# Supplementary Material

## Supplementary Tables

### 1.1 Table SI. Baseline characteristics of the patients

|                        | Study group (n=35) | ePEVAR* (n=50) | P    |
|------------------------|--------------------|----------------|------|
| Age (years)            | 72 ± 9             | 70 ± 6.6       | .25  |
| Male sex               | 30 (86)            | 47 (94)        | .27  |
| Height (cm)            | 177 ± 8            | 179 ± 6.9      | .40  |
| Weight (kg)            | 95 ± 22            | 93 ± 13        | .72  |
| BMI (kg/m\(^2\))       | 30 ± 6             | 29 ± 3.9       | .46  |
| Smoking                | 13 (37)            | 43 (86)        | <.001|
| Diabetes               | 10 (29)            | 14 (28)        | .95  |
| CVA                    | 0                  | 3 (6)          | .27  |
| COPD                   | 12 (34)            | 15 (30)        | .68  |
| CHF                    | 7 (20)             | 8 (16)         | .63  |
| CAD                    | 16 (46)            | 19 (38)        | .48  |
| Prior PCI              | 4 (11)             | 10 (20)        | .38  |
| HTN                    | 30 (86)            | 42 (84)        | .83  |
| HLD                    | 19 (54)            | 45 (90)        | <.001|
| MI                     | 2 (6)              | 6 (12)         | .46  |
| Renal failure          | 0                  | 1 (2)          | 1.00 |
| TAA                    | 1 (3)              | 0              | .41  |
| Pre-operative shock    | 17 (49)            | n/a            |      |

*ePEVAR, elective percutaneous EVAR from PEVAR trial; rPEVAR, ruptured percutaneous EVAR; rEVAR, ruptured EVAR with femoral cutdown; BMI, body mass index; CVA, cerebrovascular accident; COPD, chronic obstructive pulmonary disease; CHF, congestive heart failure; CAD, coronary artery disease; PCI, percutaneous coronary intervention; MI, myocardial infarction; TAA,
thoracic aortic aneurysm; n/a, data not available. Data are presented as number (%) for categorical variables and mean ± standard deviation for continuous variables.
### 1.2 Table SII. Perioperative and short-term outcomes

|                                      | Study group (n=35) | ePEVAR* (n=50) | P     |
|--------------------------------------|--------------------|----------------|-------|
| **Procedural and in-hospital outcomes** |                    |                |       |
| Procedure time (mins)                | 157 ± 73           | 107 ± 45       | .04   |
| Blood transfusion                    | 22 (63)            | 4 (8)          | <.001 |
| ICU length of stay (hrs)             | 113 ± 150          | 26 ± 9.0       | .004  |
| Hospital stay (days)                 | 14 ± 23            | 1.3 ± 0.7      | .002  |
| **Major adverse events at 30 days**  |                    |                |       |
| 30-day MAE                           | 12 (34)            | 3 (6)          | .001  |
| Death                                | 2 (6)              | 0              | .17   |
| Conversion to open repair            | 2 (6)              | 0              | .17   |
| Bowel ischemia                       | 2 (6)              | 0              | .17   |
| Cardiac morbidity                    | 3 (9)              | 0              | .07   |
| Neurologic complication              | 3 (9)              | 0              | .07   |
| Renal failure                        | 4 (11)             | 2 (4)          | .22   |
| Respiratory complication             | 5 (14)             | 1 (2)          | .08   |
| Secondary procedure                  | 8 (23)             | 0              | <.001 |

*ePEVAR, elective percutaneous EVAR from PEVAR trial; rPEVAR, ruptured percutaneous EVAR; rEVAR, ruptured EVAR with femoral cutdown; ICU, Intensive Care Unit; MAE, major adverse events. Data are presented as number (%) for categorical variables and mean ± standard deviation for continuous variables.
1.3 **Table SIII.** Femoral access-site techniques and complications

| Study group  | ePEVAR* | P     |
|--------------|---------|-------|
| (n=35)       | (n=50)  |       |
| **Procedural Access Technique** |         |       |
| Successful Pre-close | 16 (46) | 4 (8) | <.001 |
| Pre-close conversion to cutdown | 2 (6)   | 0     | 0.17  |
| **Femoral Access-Site Complications at 30 days** |         |       |
| 30-day FAAC | 10 (29) | 6 (12) | .054  |
| Arteriovenous fistula | 0       | 0     | -     |
| Femoral neuropathy | 0       | 0     | -     |
| Hematoma | 1 (3)   | 0     | .41   |
| Dissection | 3 (9)   | 0     | .07   |
| Infection | 4 (11)  | 0     | .026  |
| Lymphocele | 0       | 0     | -     |
| Thrombosis/occlusion | 0       | 2 (4) | .51   |
| Vascular injury | 0       | 1 (2) | 1.00  |
| Lower extremity ischemia | 1 (3)   | 2 (4) | 1.00  |
| Bleeding/transfusion | 4 (11)  | 1 (2) | .15   |

*ePEVAR, elective percutaneous EVAR from PEVAR trial; rPEVAR, ruptured percutaneous EVAR; rEVAR, ruptured EVAR with femoral cutdown; FAAC, Femoral Artery Access Complications. Data are presented as number (%) for categorical variables and mean ± standard deviation for continuous variables.*