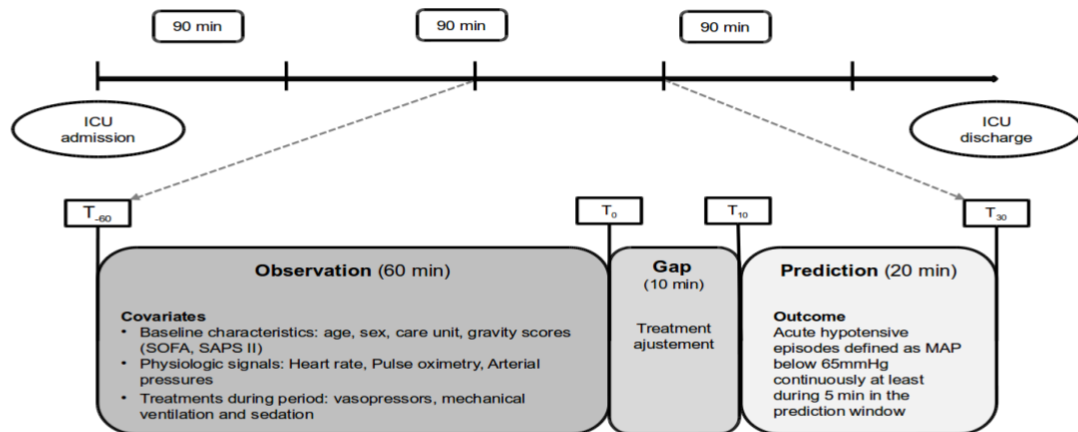


## The MIMIC II Waveform Database Matched Subset

It's a « long » file with 20 variables and 7.146.045 lines for 1276 unique patients. For each 90 min patient's period, there are 60 values for the numerics, corresponding to the « *observation period* ». (Fig 1).

The main objective is to predict an AHE in the « *prediction period* » by using only the previous values of the « *observation period* » after a 10 min « *gap period* ».



**Figure 1.** Definition of a study period.  $T_0$ : current time;  $[T_{-60} - T_0]$ : time observation window (60 min);  $[T_0 - T_{10}]$ : gap for physicians to determine the adequate treatment (10 min);  $[T_{10} - T_{30}]$ : prediction time interval for AHE (20 min)

The variables in the database are:

*subject\_id*: Unique ID patient

*periode*: Number of the patient's period

*time*: Number of the line patient's period

### Baseline characteristics variables

*gender*: F for female and M for male

*age*: In years

*sapsi\_first* and *sofa\_first*: SAPS II and SOFA gravity scores calculated at intensive care unit admission

*bmi*: body mass index

*care\_unit*: Type of the intensive care unit

- 1MICU Medical ICU
- 2 SICU Surgical ICU
- 4 CSRU Cardiac surgery recovery unit.
- 5 NICU Neonatal ICU
- 6 CCU Coronary Care Unit

*admission\_type\_descr*: Type of admission in ICU

- ELECTIVE
- EMERGENCY
- NEWBORN

- URGENT

*los\_icu*: Length of stay in ICU in days

*los\_hospital*: Length of stay in Hospitals (  $\geq$  *los\_icu*) in days

### Treatments variables

- *amine*: Vasopressors during the patient's « *observation period* »  
0 : No  
1 : Yes
- *sedation*: Sedation during the patient's « *observation period* »  
0 : No  
1 : Yes
- *ventilation*: Mechanical ventilation during the patient's « *observation period* »  
0 : No  
1 : Yes

### Numerics variables

*time\_and\_date*: Time and Date of the recording value

- *hr*: Heart Rate
- *spo2*: Pulse oximetry
- *abpsys*: Systolic arterial blood pressure
- *abpdias*: Diastolic arterial blood pressure
- *abpmean*: Mean arterial blood pressure

### Outcome

*event*: Acute Hypotensive Episode during the patient's « *prediction period* »

- 0 : No
- 1 : Yes

More information there: <https://physionet.org/physiobank/database/mimic2wdb/matched/>