

Variable selection in the development of ICU scoring systems

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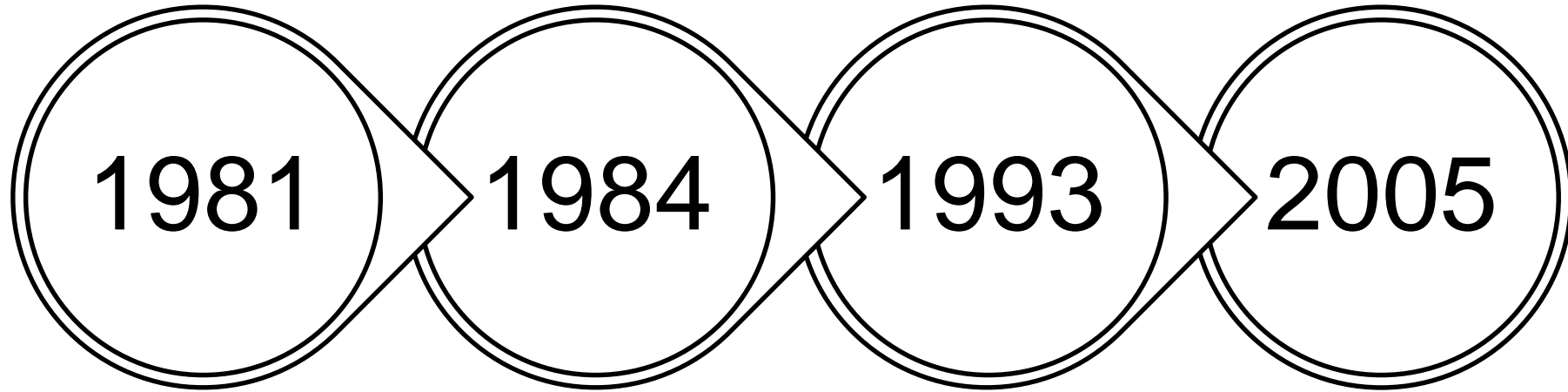
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Background

- ICU scoring systems
 - Classify critically ill patients based on illness severity
 - Used to estimate in-hospital mortality risk

- Commonly used scoring systems
 - APACHE – Acute Physiology and Chronic Health Evaluation
 - SAPS – Simplified Acute Physiology Score
 - MPM – Mortality Probability Model

Background



- **APS**
 - 34 variables

- **SAPS**
 - 14 variables

- **SAPS II**
 - 17 variables

- **SAPS III**
 - 20 variables

Background

Variable
selection
techniques

APS

Panel of experts

SAPS

Panel of experts

SAPS II

Logistic regression

SAPS III

Logistic regression +
expert knowledge

Objective of the study

- Main objective
 - To develop an ICU scoring system for assessing severity of illness and prediction of in-hospital mortality
- **Secondary objective**
 - **To select variables for the scoring system**

References

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