

## PORTHOS – PORTUGUESE Heart failure Observational Study

National epidemiological study on heart failure and asymptomatic left ventricular systolic dysfunction based on contemporary diagnostic tools

Glossary

Variable identifier: Numbering of variables

Variable description (eCRF): Description as per eCRF, when applicable

Variable description (Database): Description as extracted from the database

Value encoding: Value encoding as extracted from the database

Possible values: Possible answers as per eCRF

Units of measurement: Used by eCRF, where applicable

Variable type: Defined by CNCDC

Observations: Additional information on the variable

## Phase 1 - Consent

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
1	Participant code	IdentificationNumber	N/A	N/A	N/A	Discreet	Computed, sequential value
2	Site	Site	1	Alentejo - Aljustrel	N/A	Categorical, Nominal	Computed
			2	Alentejo - Serpa			
			3	LVT - Palmela			
			4	LVT - Sesimbra			
			5	LVT - Sobral M. Agraço			
			6	LVT - Torres Vedras			
			7	LVT - Amadora			
			8	LVT - Lisbon High			
			9	LVT - Seven Rivers			
			10	Center - Coimbra			
			11	Center - Fundao			
			12	Center - Belmonte			
			14	Center - Montemor-o-Velho / Arazede			
			15	North - Cambra Valley			
			16	North - SJ Madeira			
			17	North - Trofa			
			18	North - Santo Tirso			
			19	North - Felgueiras			
			20	North - Pacos de Ferreira			
			21	North - Braga			
			22	Algarve - Silves			
			23	Algarve - Lagos			
			24	Autonomous Region of Madeira			
			3	N/A			
4	Date of assessment *	Evaluation Date	N/A	N/A	N/A	Categorical, Ordinal	

Phase 1 - Consent (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
5	Signed informed consent *	ICF Signature	0	No	N/A	Categorical, Nominal	
			1	Yes			
6	N/A	StatePhase1	Complete	Phase 1 Complete	N/A	Categorical, Nominal	Computed
			Incomplete	Phase 1 Incomplete			
7	Signed informed consent (Biobank) *1	SubscriptionICCFBiobanco	0	No	N/A	Categorical, Nominal	Only active when the value of the "Signed informed consent" field is 1
			1	Yes			
8	Date of signature of the consents *	DataICFs	N/A	N/A	N/A	Categorical, Ordinal	It can only be equal to or less than the assessment date.

### Phase 1 - Identification

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
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\* mandatory variables

\*1 mandatory variables with constraints on observations

9	Date of birth *	Date of Birth	N/A	Month / Year	N/A	Categorical, Ordinal	
10	Age	Age	N/A	[50, +∞[	years	Discreet	Computed
11	Gender *	Gender	1	Male	N/A	Categorical, Nominal	
			2	Female			
12	Region *	NUTSII	1	North	N/A	Categorical, Nominal	
			2	Site			
			3	LVT			
			4	Alentejo			
			5	Algarve			
			6	Autonomous Region of Madeira			
13	Systolic blood pressure*	SystolicBloodPressure	N/A	[60, 180]	mmHg	Continuous	
14	Diastolic blood pressure*	Diastolic Blood Pressure	N/A	[20, 120]	mmHg	Continuous	
15	Heart rate *	Heart Rate	N/A	[20, 180]	bpm	Continuous	
16	Oxygen saturation in the blood *	Oxygen Saturation	N/A	[75, 100]	%	Continuous	
17	Previous diagnosis of heart failure *	PreviousDiagnosisIC	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
18	Weight *	Weight	N/A	N/A	kg	Continuous	Alert if weight less than 40 kg or more than 130 kg
19	Height *	Height	N/A	[130, 200]	cm	Continuous	
20	BMI	BMI	N/A	N/A	N/A	Continuous	Computed
21	Obesity	Obesity	0	No	N/A	Categorical, Nominal	Computed
			1	Yes			

Phase 1 - Identification (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
22	Abdominal perimeter (cm) *	Abdominal Perimeter	N/A	[30, 300]	N/A	Continuous	
23	EQ-5D*	EQ5D	0	No	N/A	Categorical, Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			131072	Unaware			
24	Sociodemographic questionnaire / socioeconomic *	Questionnaire	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
25	N/A	CodingDiagnosis	A	Suspected heart failure with fraction reduced or slightly reduced ejection	N/A	Categorical , Nominal	Computed
			B	Suspected heart failure with fraction preserved ejection			
			G	Atrial fibrillation			
			A; G	Suspected heart failure with reduced or slightly reduced ejection fraction; Fibrillation earpiece			
			B; G	Suspected heart failure with fraction preserved ejection; Atrial fibrillation			

EQ5DQuestionnaire

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
26	Mobility *	Mobility	1	1	N/A	Categorical , Ordinal	1. I have no problem walking 2. I have slight problems walking 3. I have moderate problems walking 4. I have serious problems walking 5. I am unable to walk
			2	2			
			3	3			
			4	4			
			5	5			
			-	-			1. I have no problem washing or dressing myself 2. I have slight problems washing or dressing myself

\* mandatory variables

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27	Personal care *	Personal Care	2	2	N/A	Categorical , Ordinal	dress 3. I have moderate problems washing or dressing myself. 4. I have serious problems washing or dressing myself 5. I am unable to wash or dress myself
			3	3			
			4	4			
			5	5			
28	Usual activities *	Usual Activities	1	1	N/A	Categorical , Ordinal	1. I have no problem performing the my usual activities 2. I have slight problems carrying out my usual activities 3. I have moderate problems performing my usual activities 4. I have serious problems performing the
			2	2			
			3	3			
			4	4			
			5	5			
29	Pain/Discomfort *	Pain	1	1	N/A	Categorical , Ordinal	1. I have no pain or discomfort 2. I have mild pain or discomfort 3. I have moderate pain or discomfort 4. I have severe pain or discomfort 5. I have extreme pain or discomfort
			2	2			
			3	3			
			4	4			
			5	5			
30	Anxiety/Depression *	Anxiety	1	1	N/A	Categorical , Ordinal	1. I'm not anxious or depressed 2. I am slightly anxious or depressed 3. I am moderately anxious or depressed 4. I am severely anxious or depressed 5. I am extremely anxious or depressed
			2	2			
			3	3			
			4	4			
			5	5			
31	Health scale *	Number	N/A	[0, 100]	N/A	Continuous	
32	EQ5D Score	Score	N/A	[-0.24, 1]	N/A	Continuous	Computed

### Sociodemographic Questionnaire

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
33	Functional unit where it was recruited *	Unit	N/A	N/A	N/A	Categorical, Nominal	
34	Postal code where you live *	CP	N/A	N/A	N/A	Categorical, Nominal	
35	Marital Status *	Marital Status	1	Single	N/A	Categorical , Nominal	
			2	Married			
			3	de facto union			
			4	Separate			
			5	Divorced			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			6	Widower			
			7	Don't know			
36	Education (select highest qualification) *	Education	1	Did not attend the education system	N/A	Categorical , Nominal	
			2	1st complete cycle (1st-4th years)			
			3	2nd complete cycle (5th-6th years)			
			4	3rd complete cycle (7th-9th years)			
			5	Complete secondary education (10th-12th grades)			
			6	Post-secondary (non-higher)			
			11	Higher Education – Bachelor's Degree			
			7	Higher Education – Bachelor's Degree			
			8	Higher Education – Master's Degree			
			9	Higher Education – Doctorate			
			10	Don't know			
37	What do you do for a living? *	Profession	N/A	N/A	N/A	Categorical, Nominal	

Sociodemographic Questionnaire (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
38	What is your work status? *	Condition	1	Student	N/A	Categorical , Nominal	
			7	Full-time employee			
			8	Part-time employee (at least 15 hours weekly)			
			9	Employed less than part-time (less than 15 weekly hours)			
			3	Unemployed			
			2	Domestic			
			4	Renovated and pre-renovated			
			5	Don't know			
			1	Armed Forces Professions			

\* mandatory variables

\*1 mandatory variables with constraints on observations

39	If you answered "Employee", please specify *1	SpecifyEmployee	2	Representatives of the legislative branch and executive bodies, directors, officers and executive managers	N/A	Categorical , Nominal	Only active when the value of the field "What is your employment status?" is 7, 8 or 9
			3	Experts in intellectual and scientific activities			
			4	Technicians and intermediate level professions			
			5	Administrative staff			
			6	Workers in personal, protective and security and sellers			
			7	Farmers and skilled workers of agriculture, fishing and forestry			
			8	Skilled workers in industry, construction and craftsmen			
			9	Plant and machine operators and assembly workers			
			10	Unskilled workers			
			40	If you answered "Retired", was the retirement due to heart disease? *1			
1	Yes						
131072	Unknown						

Sociodemographic Questionnaire (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
41	Do you have any health subsystem?	Subsystem	1	No	N/A	Categorical , Nominal	
			2	ADSE			
			3	Health insurance			
			4	Other			
42	If you answered "Other", specify *1	Specify	N/A	N/A	N/A	Categorical, Nominal	Only active when the value of the field "Has any health subsystem?" is 4
43	How many people live in the house where you live most of the time? (including yourself own) *	How Many People Live	N/A	N/A	N/A	Discreet	
			1	Insufficient			

\* mandatory variables

\*1 mandatory variables with constraints on observations

44	Do you consider that your household income is *	Income	2	You have to be careful with your spending	N/A	Categorical , Nominal
			3	Enough for the needs		
			4	Comfortable		

### Phase 1 - Symptoms

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
45	Choose the option that best summarizes your ability to do physical activity before arriving at the mobile unit *	NYHA Class	1	I can do any physical activity without getting short of breath or tired, or with palpitations.	N/A	Categorical , Ordinal	
			2	I feel short of breath or tired, or I have palpitations when doing more intense activities. For example, climbing steep slopes or climbing several flights of stairs.			
			3	I feel short of breath or tired, or have palpitations when doing everyday activities. For example, walking on flat ground or cleaning the house.			
			4	I feel breathless at rest, often making it impossible for me to leave the house. I am unable to perform any physical activity without feeling short of breath. out of breath or tired, or with palpitations.			

\* mandatory variables

\*1 mandatory variables with constraints on observations

46	Do you often notice that your ankles and/or legs are swollen? *	Edema	1	Never	N/A	Categorical , Ordinal	
			2	Rarely			
			3	Sometimes			
			4	Often			
			5	Always			
47	Do you often feel short of breath when lying down? *	Dyspnea Lying down	1	Never	N/A	Categorical , Ordinal	
			2	Rarely			
			3	Sometimes			
			4	Often			
			5	Always			
48	Do you often wake up during the night short of breath? *	DyspneaRest	1	Never	N/A	Categorical , Ordinal	
			2	Rarely			
			3	Sometimes			
			4	Often			
			5	Always			

### Phase 1 - Medical History

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
49	Smoking *	Smoker	1	Never smoked	N/A	Categorical , Nominal	
			2	Smoker			
			3	Former smoker			
50	Daily alcohol consumption*	Alcohol Consumption	1	Does not consume	N/A	Categorical , Ordinal	
			2	≤ 1 unit			
			3	> 1 and ≤ 2 units			
			4	> 2 units			
51	Myocardial infarction/ Unstable angina *	Myocardial Enf	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
52	Stable angina*	Angina Est	0	No	N/A	Categorical , Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			131072	Unaware			
53	Coronary Artery Surgery (CABG)*	CABG	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
54	Cardiac (valvular) Surgery *	CCardiac	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
55	Percutaneous coronary intervention *	ICP	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
56	Carotid disease *	Carotid Disease	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

Phase 1 - Medical History (cont.)

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
57	Carotid endarterectomy *	Endarterectomy	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
58	Carotid stenting*	CarotStentImplant	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
59	Stroke *	Stroke	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
60	Peripheral arterial disease *	DiseaseArtPerif	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
			0	No			

\* mandatory variables

\*1 mandatory variables with constraints on observations

61	Revascularization surgery peripheral *	Peripheral SurgeryRevascularization	1	Yes	N/A	Categorical, Nominal
			131072	Unaware		
			0	No		
62	Amputation *	Amputation	1	Yes	N/A	Categorical, Nominal
			131072	Unaware		
			0	No		
63	Hypertension *	Hypertension	1	Yes	N/A	Categorical, Nominal
			131072	Unaware		
			0	No		
64	Dyslipidemia *	Dyslipidemia	1	Yes	N/A	Categorical, Nominal
			131072	Unaware		
			0	No		
65	Type 1 diabetes mellitus*	T1DM	1	Yes	N/A	Categorical, Nominal
			131072	Unaware		
			0	No		

Phase 1 - Medical History (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
66	Type 2 diabetes mellitus*	T2DM	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
67	Valvular heart disease *	DCV	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
68	Chronic obstructive pulmonary disease *	COPD	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
69	Chronic kidney disease on renal replacement therapy *	DRC	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
70	Obstructive sleep apnea *	TO THE	0	No	N/A	Categorical, Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			131072	Unaware			
71	Neoplasia *	Cancer	1	Active	N/A	Categorical , Nominal	
			2	Not active (>5 years)			
			3	Never diagnosed			
			131072	Unaware			
72	Chemotherapy/radiotherapy *1	ChemoRadio	1	Chemotherapy	N/A	Categorical , Nominal	Only active when the value of the "Neoplasia" field is 1 or 2
			2	Chest radiotherapy			
			3	Chemo and RT chest			
			4	None of the options			
			131072	Unaware			
73	Medical device – Pacemaker ICD (including CRT- D)*	PacemakerICD	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

Phase 1 - Medical History (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
74	Medical device – Pacemaker CRT*	PacemakerCRT	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
75	First-degree family members with a history of premature coronary artery disease*	HistFamDCP	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
76	First family members degree with history of heart failure or cardiomyopathies *	HistFamIC	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

\* mandatory variables

\*1 mandatory variables with constraints on observations

Phase 1 - Medication

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
77	Loop diuretics *	DiurAnsa	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
78	Other Diuretics *	OthersDiur	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
79	Nitrates *	Nitrates	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
80	Beta Blockers*	Beta Blockers	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
81	Angiotensin converting enzyme inhibitors*	I ACCEPT	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
82	Angiotensin receptor blockers*	ARB	0	No	N/A	Categorical , Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			131072	Unaware			
83	Mineralocorticoid receptor antagonists *	MRA	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
84	Angiotensin receptor blocker – neprilysin inhibitor *	ARNI	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
85	Ivabradine *	Ivabradine	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

Phase 1 - Medication (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
86	Digoxin *	Digoxin	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
87	Antiplatelets *	Antiplatelet agents	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
88	Anticoagulants *	Anticoagulants	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
89	Calcium antagonists *	AntagonistsCalcium	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
90	Statins *	Statins	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
91	Metformin *	Metformin	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
			0	No			

\* mandatory variables

\*1 mandatory variables with constraints on observations

92	DPP-IV inhibitors*	iDPP4	1	Yes	N/A	Categorical, Nominal	
			131072	Unaware			
93	Insulin *	Insulin	0	No	N/A	Categorical , Nominal	
			131072	Unaware			
94	SGLT2 inhibitors*	iSGLT2	0	No	N/A	Categorical , Nominal	
			131072	Unaware			

Phase 1 - Medication (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
95	Sulfonylureas *	Sulfonylureas	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
96	GLP-1 agonists*	GLP1 agonists	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

Phase 1 - NTproBNP

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
97	NT-proBNP test result*	NTproBNP Test	1	< 125 pg/mL	N/A	Categorical , Nominal	
			2	>= 125 pg/mL			
98	NT-proBNP value*	NTproBNPPOC	N/A	N/A	(pg/mL)	Discreet	
99	KCCQ*	KCCQ	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
			0	No			

\* mandatory variables

\*1 mandatory variables with constraints on observations

100	Suspected Fibrillation Headset *	SuspicionFA	1	Yes	N/A	Categorical, Nominal	
			131072	Unaware			
101	Participant proceeds to Phase 2	Phase 2	0	No	N/A	Categorical, Nominal	Computed
			1	Yes			
			131072	Unaware			

Phase 1 - NTproBNP (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
102	Participant status in Phase 2	Control	0	It's not control	N/A	Categorical, Nominal	Computed
			1	Agreed to be controlled			
			2	Did not accept being controlled			
103	Notes	Notes	N/A	N/A	Free text	Categorical, Nominal	

Phase 2 - Electrocardiogram and Echocardiogram

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Electrocardiogram							
104	FA/Flutter *	FAFlutter	0	No	N/A	Categorical, Nominal	
			1	Yes			
			131072	Unaware			
105	Left bundle branch block*	BRE	0	No	N/A	Categorical, Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

			131072	Unaware			
Echocardiogram							
106	Valvular disease = 2/4*	Valvular Disease	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			

Phase 2 - Electrocardiogram and Echocardiogram (cont.)

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Echocardiogram							
107	Moderate or severe aortic stenosis*	Aortic Stenosis	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
108	Moderate or severe mitral stenosis*	Mitral Stenosis	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
109	Moderate or severe aortic insufficiency*	Aortic insufficiency	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
110	Moderate or severe mitral regurgitation*	Mitral Insufficiency	0	No	N/A	Categorical , Nominal	
			1	Yes			
			131072	Unaware			
111	Diastolic dimension of left ventricle	DimensionDiastVentLeft	N/A	N/A	mm	Continuous	Normal values should be in the range: [30, 70]
112	Exit tract diameter of the left ventricle	DiameterTractVentLeft	N/A	N/A	mm	Continuous	Normal values should be in the range: [15, 35]
113	Exit tract diameter of the right ventricle	DiameterTractVentDto	N/A	N/A	mm	Continuous	Normal values should be in the range: [15, 35]
114	Fraction of the area of shortening	FAC	N/A	N/A	%	Continuous	Normal values should be in the range: [10, 70]
115	Septum thickness interventricular	Intraventricular septum	N/A	N/A	mm	Continuous	Normal values should be in the range: [5, 30]
116	Left auricle diameter	Left Ear Diameter	N/A	N/A	mm	Continuous	Normal values should be in the range: [10, 90]

\* mandatory variables

\*1 mandatory variables with constraints on observations

117	Left atrial volume indexed	VolumeLeft EarIndex	N/A	N/A	mL/m2	Continuous	Normal values should be in the range: [15, 250]
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Phase 2 - Electrocardiogram and Echocardiogram (cont.)

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Echocardiogram							
118	Ventricular ejection fraction left	LeftVentEjectionFraction	N/A	N/A	%	Continuous	Normal values should be in the range: [10, 80]
119	Ejection fraction	LVEF_ECG	1	Reduced	N/A	Categorical, Nominal	1. Reduced: <= 40% 2. Moderately Reduced: 41-49% 3. Preserved: >=50%
			2	Moderately Reduced			
			3	Preserved			
120	Tele-diastolic volume of indexed left ventricle	VTelediastolicVentEsqIn dex	N/A	N/A	mL/m2	Continuous	Normal values should be in the range: [20, 250]
121	End-systolic volume indexed left ventricle	VTelesystolicVentLeftIndex	N/A	N/A	mL/m2	Continuous	Normal values should be in the range: [5, 150]
122	Posterior wall thickness	Back Wall	N/A	N/A	mm	Continuous	Normal values should be in the range: [5, 30]
123	Right atrial volume	VolumeAuricularDta	N/A	N/A	mL	Continuous	Normal values should be in the range: [10, 250]
124	Right atrial volume indexed	VolumeAuricularDtaIndex	N/A	N/A	mL/m2	Continuous	Normal values should be in the range: [10, 50]
125	E wave speed transmitral	Transmitral Wave	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 2]
126	Wave speed A transmitral	Transmitral WaveA	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 2]
127	Velocity is septal	eSeptal	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0.02, 0.25]
128	Speed is lateral	eSide	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0.02, 0.25]
129	Septal E/e' ratio	EeSeptal	N/A	N/A	N/A	Continuous	Normal values should be in the range: [1, 35]
130	Lateral E/e' ratio	EeLateral	N/A	N/A	N/A	Continuous	Normal values should be in the range: [1, 35]

\* mandatory variables

\*1 mandatory variables with constraints on observations

131	Average E/e' ratio	EeMedia	N/A	N/A	N/A	Continuous	Normal values should be in the range: [1, 35]
132	S' Lateral Tricuspid	STL	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0.01, 0.3]

Phase 2 - Electrocardiogram and Echocardiogram (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Echocardiogram							
133	VTI outlet chamber left ventricle	VTI	N/A	N/A	cm	Continuous	Normal values should be in the range: [5, 35]
134	Pulmonary acceleration time	PulmonaryAcceleration	N/A	N/A	m/s	Continuous	Normal values should be in the range: [4, 200]
135	Regurgitation speed tricuspid (VTr)	VTR	N/A	N/A	m/s	Continuous	Normal values should be in the range: [1, 5]
136	Central venous pressure estimated	VenousPressure	N/A	N/A	mmHg	Continuous	Normal values should be in the range: [3, 20]
137	Heart rate	Echo Heart Rate	N/A	N/A	bpm	Continuous	Normal values should be in the range: [20, 180]
138	Left ventricular mass	MVE	N/A	N/A	g	Continuous	Normal values should be in the range: [50, 500]
139	Left ventricular mass indexed	MVEIndex	N/A	N/A	g/m2	Continuous	Normal values should be in the range: [20, 250]
140	Other diagnoses	OtherDiagnostics	N/A	N/A	Free text	Categorical, Nominal	

\* mandatory variables

\*1 mandatory variables with constraints on observations

## Phase 2 - Clinical Analysis

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
141	HbA1c	Hba1c	N/A	N/A	%	Continuous	Reference values: <5.7%
142	Serum creatinine	Creatinine	N/A	N/A	mg/dL	Continuous	Reference values: 0.50 - 1.10 mg/dL
143	High C-reactive protein sensitivity	ProteinCreative	N/A	N/A	mg/dL	Continuous	Reference values: <0.5 mg/dL
144	High Troponin T sensitivity	TroponinT	N/A	N/A	pg/mL	Continuous	Reference values: <9 pg/mL
145	Total cholesterol	Cholesterol	N/A	N/A	mg/dL	Continuous	Reference values: <200 mg/dL
146	HDL cholesterol	HDL	N/A	N/A	mg/dL	Continuous	Reference values: >60 mg/dL
147	LDL cholesterol	LDL	N/A	N/A	mg/dL	Continuous	Reference values: <130 mg/dL
148	Triglycerides	Triglycerides	N/A	N/A	mg/dL	Continuous	Reference values: <150 mg/dL
149	NT-proBNP	NTproBNPlab	N/A	N/A	pg/dL	Discreet	Reference values: <125 pg/mL
150	Estimated average glucose	GlucoseMediaEst	N/A	N/A	mg/dL	Continuous	
151	Glycated hemoglobin IFCC	HbIFCC	N/A	N/A	mmol/mol	Continuous	Reference values: <39 mmol/mol
HFA-PEFF Score							
152	HFA-PEFF Score	HFAPEFFscore	0	0	N/A	Categorical , Ordinal	Computed
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
			6	6			

\* mandatory variables

\*1 mandatory variables with constraints on observations

Quizzes - KCCQuiz

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
153	Get dressed*	Dress up	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
154	Take a shower/bath*	Take a shower	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
155	Walk one block on a flat surface*	To walk	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
156	Doing gardening, housework or carrying groceries*	DoGardening	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			

\* mandatory variables

\*1 mandatory variables with constraints on observations

Quizzes - KCCQ Quiz (cont.)

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
157	Climb a flight of stairs without stopping*	Go up	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
158	Walk quickly (as if catching a bus) or run *	WalkFast	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
159	My symptoms are now *	Symptoms	1	Much worse	N/A	Categorical , Nominal	Much worse = 1 Slightly worse = 2 No change = 3 Slightly better = 4 Much better = 5 I have had no symptoms in the last 2 weeks = 3
			2	Slightly worse			
			4	No change			
			8	Slightly better			
			16	Much better			
			32	I have had no symptoms in the last 2 weeks			
160	I had *	I had	1	Every morning	N/A	Categorical , Nominal	Every morning = 1 3 times or more per week, but not every day = 2 1-2 times a week = 3 Less than once a week = 4 Never in the last 2 weeks = 5
			2	3 times or more a week, but not every day			
			4	1-2 times a week			
			8	Less than once a week			
			16	Never in the last 2 weeks			

\* mandatory variables

\*1 mandatory variables with constraints on observations

Quizzes - KCCQ Quiz (cont.)

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
161	It's been (inconvenient)*	HasBeen4	1	Extremely	N/A	Categorical, Nominal	Extremely uncomfortable = 1 Quite uncomfortable = 2 Moderately uncomfortable = 3 Slightly uncomfortable = 4 Not at all uncomfortable = 5 I had no swelling = 5
			2	Quite a bit			
			4	Moderately			
			8	Slightly			
			16	Not at all			
			32	I had no swelling			
162	Limited *	Limited5	1	Always	N/A	Categorical, Nominal	Always = 1 Several times a day = 2 At least once a day = 3 3 times or more per week, but not every day = 4 1-2 times a week = 5 Less than once a week = 6 Never in the last 2 weeks = 7
			2	Several times a day			
			4	At least once a day			
			8	3 times or more a week, but not every day			
			16	1-2 times a week			
			32	Less than once a week			
163	It's been (inconvenient)*	HasBeen6	1	Extremely	N/A	Categorical, Nominal	Extremely uncomfortable = 1 Quite uncomfortable = 2 Moderately uncomfortable = 3 Slightly uncomfortable = 4 Not at all uncomfortable = 5 I wasn't tired = 5
			2	Quite a bit			
			4	Moderately			
			8	Slightly			
			16	Not at all			
			32	I wasn't tired			
164	Limited *	Limited7	1	Always	N/A	Categorical, Nominal	Always = 1 Several times a day = 2 At least once a day = 3 3 times or more per week, but not every day = 4 1-2 times a week = 5 Less than once a week = 6 Never in the last 2 weeks = 7
			2	Several times a day			
			4	At least once a day			
			8	3 times or more a week, but not every day			
			16	1-2 times a week			
			32	Less than once a week			
64	Never in the last 2 weeks						

\* mandatory variables

\*1 mandatory variables with constraints on observations

Quizzes - KCCQ Quiz (cont.)

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
165	It's been (inconvenient)*	HasBeen8	1	Extremely	N/A	Categorical, Nominal	Extremely uncomfortable = 1 Quite uncomfortable = 2 Moderately uncomfortable = 3 Slightly uncomfortable = 4 Not at all uncomfortable = 5 I had no shortness of breath = 5
			2	Quite a bit			
			4	Moderately			
			8	Slightly			
			16	Not at all			
			32	I didn't have any shortness of breath.			
166	How many times *	How Many Times	1	Every night	N/A	Categorical, Nominal	Every night = 1 3 or more times a week, but not every night = 2 1-2 times a week = 3 Less than once a week = 4 Never in the last 2 weeks = 5
			2	3 or more times a week, but not every night			
			4	1-2 times a week			
			8	Less than once a week			
			16	Never in the last 2 weeks			
167	How safe*	How Safe	1	I'm not at all	N/A	Categorical, Nominal	Not sure at all = 1 Not very sure = 2 Somewhat safe = 3 Quite safe = 4 Completely safe = 5
			2	I'm not very			
			4	A little			
			8	Quite a bit			
			16	Completely			
168	Understand *	Understand	1	I don't understand at all	N/A	Categorical, Nominal	I don't understand at all = 1 I don't understand very well = 2 I understand a little = 3 I understand quite a bit = 4 I understand perfectly = 5
			2	I don't understand very well			
			4	I understand a little			
			8	I understand a lot			
			16	I understand perfectly			

Quizzes - KCCQ Quiz (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
169	Limited (ability to enjoy life)*	Limited12	1	Extremely	N/A	Categorical , Nominal	It has extremely limited my ability to enjoy life = 1 It greatly limited my ability to enjoy life = 2 Moderately limited my ability to enjoy life = 3 Slightly limited = 4
			2	Quite a bit			
			4	Moderately			
			8	Slightly			
			16	Not limited			
170	I would feel *	To feel	1	Completely dissatisfied	N/A	Categorical , Nominal	Completely dissatisfied = 1 Quite dissatisfied = 2 Somewhat satisfied = 3 Quite satisfied = 4 Completely satisfied = 5
			2	Quite dissatisfied			
			4	A little satisfied			
			8	Quite satisfied			
			16	Completely satisfied			
171	I felt like this*	I felt	1	Always	N/A	Categorical , Nominal	I always felt like this = 1 I felt this way most of the time = 2 I occasionally felt this way = 3 I rarely felt this way = 4 I've never felt like this = 5
			2	Most of the time			
			4	Occasionally			
			8	Rarely			
			16	Never			
172	Hobbies, leisure activities *	Hobbies	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
173	Working or doing chores at home*	To work	1	Extremely limited	N/A	Categorical , Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			

Quizzes - KCCQ Quiz (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
174	Visit family or friends*	Visit	1	Extremely limited	N/A	Categorical, Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
175	Intimate or sexual relationships *	Relations	1	Extremely limited	N/A	Categorical, Nominal	Extremely limited = 1 Quite limited = 2 Moderately limited = 3 Slightly limited = 4 I do not feel limited = 5 Limited by other reasons or did not do the activity =<missing value>
			2	Quite limited			
			4	Moderately limited			
			8	Slightly limited			
			16	I don't feel limited			
			32	Limited by other reasons or did not do the activity			
176	Overall Score KCCQ	OverallScore	N/A	[0, 100]	N/A	Continuous	Computed
177	Clinical Score KCCQ	ClinicalScore	N/A	[0, 100]	N/A	Continuous	Computed

### Phase 3 - Stress Test

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Include in Phase 3							
178	Advance to Phase 3*	Phase 3	0	Did not accept	N/A	Categorical, Nominal	Only option 1 unlocks the remaining variables
			1	Yes, accepted			
			2	Accepted but missed			
			3	Eligible, not invited			
179	Was a stress echocardiogram performed? *	Eco_realized	0	No	N/A	Categorical, Nominal	
			1	Yes			
180	Reason for not performing the stress echocardiogram *	ReasonNon-Performance	1	Inadequate adaptation to the cycle ergometer	N/A	Categorical, Nominal	Only active when the answer to the previous question is "No"
			2	Osteoarticular pathology			
			3	Patient refusal			
			4	Other			
181	Specify *1	ReasonNon-PerformanceOther	N/A	N/A	Free text	Categorical, Nominal	Only active when the value of the "Reason for" field not performing the stress echocardiogram" is 4
Rest							
182	Transmitral E-wave velocity*	Transmitral Wave_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
183	Value *	OndaETransmitral_repou only	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
184	Transmitral A-wave velocity *	Transmitral wave_rest_Assessable	0	No	N/A	Categorical, Nominal	
			1	Yes			
185	Value *	OndaATransmitral_repou only	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
186	Velocity is septal *	eSeptal_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
187	Value *	eSeptal_rest	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
188	Speed is lateral *	eLateral_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			

\* mandatory variables

\*1 mandatory variables with constraints on observations

### Phase 3 - Stress Test (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Rest							
189	Value *	eLateral_rest	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
190	Tricuspid regurgitation velocity (VTr)*	Vtr_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
191	Value *	Vtr_rest	N/A	N/A	m/s	Continuous	Normal values should be in the range: [1, 6]
192	Heart rate *	Heart RateEcho_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
193	Value *	Heart RateEcho_rest_the	N/A	N/A	bpm	Continuous	Normal values should be in the range: [20, 180]
194	Systolic blood pressure *	SystolicArtPressure_repose	N/A	N/A	mmHg	Continuous	Normal values should be in the range: [60, 220]
195	Diastolic blood pressure *	PressureArtDiastolic_repildare	N/A	N/A	mmHg	Continuous	Normal values should be in the range: [40, 220]
196	LVOT diameter *	DiameterLVOT_rest_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
197	Value *	DiameterLVOT_rest	N/A	N/A	mm	Continuous	Normal values should be in the range: [10, 30]
198	VTI LVOT *	VTILVOT_rest_Evaluate vel	0	No	N/A	Categorical, Nominal	
			1	Yes			
199	Value *	VTILVOT_rest	N/A	N/A	cm	Continuous	Normal values should be in the range: [10, 90]
200	Height *	Resting height	N/A	N/A	cm	Continuous	Normal values should be in the range: [100; 250]
201	Weight *	Resting weight	N/A	N/A	Kg	Continuous	Normal values should be in the range: [40, 200]

Phase 3 - Stress Test (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
25 Watts							
202	Transmitral E wave speed	OndaETransmitral_25Watts_Avaliavel	0	No	N/A	Categorical, Nominal	
			1	Yes			
203	Value	OndaETransmitral_25Watts	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
204	Transmitral A-wave velocity	OndaATransmitral_25Watts_Avaliable	0	No	N/A	Categorical, Nominal	
			1	Yes			
205	Value	OndaATransmitral_25Watts	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
206	Velocity is septal	eSeptal_25Watts_Evaluabile	0	No	N/A	Categorical, Nominal	
			1	Yes			
207	Value	eSeptal_25Watts	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
208	Speed is lateral	eLateral_25Watts_Avaliavel	0	No	N/A	Categorical, Nominal	
			1	Yes			
209	Value	eLateral_25Watts	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
210	Tricuspid regurgitation velocity (VTr)	Vtr_25Watts_Avaliavel	0	No	N/A	Categorical, Nominal	
			1	Yes			
211	Value	Vtr_25Watts	N/A	N/A	m/s	Continuous	Normal values should be in the range: [1, 6]
212	Heart rate	EcoHeartRate_25Watts_Avaliable	0	No	N/A	Categorical, Nominal	
			1	Yes			
213	Value	Heart Rate Eco_25 Watts	N/A	N/A	bpm	Continuous	Normal values should be in the range: [20, 180]
214	VTI LVOT	VTILVOT_25Watts_Evaluation	0	No	N/A	Categorical, Nominal	
			1	Yes			
215	Value	VTILVOT_25Watts	N/A	N/A	cm	Continuous	Normal values should be in the range: [10, 90]

Phase 3 - Stress Test (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
Peak							
216	Transmitral E-wave velocity*	WaveTransmitral_peak_Evaluable	0	No	N/A	Categorical, Nominal	
			1	Yes			
217	Value *	WaveETransmitral_peak	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
218	Transmitral A-wave velocity*	WaveATransmitral_peak_Evaluable	0	No	N/A	Categorical, Nominal	
			1	Yes			
219	Value *	WaveATransmitral_peak	N/A	N/A	m/s	Continuous	Normal values should be in the range: [0, 3]
220	Velocity is septal *	eSeptal_peak_Avaliable	0	No	N/A	Categorical, Nominal	
			1	Yes			
221	Value *	eSeptal_peak	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
222	Speed is lateral *	eLateral_pico_Avaliavel	0	No	N/A	Categorical, Nominal	
			1	Yes			
223	Value *	eLateral_pico	N/A	N/A	cm/s	Continuous	Normal values should be in the range: [1, 20]
224	Tricuspid regurgitation velocity (VTr)*	Vtr_peak_Avaliable	0	No	N/A	Categorical, Nominal	
			1	Yes			
225	Value *	Vtr_peak	N/A	N/A	m/s	Continuous	Normal values should be in the range: [1, 6]
226	Heart rate *	FreqCardiacaEco_pico_Valuable	0	No	N/A	Categorical, Nominal	
			1	Yes			
227	Value *	Heart RateEcho_peak	N/A	N/A	bpm	Continuous	Normal values should be in the range: [20, 180]
228	Systolic blood pressure*	SystolicArtPressure_peak	N/A	N/A	mmHg	Continuous	Normal values should be in the range: [60, 220]

Phase 3 - Stress Test (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
229	Diastolic blood pressure*	DiastolicArtPressure_peak	N/A	N/A	mmHg	Continuous	Normal values should be in the range: [40, 220]
230	VTI LVOT *	VTILVOT_peak_Available	0	No	N/A	Categorical, Nominal	
			1	Yes			
231	Value *	VTILVOT_peak	N/A	N/A	cm	Continuous	Normal values should be in the range: [10, 90]
232	Maximum load *	Maximum_peak_load	N/A	N/A	Watts	Continuous	Normal values should be in the range: [25, 250]
233	Effort time *	TimeEffort_peak	N/A	N/A	Mon	Continuous	Normal values should be in the range: [0, 1200]
234	Remarks	Observations	N/A	N/A	Free text	Categorical, Nominal	
HFA-PEFF Combined Score							
235	Score Stress Eco 25 Watts	ScoreStressEco_25Watts	0	0	N/A	Categorical, Ordinal	Computed
			2	2	N/A		Computed
			3	3	N/A		Computed
236	Stress Eco Peak Score	ScoreStressEco_pico	0	0	N/A	Categorical, Ordinal	Computed
			2	2	N/A		Computed
			3	3	N/A		Computed
237	HFA-PEFF Combined Score	HFAPEFF_Combined	2	2	N/A	Categorical, Ordinal	Computed
			3	3	N/A		Computed
			4	4	N/A		Computed
			5	5	N/A		Computed
			6	6	N/A		Computed
			7	7	N/A		Computed

## Annex I - Computed variables

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable Identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
238	N/A	Symptoms_Calc	0	0	N/A	Categorical, Ordinal	No symptoms - 0 With symptoms - 1 The following symptoms are considered to have: participants: NYHA Class >=2 and/or Edema / Dyspnea Lying Down / Dyspnea Resting >=3
			1	1			
239	N/A	Functional	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Functional" score of the HFA-PEFF Score
			1	1			
			2	2			
240	N/A	Morphological	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Morphological" score of the HFA-PEFF Score
			1	1			
			2	2			
241	N/A	Biomarker_POC	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Biomarker" score of the HFA-PEFF Score, taking into account the NTproBNP value of the POC
			1	1			
			2	2			
242	N/A	Biomarker_LAB	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Biomarker" score of the HFA-PEFF Score, taking into account the Lab's NTproBNP value
			1	1			
			2	2			
243	N/A	HFAPEFFscore_POC	0	0	N/A	Categorical, Ordinal	HFA-PEFF score considering "POC_Biomarker"
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
6	6						

Annex I - Computed variables (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
244	N/A	HFAPEFFscore_LAB	0	0	N/A	Categorical, Ordinal	HFA-PEFF Score considering "Biomarker_LAB"
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
245	N/A	Heavy	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Heavy" score of the H2FPEFF Score
			1	1			
			2	2			
246	N/A	Hypertensive	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Hypertensive" score of the H2FPEFF Score
			1	1			
247	N/A	FAN	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate score "FA" of the H2FPEFF Score
			1	1			
			2	2			
			3	3			
248	N/A	Pul. Art. Sys. Pres.	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate score "Pulmonary hypertension" of the H2FPEFF Score
			1	1			
249	N/A	Elder	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate score "Elder" of the H2FPEFF Score
			1	1			
250	N/A	Filling Pressure	0	0	N/A	Categorical, Ordinal	Calculation of the intermediate "Filling Pressure" score of the H2FPEFF Score
			1	1			

Annex I - Computed variables (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
251	N/A	H2FPEF Score	0	0	N/A	Categorical, Ordinal	H2FPEF Score
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
			6	6			
			7	7			
			8	8			
252	N/A	Variable 1_POC_NMS	0	0	N/A	Categorical, Ordinal	No IC - 0 Has IC - 1 Variable indicates whether or not the participant has IC (taking into account the value of NTproBNP POC)
			1	1			
253	N/A	Variable 1_LAB_NMS	0	0	N/A	Categorical, Ordinal	No IC - 0 Has IC - 1 Variable indicates whether or not the participant has IC (taking into account the NTproBNP Lab value)
			1	1			
254	N/A	Variable 3_POC	0	0	N/A	Categorical, Ordinal	No IC - 0 ICr - 1 ICmr - 2 Confirmed ICp (HFA-PEFF >=5) - 3 Probable ICp (HFA-PEFF [2;4]) - 4 No ICp (HFA-PEFF <=1) - 5 Indicates whether or not the participant has IC and its respective categorization (taking into account the NTproBNP POC value)
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			

Annex I - Computed variables (cont.)

\* mandatory variables

\*1 mandatory variables with constraints on observations

Variable identifier	Variable description (eCRF)	Variable Description (Database)	Value encoding	Possible values	Units of measurement	Variable type	Remarks
255	N/A	Variable 3_LAB	0	0	N/A	Categorical, Ordinal	No IC - 0 ICr - 1 ICmr - 2 Confirmed ICp (HFA-PEFF >=5) - 3 Probable ICp (HFA-PEFF [2;4]) - 4 No ICp (HFA-PEFF <=1) - 5 Indicates whether or not the participant has IC and its respective categorization (taking into account the NTproBNP Lab value)
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
256	N/A	RAASI	0	0	N/A	Categorical, Ordinal	No (does not take ACEi or ARB) - 0 Yes (taking at least one class of drugs) - 1 Unknown - 131072 Joining the ACEi and ARB variables
			1	1			
			131072	131072			
257	N/A	HFAPEFFscore_LAB23	0	0	N/A	Categorical, Ordinal	HFAPEFF_LAB score which also includes cases where there are only 2 domains
			1	1			
			2	2			
			3	3			
			4	4			
			5	5			
			6	6			

\* mandatory variables

\*1 mandatory variables with constraints on observations