Hospital intervention volume affects outcomes of emergency transcatheter aortic valve implantations in Germany

Supplementary material

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Supplementary Table 1: Propensity score adjustment for in-hospital outcomes of patients with balloon-expandable or self-expanding TAVI in Germany in 2018

| Number of emergency cases per center | In-hospital mortality | Bleeding >5 units | Stroke | Acute kidney injury | Delirium | Mechanical ventilation >48h | Permanent pacemaker implantation | Length of hospital stay | Reimbursement |
|-------------------------------------|-----------------------|------------------|--------|---------------------|----------|----------------------------|-------------------------------|--------------------------|--------------|
|                                     | OR                    | p-value          | 95% CI | OR                  | p-value  | 95% CI                     | OR                           | p-value                  | 95% CI        | OR          | p-value  | 95% CI | OR          | p-value  | 95% CI | Coeff | p-value | 95% CI | Coeff | p-value | 95% CI |
| Increase per 10 emergency cases     | 0.872                 | 0.043            | 0.764  | 0.996               | 0.772    | 0.001                      | 0.658                        | 0.905                    | 0.816        | 0.044      | 0.669   | 0.944   | 0.104       | 0.975    | 0.480  | 0.010 | 0.749   | 0.001  | 0.632  | 0.887   | 1.010  |
| Predicted rates or means            |                       |                  |        |                     |          |                            |                              |                          |              |            |         |        |                        |          |        |       |         |        |        |        |        |
| 0                                   | 0.054                 | 0.030            | 0.077  | 0.068               | 0.037    | 0.098                      | 0.034                        | 0.014                    | 0.055  | 0.173     | 0.139   | 0.207   | 0.082       | 0.137    | 0.071  | 0.039 | 0.103   | 0.134  | 0.010   | 0.163   | 21.327 |
| 10                                  | 0.048                 | 0.031            | 0.065  | 0.054               | 0.035    | 0.073                      | 0.029                        | 0.015                    | 0.042  | 0.167     | 0.140   | 0.194   | 0.085       | 0.129    | 0.056  | 0.036 | 0.073   | 0.135  | 0.111   | 0.160   | 20.415 |
| 20                                  | 0.042                 | 0.030            | 0.054  | 0.042               | 0.031    | 0.054                      | 0.024                        | 0.015                    | 0.032  | 0.160     | 0.139   | 0.181   | 0.087       | 0.122    | 0.042  | 0.031 | 0.154   | 0.137  | 0.117   | 0.156   | 19.402 |
| 30                                  | 0.037                 | 0.028            | 0.046  | 0.033               | 0.024    | 0.042                      | 0.019                        | 0.013                    | 0.026  | 0.153     | 0.136   | 0.171   | 0.087       | 0.117    | 0.032  | 0.023 | 0.041   | 0.138  | 0.121   | 0.155   | 18.389 |
| 40                                  | 0.032                 | 0.023            | 0.041  | 0.026               | 0.017    | 0.034                      | 0.016                        | 0.009                    | 0.023  | 0.147     | 0.130   | 0.164   | 0.085       | 0.115    | 0.024  | 0.015 | 0.033   | 0.139  | 0.122   | 0.156   | 17.376 |
| 50                                  | 0.028                 | 0.018            | 0.038  | 0.020               | 0.011    | 0.029                      | 0.013                        | 0.006                    | 0.020  | 0.141     | 0.121   | 0.161   | 0.081       | 0.115    | 0.018  | 0.009 | 0.027   | 0.140  | 0.121   | 0.159   | 16.362 |

CI: confidence interval; OR: odds ratio