Supplementary material

**Preoperative Risk Stratification of Deep Sternal Wound Infection after Coronary Surgery**

Fausto Biancari et al.

**Table 1**. Baseline characteristics and operative data of patients undergoing coronary surgery in the derivation and validation datasets.

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| --- | --- | --- | --- |
| *Covariates* | *Derivation dataset**4901 patients* | *Validation dataset**2451 patients* | *P-value* |
| *Baseline risk factors* |  |  |  |
| Age (years) | 67.4±9.4 | 67.4±9.4 | 0.975 |
| Female | 771 (15.7) | 433 (17.7) | 0.035 |
| Body mass index (kg/m2) | 27.5±4.2 | 27.5±4.0 | 0.738 |
| Body mass index ≥30 kg/m2 | 1200 (24.6) | 583 (23.9) | 0.495 |
| Hemoglobin (g/L) | 137±17 | 137±17 | 0.990 |
| eGFR (mL/min/1.73 m2) | 82±25 | 81±26 | 0.552 |
| eGFR <45 mL/min/1.73 m2 | 302 (6.2) | 147 (6.0) | 0.775 |
| Dialysis | 57 (1.2) | 25 (1.0) | 0.582 |
| Functioning renal transplant | 18 (0.4) | 10 (0.4) | 0.789 |
| Diabetes on drug treatment | 1507 (30.7) | 785 (32.0) | 0.264 |
| Insulin-dependent diabetes | 601 (12.3) | 335 (13.7) | 0.088 |
| Prior stroke/transient ischemic attack | 304 (6.2) | 135 (5.5) | 0.236 |
| Atrial fibrillation | 418 (8.5) | 181 (7.4) | 0.090 |
| Chronic lung disease | 514 (10.5) | 247 (10.1) | 0.586 |
| Extracardiac arteriopathy | 1127 (23.0) | 588 (24.0) | 0.346 |
| Left ventricular ejection fraction ≤50% | 1435 (29.3) | 712 (29.0) | 0.829 |
| Recent myocardial infarction | 1573 (32.1) | 799 (32.6) | 0.663 |
| Prior percutaneous coronary intervention | 1032 (21.1) | 508 (20.7) | 0.743 |
| Prior cardiac surgery | 23 (0.5) | 16 (0.7) | 0.307 |
| Critical preoperative state | 329 (6.7) | 150 (6.1) | 0.331 |
| Preop. IABP | 188 (3.8) | 82 (3.3) | 0.292 |
| Urgency of the procedure |  |  | 0.627 |
| Elective | 2632 (53.7) | 1335 (54.5) |  |
| Urgent | 2041 (41.7) | 995 (40.6) |  |
| Emergency | 227 (4.6) | 121 (4.9) |  |
| EuroSCORE II (%) | 2.8±4.2 | 2.8±4.2 | 0.511 |
|  |  |  |  |
| *Operative data* |  |  |  |
| Off-pump surgery | 1013 (20.7) | 498 (20.3) | 0.725 |
| No. of distal anastomoses | 2.7±0.9 | 2.7±0.9 | 0.849 |
| BIMA grafting | 1794 (36.6) | 875 (35.7) | 0.447 |

Continuous variables are reported as mean and standard deviation. Categorical variables are reported as counts and percentages (in parentheses). eGFR, estimated glomerular filtration rate according to the Modification of Diet in Renal Disease Study Group equation; IABP, intra-aortic balloon pump; BIMA: bilateral internal mammary artery.



**Supplementary figure 1.** Rates of deep sternal wound infection/mediastinitis among the participating institutions in the overal, derivation and validation datasets.