**APPENDIX 1**

**Supplemental Table 1: Adjusted odds ratios from hierarchical logistic models for the outcome of early postoperative mortality.** All models were adjusted for age using b-splines to account for non-linearity to the logit, with site incorporated as a Level 2 random effect. Early mortality is defined as within 28 days after the index surgery.

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| MODEL 1: PREOPERATIVE and OPERATIVE FACTORS  *Model c-statistic: 0.84*  *Hosmer-Lemeshow: p=0.11* | | | | |
| *Predictor* | *Adjusted OR* | *95% CI* | *t Value* | *Overall P-Value* |
| *Procedure Urgency*  Elective  Urgent  Emergent | Reference  1.37  4.21 | 0.98-1.76  3.75-4.67 | 1.55  6.07 | <0.0001 |
| *Preoperative Comorbidities*  Renal Dysfunction  Extracardiac arteriopathy  Liver Disease  Heart Failure | 2.20  1.89  3.03  1.86 | 1.83-2.57  1.55-2.23  2.34-3.72  1.51-2.21 | 4.13  3.65  3.16  3.46 | <0.0001  0.0003  0.002  0.0005 |
| Preoperative Hemoglobin (per each 1 g/L increase) | 0.99 | 0.98-0.99 | -3.41 | 0.0007 |
| Redo Procedure | 1.73 | 1.25-2.21 | 2.21 | 0.03 |
| Complex Procedure | 2.28 | 1.91-2.64 | 4.46 | <0.0001 |
| Preoperative IABP | 3.89 | 3.24-4.54 | 4.10 | <0.0001 |
| MODEL 2: PREOPERATIVE and OPERATIVE FACTORS + UDPB  *Model c-statistic: 0.91*  *Hosmer-Lemeshow: p=0.73* | | | | |
| *Predictor* | *Adjusted OR* | *95% CI* | *t Value* | *Overall P-Value* |
| *Procedure Urgency*  Elective  Urgent  Emergent | Reference  0.95  2.48 | 0.51-1.39  1.97-2.99 | -0.23  3.50 | 0.82  0.0005 |
| *Preoperative Comorbidities*  Renal Dysfunction  Extracardiac arteriopathy  Liver Disease  Heart Failure | 1.75  1.86  2.78  1.75 | 1.34-2.16  1.47-2.25  2.05-3.51  1.36-2.14 | 2.69  3.12  2.75  2.81 | 0.007  0.002  0.006  0.005 |
| Preoperative Hemoglobin (per each 1 g/L increase) | 0.99 | 0.98-1.00 | -1.67 | 0.10 |
| Redo Procedure | 1.03 | 0.47-1.59 | 0.10 | 0.92 |
| Complex Procedure | 1.42 | 1.02-1.82 | 1.75 | 0.08 |
| Preoperative IABP | 3.50 | 2.78-4.22 | 3.42 | 0.0006 |
| *UDPB*  Class 0  Class 1  Class 2  Class 3  Class 4 | Reference  6.41  6.06  34.65  122.16 | 4.86-7.96  4.59-7.53  33.23-36.07  120.71-123.61 | 2.34  2.40  4.88  6.50 | <0.0001 |
| MODEL 3: PREOPERATIVE and OPERATIVE FACTORS + UDPB + POSTOPERATIVE COMPLICATIONS  *Model c-statistic: 0.94*  *Hosmer-Lemeshow: p=0.34* | | | | |
| *Predictor* | *Adjusted OR* | *95% CI* | *t Value* | *Overall P-Value* |
| *Procedure Urgency*  Elective  Urgent  Emergent | Reference  0.78  2.34 | 0.31-1.25  1.80-2.88 | -1.02  3.07 | 0.0005 |
| Redo Procedure | 0.98 | 0.38-1.58 | -0.07 | 0.95 |
| Complex Procedure | 1.27 | 0.84-1.70 | 1.11 | 0.27 |
| Preoperative IABP | 3.83 | 3.08-4.58 | 3.53 | 0.0004 |
| Preoperative Hemoglobin (per each 1 g/L increase) | 0.99 | 0.98-1.00 | -1.41 | 0.16 |
| *Preoperative Comorbidities*  Renal Dysfunction  Extracardiac arteriopathy  Liver Disease  Heart Failure | 1.53  1.54  3.16  1.82 | 1.09-1.97  1.12-1.96  2.40-3.92  1.40-2.24 | 1.90  2.02  2.95  2.81 | 0.06  0.04  0.003  0.005 |
| *UDPB*  Class 0  Class 1  Class 2  Class 3  Class 4 | Reference  6.13  5.52  26.28  88.12 | 5.56-7.70  4.04-7.00  24.85-27.71  86.65-89.58 | 2.27  2.26  4.47  6.00 | <0.0001 |
| *Postoperative Complications*  AKI  Stroke  MI  Sepsis  Sternal Infection | 2.15  8.47  10.89  6.87  0.86 | 1.00-3.31  7.91-9.03  9.89-11.89  6.27-7.47  0.00-1.76 | 1.49  7.49  4.70  6.31  -0.34 | 0.14  <0.0001  <0.0001  <0.0001  0.73 |
| MODEL 4: PREOPERATIVE and OPERATIVE FACTORS + E-CABG  *Model c-statistic: 0.92*  *Hosmer-Lemeshow: p=0.57* | | | | |
| *Predictor* | *Adjusted OR* | *95% CI* | *t Value* | *Overall P-Value* |
| *Procedure Urgency*  Elective  Urgent  Emergent | Reference  0.95  2.58 | 0.53-1.37  0.72-4.44 | -0.25  3.75 | 0.0002 |
| *Preoperative Comorbidities*  Renal Dysfunction  Extracardiac arteriopathy  Liver Disease  Heart Failure | 1.73  1.91  2.61  1.57 | 1.34-2.12  1.54-2.28  1.89-3.33  1.20-1.94 | 2.75  3.45  2.59  2.35 | 0.006  0.0006  0.01  0.02 |
| Preoperative Hemoglobin (per each 1 g/L increase) | 1.01 | 1.00-1.02 | 1.31 | 0.19 |
| Redo Procedure | 1.35 | 0.84-1.86 | 1.15 | 0.25 |
| Complex Procedure | 1.29 | 0.90-1.68 | 1.27 | 0.20 |
| Preoperative IABP | 3.00 | 2.30-3.70 | 3.07 | 0.002 |
| *E-CABG Grade*  Grade 0  Grade 1  Grade 2  Grade 3 | Reference  2.82  26.53  64.72 | 2.18-3.46  25.93-27.13  63.89-65.55 | 3.16  10.65  9.84 | <0.0001 |
| MODEL 5: PREOPERATIVE and OPERATIVE FACTORS + E-CABG + POSTOPERATIVE COMPLICATIONS  *Model c-statistic: 0.94*  *Hosmer-Lemeshow: p=0.29* | | | | |
| *Predictor* | *Adjusted OR* | *95% CI* | *t Value* | *Overall P-Value* |
| *Procedure Urgency*  Elective  Urgent  Emergent | Reference  0.83  2.43 | 0.37-1.29  1.89-2.97 | -0.82  3.22 | 0.0005 |
| Redo Procedure | 1.15 | 0.58-1.72 | 0.49 | 0.63 |
| Complex Procedure | 1.18 | 0.76-1.60 | 0.79 | 0.43 |
| Preoperative IABP | 3.33 | 2.58-4.08 | 3.14 | 0.002 |
| Preoperative Hemoglobin (per each 1 g/L increase) | 1.00 | 0.99-1.01 | 0.86 | 0.39 |
| *Preoperative Comorbidities*  Renal Dysfunction  Extracardiac arteriopathy  Liver Disease  Heart Failure | 1.50  1.68  2.91  1.77 | 1.07-1.93  1.28-2.08  2.14-3.68  1.36-2.18 | 1.85  2.53  2.71  2.75 | 0.06  0.01  0.007  0.006 |
| *E-CABG Grade*  Grade 0  Grade 1  Grade 2  Grade 3 | Reference  2.77  19.62  40.44 | 2.09-3.45  18.97-20.27  39.53-41.35 | 2.94  9.00  7.97 | <0.0001 |
| *Postoperative Complications*  AKI  Stroke  MI  Sepsis  Sternal Infection | 1.98  5.76  10.48  6.20  0.81 | 0.99-2.97  5.21-6.31  9.54-11.42  5.62-6.78  0.00-1.63 | 1.35  6.22  4.88  6.19  -0.46 | 0.18  <0.0001  <0.0001  <0.0001  0.64 |