Modality	Core-lab location	
SPECT	Turku (Finland)	
Cine-MRI + MRI-viability	Linkoping (Sweden)	
MRI-perfusion	London (UK)	
MRI-tagging	Oslo (Norway)	
2D-echocardiography	Pisa (Italy)	
3D-echocardiography	London (UK)	
Contrast-echo	Madrid (Spain)	
Myocardial Velocity Imaging-echo	Leuven (Belgium)	

Table: Distribution of core-labs amongst the partners

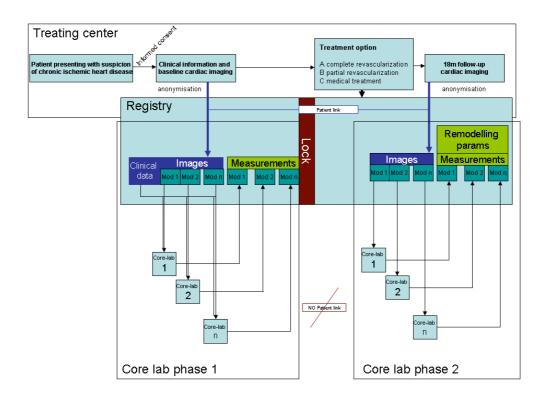


Figure 1: Schematic overview of the DOPPLER-CIP study protocol

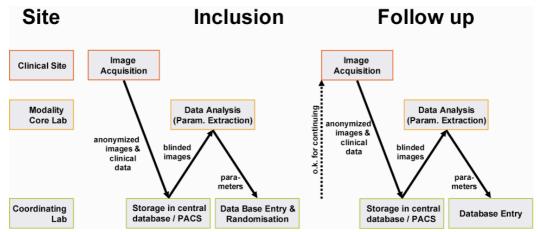


Figure 2: Schematic overview of the DOPPLER-CIP data-flow

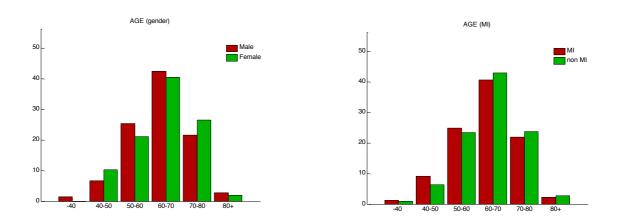


Figure 3: Age (years) distribution of the DOPPLER-CIP study population

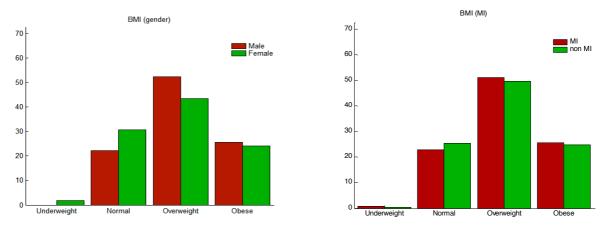


Figure 4: Distribution of the body mass index of the DOPPLER-CIP study population

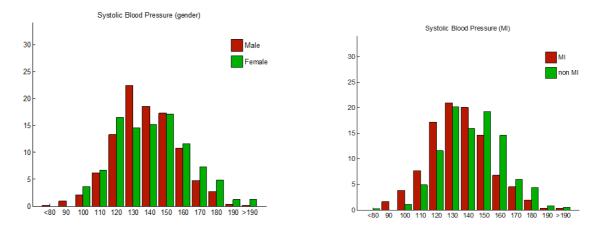


Figure 5: Systolic blood pressure (mmHg) distribution of the DOPPLER-CIP study population

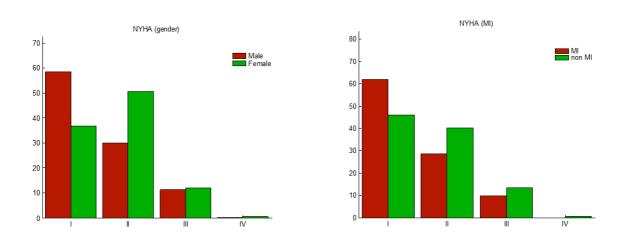


Figure 6: NYHA class distribution of the DOPPLER-CIP study population

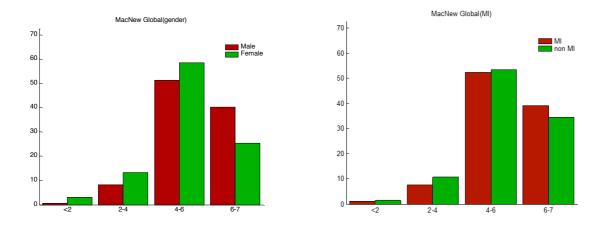


Figure 7: Total McNew score distribution of the DOPPLER-CIP study population

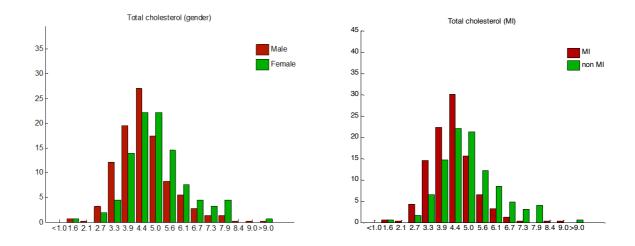


Figure 8: Distribution of the total cholesterol levels of the DOPPLER-CIP study population

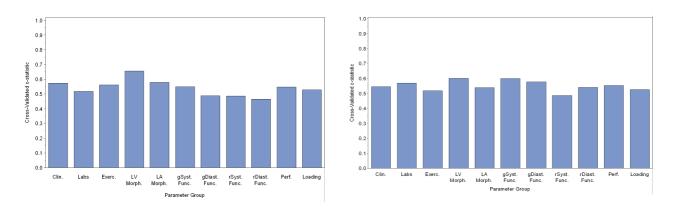


Figure 9: Cross-validated c-statistic towards predicting morphological (left) and functional (right) ventricular remodelling using parameters characterizing different physiological parameters.

Variable	C-stat on Data C-stat o	n Imputed Da	ta Cross-Validated c-stat
LVIDd	0.852	0.779	0.779
LVM	0.734	0.683	0.684
LV_EDV_ml	0.601	0.591	0.574
PerfScar: %Segments with Highest Value (=4)	0.492	0.552	0.549
LVEDV_Rest	0.551	0.560	0.544
PerfScar: %Segments with Lowest Value (=0)	0.551	0.560	0.544
IVSd	0.576	0.558	0.543
SAX_diameter_ED_mm	0.603	0.559	0.538
Sphericity_ES	0.578	0.554	0.537
Sphericity_ED	0.612	0.552	0.532
Scar (%) Segmental: Mean Value Across Segments	0.576	0.548	0.522
EDSI	0.667	0.547	0.518
ESSI	0.588	0.544	0.518
LVEDV_A4CH	0.630	0.544	0.515
LV Axis Dias (cm): Mean Value Across Segments	0.544	0.545	0.514

Table 1: Detailed c-statistic of the parameters describing 'LV morphology' towards the prediction of LV morphologic remodelling.

Variable	C-stat on Data C-stat on	Imputed Dat	ta Cross-Validated c-stat
LV_EDV_ml	0.664	0.650	0.641
LVIDd	0.602	0.610	0.603
SAX_diameter_ED_mm	0.656	0.598	0.588
Sphericity_ES	0.615	0.594	0.584
PerfScar: %Segments with Highest Value (=4)	0.560	0.574	0.574
LVM	0.603	0.581	0.562
Sphericity_ED	0.645	0.573	0.559
ESSI	0.606	0.577	0.557
LVEDV_A2CH	0.641	0.567	0.545
LVEDV_A4CH	0.627	0.560	0.541
Scar (%) Segmental: Mean Value Across Segments	0.639	0.560	0.532
Scar (%) Segmental: %Segments with Value <=0	0.680	0.555	0.531
PWd	0.565	0.555	0.529
Scar_ml	0.542	0.543	0.525
Scar (%) Segmental: %Segments with Value >=20.1	0.674	0.554	0.520

Table 2: Detailed c-statistic of the parameters describing 'LV morphology' towards the prediction of LV functional remodelling.

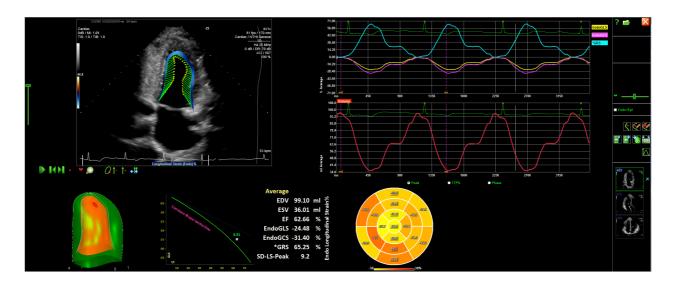


Figure 10: Snapshot of the graphical user interface of the software developed within the context of DOPPLER-CIP for efficient extraction of morphologic and functional data.

Title sub-study	Leading DOPPLER-CIP partner
Myocardial function by cardiac imaging in patients with established coronary	Oslo
artery disease and patients with suspected coronary artery disease	
The influence of risk factors for coronary artery disease (e.g. age, male	Oslo
gender, diabetes mellitus, hypertension, hypercholesterolemia, smoking,	
obesity, sedentary lifestyle) on myocardial function assessed by different	
cardiac imaging modalities	
Myocardial function by three-dimensional speckle tracking echocardiography	London
(3D STE) in patients with suspected and established coronary artery disease	
Association between myocardial anatomy and function by different imaging	Oslo
modalities and circulating concentrations of hs-cTnI and hs-cTnT	
Quantitative and semi-quantitative myocardial perfusion by first pass CMR,	Leuven
SPECT and perfusion echocardiography: regional perfusion distribution in	
patients with non-obstructive CAD	
Segmental perfusion-contraction coupling in different ischemic substrates	Leuven
Clinical validation of a novel fully automatic volumetric segmentation	Leuven
algorithm for 3D ultrasound	
Clinical validation of a novel approach for the assessment of regional	Leuven
deformation from tagged MRI	
The diagnostic value of ESPVR relations and their correlation with regional	Pisa
function	
Determining the accuracy of speckle tracking parameters in the detection of	Pisa
myocardial ischemia and eventual their incremental value in comparison with	
conventional wall motion score during the stress echocardiography	
Myocardial strain measured with DENSE and HARP – differences and	Linkoping
advantages	
Validation of an automated algorithm for left atrial volume measurements in	Leuven
volumetric ultrasound	

Table 3: List of on-going sub-studies based on the DOPPLER-CIP databases