

The impact of frailty and surgical risk on health-related quality of life after TAVI

A systematic review and meta-analysis

Supplementary Materials

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Table S1. Health-related quality of life, measured by MLHFQ after TAVI.

Table S1a indicates the effect of TAVI on HrQoL, measured by MLHFQ after 30 days.

| Study | Pre-TAVI | | | Post-TAVI | | | <i>p</i> |
|--------------------|----------|------|------|-----------|------|------|-------------------|
| | N | Mean | SD | N | Mean | SD | |
| Gotzmann 2011 [28] | 51 | 39,6 | 19 | 51 | 26,1 | 18 | <i>< 0.001</i> |
| Gouda 2020 [29] | 82 | 32,2 | 15,6 | 82 | 13,2 | 11,5 | <i>< 0.001</i> |

Table S1b indicates the effect of TAVI on HrQoL, measured by MLHFQ, after 1 year.

| Study | Pre-TAVI | | | Post-TAVI | | | <i>p</i> |
|--------------------|----------|------|----|-----------|------|------|-------------------|
| | N | Mean | SD | N | Mean | SD | |
| Gotzmann 2011 [28] | 51 | 39,6 | 19 | 51 | 26,1 | 18 | <i>< 0.001</i> |
| Gouda 2020 [29] | 41 | 28,8 | 15 | 82 | 17,3 | 16,9 | <i>0.001</i> |

Table S2. Health-related quality of life, measured by remaining tools, after various periods of follow-up

| Study | HrQoL questionnaire | Follow-up | Pre-TAVI | | | Post-TAVI | | | |
|-----------------------|---------------------|-----------|----------|------|------|-----------|------|------|--|
| | | | N | Mean | SD | N | Mean | SD | |
| Arnold 2021 [19] | SF-12 PCS | 1 year | 639 | 28,4 | 8,2 | 318 | 33,2 | 9,6 | |
| | SF-12 MCS | 1 year | 639 | 46,2 | 12,2 | 318 | 48,6 | 11,4 | |
| Baron 2017 [21] | SF-36 PCS | 1 year | 950 | 36,0 | 8,9 | 746 | 40,3 | 2,3 | |
| | SF-36 MCS | 1 year | 950 | 48,7 | 11,3 | 746 | 51,7 | 3,2 | |
| | EQ-5D | 1 year | 950 | 0,75 | 0,2 | 754 | 0,79 | 0,1 | |
| Boureau 2017 [23] | SF-36 PCS | 6 months | 150 | 33,6 | 8,4 | 119 | 36,4 | 9,96 | |
| | SF-36 MCS | 6 months | 150 | 55,6 | 8,1 | 119 | 48,2 | 9,44 | |
| Dziewierz 2018 [25] | EQ-VAS | 1 year | 148 | 24,1 | 17,6 | 116 | 68,8 | 11,1 | |
| Frantzen 2021 [26] | SF-12 PCS | 6 months | 124 | 34,0 | 10,5 | 96 | 40,1 | 10,5 | |
| | SF-12 MCS | 6 months | 124 | 48,7 | 11 | 96 | 51,4 | 9,3 | |
| Goudzwaard 2020 [16] | EQ-5D | 1 year | 235 | 0,66 | 0,3 | 196 | 0,73 | 0,24 | |
| Osnabrugge 2015 [33] | SF-12 PCS | 1 year | 436 | 28,5 | 8,3 | 366 | 34,1 | 10,6 | |
| | SF-12 MCS | 1 year | 436 | 45,8 | 12,3 | 366 | 51,7 | 11,8 | |
| | EQ-5D | 1 year | 436 | 0,65 | 0,24 | 366 | 0,73 | 0,2 | |
| Sondergaard 2018 [34] | EQ-VAS | 1 year | 620 | 62,2 | 18,8 | 620 | 69 | 17,9 | |

Table S3. Quality of life of frail patients, measured by remaining tools, after TAVI

| Study | Frailty measurement | Follow-up | HrQoL questionnaire | Pre-TAVI | | | Post-TAVI | |
|-----------------------|-----------------------|-----------|---------------------|----------|------|------|-----------|------|
| | | | | N | Mean | SD | N | Mean |
| Boureau 2017 [23] | TUG | 6 months | SF-36 PCS | 119 | 33,7 | 8,5 | 119 | 36,4 |
| | TUG | 6 months | SF-36 MCS | 119 | 55,6 | 8,2 | 119 | 48,2 |
| Goudzwaard 2020 [16] | SOF-index | 1 year | SF-12 PCS | 81 | 32,2 | 9,6 | 53 | 35,8 |
| | SOF-index | 1 year | SF-12 MCS | 81 | 47,1 | 11,8 | 53 | 48,5 |
| Sondergaard 2018 [34] | Erasmus frailty score | 1 year | EQ-5D | 70 | 0,55 | 0,26 | 51 | 0,44 |
| | Erasmus frailty score | 1 year | EQ-VAS | 70 | 58,4 | 16,8 | 51 | 63,4 |

Figure S1. Health-related quality of life, measured by KCCQ, 1 month after TAVI.

