

| Supplementary Table 9. Perioperative surgical data     |                                      |                    |                          |             |                          |                         |
|--|--------------------------------------|--------------------|--------------------------|-------------|--------------------------|-------------------------|
| Outcomes   | Studies                              | Percutaneous group |                          | Open group  |                          | WMD (95% CI)*           |
|  |                                      | Values             | Total number of patients | Values      | Total number of patients |                         |
| Operation time (minutes)                               | 7 <sup>19, 21, 22, 24 - 26, 29</sup> | 184.9±43.9         | 302                      | 172.9±30.8  | 289                      | 21.0 (15.9 to 26.2)†    |
| Blood loss   |                                      |                    |                          |             |                          |                         |
| Intraoperative blood loss (ml)                         | 6 <sup>19, 21, 22, 25, 26, 29</sup>  | 247.8±124.5        | 265                      | 572.8±147.6 | 259                      | 269.5 (246.2 to 292.9)† |
| Postoperative blood loss (ml)                          | 4 <sup>22, 25, 26, 29</sup>          | 59.8±78.5          | 171                      | 329.2±204.9 | 171                      | 126.4 (111.6 to 141.3)† |
| Blood transfusion (units)                              | 2 <sup>26, 29</sup>                  | 0.2±0.1            | 74                       | 1.2±0.4     | 72                       | 1.3 (1.1 to 1.4)†       |
| Radiation exposure time (seconds)                      | 4 <sup>21, 22, 25, 26</sup>          | 62.8±18.7          | 183                      | 30.6±9.7    | 180                      | 25.4 (22.0 to 28.8)†    |
| Postoperative intravenous analgesia with morphine (mg) | 2 <sup>22, 23</sup>                  | 44.7±58.3          | 109                      | 101.2±95.7  | 102                      | 31.1 (21.9 to 40.2)†    |
| Time to ambulation (days)                              | 3 <sup>22, 23, 29</sup>              | 1.1±0.2            | 141                      | 2.6±1.1     | 131                      | 1.3 (1.1 to 1.4)†       |
| Hospital stay (days)                                   | 6 <sup>19, 21 - 23, 26, 29</sup>     | 6.2±3.1            | 277                      | 9.7±3.8     | 262                      | 1.3 (1.1 to 1.5)†       |

\* WMD = weighted mean difference, CI = confidence interval. † p < 0.0001.