

Supplementary Table S1: Baseline characteristics of patients admitted for acute coronary syndrome before and during COVID-19 pandemic.

| | Before COVID-19 Pandemic (n = 2142) | During COVID-19 Pandemic (n = 709) | P |
|--|-------------------------------------|------------------------------------|------------------|
| Age | 67±12,47 | 67±11,862 | 0,805 |
| BMI (kg/m ²) | 26±4 | 26±4 | 0,74 |
| Female Sex | 26,10% | 26,00% | 0,933 |
| Hypertension | 69,20% | 69,60% | 0,833 |
| Diabetes Mellitus | 27,70% | 28,80% | 0,57 |
| Dyslipidemia | 50,20% | 50,10% | 0,939 |
| Smoking | 27,90% | 30,60% | 0,165 |
| Ex-Smoking | 18,20% | 14,00% | 0,012 |
| Atrial Fibrillation (All Forms) | 9,60% | 8,80% | 0,514 |
| History Of Heart Failure | 5,20% | 4,90% | 0,794 |
| Valve Disease (more than mild) | 0,40% | 0% | 0,012 |
| COPD | 8,10% | 8,20% | 0,899 |
| Respiratory/Pulmonary Disease | 0,50% | 0,40% | 0,765 |
| Neurological Disease | 0,60% | 0,60% | 0,99 |
| Chronic Kidney Disease (GFR < 60 ml/min) | 11,50% | 13,20% | 0,225 |
| Hemorrhagic Diatesis | 1,10% | 0% | 0,005 |
| Thrombosis Diatesis (PVT) | 1,20% | 0,40% | 0,082 |
| Anemia | 0,50% | 0,30% | 0,51 |
| Inflammatory/Infective Disease | 1,80% | 1,10% | 0,237 |
| Previous Oncological Disease | 1,40% | 0,60% | 0,075 |
| Previous PCI | 22,60% | 21,80% | 0,672 |
| Previous CABG | 5,60% | 4,80% | 0,429 |
| Previous MI | 20,40% | 19,10% | 0,463 |
| Previous Stroke/TIA | 4,30% | 4,50% | 0,833 |
| Atypical Symptoms | 13,40% | 14,90% | 0,312 |
| Dyspnea | 13,10% | 13,40% | 0,842 |
| Fever | 1,70% | 5,10% | <0,001 |
| Heart Failure (at the presentation) | 13,00% | 12,50% | 0,717 |
| Killip Class > 1 | 28,60% | 37,50% | <0,001 |
| EF (%; at presentation) | 48,6±9,8 | 47,1±9,9 | 0,001 |
| Cardiac Arrest before Cathlab | 3,50% | 3,00% | 0,456 |
| STEMI | 43,30% | 47,20% | 0,065 |
| NSTEMI | 39,30% | 38,10% | 0,576 |
| Unstable Angina | 12,90% | 9,60% | 0,02 |
| Total Thrombotic occlusion | 37,40% | 37,70% | 0,919 |
| Thrombus Aspiration | 17,30% | 14,50% | 0,08 |
| Number of stent implanted | 0,82±0,39 | 0,80±0,45 | 0,49 |
| Fibrinolysis | 0,30% | 0% | 0,167 |

| | | | |
|-------------------------|--------|-------|-------|
| GP IIB/IIIA use | 11,00% | 9,40% | 0,216 |
| Any Ventricular Support | 0,1% | 0,6% | 0,004 |

BMI= body mass index; COPD=chronic obstructive pulmonary disease ;PCI= percutaneous coronary intervention ;CABG= coronary artery bypass graft; MI=myocardial infarction; TIA=transient ischemic attack; EF=ejection fraction; STEMI=ST-segment elevated myocardial infarction; NSTEMI= non ST-segment elevated myocardial infarction; GP= glycoprotein.

Supplementary Table S2: Baseline characteristics of patients admitted for acute coronary syndrome during the COVID-19 pandemic first wave with positive and negative COVID-19 swab.

| | Negative COVID-19 swab (n = 639) | Negative COVID-19 swab (n = 70) | P |
|-------------------------------------|----------------------------------|---------------------------------|--------|
| Age | 67±12 | 68±12 | 0,34 |
| BMI (kg/m2) | 27±4 | 24±4 | <0,001 |
| Female Sex | 26,30% | 22,90% | 0,534 |
| Hypertension | 70,10% | 65,70% | 0,451 |
| Diabetes Mellitus | 27,40% | 41,40% | 0,014 |
| Dyslipidemia | 51,50% | 37,10% | 0,023 |
| Smoking | 32,10% | 17,10% | 0,01 |
| Ex-Smoking | 14,10% | 13,00% | 0,807 |
| Atrial Fibrillation (all forms) | 8,60% | 10,10% | 0,669 |
| History of Heart Failure | 4,60% | 7,20% | 0,341 |
| COPD | 8,30% | 7,10% | 0,728 |
| Respiratory/Pulmonary Disease | 0,50% | 0,00% | 0,566 |
| Neurological Disease | 0,50% | 1,40% | 0,309 |
| Chronic Kidney Disease | 12,60% | 18,60% | 0,161 |
| Thrombosis Diatesis (PVT) | 0,50% | 0,00% | 0,566 |
| Anemia | 0,20% | 1,40% | 0,057 |
| Inflammatory/Infective Disease | 1,30% | 0,00% | 0,346 |
| Previous Oncological Disease | 0,50% | 1,40% | 0,309 |
| Previous PCI | 22,40% | 17,10% | 0,316 |
| Previous CABG | 4,10% | 11,40% | 0,007 |
| Previous MI | 20,00% | 11,40% | 0,084 |
| Previous Stroke/TIA | 4,30% | 7,10% | 0,27 |
| Atypical symptoms | 14,80% | 15,90% | 0,798 |
| Dyspnea | 12,10% | 24,60% | 0,004 |
| Fever | 3,20% | 22,10% | <0,001 |
| Heart Failure (at the presentation) | 11,80% | 18,80% | 0,092 |
| Killip Class > 1 | 36,60% | 45,70% | 0,136 |
| EF (%; at presentation) | 48±10 | 44±6 | 0,006 |
| Cardiac arrest before Cathlab | 2,80% | 4,30% | 0,491 |
| STEMI | 44,90% | 68,60% | <0,001 |
| NSTEMI | 40,40% | 17,10% | <0,001 |
| Unstable Angina | 10,20% | 4,30% | 0,112 |
| MINOCA | 3,30% | 4,30% | 0,661 |

| | | | |
|---|----------|-----------|--------|
| TakoTsubo Syndrome | 1,70% | 7,10% | 0,004 |
| Total Thrombotic occlusion | 35,40% | 58,00% | <0,001 |
| Thrombus Aspiration | 14,80% | 11,60% | 0,472 |
| Number of stent implanted | 0,8±0,45 | 0,84±0,47 | 0,488 |
| GP IIB/IIIA use | 9,6% | 7,2% | 0,523 |
| Any Ventricular Support | 0,50% | 1,40% | 0,309 |
| Arrhythmic complications during procedure | 3,80% | 11,60% | 0,003 |
| Intra-hospital Arrhythmic Complications | 3,20% | 1,40% | 0,424 |
| Intra-hospital Mechanical Complications | 0,80% | 2,90% | 0,094 |
| Intra-hospital TIMI Major bleeding | 0,90% | 0,00% | 0,421 |
| Intra-hospital TIMI Minor bleeding | 2,50% | 4,40% | 0,36 |
| Total Bleeding | 3,40% | 4,30% | 0,717 |
| Deaths during hospitalization | 1,60% | 7,10% | 0,002 |

BMI= body mass index; COPD=chronic obstructive pulmonary disease ;PCI= percutaneous coronary intervention ;CABG= coronary artery bypass graft; MI=myocardial infarction; TIA=transient ischemic attack; EF=ejection fraction; STEMI=ST-segment elevated myocardial infarction; NSTEMI= non ST-segment elevated myocardial infarction; GP= glycoprotein.

Supplementary Table S3: Baseline characteristics of the population with or without in-hospital bleeding based on COVID-19 swab result.

| | Negative COVID-19 swab (n = 639) | | | Positive COVID-19 swab (n = 70) | | |
|--------------------------------|-------------------------------------|---------|-------|------------------------------------|---------|------|
| | No Bleed | Bleed | P | No Bleed | Bleed | P |
| Age | 66.8±12.3 | 69±12.9 | 0,21 | 68.1±12.3 | 70.3±4 | 0,24 |
| BMI (kg/m2) | 26 ± 4 | 27 ± 4 | 0.77 | 24 ± 4 | 24 ± 2 | 0.93 |
| Female Sex | 25,70% | 42,90% | 0.08 | 23,90% | 0,00% | 0.33 |
| Hypertension | 69,70% | 81,00% | 0.27 | 64,20% | 100,00% | 0.20 |
| Diabetes mellitus | 27,40% | 28,60% | 0.90 | 41,80% | 33,30% | 0.77 |
| Dyslipidemia | 52,10% | 33,30% | 0.09 | 35,80% | 66,70% | 0.30 |
| Smoking | 32,20% | 28,60% | 0.72 | 17,90% | 0,00% | 0.42 |
| Ex-smoking | 14,30% | 9,50% | 0.54 | 12,10% | 33,30% | 0.28 |
| Atrial Fibrillation | 8,40% | 14,30% | 0.34 | 9,10% | 33,30% | 0.17 |
| History of Heart Failure | 4,50% | 9,50% | 0.28 | 6,10% | 33,30% | 0.07 |
| Vascular diseases | 1,30% | 9,50% | 0.003 | 0,00% | 0,00% | NA |
| COPD | 8,30% | 9,50% | 0.84 | 7,50% | 0,00% | 0.62 |
| Respiratory/Pulmonary disease | 0,50% | 0,00% | 0.75 | 0,00% | 0,00% | |
| Chronic kidney disease | 12,20% | 23,80% | 0.11 | 17,90% | 33,30% | 0.50 |
| Thrombotic diathesis | 0,50% | 0,00% | 0.75 | 0,00% | 0,00% | |
| Anemia | 0,20% | 0,00% | 0.85 | 1,50% | 0,00% | 0.83 |
| Inflammatory/Infective disease | 1,30% | 0,00% | 0.60 | 0,00% | 0,00% | |
| Previous oncological disease | 0,30% | 4,80% | 0.003 | 1,50% | 0,00% | 0.83 |

| Previous PCI | 22,60% | 14,30% | 0.36 | 16,40% | 33,30% | 0.45 |
|---|-------------|-------------|-------|-------------|-------------|------|
| Previous CABG | 3,90% | 9,50% | 0.20 | 10,40% | 33,30% | 0.22 |
| Previous MI | 20,20% | 14,30% | 0.50 | 10,40% | 33,30% | 0.22 |
| Previous Stroke/TIA | 4,40% | 0,00% | 0.32 | 7,50% | 0,00% | 0.62 |
| Typical symptoms | 74,10% | 81,00% | 0.48 | 78,80% | 66,70% | 0.62 |
| Atypical symptoms | 14,80% | 14,30% | 0.95 | 15,20% | 33,30% | 0.40 |
| Intermittent Angina | 13,70% | 9,50% | 0.58 | 13,60% | 0,00% | 0.49 |
| Dyspnea | 12,20% | 9,50% | 0.71 | 22,70% | 66,70% | 0.08 |
| Respiratory impairment | 6,00% | 0,00% | 0.25 | 15,20% | 66,70% | 0.02 |
| Fever | 3,20% | 4,80% | 0.68 | 21,50% | 33,30% | 0.63 |
| Heart Failure (at the presentation) | 11,70% | 14,30% | 0.71 | 19,70% | 0,00% | 0.07 |
| Killip Class (at presentation) > 1 | 98,10% | 100,00% | 0.16 | 100,00% | 100,00% | 0.74 |
| Night Presentation | 20,50% | 14,30% | 0.49 | 19,40% | 0,00% | 0.40 |
| EF (%; at presentation) | 48 ± 10 | 41 ± 9 | 0.005 | 44 ± 6 | 52 ± 5 | 0.09 |
| Time Door to Balloon (minutes) | 257 ± 609 | 150 ± 351 | 0.48 | 34 ± 49 | 35 ± 7 | 0.98 |
| Time Symptoms to Cath-lab door (minutes) | 1360 ± 3808 | 651 ± 967 | 0.44 | 579 ± 2622 | 827 ± 1363 | 0.87 |
| Time Symptoms to Emergency call (minutes) | 875 ± 2806 | 925 ± 1944 | 0.94 | 428 ± 1438 | 30 | 0.78 |
| Cardiac arrest before cathlab | 2,60% | 9,50% | 0.06 | 4,50% | 0,00% | 0.71 |
| STEMI | 44,30% | 61,90% | 0.11 | 70,10% | 33,30% | 0.18 |
| NSTEMI | 40,80% | 28,60% | 0.26 | 14,90% | 66,70% | 0.02 |
| Unstable Angina | 10,20% | 9,50% | 0.92 | 4,50% | 0,00% | 0.71 |
| Thrombotic occlusion | 34,90% | 50,00% | 0.16 | 59,10% | 33,30% | 0.37 |
| Number of stents implanted | 0,80 + 0,45 | 0,86 + 0,48 | 0.56 | 0,85 + 0,45 | 0,67 + 0,57 | 0.79 |
| GP IIB/IIIA use | 9,90% | 0,00% | 0.13 | 7,60% | 0,00% | 0.62 |
| Thrombus Aspiration | 15,00% | 9,50% | 0.49 | 12,10% | 0,00% | 0.52 |
| Any Ventricular Support | 2,80% | 9,50% | 0.21 | 7,50% | 0,00% | 0.89 |
| Mechanical Complications (Intra-Procedural) | 2,50% | 14,30% | 0.001 | 1,50% | 0,00% | 0.83 |

BMI= body mass index; COPD=chronic obstructive pulmonary disease ;PCI= percutaneous coronary intervention ;CABG= coronary artery bypass graft; MI=myocardial infarction; TIA=transient ischemic attack; EF=ejection fraction; STEMI=ST-segment elevated myocardial infarction; NSTEMI= non ST-segment elevated myocardial infarction; GP= glycoprotein.

Supplementary Table S4: Univariate analysis for TIMI major or minor bleeding.

| | Hazard ratio (95% CI) | | P value | |
|-----|-----------------------|-------|---------|-------|
| | Lower | Upper | | |
| Age | 1.013 | 0.995 | 1.03 | 0.159 |

| | Hazard ratio | 95% CI | P value |
|---|--------------|--------|---------|
| Female gender | 1.892 | 1.226 | 2.921 |
| Hypertension | 1.15 | 0.718 | 1.843 |
| Diabetes mellitus | 0.956 | 0.596 | 1.534 |
| Dyslipidemia | 0.617 | 0.398 | 0.956 |
| Previous PCI | 1.122 | 0.68 | 1.851 |
| Previous CABG | 1.09 | 0.442 | 2.689 |
| Previous MI | 1.286 | 0.779 | 2.121 |
| Smoking | 0.823 | 0.503 | 1.346 |
| Atrial Fibrillation | 1.549 | 0.856 | 2.804 |
| Heart Failure at the presentation | 1.24 | 0.714 | 2.154 |
| History of Heart Failure | 1.618 | 0.746 | 3.507 |
| Previous Stroke/TIA | 1.839 | 0.849 | 3.988 |
| COPD | 1.762 | 0.956 | 3.249 |
| Chronic kidney disease | 2.133 | 1.292 | 3.523 |
| Anemia | 6.595 | 2.075 | 20.963 |
| Peripheral vascular diseases | 2.786 | 1.018 | 7.629 |
| Valve disease | 6.073 | 1.482 | 24.882 |
| Respiratory/Pulmonary disease | 1.895 | 0.263 | 13.673 |
| Inflammatory/Infective disease | 0.653 | 0.091 | 4.691 |
| Thrombotic diathesis | 1.751 | 0.429 | 7.154 |
| Hemorrhagic diathesis | 3.602 | 1.137 | 11.416 |
| Previous oncological disease | 3.991 | 1.607 | 9.913 |
| Neurological disease | 2.926 | 0.715 | 11.981 |
| STEMI presentation | 1.003 | 0.656 | 1.534 |
| NSTEMI presentation | 1.12 | 0.728 | 1.723 |
| Unstable Angina presentation | 0.575 | 0.232 | 1.424 |
| MINOCA presentation | 1.12 | 0.354 | 3.545 |
| Cardiac arrest before Cathlab | 1.847 | 0.802 | 4.253 |
| Fever at presentation | 1.553 | 0.566 | 4.259 |
| Killip Class at presentation | 1.398 | 1.119 | 1.747 |
| EF (%) at presentation) | 0.972 | 0.952 | 0.993 |
| Echo Wall motion abnormalities | 2.46 | 1.131 | 5.35 |
| Number of diseased vessels | 0.97 | 0.862 | 1.091 |
| Fibrinolysis | 4.585 | 0.635 | 33.115 |
| GP IIB/IIIA use | 0.871 | 0.436 | 1.738 |
| Mechanical Complications in cathlab | 5.692 | 2.729 | 11.872 |
| Inotropes at presentation and/or during procedure | 1.88 | 0.988 | 3.579 |
| Cardiac Arrest during procedure | 1.226 | 0.301 | 4.993 |
| | | | < 0.001 |
| | | | 0.054 |
| | | | 0.776 |

BMI= body mass index; COPD=chronic obstructive pulmonary disease ;PCI= percutaneous coronary intervention ;CABG= coronary artery bypass graft; MI=myocardial infarction; TIA=transient ischemic attack; EF=ejection fraction; STEMI=ST-segment elevated myocardial infarction; NSTEMI= non ST-segment elevated myocardial infarction; GP= glycoprotein.

Supplementary Table S5: Multivariate analysis for TIMI major or minor bleeding.

| | Hazard ratio (95% CI) | P value |
|---------------|-----------------------|---------|
| Female gender | 2.053 | 1.291 |
| | 3.266 | 0.002 |

| | | | | |
|-------------------------------------|-------|-------|--------|---------|
| Dyslipidemia | 0.541 | 0.337 | 0.87 | 0.011 |
| Chronic kidney disease | 1.85 | 1.089 | 3.141 | 0.023 |
| Anemia | 5.538 | 1.519 | 20.191 | 0.01 |
| Previous oncological disease | 2.655 | 0.966 | 7.296 | 0.058 |
| Killip Class (at presentation) | 1.309 | 1.038 | 1.651 | 0.023 |
| Echo Wall motion abnormalities | 2.092 | 0.895 | 4.89 | 0.088 |
| Mechanical Complications in cathlab | 4.844 | 2.179 | 10.77 | < 0.001 |