

SafePolyMed - Improving safety in polymedication by managing drug-drug-gene interactions

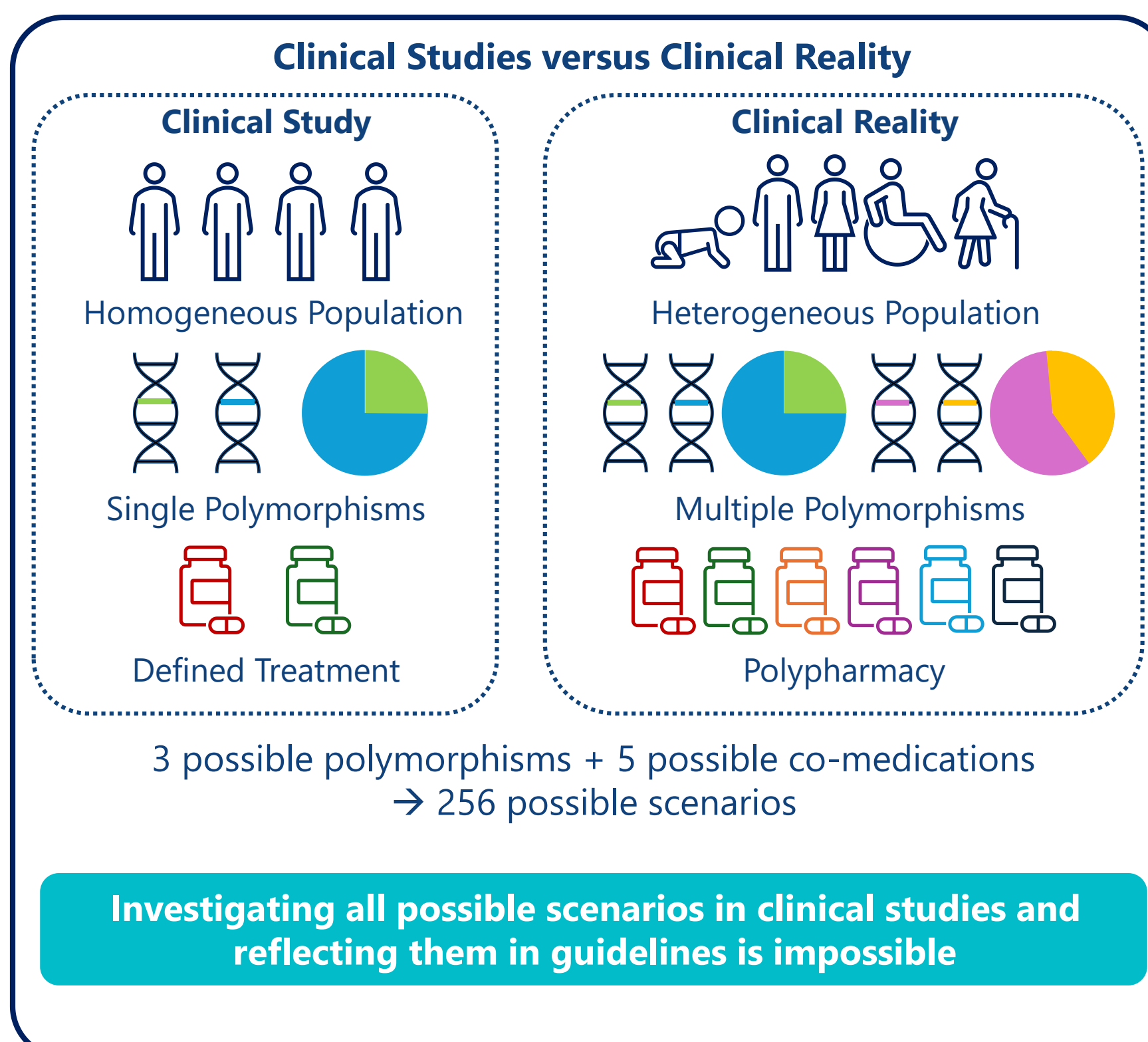
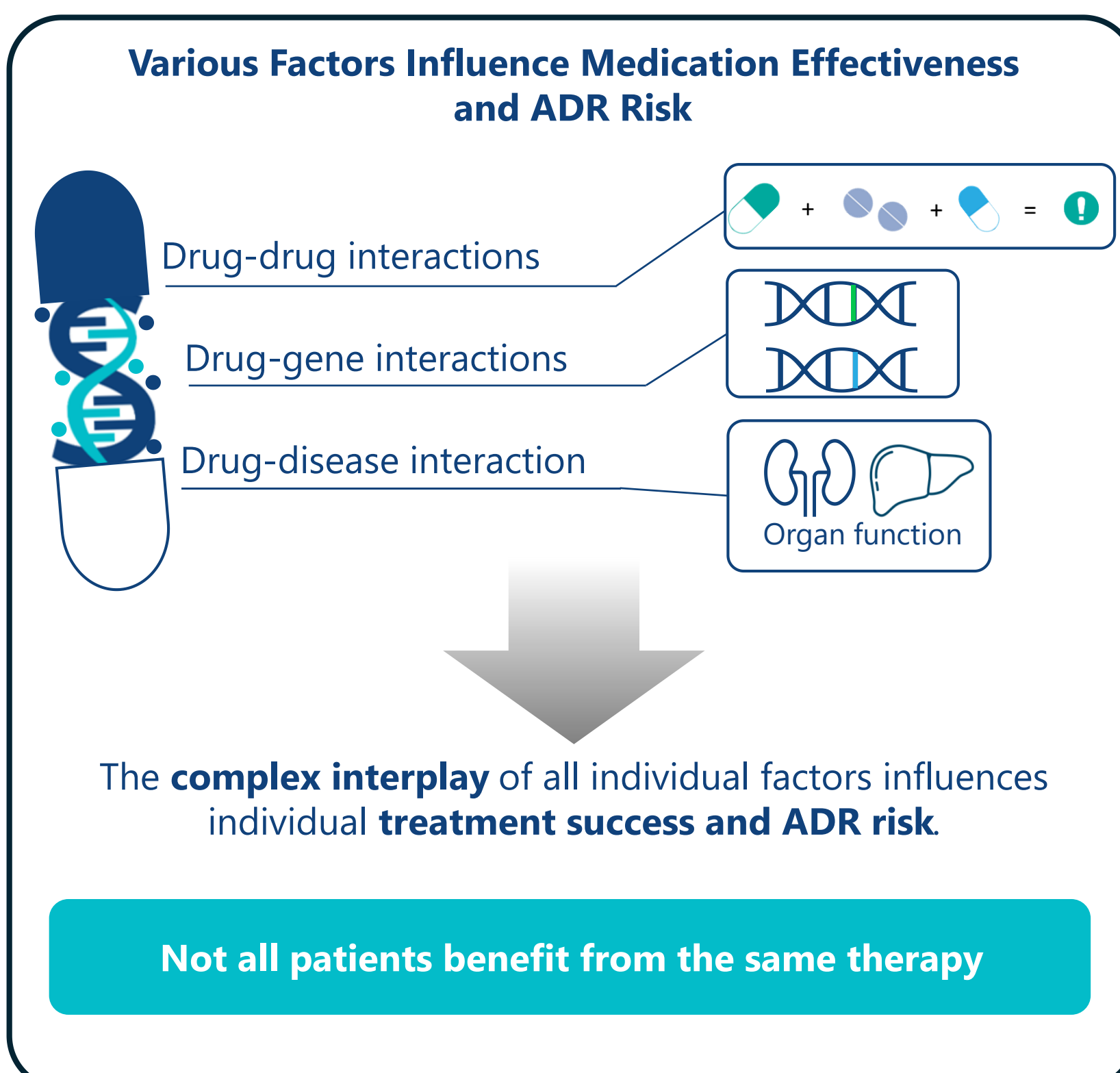
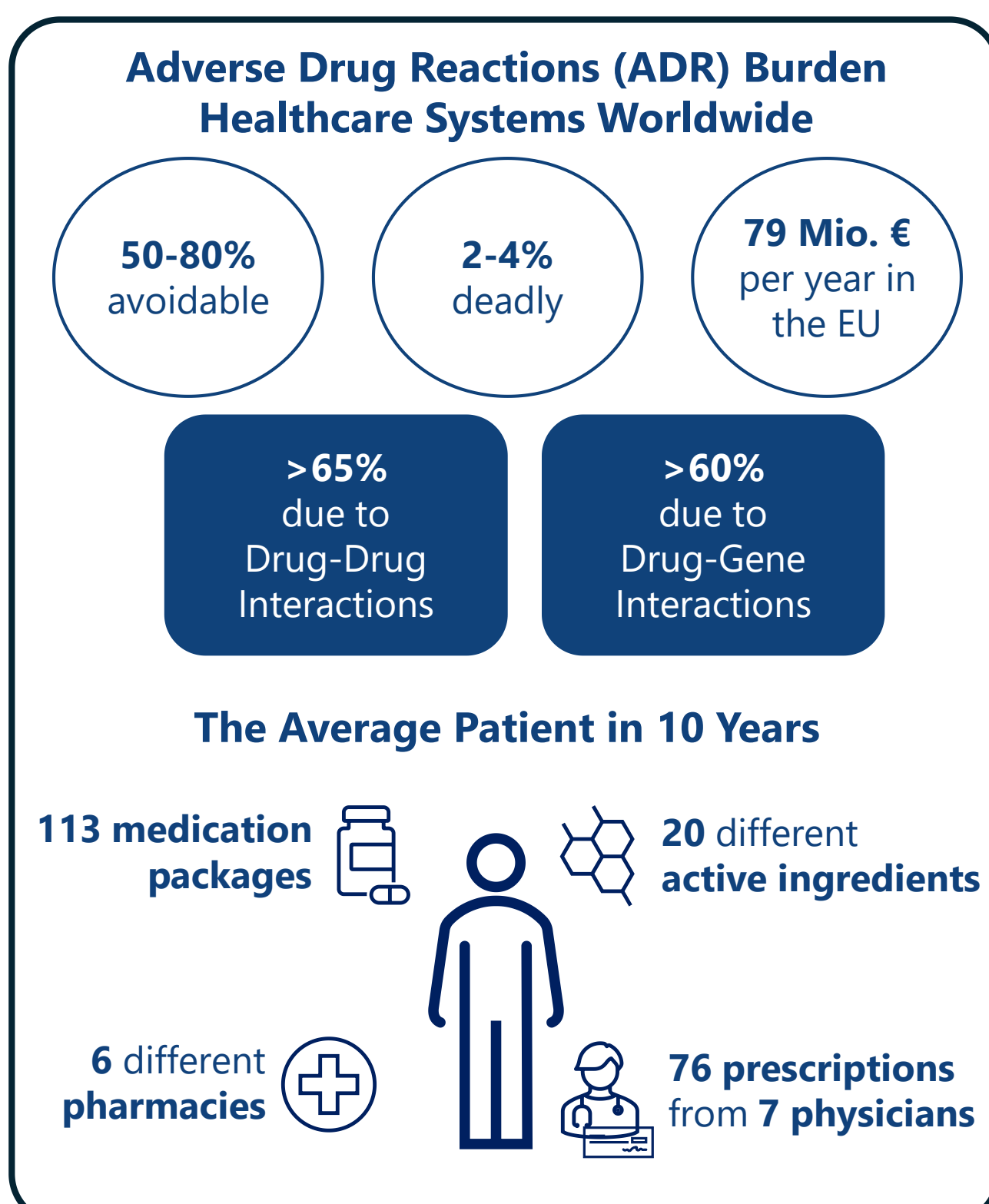
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Background



SAFEPOLYMED



01 June 2022
Start Date



42 Month
of Duration



5.6 MIO €
Budget



12 Partners
from 6 Countries

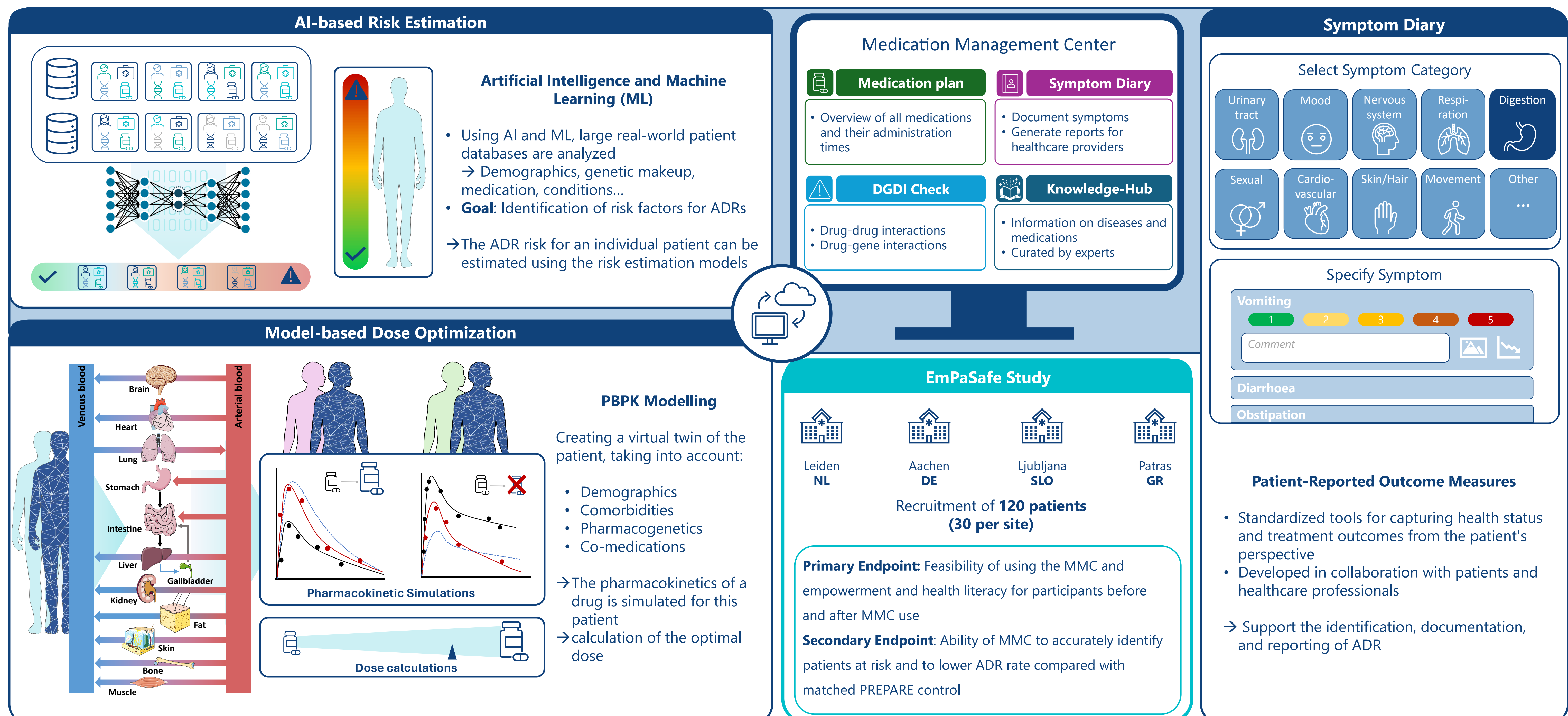
Objectives

Improving safety in polymedication by managing of drug-drug-gene interactions

Development of a 'Medication Management Center' (MMC) to empower patients in managing their medication therapy and to support healthcare providers in assessing interactions and adverse effect risks.

Methods and Results

The MMC enables patients to manage their polypharmacy and checks medications for drug-drug and drug-gene interactions to support therapy optimization. Patient-Reported Outcome Measures (PROMs) are integrated into a symptom diary, allowing for structured documentation of ADR symptoms. A connected risk assessor uses artificial intelligence (AI) to identify patterns in the patient profile that indicate an increased risk of ADR. Physiologically-based pharmacokinetic (PBPK) models are integrated into a dose optimization tool, which can be used to predict drug-drug-gene interactions and for individual dose calculations.



Conclusion

The MMC and its integrated functionalities are being evaluated in a multicenter proof-of-concept study across Europe. This study examines the tool's applicability, analyzes the active involvement of patients in their therapy, and assesses how effectively the tool can help reduce adverse drug reactions.