Supplementary table 1: Distribution of baseline and anatomical characteristics among Training, Test and Validation and subgroup of patients.

Data	Training group (n=175)[a]	Test group (n=72)[a]	Validation group (n=30)[a]	P
Sex male	151 (86.8)	73 (91.8)	28 (89.3)	.528
Weight, Kg	77.4 [67-88]	77.2 [66.3-87]	74.1 [71.2-80.4]	.742
Height, m	1.71 [1.67-1.77]	1.70 [1.67-1.75]	1.71 [1.68-1.76]	.757
BMI, Kg/m^2	26.5 [23.6-29.9]	26.5 [23.5-29.4]	26.1 [23.3-27.4]	.472
Age, y	77 [71-82]	77 [72-81]	81 [77-83]	**.016**
CAD	91 (52.3)	35 [47.9]	6 [21.4]	**.010**
Dyslipidaemia	120 (69.0)	52 (71.2)	19 (67.9)	.922
HTN	123 (70.7)	67 (91.8)	25 (89.3)	**<.001**
Arrythmia	42 (24.1)	23 (31.5)	7 (25.0)	.480
Pacemaker	13 (7.5)	1 (1.4)	1 (3.6)	.140
History of smoke	85 (48.6)	36 (49.3)	10 (35.7)	.677
AOCP	44 (25.3)	23 (31.5)	3 (10.7)	.099
CHF	13 (7.5)	14 (19.2)	0 (0.0)	.004
Valvular cardiopathy	17 (9.77)	17 (23.3)	7 (25.0)	.007
COPD	38 (22.0)	16 (21.9)	6 (21.4)	.998
Respiratory failure	6 (4.9)	8 (16.0)	5 (45.5)	<.001
OAC/DOAC usage	32 (18.3)	15 (20.8)	8 (26.7)	.656
CKD (eGFR<60 $ml/min/1.73m^2$)	35 (20.1)	17 (23.3)	6 (21.4)	.855
Renal failure	3 (1.72)	0 (0)	0 (0)	.415
DM	36 (20.7)	12 (16.4)	8 (28.6)	.337
Cerebrovascular disease	21 (12.1)	3 (4.11)	3 (10.7)	.157
Malignancy	39 (22.4)	11 (15.1)	2 (7.14)	.258
Proximal neck diameter, mm	21.5 [19.5-24.4]	22.2 [20.2-25.3]	23.3 [19.9-24.7]	.358
Maximum AAA diameter, mm	56.3 [49.2-61.1]	56.6 [53-63.7]	56.8 [53.5-61.3]	.395
Aortic length, mm	110 [97.5-120.5]	106.5 [99-117]	104 [91-117]	.495
Distal neck diameter, mm	24.5 [21.5-27.3]	24.9 [21.3-28.4]	23.8 [20.8-28.6]	.926
Aortic neck length	29 [18.5-41.5]	32.5 [22-42]	30 [19-41]	.608
IMA, patent	136 (79.1)	54 (77.1)	22 (81.5)	.887
Number of patent lumber arteries	3 [3-4]	4 [3-6]	4 [2-6]	.430
Total number of patent afferent vessels	5 [4-6]	5 [4-7]	5 [4-7]	.919
Aortic lumen volume, mm^3	37049.5 [9530-65539.5]	19060.5 [9062-66124]	15874 [6958-58223]	.395
Days from EVAR to T2EL	40 [33-378]	32 [27.5-68.5]	34 [32-43]	.176
Follow-up, months	71.1 [37.9-104.0]	39.7 [21.0-65.0]	37.9 [24.4-57.5]	**.001**

Abbreviations: AAA, Abdominal Aortic Aneurysm; BMI, body mass index (kg/m2); CAD, coronary artery disease; CHD, congestive heart failure; COPD, congestive pulmonary obstructive disease; DOAC, direct oral anticoagulant drug; DM, diabetes mellitus; eGFR, estimated glomerular filtration rate (ml/min/1.73m2); EVAR, EndoVascular Aortic Repair; IMA, inferior mesenteric artery; OAC, oral anticoagulant; PAD, peripheral artery disease; T2EL, type II endoleak.

[a] Data are presented as count (%), median [Interquartile range]
Percentage on column, when not otherwise specified