gen, 0-9 years	0.73	0.40 - 1.32
Moroccan, 1 <sup>st</sup> gen, ≥ 10 years	1.00	0.81 – 1.23
Moroccan, 2 <sup>nd</sup> gen	1.99	1.13 – 3.52

Source: Belgian census linked to Registry data and death certificates, period 2001-2011



# 1. RATIONALE FOR LINKING



▶ Do mortality patterns reflect patterns in incidence, or rather survival?



### 2. LINKAGE AND COLLABORATION

- ▶ → Linkage between different databases consisting of
  - ▶ information on sociodemographics and socioeconomic situation (census)
  - cancer incidence (Belgian Cancer Registry)
  - (cause-specific) mortality (death certificates)



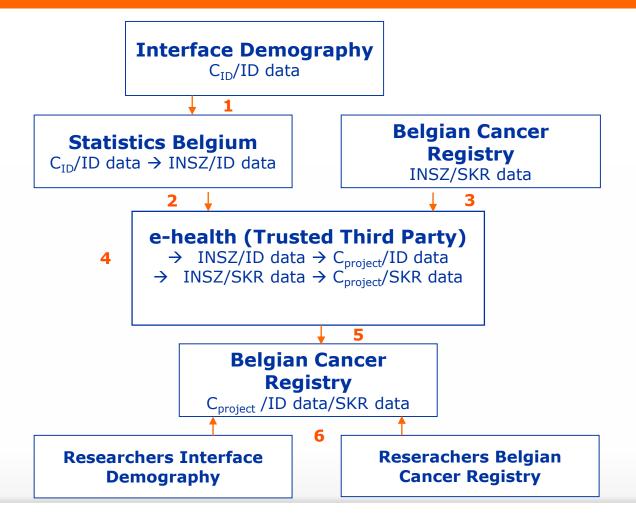
# 2. LINKAGE AND COLLABORATION

- Collaboration between
  - Belgian Cancer Registry
  - Statistics Belgium
  - Interface Demography





# 2. LINKAGE AND COLLABORATION





### 3. POSSIBILITIES OF DATA

#### Main objectives project

- Map out differences in incidence, survival & mortality by migrant background and socioeconomic position
- Probe into mechanisms behind the observed patterns
  - Socioeconomic, demographic and clinical confounders
  - Breaking down: immigrant origin, generations, age at migration, length of stay



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#### 3. POSSIBILITIES OF DATA

#### Example of research currently being conducted

- ► Is lower breast cancer mortality in non-western migrant vs. Belgian women due to lower incidence and/or higher survival in these groups?
  - Role of reproductive factors in incidence pattern?
  - ► Role of stage of diagnosis in differences in survival risks between Belgian and non-western women?





