CODE BOOK ICM TRADI

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Title: Code book of the study ICM Tradi

To note: no missing values in the dataset!

DEMOGRAPHICS

Variable Name	Variable Description	Units	Value Labels	Comments
demo_NIP	Patient ID			
demo_center	Center - Centre		0: Massy - 5214 (85.7%) 1: Lariboisière - 868 (14.3%)	
demo_gender	Gender - Genre		0: Female - 1663 (27.3%) 1: Male - 4419 (72.7%)	
demo_height	Height - Taille	Cm	Mean (sd): 170.1 (9.1) min < med < max: 130 < 170 < 213 Q1 - Q3: 164 - 176	
demo_weight	Weight - Poids	Kg	Mean (sd): 80.4 (17.5) min < med < max: 38 < 79 < 185 Q1 - Q3: 69 - 90	
demo_BMI	Body Mass Index		Mean (sd): 27.7 (5.3) min < med < max: 13.6 < 27 < 81.2 Q1 - Q3: 24.2 - 30.4	

CARDIAC RISK FACTORS

Variable Name	Variable Description	Units	Value Labels	Comments
CV_risk_obesity	Obesity (0=No; 1=Yes)		0: 4395 (72.3%) 1: 1687 (27.7%)	
CV_risk_dyslipidemia	Dyslipidemia (0=No; 1=Yes)		0: 3077 (50.6%) 1: 3005 (49.4%)	
CV_risk_diabete	Diabetes (0=No, 1 = yes)		0: 3773 (62.0%) 1: 2309 (38.0%)	
CV_risk_HTA	Hypertension (0=No; 1=Yes)		0: 2938 (48.3%) 1: 3144 (51.7%)	
CV_risk_Smoking	Smoking (0= no or previous smoker; 1=current smoking)		0: no smoking or past smoking history - 4797 (78.9%) 1: current smoking -1285 (21.1%)	The dataset had this information: Smoking (0= no; 1=current smoker; 2=previous smoker) but adapted it to fit our goal.
CV_risk_history_fam_CAD	Family History of CAD (0=No; 1=Yes)		0: 5410 (89.0%) 1: 672 (11.0%)	

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CARDIOVASCULAR HISTORY

Variable Name	Variable Description	Units	Value Labels	Comments
history_med_MI	Known myocardial infarction (0=No; 1=Yes)		0: 3728 (61.3%) 1: 2354 (38.7%)	
history_interv_PCI	History of PCI (0=No; 1=Yes)		0: 997 (16.4%) 1: 5085 (83.6%)	
history_interv_CABG	History of CABG (0=No; 1=Yes)		0: 5702 (93.8%) 1: 380 (6.2%)	
med_CKD	Renal failure, GFR < 60 (0=No; 1=Yes)		0: 5961 (98.0%) 1: 121 (2.0%)	
history_stroke	Stroke (0=No; 1=Yes)		0: 5896 (96.9%) 1: 186 (3.1%)	
med_pacemaker	Pacemaker (0=No; 1=Yes)		0: 6041 (99.3%) 1: 41 (0.7%)	
med_periph_atheroma	Peripheral atheroma disease (0=No; 1=Yes)		0: 5738 (94.3%) 1: 344 (5.7%)	
history_hospit_HF	History of hospitalization for Heart Failure (0=No; 1=Yes)		0: 5714 (93.9%) 1: 368 (6.1%)	
history_AFib	History of Atrial Fibrillation (0=No; 1= Yes)		0: 5629 (92.6%) 1: 453 (7.4%)	

CLINICS

Variable Name	Variable Description	Units	Value Labels	Comments
clini_NYHA	Dyspnea, NYHA II+ (0=No; 1=Yes)		0: 5329 (87.6%) 1: 753 (12.4%)	

CMR

Variable Name	Variable Description	Units	Value Labels	Comments
CMR_LVEF	Left ventricular ejection fraction	%	Mean (sd): 43.7 (5.7) min < med < max: 16 < 46 < 49 Q1 - Q3: 40 - 48	
CMR_LVEDV	LV end-diastolic volume index EDVi	ml/m2	Mean (sd): 102.9 (21.5) min < med < max: 30 < 97 < 283 Q1 - Q3: 94 - 115	
CMR_LVESV	LV end-systolic volume index ESVi	ml/m2	Mean (sd): 44.3 (17.8) min < med < max: 16.5 < 51.3 < 226.4 Q1 - Q3: 49.8 - 66.4	
CMR_systolic_ejection	Systolic ejection volume	ml/m2	Mean (sd): 58.6 (7.1) min < med < max: 13.5 < 44.64< 92.7 Q1 - Q3: 42.8 - 47.5	

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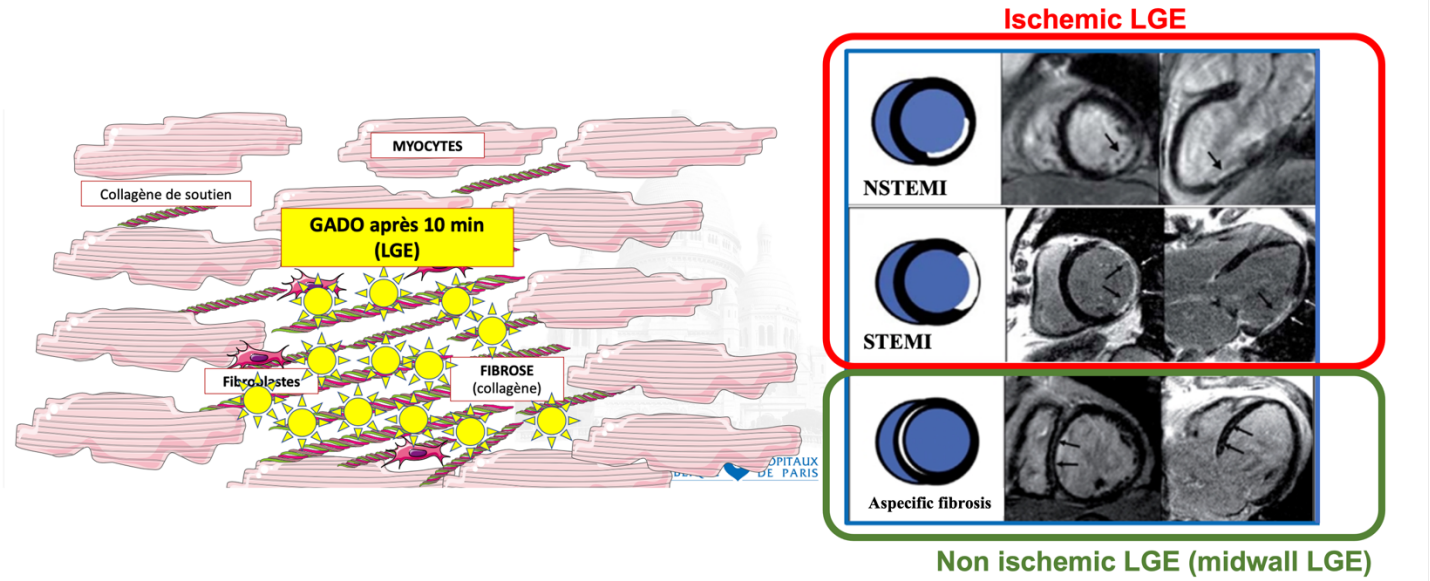
Variable Name	Variable Description	Units	Value Labels	Comments
CMR_RV_dysfunction	Right ventricular dysfunction (0= No; 1=Yes)		0: 5864 (96.4%) 1: 218 (3.6%)	
CMR_LV_mass	LV mass indexed (g/m2)	g/m2	Mean (sd): 91 (19.5) min < med < max: 46 < 92 < 122 Q1 - Q3: 78 - 108	

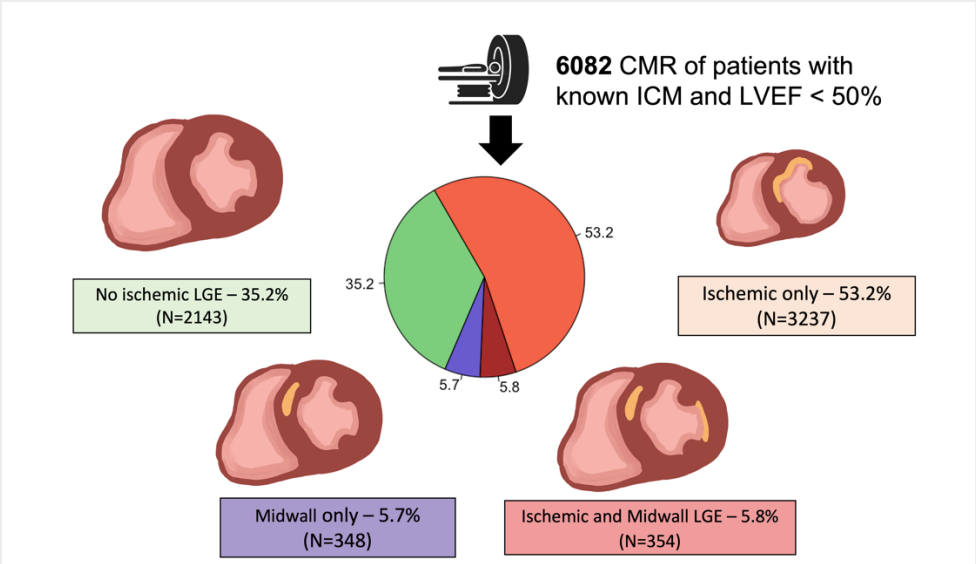
CMR Late gadolinium enhancement (LGE)

Type of late gadolinium enhancement



Variable Name	Variable Description	Units	Value Labels	Comments

GENERAL ANALYSIS OF LGE



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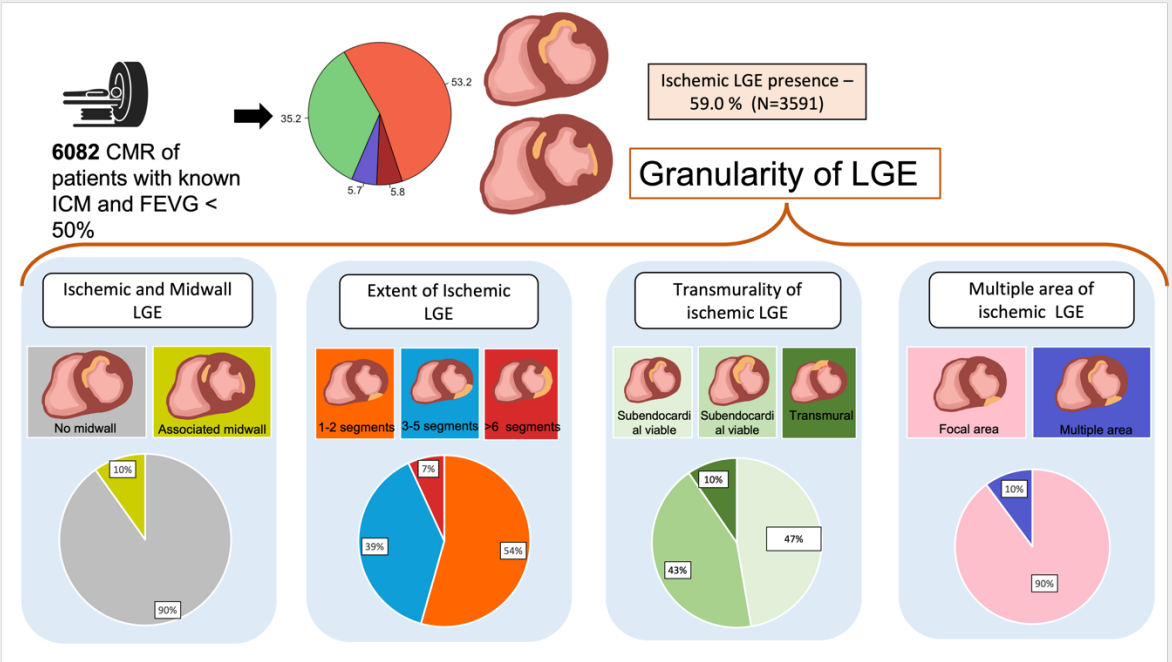
Variable Name	Variable Description	Units	Value Labels	Comments
CMR_LGE_ischemic_presence	Ischemic-LGE presence		0: absence: 2491 (41.0%) 1: presence: 3591 (59.0%)	With or without midwall-LGE
CMR_LGE_midwall_presence	Midwall-LGE presence		0: 5380 (88.5%) 1: 702 (11.5%)	With or without ischemic-LGE
CMR_LGE_presence_ischemic_and_midwall	Midwall-LGE and ischemic-LGE presence		0: 5728 (94.2%) 1: 354 (5.8%)	
CMR_LGE_presence_ischemic_or_midwall	Midwall and/or ischemic-LGE presence		0: 2143 (35.2%) 1: 3939 (64.8%)	
LGE_Presence_MidW	Midwall-LGE presence		0: 5380 (88.5%) 1: 702 (11.5%)	
CMR_LGE_type	Composite of previous LGE distribution		1. A_No_LGE - 2143 (35.2%) 2. B_MidW_only - 348 (5.7%) 3. C_Isch_only - 3237 (53.2%) 4. D_Isch_and_miwal - 354 (5.8%)	

DETAILS OF ISCHEMIC LGE PATTERNS



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Variable Name	Variable Description	Units	Value Labels	Comments
CMR_LGE_ischemic_transmurality	Maximum transmurality of ischemic-LGE		• A_No_Isch_LGE - 2491 (41.0%) • B_Isch_SubEndo_viable -1698 (27.9%) • C_Isch_SubEndo_non_viable - 1549 (25.5%) • D_Isch_Transmural - 344 (5.7%)	The transmurality of ischemic-LGE used the spatial maximal scar transmurality, as already published* Overall myocardium was considered viable when the majority of infarct segments exhibited a LGE transmurality <50%, and non-viable when the transmural extent of LGE was ≥50% of the myocardial wall. Transmural infarct referred to LGE extent ≥75% of the myocardial wall. ** Alexandre Jet al. J Cardiovasc Magn Reson. 2013*
CMR_LGE_ischemic_extent_count	Number of segments of ischemic-LGE	segments	Mean (sd): 1.8 (2) min < med < max: 0 < 1 < 9 Q1 - Q3: 0 - 3	The extent of ischemic-LGE was assessed semi-quantitatively by the number of ischemic-LGE segments regardless of the transmurality of each segments, as already published. * Cerqueira MD, et al Circulation. 2002 * Schulz-Menger J, Bluemke DA, et al. J Cardiovasc Magn Reson. 2020
CMR_LGE_ischemic_extent_categ	Category of ischemic-LGE extent		1. A_No_Isch_LGE - 2491 (41.0%) 2. B_1_2_Seg_Isch_LGE - 1392 (22.9%) 3. C_3_5_Seg_Isch_LGE - 1953 (32.1%) 4. D_6_more_Isch_LGE - 246 (4.0%)	
CMR_LGE_ischemic_multiple	Focal or multiple character of ischemic-LGE		1. A_No_Isch_LGE - 2491 (41.0%) 2. B_Focal_LGE - 3226 (53.0%) 3. C_multiple_LGE - 365 (6.0%)	
CMR_LGE_ischemic_anterior	Presence (non exclusive) of ischemic-LGE in anterior location		0: 5296 (87.1%) 1: 786 (12.9%)	
CMR_LGE_ischemic_septal	Presence (non exclusive) of ischemic-LGE in septal location		0: 5575 (91.7%) 1: 507 (8.3%)	
CMR_LGE_ischemic_inferior	Presence (non exclusive) of ischemic-LGE in inferior location		0: 4868 (80.0%) 1: 1214 (20.0%)	

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Variable Name	Variable Description	Units	Value Labels	Comments
CMR_LGE_ischemic_lateral	Presence (non exclusive) of ischemic-LGE in lateral location		0: 4887 (80.4%) 1: 1195 (19.6%)	
CMR_LGE_ischemic_Apical	Presence (non exclusive) of ischemic-LGE in apical location		0: 4914 (80.8%) 1: 1168 (19.2%)	
CMR_LGE_ischemic_location_6	**Exclusive** location of ischemic-LGE		1. A_No_Isch_LGE - 2491 (41.0%) 2. B_Apical_Isch_Only - 702 (11.5%) 3. C_Inferior_Isch_Only - 910 (15.0%) 4. D_Lateral_Isch_Only - 800 (13.2%) 5. E_Anterior_Isch_Only - 265 (4.4%) 6. F_Septal_Isch_Only - 123 (2.0%) 7. G_Numerous_Isch_location - 791 (13.0%)	G_numerous_Isch_Location = when several location, the cateogyr was numerous ischemic-LGE location (G)
CMR_LGE_ischemic_location_4	**Exclusive** location of ischemic-LGE based on the extent to certain location		1. A_No_ischemic_LGE - 2491 (41.0%) 2. B_Neither_anterior_nor_septal- 2662 (43.7%) 6. C_Anterior_without_septal- 422 (6.9%) 7. D_Septal - 507 (8.3%)	We fused the territory less at risk
Details of midwall LGE pattern				
CMR_LGE_midwall_extent_count	Number of segments of midwall-LGE		Mean (sd): 0.1 (0.4) min < med < max: 0 < 0 < 4 Q1 - Q3: 0 - 0	
CMR_LGE_midwall_extent_categ	Category of midwall-LGE extent		1. A_No_MidW_LGE - 5380 (88.5%) 2. B_1_Seg_MidW_LGE - 610 (10.0%) 3. C_2_or_more_seg_MidW_LGE - 92 (1.5%)	
CMR_LGE_midwall_anterior	Presence (non exclusive) of midwall-LGE in anterior location		0: 5942 (97.7%) 1: 140 (2.3%)	
CMR_LGE_midwall_septal	Presence (non exclusive) of midwall-LGE in septal location		0: 5969 (98.1%) 1: 113 (1.9%)	
CMR_LGE_midwall_inferior	Presence (non exclusive) of midwall-LGE in inferior location		0: 5870 (96.5%) 1: 212 (3.5%)	

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Variable Name	Variable Description	Units	Value Labels	Comments
CMR_LGE_midwall_lateral	Presence (non exclusive) of midwall-LGE in lateral location		0: 5958 (98.0%) 1: 124 (2.0%)	
CMR_LGE_midwall_apical	Presence (non exclusive) of midwall-LGE in apical location		0: 5936 (97.6%) 1: 146 (2.4%)	
CMR_LGE_midwall_location_6	Exclusive location of midwall-LGE		1. A_No_MidW_LGE - 5380 (88.5%) 2. B_Apical_MidW_Only - 139 (2.3%) 3. C_Inferior_MidW_Only - 191 (3.1%) 4. D_Lateral_MidW_Only - 106 (1.7%) 5. E_Anterior_MidW_Only - 136 (2.2%) 6. F_Septal_MidW_Only - 98 (1.6%) 7. G_Numerous_MidW_location - 32 (0.5%)	G_numerous_Isch_Location = when several location, the cateogyr was numerous midwall-LGE location (G)
CMR_LGE_midwall_location_4	**Exclusive** location of ischemic-LGE based on the extent to certain location		1: No_midwall_LGE (88.5%) 2: Midwall_LGE_not_at_risk (7.7%) 3: Lateral_midwall_LGE(1.9%) 4: Septal_Midwall_LGE (1.9%)	

CLINICAL EVENTS

Variable Name	Variable Description	Units	Value Labels	Comments
outcome_FU_time_death	Follow-up time before last contact	months	Mean (sd): 107.5 (36) min < med < max: 1 < 108 < 168 Q1 - Q3: 79 - 138	
outcome_death	Death		0: alive - 5430 (89.3%) 1: dead - 652 (10.7%)	
outcome_revascularisation_90days	Revascularisation within 90 days after CMR index (0= No; 1=Yes)		0: No – 3309 (54%) 1: Yes – 2773 (46%)	