

## SUPPLEMENT

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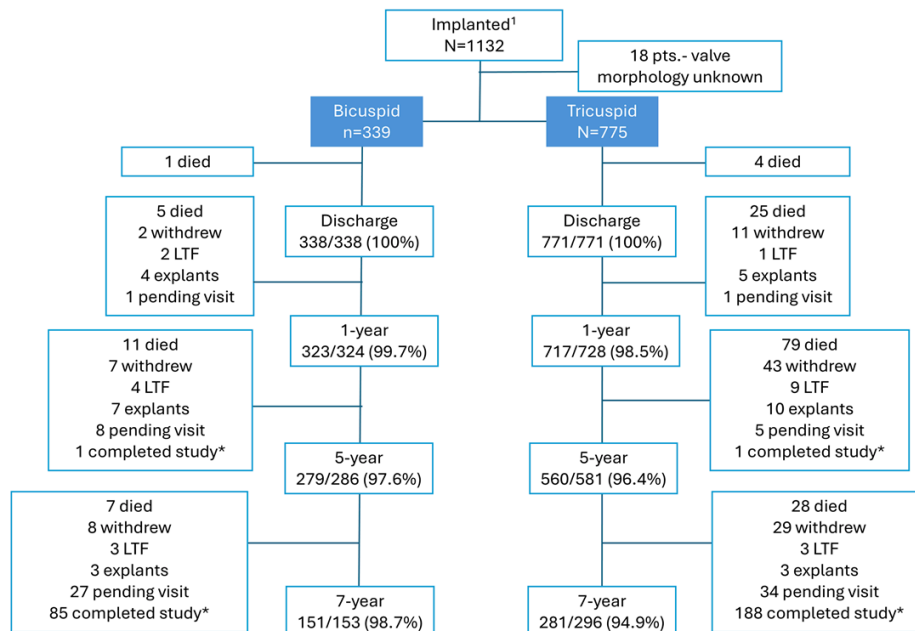


Figure S1

Patient disposition through 7 years of follow-up in bicuspid and tricuspid cohorts.

Shown are the number of patients expected at the visit (N) and the number of expected patients who completed the visit (n).

1N=1132 indicates successfully implanted patients in the full PERIGON cohort. Withdrawals include patients who withdrew consent, patients withdrawn by their physicians, and subjects who did not receive a study valve. \*Study completions include patients who completed their 5-year visit and exited the study. Patients marked as "pending visit", were, at the time of the data snapshot, still within the window to complete their visit, so they had not missed their visit and were still included in Kaplan-Meier analyses.

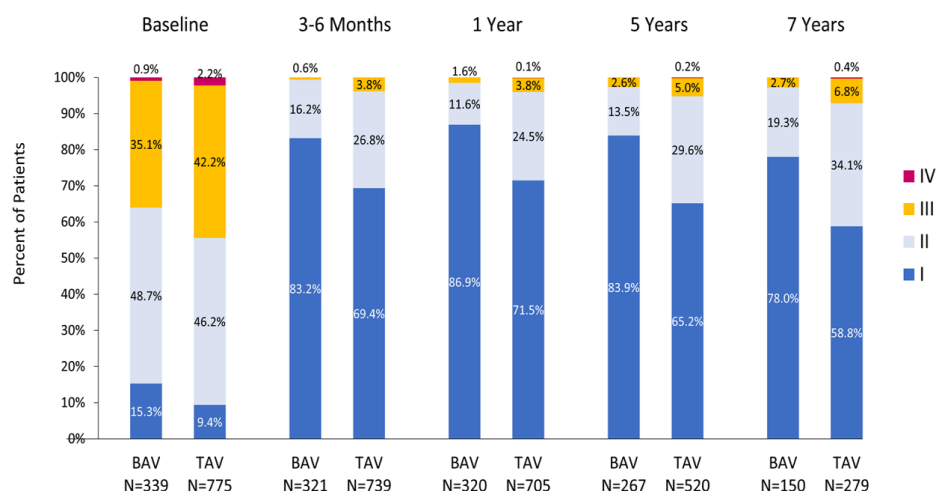


Figure S2

New York Heart Association functional class after implant through 7 years of follow-up in bicuspid and tricuspid patients. Abbreviations: BAV: bicuspid aortic valve, TAV: tricuspid aortic valve.

Table S1

**Mean effective orifice area in the full cohort, bicuspid cohort and tricuspid cohort - according to valve size**

		3 to 6 months	1 year	5 years	7 years
All sizes	Full cohort N=1132	2.10 ± 0.53 (982)	2.01 ± 0.53 (909)	2.05 ± 0.57 (611)	1.99 ± 0.53 (367)
	BAV N=339	2.20 ± 0.56 (301)	2.10 ± 0.59 (289)	2.10 ± 0.64 (221)	2.01 ± 0.59 (130)
	TAV N=775	2.05 ± 0.51 (665)	1.96 ± 0.49 (605)	2.02 ± 0.51 (380)	1.97 ± 0.48 (229)
19 mm	Full cohort N=42	1.46 ± 0.29 (37)	1.40 ± 0.24 (30)	1.40 ± 0.29 (17)	1.38 ± 0.26 (10)
	BAV N=5	1.52 ± 0.23 (5)	1.26 ± 0.22 (5)	1.45 ± 0.28 (4)	1.26 ± NA (1)
	TAV N=37	1.45 ± 0.30 (32)	1.42 ± 0.24 (25)	1.39 ± 0.30 (13)	1.40 ± 0.27 (9)
21 mm	Full cohort N=211	1.70 ± 0.34 (183)	1.57 ± 0.31 (162)	1.60 ± 0.32 (118)	1.58 ± 0.40 (61)
	BAV N=48	1.72 ± 0.44 (41)	1.49 ± 0.31 (39)	1.52 ± 0.28 (33)	1.49 ± 0.43 (18)
	TAV N=160	1.69 ± 0.32 (141)	1.60 ± 0.30 (122)	1.64 ± 0.33 (84)	1.64 ± 0.38 (42)
23 mm	Full cohort N=401	2.07 ± 0.41 (339)	1.98 ± 0.43 (313)	2.01 ± 0.44 (214)	1.96 ± 0.43 (138)
	BAV N=97	2.03 ± 0.38 (85)	1.94 ± 0.39 (79)	1.98 ± 0.49 (69)	1.89 ± 0.41 (45)
	TAV N=298	2.08 ± 0.42 (248)	1.99 ± 0.45 (229)	2.03 ± 0.42 (141)	1.99 ± 0.45 (89)
25 mm	Full cohort N=350	2.24 ± 0.45 (309)	2.13 ± 0.44 (298)	2.24 ± 0.50 (202)	2.17 ± 0.49 (118)
	BAV N=115	2.26 ± 0.45 (106)	2.16 ± 0.51 (102)	2.19 ± 0.51 (77)	2.17 ± 0.57 (41)
	TAV N=230	2.23 ± 0.44 (198)	2.10 ± 0.40 (191)	2.26 ± 0.49 (122)	2.16 ± 0.45 (76)
27 mm	Full cohort N=101	2.61 ± 0.55 (92)	2.50 ± 0.54 (83)	2.57 ± 0.64 (52)	2.28 ± 0.61 (37)
	BAV N=57	2.63 ± 0.51 (51)	2.56 ± 0.54 (50)	2.57 ± 0.69 (32)	2.32 ± 0.70 (23)
	TAV N=43	2.60 ± 0.61 (40)	2.44 ± 0.53 (32)	2.55 ± 0.59 (19)	2.18 ± 0.44 (13)
29 mm	Full cohort N=26	3.04 ± 0.69 (21)	3.05 ± 0.51 (22)	3.23 ± 1.12 (7)	2.96 ± 0.59 (3)
	BAV N=17	2.96 ± 0.74 (13)	2.99 ± 0.43 (14)	3.27 ± 1.22 (6)	2.82 ± 0.76 (2)
	TAV N=6	3.12 ± 0.79 (5)	3.21 ± 0.72 (5)	NA	NA

Abbreviations: BAV: bicuspid aortic valve, TAV: tricuspid aortic valve, SD: standard deviation.

Values shown are Mean ± SD (n).

The full cohort includes the 18 patients with unknown etiology that are not part of either the BAV or TAV cohorts.

Table S2

**Mean aortic gradient in the full cohort, bicuspid cohort and tricuspid cohort - according to valve size**

		3 to 6 months	1 year	5 years	7 years
All sizes	Full cohort N=1132	12.1 ± 4.2 (1061)	13.0 ± 4.6 (1030)	13.5 ± 5.2 (714)	13.9 ± 5.9 (409)
	BAV N=339	11.8 ± 4.5 (320)	12.8 ± 4.9 (316)	13.5 ± 5.3 (245)	13.6 ± 6.4 (143)
	TAV N=775	12.2 ± 4.0 (725)	13.2 ± 4.4 (698)	13.4 ± 5.1 (459)	14.1 ± 5.7 (257)
19 mm	Full cohort N=42	15.4 ± 4.2 (39)	17.3 ± 4.8 (36)	18.9 ± 6.6 (23)	18.5 ± 7.3 (10)
	BAV N=5	18.5 ± 1.6 (5)	19.8 ± 4.9 (5)	18.3 ± 2.8 (4)	15.6 ± NA (1)
	TAV N=37	14.9 ± 4.3 (34)	16.9 ± 4.8 (31)	19.0 ± 7.2 (19)	18.8 ± 7.6 (9)
21 mm	Full cohort N=211	14.5 ± 4.7 (198)	15.6 ± 5.1 (195)	15.8 ± 5.5 (140)	16.7 ± 6.8 (67)
	BAV N=48	14.9 ± 5.8 (44)	16.7 ± 5.9 (42)	17.2 ± 6.6 (36)	18.2 ± 8.9 (19)
	TAV N=160	14.3 ± 4.3 (153)	15.2 ± 4.9 (152)	15.3 ± 4.9 (103)	16.1 ± 5.9 (47)
23 mm	Full cohort N=401	11.7 ± 3.6 (372)	12.7 ± 4.0 (363)	13.2 ± 4.3 (251)	13.7 ± 5.2 (154)
	BAV N=97	12.2 ± 3.9 (93)	13.1 ± 4.6 (90)	13.8 ± 4.6 (73)	13.4 ± 5.0 (49)
	TAV N=298	11.6 ± 3.5 (273)	12.6 ± 3.8 (267)	12.8 ± 4.1 (174)	13.9 ± 5.4 (101)
25 mm	Full cohort N=350	11.5 ± 3.7 (333)	12.4 ± 3.9 (320)	12.4 ± 4.4 (230)	13.1 ± 5.3 (133)
	BAV N=115	11.5 ± 4.0 (112)	12.7 ± 4.0 (110)	13.0 ± 4.6 (86)	12.8 ± 4.9 (45)
	TAV N=230	11.5 ± 3.5 (216)	12.3 ± 3.9 (205)	12.1 ± 4.3 (141)	13.3 ± 5.6 (86)
27 mm	Full cohort N=101	9.9 ± 3.3 (95)	10.3 ± 3.5 (91)	11.6 ± 6.8 (61)	11.6 ± 6.6 (41)
	BAV N=57	9.7 ± 3.3 (52)	10.0 ± 3.5 (53)	10.9 ± 4.7 (39)	12.5 ± 8.0 (26)
	TAV N=43	10.2 ± 3.3 (42)	10.7 ± 3.5 (37)	13.1 ± 9.6 (21)	10.2 ± 2.2 (14)
29 mm	Full cohort N=26	7.8 ± 3.6 (23)	8.7 ± 3.9 (24)	8.6 ± 3.0 (8)	7.5 ± 3.6 (4)
	BAV N=17	7.6 ± 3.6 (14)	8.7 ± 3.5 (16)	9.0 ± 3.1 (7)	8.5 ± 3.7 (3)
	TAV N=6	8.3 ± 4.2 (6)	8.4 ± 5.9 (5)	NA	NA

Abbreviations: BAV: bicuspid aortic valve, TAV: tricuspid aortic valve, SD: standard deviation

Values shown are Mean ± SD (n).

The full cohort includes the 18 patients with unknown etiology that are not part of either the BAV or TAV cohorts.