Development and Validation of mediPORT: A Simple Pre-Operative Risk-prediction Tool for Drug-Related Problems

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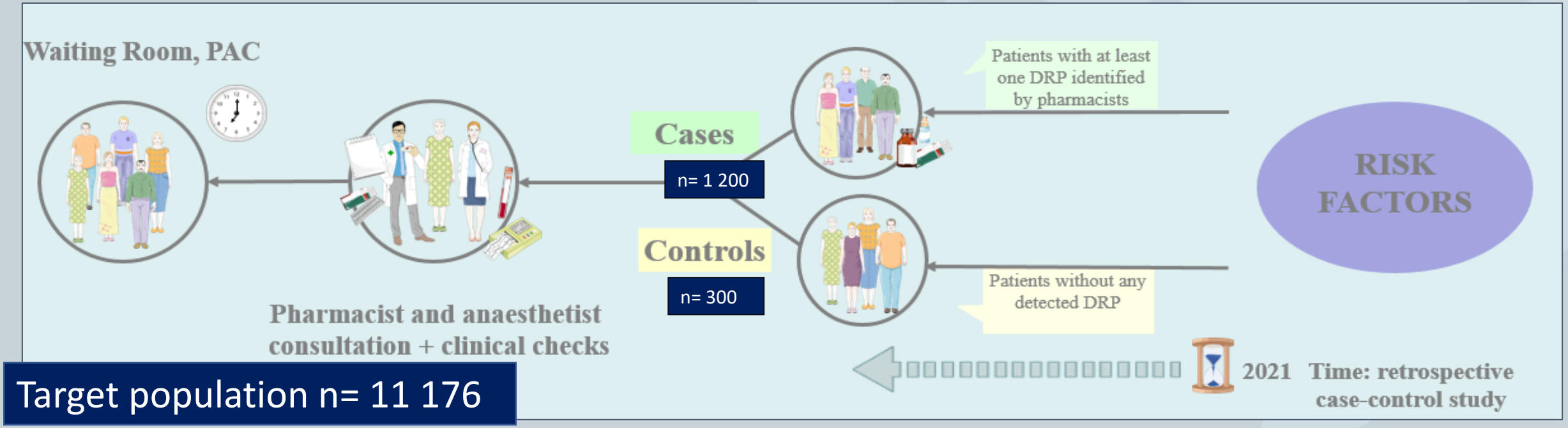
Inappropriate pre-operative medication management → RISK

Aim:

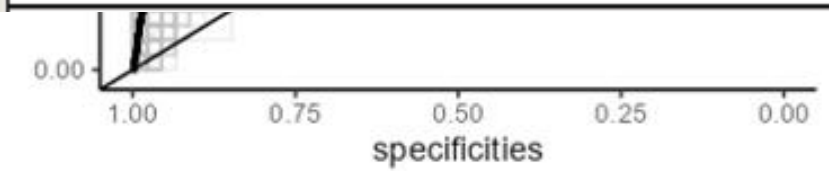
Design: Case-Control Study

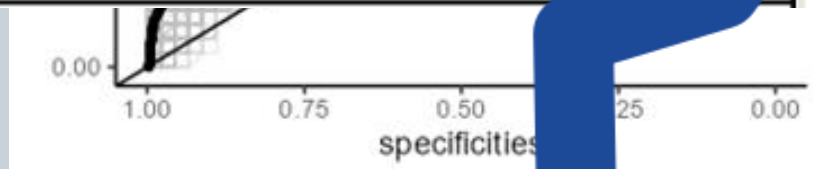
Setting: Pre-anesthesia clinic of the University Hospital Salzburg



Target population n= 11 176

Essential Points of Internal and External Validation Results for a Prediction Model	
Models with Strong Performance	**Models with Weak Performance**
Good Discrimination	**Poor Discrimination**
Large AUC (traditionally larger than 0.700 or 0.800)	Small AUC (closer to 0.500)





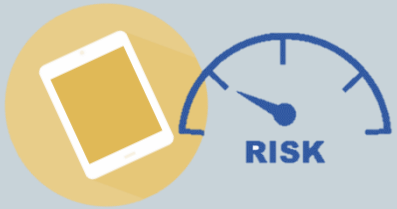
AUC (5VM) = 0.823 (CI 95% 0.766-0.879)

AUC (2VM) = 0.872 (CI 95% 0.835-0.909)

Sensitivity ≥ 78%
Specificity ≥ 75%

5-Variable Model

Age, Number of drugs at admission, Body-Mass-Index and Renal function

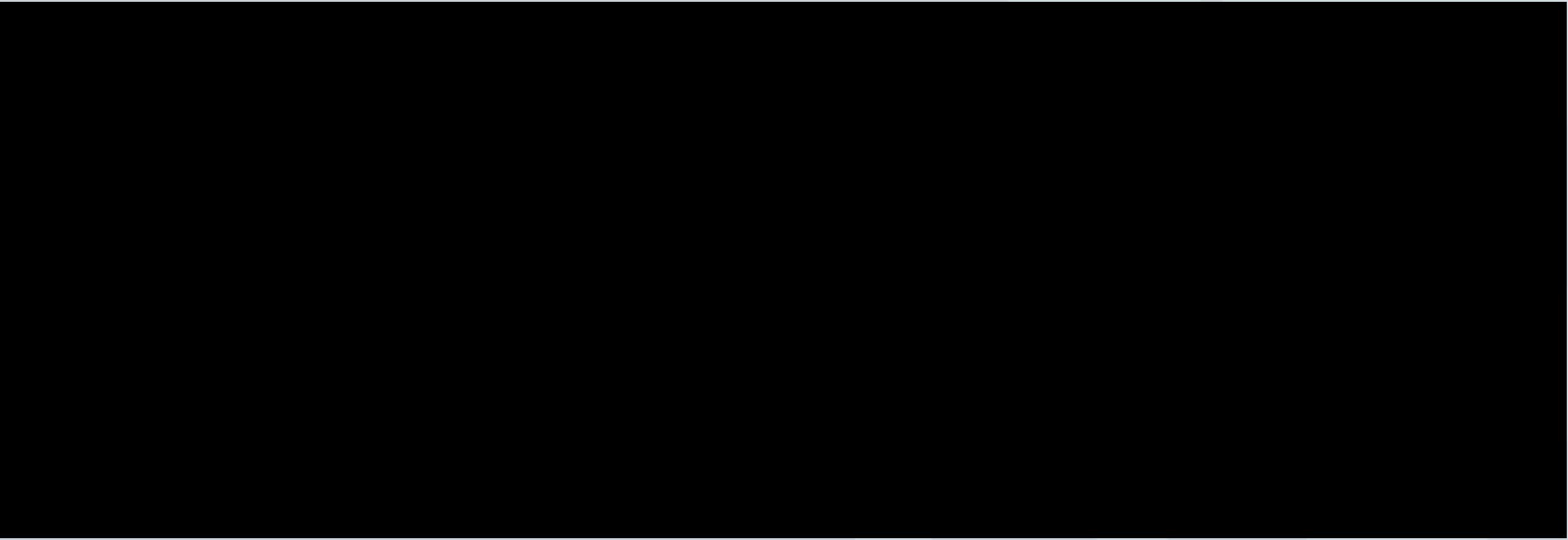


2-Variable Model

Age, Number of drugs at admission

Staffa, S.J. & Zurakowski, D. Statistical Development and Validation of Clinical Prediction Models. *Anesthesiology* **135**, 396-405 (2021)

Demonstration of the mediPORT tool



What‘s NEXT?

MediPORT 2.0 study – external validation
a prospective, national, multicentre observational study