

**Supplementary Table 1.** Predictors of TF elevation: univariate and multivariate analysis.

|                           | Univariate Analysis |               |          | Multivariate Analysis |        |          |
|---------------------------|---------------------|---------------|----------|-----------------------|--------|----------|
|                           | HR                  | 95% CI        | <i>p</i> | HR                    | 95% CI | <i>p</i> |
| Age                       | 0.986               | 0.935–1.040   | 0.603    |                       |        |          |
| AF                        | 2.641               | 0.760–9.176   | 0.127    |                       |        |          |
| Permanent AF              | 1.700               | 0.402–7.198   | 0.471    |                       |        |          |
| Paroxysmal AF             | 1.600               | 0.413–6.193   | 0.496    |                       |        |          |
| AF at the Time of Surgery | 2.167               | 0.631–7.442   | 0.129    |                       |        |          |
| Hypertension              | 0.533               | 0.148–1.922   | 0.336    |                       |        |          |
| Diabetes Mellitus         | 0.813               | 0.229–2.877   | 0.748    |                       |        |          |
| Smoking                   | 0.417               | 0.111–1.567   | 0.195    |                       |        |          |
| Female Sexe               | 1.083               | 0.288–4.081   | 0.906    |                       |        |          |
| LVEF < 40%                | 188.47              | 0.001–487.243 | 0.999    |                       |        |          |
| CHA2DS2VASc               | 0.921               | 0.645–1.315   | 0.652    |                       |        |          |
| Statins                   | 1.038               | 0.226–4.768   | 0.961    |                       |        |          |
| ACEinhibitor/AT1blocker   | 0.440               | 0.13–1.577    | 0.208    |                       |        |          |
| Coronaropathy             | 0.677               | 0.198–2.312   | 0.534    |                       |        |          |
| Euroscore I               | 1.061               | 0.918–1.227   | 0.424    |                       |        |          |
| Euroscore II              | 1.109               | 0.871–1.412   | 0.401    |                       |        |          |
| LA area                   | 1.018               | 0.968–1.071   | 0.496    |                       |        |          |
| p16                       | 1.376               | 0.211–8.971   | 0.738    |                       |        |          |
| p 53                      | 18.091              | 2.214–147.820 | 0.007    |                       |        |          |

AF atrial fibrillation; LVEF left ventricle ejection fraction; LA left atrium.

**Supplementary Table 2.** Predictors of eNOS elevation: univariate and multivariate analysis.

|                           | Univariate Analysis |              |          | Multivariate Analysis |        |          |
|---------------------------|---------------------|--------------|----------|-----------------------|--------|----------|
|                           | HR                  | 95% CI       | <i>p</i> | HR                    | 95% CI | <i>p</i> |
| Age                       | 1.038               | 10.981–1.098 | 0.194    |                       |        |          |
| AF                        | 0.231               | 0.061–0.869  | 0.030    |                       |        |          |
| Permanent AF              | 0.328               | 0.071–1.518  | 0.154    |                       |        |          |
| Paroxysmal AF             | 0.583               | 0.136–2.498  | 0.468    |                       |        |          |
| AF at the Time of Surgery | 0.290               | 0.079–1.063  | 0.062    |                       |        |          |
| Hypertension              | 1.556               | 0.420–5.763  | 0.508    |                       |        |          |
| Diabetes Mellitus         | 1.909               | 0.520–7.007  | 0.330    |                       |        |          |
| Smoking                   | 0.407               | 0.106–1.559  | 0.190    |                       |        |          |
| Female Sex                | 0.714               | 0.179–2.843  | 0.633    |                       |        |          |
| LVEF < 40%                | 0.474               | 0.039–5.688  | 0.556    |                       |        |          |
| CHA2DS2VASc               | 1.297               | 0.890–1.890  | 0.175    |                       |        |          |
| Statins                   | 2.800               | 0.570–13.754 | 0.205    |                       |        |          |
| ACEinhibitor/AT1blocker   | 1.000               | 0.273–3.667  | 1.000    |                       |        |          |
| Coronaropathy             | 1.560               | 0.429–5.248  | 0.526    |                       |        |          |
| Euroscore I               | 0.915               | 0.785–1.065  | 0.251    |                       |        |          |
| Euroscore II              | 0.875               | 0.679–1.128  | 0.302    |                       |        |          |
| LA Area                   | 0.984               | 0.939–1.032  | 0.515    |                       |        |          |
| p16                       | 0.128               | 0.012–1.372  | 0.089    |                       |        |          |
| p 53                      | 0.186               | 0.028–1.247  | 0.083    |                       |        |          |

AF atrial fibrillation; LVEF left ventricle ejection fraction; LA left atrium.

**Supplementary Table 3.** Predictors of MMP-9 elevation: univariate and multivariate analysis.

|                           | Univariate Analysis |              |          | Multivariate Analysis |              |          |
|---------------------------|---------------------|--------------|----------|-----------------------|--------------|----------|
|                           | HR                  | 95% CI       | <i>p</i> | HR                    | 95% CI       | <i>p</i> |
| Age                       | 1.092               | 1.017–1.173  | 0.015    | 1.071                 | 0.995–1.154  | 0.069    |
| AF                        | 1.210               | 0.360–4.062  | 0.758    |                       |              |          |
| Permanent AF              | 3.000               | 0.655–13.747 | 0.157    |                       |              |          |
| Paroxysmal AF             | 0.625               | 0.161–2.419  | 0.496    |                       |              |          |
| AF at the Time of Surgery | 1.467               | 0.434–4.951  | 0.537    |                       |              |          |
| Hypertension              | 8.000               | 1.790–35.744 | 0.006    | 5.359                 | 1.106–25.953 | 0.037    |
| Diabetes Mellitus         | 2.909               | 0.777–10.887 | 0.113    |                       |              |          |
| Smoking                   | 0.417               | 0.111–1.567  | 0.195    |                       |              |          |
| Female Sex                | 2.327               | 0.600–9.028  | 0.222    |                       |              |          |
| LVEF < 40%                | 2.105               | 0.176–25.170 | 0.556    |                       |              |          |
| CHA2DS2VASc               | 1.980               | 1.246–3.146  | 0.004    |                       |              |          |
| Statins                   | 4.083               | 0.818–20.376 | 0.086    |                       |              |          |
| ACEinhibitor/AT1blocker   | 0.667               | 0.190–2.334  | 0.526    |                       |              |          |
| Coronary Artery Disease   | 1.477               | 0.432–5.046  | 0.534    |                       |              |          |
| Euroscore I               | 1.187               | 0.995–1.417  | 0.057    |                       |              |          |
| Euroscore II              | 1.028               | 0.821–1.288  | 0.810    |                       |              |          |
| LA Area                   | 1.049               | 0.976–1.126  | 0.192    |                       |              |          |
| p16                       | 1.258               | 0.194–8.171  | 0.810    |                       |              |          |
| p 53                      | 3.997               | 0.664–24.068 | 0.130    |                       |              |          |

AF atrial fibrillation; LVEF left ventricle ejection fraction; LA left atrium. CHA2DS2VASc score was not entered into the multivariate analysis model since this score comprises age and arterial hypertension. .