## Supplement Material

## Supplementary Table 1

Artery	LAD	RCA	LCX
Total Cases	279	259	253
Task 1: 50% or greater			
occlusion			
Cases distribution (100%)	36.2% (101)	13.1% (34)	11.5% (29)
Training (70%)	36.1% (70)	12.8% (23)	11.4% (20)
Testing (20%)	36.8% (21)	14.8% (8)	11.5% (6)
Validation (10%)	35.7% (10)	12.0% (3)	12% (3)
Task 2: 70% or greater			
occlusion			
Cases distribution (100%)	19.7% (55)	6.9% (18)	3.2% (8)
Training (70%)	19.6% (38)	6.7% (12)	IC*
Testing (20%)	20.7% (12)	7.5% (4)	IC*
Validation (10%)	18.5% (5)	7.7% (2)	IC*

Description of datasets, containing only patients with 36 CMR slices, used in the two classification tasks, detailing the proportion (in %) and the absolute number of patients (reported in parentheses) belonging to the positive class. \*IC = Insufficient Cases, in this case of the positive class



Supplementary Figure 1: Represents an overview of the modelling process from data acquisition to evaluation.

## (A) LAD: Moderate or more stenosis

## (B) LAD: Severe or more stenosis



Supplementary Figure S2: Representing detailed AUC-ROC plots, for each fold and mean, along with corresponding Brier scores. (left to right, top to bottom).





Supplementary Figure S3: Represents the evaluation of various metrics on the threshold range from 0 to 50%, including Sensitivity, Specificity, Precision (Positive Predictive Value), Negative Predictive Value, Image Recognition Rate, Patient Recognition Rate, and F-score. (left to right, top to bottom)

Original Image





EfficientNetB2



EfficientNetB0



Supplementary Figure S4: Representing heatmaps generated by different models.



Supplementary Figure S5: Illustrates results for Moderate stenosis in LAD with variable number of CMR images (left to right, top to bottom). Four subfigures, each corresponds to, detailed AUC-ROC with folds, mean AUC-ROC with CI, Calibration, behaviour of metrics depending on threshold.



Supplementary Figure S6: Illustrates results for Severe stenosis in LAD with variable number of CMR images (left to right, top to bottom). Four subfigures, each corresponds to, detailed AUC-ROC with folds, mean AUC-ROC with CI, Calibration, behaviour of metrics depending on threshold.



Supplementary Figure S7: Illustrates results for Moderate stenosis in RCA with variable number of CMR images (left to right, top to bottom). Four subfigures, each corresponds to, detailed AUC-ROC with folds, mean AUC-ROC with CI, Calibration, behaviour of metrics depending on threshold.



Supplementary Figure S8: Illustrates results for Severe stenosis in RCA with variable number of CMR images (left to right, top to bottom). Four subfigures, each corresponds to, detailed AUC-ROC with folds, mean AUC-ROC with CI, Calibration, behaviour of metrics depending on threshold.



Supplementary Figure 9



Supplementary Figure 10





Supplementary Figure 11

(A)



Supplementary Figure 12