

# CBRA: Cardiac Biomarkers Release Analyzer for Applications in Research and Clinical Environment

Anna Procopio<sup>&</sup>, Salvatore De Rosa<sup>&</sup>, Francesco Montefusco, Giovanni Canino, Alessio Merola, JolandaSabatino, Jessica Ielapi, Ciro Indolfi, Francesco Amato, Carlo Cosentino\*

Supplementary Table

PERSONAL DATA		
VARIABLE NAME	ID	DESCRIPTION
Gender	Gender	
Weight (or BMI)		Weight in Kg
Age		
CLINICAL DATA		
VARIABLE NAME	ID	DESCRIPTION
First Medical Contact	FirstMedicalContact	Date and time of the first medical contact
Hospital	Hospital	
Event Date	EventDate	Date and time of the ischemic event
Event Time	EventTime	
Hospitalization Date	Hospitalization Data	Date and time of hospitalization
Hospitalization Time	HospitalizationTime	
Revascularization Date		Date and time of revascularization
Revascularization Time		
Thrombolysis Date		Date and time for thrombolysis treatment dosing
Thrombolysis Time		
Intervention Data	InterventionDate	Information about eventually treatment and therapy – date, time and type: revascularization or thrombolysis
Intervention Time	InterventionTime	
Intervention Type	InterventionType	
Drug	Drug	
Culprit Vessel	CulpritVessel	Indicates the vessel with the occlusion
Culprit Stenosis		
Acquisition Date	AcquisitionDate	Date and time for each singular blood sample
Acquisition Time	AcquisitionTime	
DUMMY VARIABLE		
VARIABLE NAME	ID	DESCRIPTION
Dyslipidemia	Dyslipidemia	Index the abnormal amount of lipids in the blood: 0 = no dyslipidemia, and 1 otherwise

<sup>&</sup> Equal contribution.

\* Corresponding author: [carlo.cosentino@unicz.it](mailto:carlo.cosentino@unicz.it)

Familiarity	Familiarity	Familiarity tracks the presence of any cases of AMI among members of the same family: 0 = no treatment, and 1 otherwise
Diabetes	Diabetes	0 = no diabetes, and 1 otherwise
Insulin		0 = no insulin, and 1 otherwise
Hypertension		0 = none; 1 = known history of hypertension
Angina		0 = none; 1 = known history of angina
Smoke	Smoke	0 = no smoke, and 1 otherwise
Revascularization		Clinical therapy to restore the perfusion of the body part or organ that has suffered ischemia: 0 = no therapy, and 1 otherwise
Thrombolysis		Thrombolytic therapy to dissolve dangerous clots in blood vessels, favoring the blood flow : 0 = no treatment, and 1 otherwise
PreAMI		Information about eventually previous acute myocardial infarction: 0 without previous AMI, and 1 otherwise
PreVasc		Information about eventually previous vascular disease (e.g., cerebrovascular disease or peripheral vascular disease): 0 = no none, and 1 otherwise
AI		Aortic insufficiency: 0 = nonet AI, and 1 otherwise
<b>CATEGORICAL VARIABLE</b>		
VARIABLE NAME	ID	DESCRIPTION
TIMI		Flow grade after PCI (percutaneous transluminal coronary angioplasty): 0 = no perfusion; 1 = partial (non-complete) opacification of the coronary artery; 2 = opacification of the coronary artery under examination is lower than in other coronary arteries; 3 = normal perfusion
Killip class at presentation		1 = no sign of HF (hearth failure); 2 = rales in <50% of lung fields; 3 = rales in < 50% of lung fields (overt pulmonary oedema); 4 = cardiogenic shock
<b>CONTINUOS VARIABLE</b>		
VARIABLE NAME	ID	DESCRIPTION
SBP		Systolic blood pressure (PA/mmHg)

DBP		Diastolic blood pressure (PA/mmHg)
FC		Heart rate (bpm)
WT		Wall thickness
EF		Ejection fraction
Hb		Hemoglobin
RBC		Red blood cells
HCT		Hematocrit
Na	Sodium	Sodium
K	Potassium	Potassium
High sensitivity TnT	hs-cTnT	Cardiac troponin T measured using high sensitivity analytical methods in blood, expressed in ng/ml
CK-MB	CK-MB	Creatine Kinase – Muscle and Brain, expressed in ng/ml
CRP		High sensitivity C – reactive protein blood levels, expressed in ng/ml
NT proBNP		N-terminal prohormone of brain natriuretic peptide (NT pro-BNP) blood levels, expressed in ng/ml
eGFR		Estimated the renal function by evaluating glomerular filtration

**Supplementary Table 1** – Description of all the personal and clinical data collected in CBRA. The red background identifies the cells with the variables present in the original datasheet and no included in CBRA. The blue background identifies the cell with the variables added in CBRA and not present in the original datasheet. The ID label refers to the variable names in CBRA.