

## Trends in trans-catheter aortic valve implantation between 2011 and 2012. Results from the GARY Registry

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**Background:** Trans-catheter aortic valve implantation (TAVI), either by a surgical access (S-TAVI) or by a percutaneous trans-vascular access (V-TAVI), has established as a routine treatment modality for older surgical high-risk patients suffering from severe symptomatic aortic stenosis. Little is known on current trends concerning patient selection as well as results in the last years.

**Methods:** We analysed all patients treated with TAVI between 2011 and 2012, who were included in the prospective German aortic valve replacement registry (GARY).

**Results:** Out of all documented aortic valve replacement therapies (also the surgical ones) the proportion of the TAVI procedures in GARY was 27.6% in 2011 (3938/14247) and 31.9% (5333/16722) in 2012 (p-value: <0.001).

**Conclusions:** The GARY Registry documents an absolute increase in TAVI numbers between 2011 and 2012, as well as a relative increase out of all aortic valve replacement therapies. Patient characteristics were similar, besides a small reduction in the mean log. EuroScore. This may contribute to the observed decrease in hospital event rates.

Parameter	2011 (n=3940)	2012 (n=5342)	p-value
Number of treated patients	3938	5333	–
Transvascular TAVI (Pt)	2719	3760	–
Surgical TAVI (Pt)	1186	1446	–
Age (years, mean)	80.8	81	0.190
Women (%)	56	54.6	0.190
Cardiogenic shock <48h (%)	3.2	2.4	0.024
EF <30%	8.6	8.3	0.520
Log. EuroScore (% , mean)	25.4	23.6	<0.001
Intervention by “heart team” (%)	49.1	54.7	<0.001
Mean gradient before TAVI (mean)	45.4	43.9	0.001
Mean gradient after TAVI (mean)	5.8	5.8	0.109
Residual aortic insufficiency ≥II° (%)	6.2	5.9	0.537
Conversion to surgery (%)	1.6	1.2	0.099
Duration of intervention (Min., mean)	93.8	89.5	<0.001
In-hospital stroke (%)	3.6	2.4	0.001
In-hospital death (%)	5.8	4.9	0.039