

# Data-driven shared decision-making on cancer treatment



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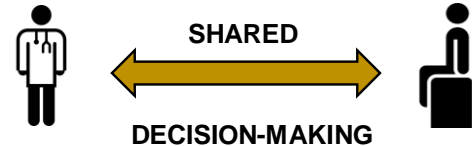
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## 1. PROJECT AIM



AIM

- To facilitate shared decision-making, patients can make use of **decision aids**
- However, such tools are generic and lack personalized explanations about treatments

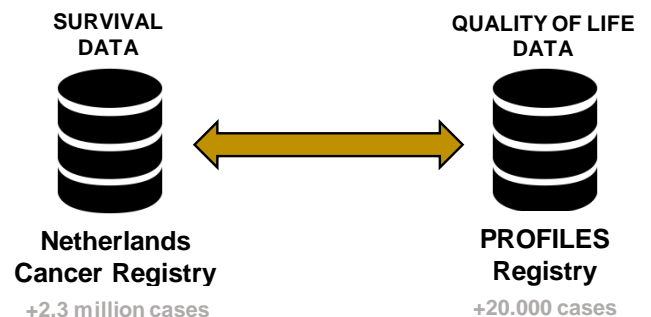


To develop a data-driven personalized patient decision aid

## 2. APPROACH

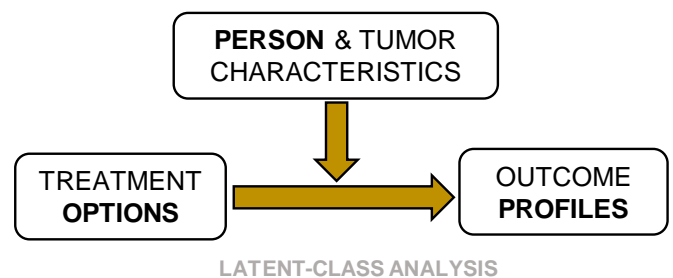
1  
DATA

- We use data from two large and dynamic datasets with information about prior cancer patients
- Both **survival and quality of life data**
- The datasets can be linked at the patient level



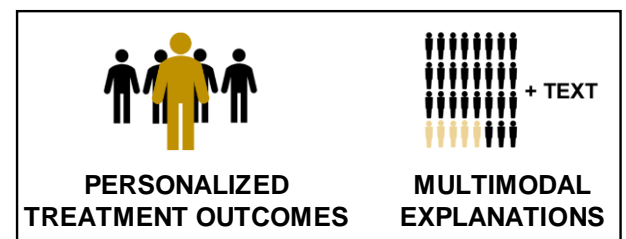
2  
PERSONALIZED  
OPTION PROFILES

- By combining these datasets, we will build new personalized statistical models
- Each **treatment option** yields a possible **outcome profile** with a certain probability, which in turn depends on **person & tumor characteristics**



3  
PERSONALIZED  
DECISION AID

- A **data-to-text system** will automatically generate personalized explanations of the outcome profiles
- The explanations will be patient-friendly and **multimodal**, combining textual and visual information



EXPECTATION

When patients and doctors can rely on personalized data, the shared decision-making process will be more effective and efficient



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Commit2Data