Supplementary Table. Propensity-matched comparison between the no ECMO and ECMO application groups

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|  | Propensity-matched patients |
| No ECMO (N=64) | ECMO (N=64) | P Value |
| Demographics |  |  |  |
| Age, years | 65.1±12.9 | 64.0±11.0 | 0.607 |
| Age >75 years | 19 (29.7) | 14 (21.9) | 0.419 |
| Male, % | 50 (78.1) | 45 (70.3) | 0.419 |
| Body mass index, kg/m2 | 24.4±3.7 | 24.1±3.5 | 0.637 |
| Initial presentation |  |  |  |
| Killip class ≥3 | 42 (65.6) | 39 (60.9) | 0.714 |
| Systolic blood pressure, mmHg | 102.0±27.2 | 104.6±26.8 | 0.583 |
| Diastolic blood pressure, mmHg | 62.6±19.3 | 66.7±19.9 | 0.244 |
| Heart rate, beats per minute | 91.0±28.8 | 87.6±27.4 | 0.492 |
| STEMI | 43 (67.2) | 51 (79.7) | 0.161 |
| Process of care index |  |  |  |
| Symptom onset-to-door time, hours | 15.6±60.7 | 13.0±29.9 | 0.764 |
| Door-to-balloon time, hours | 12.6±39.0 | 8.4±34.2 | 0.516 |
| Cardiovascular risk factors |  |  |  |
| Family history | 4 (6.3) | 3 (4.9) | 1.000 |
| Hypertension | 32 (50.0) | 33 (51.6) | 1.000 |
| Diabetes mellitus | 24 (37.5) | 25 (39.1) | 1.000 |
| Dyslipidemia | 8 (12.5) | 7 (10.9) | 1.000 |
| Previous history of MI | 6 (9.4) | 2 (3.1) | 0.273 |
| Previous history of CHF | 2 (3.1) | 1 (1.6) | 1.000 |
| Previous history of CVA | 8 (12.5) | 3 (4.7) | 0.207 |
| Current smoker | 28 (43.8) | 30 (46.9) | 0.859 |
| Left ventricular EF, % | 44.3±13.2 | 35.0±13.8 | 0.001 |
| Laboratory findings |  |  |  |
| Creatinine, mg/dl | 1.1±0.5 | 1.7±2.4 | 0.052 |
| Peak troponin I, mg/ml | 94.9±132.5 | 214.7±270.0 | 0.004 |
| Peak CK-MB, ng/ml | 204.1±178.6 | 389.5±496.1 | 0.007 |
| Medications |  |  |  |
| Aspirin | 64 (100.0) | 64 (100.0) | 1.000 |
| Clopidogrel | 60 (93.8) | 44 (68.8) | 0.001 |
| Prasugrel | 5 (7.8) | 18 (28.1) | 0.006 |
| Ticagrelor | 9 (14.1) | 13 (20.3) | 0.482 |
| ACEi or ARB | 41 (64.1) | 19 (29.7) | <0.001 |
| Beta-blocker | 44 (68.8) | 20 (31.2) | <0.001 |
| Statin | 47 (73.4) | 25 (39.1) | <0.001 |
| Oral anticoagulant | 3 (4.7) | 3 (4.7) | 1.000 |
| Culprit lesion profiles |  |  |  |
| Location |  |  |  |
|  Left main artery | 8 (12.5) | 10 (15.6) | 0.799 |
|  LAD | 31 (48.4) | 29 (45.3) | 0.859 |
|  LCX | 6 (9.4) | 12 (18.8) | 0.204 |
|  RCA | 19 (29.7) | 13 (20.3) | 0.307 |
| Type B2/C lesion\* | 62 (96.9) | 60 (93.8) | 0.676 |
| Overall lesion profiles |  |  |  |
|  Left main artery disease | 12 (18.8) | 14 (21.9) | 0.826 |
|  3-vessel disease | 10 (15.6) | 11 (17.2) | 1.000 |
| Procedural characteristics |  |  |  |
| Transradial approach | 7 (10.9) | 7 (10.9) | 1 |
| Glycoprotein IIb/IIIa inhibitor use | 14 (21.9) | 18 (28.1) | 0.540 |
| Thrombus aspiration | 16 (25.0) | 21 (32.8) | 0.435 |
| IRA treatment |  |  |  |
| BMS | 5 (7.8) | 6 (9.4) | 1.000 |
|  EES | 32 (50.0) | 31 (48.4) | 1.000 |
|  ZES | 15 (23.4) | 12 (18.8) | 0.665 |
|  BES | 6 (9.4) | 9 (14.1) | 0.583 |
|  SES | 1 (1.6) | 2 (3.1) | 1.000 |
|  NES | 0 (0.0) | 0 (0.0) | 1.000 |
|  PES | 1 (1.6) | 0 (0.0) | 1.000 |
|  Other stents | 0 (0.0) | 0 (0.0) | 1.000 |
|  Plain balloon angioplasty | 3 (4.7) | 4 (6.2) | 1.000 |
| Stent diameter, mm | 3.2±0.4 | 3.1±0.4 | 0.359 |
| Stent length, mm | 25.6±7.3 | 25.4±8.5 | 0.899 |
| Pre-PCI TIMI flow in culprit lesion ≤ 1 | 42 (65.6) | 47 (73.4) | 0.442 |
| Post-PCI TIMI flow 3 | 64 (100.0) | 64 (100.0) | 1.000 |
| IVUS during PCI | 8 (12.5) | 5 (7.8) | 0.558 |
| OCT during PCI | 1 (1.6) | 0 (0.0) | 1.000 |
| IABP use | 31 (48.4) | 32 (50.0) | 1.000 |
| In-hospital complications |  |  |  |
| Acute heart failure | 11 (17.2) | 16 (25.0) | 0.386 |
| Re-infarction | 0 (0.0) | 4 (6.2) | 0.128 |
| Stent thrombosis | 0 (0.0) | 3 (4.7) | 0.243 |
| Major bleeding |  |  |  |
| Intracranial hemorrhage | 6 (9.4) | 13 (20.3) | 0.136 |
| Hb decrease† | 3 (4.7) | 6 (9.4) | 0.489 |
| Hct decrease‡ | 0 (0.0)  | 2 (3.1) | 0.476 |
| Minor bleeding | 7 (10.9) | 13 (20.3) | 0.224 |
| Atrial fibrillation | 9 (14.1) | 9 (14.1) | 1.000 |
| Sepsis | 2 (3.1) | 3 (4.7) | 1.000 |
| CPR | 39 (60.9) | 55 (85.9) | 0.003 |
| MOF | 5 (7.8) | 8 (12.5) | 0.558 |
| Defibrillation | 14 (21.9) | 32 (50.0) | 0.002 |
| Acute kidney injury | 5 (7.8) | 5 (7.8) | 1.000 |

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|  | Propensity-matched patients |
| 3-year follow-up | No ECMO(N=65) | ECMO (N=65) | HR (95% CI) | P Value |
| All-cause death | 18 (28.1) | 46 (71.9) | 3.96 (2.28-6.85) | <0.001 |
| Cardiac death | 16 (25.0) | 40 (62.5) | 3.83 (2.13-6.87) | <0.001 |
| Spontaneous MI | 4 (6.2) | 1 (1.6) | 0.51 (0.06-4.55) | 0.544 |
| Repeat revascularization | 6 (9.4) | 4 (6.2) | 1.39 (0.39-4.92) | 0.612 |
| All-cause death or MI | 20 (31.2) | 47 (73.4) | 3.67 (2.16-6.22) | <0.001 |
| MACE | 24 (37.5) | 50 (78.1) | 3.31 (2.05-5.34)  | <0.001 |

Values are mean ± SD or n (%). Values for systolic blood pressure are missing in 3 cases, family history in 4 cases, previous history of CHF in 1 case, left ventricular EF in 22 cases, peak troponin I in 19 cases, and peak CK-MB in 1 case.

\*Type B2 or C lesions according to the ACC/AHA classification. †Hb decrease denotes a decline in hemoglobin of at least 5.0 g/dl. ‡Hct decrease denotes a decline in hematocrit of at least 15%. ACEi = angiotensin-converting enzyme inhibitor; ARB = angiotensin receptor blocker; BES = biolimus-eluting stent; BMS = bare metal stent; CHF = congestive heart failure; CI = confidence interval; CK-MB = creatine kinase-myocardial band; CPR = cardiopulmonary resuscitation; CVA = cerebrovascular accident; ECMO = extracorporeal membrane oxygenation; EES = everolimus-eluting stent; EF = ejection fraction; Hb = hemoglobin; Hct = hematocrit; HR = hazard ratio; IABP = intra-aortic balloon pump; IRA = infarct-related artery; IVUS = intravascular ultrasound; LAD = left anterior descending artery; LCX = left circumflex artery; MACE = major adverse cardiac event; MI = myocardial infarction; MOF = multi-organ failure; NES = novolimus-eluting stent; OCT = optical coherence tomography; PES = paclitaxel-eluting stent; PCI = percutaneous coronary intervention; RCA = right coronary artery; SES = sirolimus-eluting stent; STEMI = ST-segment elevation myocardial infarction; TIMI = Thrombolysis in Myocardial Infarction; ZES = zotarolimus-eluting stent.