

TAVR or SAVR

A glimpse into the future

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**“Prediction is very difficult, especially if it’s about
the future.”
— Niels Bohr**

Conflicts of interest

- None

“If In the Last Few Years You Haven’t Discarded a Major Opinion or Acquired a New One, Check Your Pulse. You May Be Dead”

My interpretation:

Always be prepared to change your mind!
Even consider it a sign of intelligence ...



Galett Burgess 1866 - 1951

“If In the Last Few Years You
Haven’t Discarded a Major
Opinion or Assumption
One Day
May

**In 2007, I was convinced
TAVR would never work!**



My interpretation:

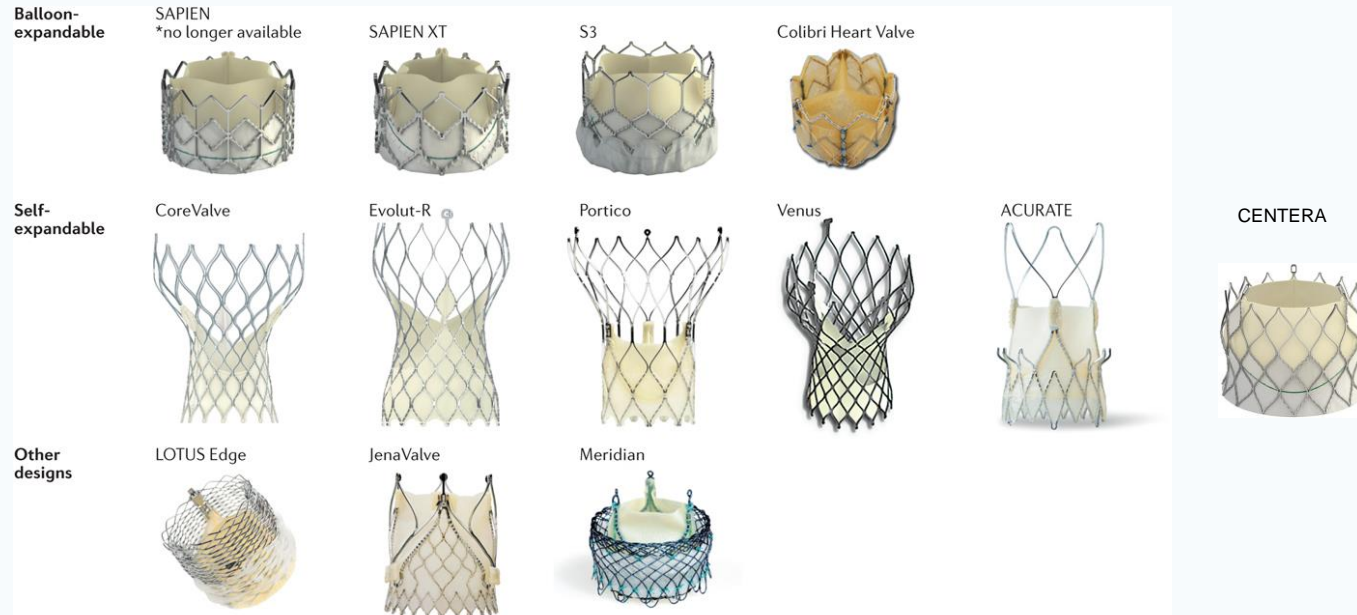
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I WAS WRONG!!

TAVR

- First-in-man in 2002
- CE-mark in 2007 (CoreValve and Edwards-SAPIEN)

Figure 4 Commercially available and investigational devices for transcatheter aortic valve implantation



Nature Reviews | Cardiology

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Jones, B. M. *et al.* (2017) Matching patients with the ever-expanding range of TAVI devices
Nat. Rev. Cardiol. doi:10.1038/nrcardio.2017.82



Figure 1. Number of TAVI procedures, per centre and year, 2008–2017.

The total number of TAVI procedures increased by 27 % to 842 in 2017. Details on the numbers of procedures can also be found in Table 1. Karolinska had over 200 procedures, Uppsala, Lund, Linköping, and Sahlgrenska had over 100 cases each, whereas Umeå, Örebro, and Karlskrona had less than 100 cases each.

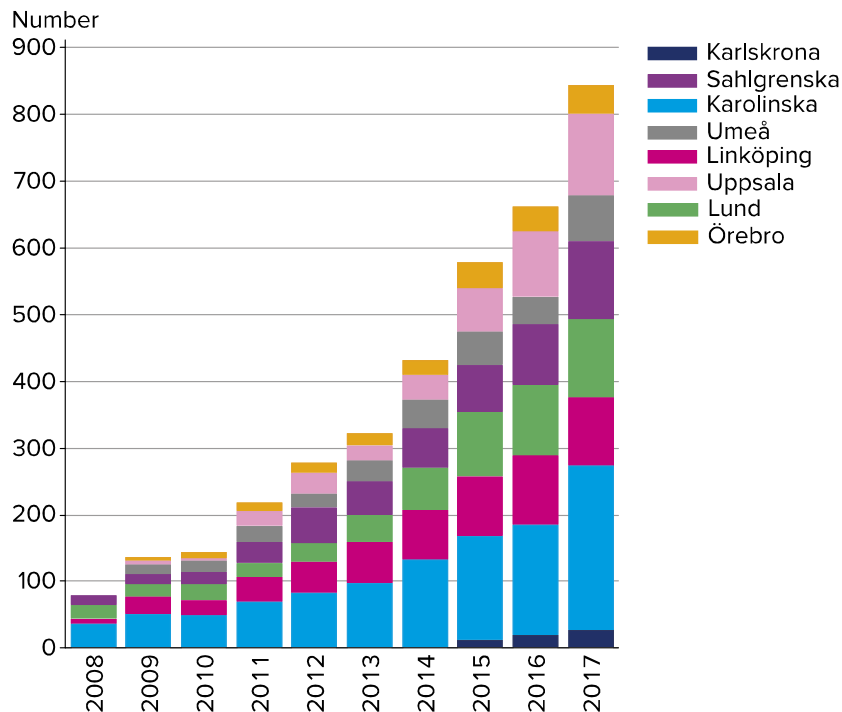
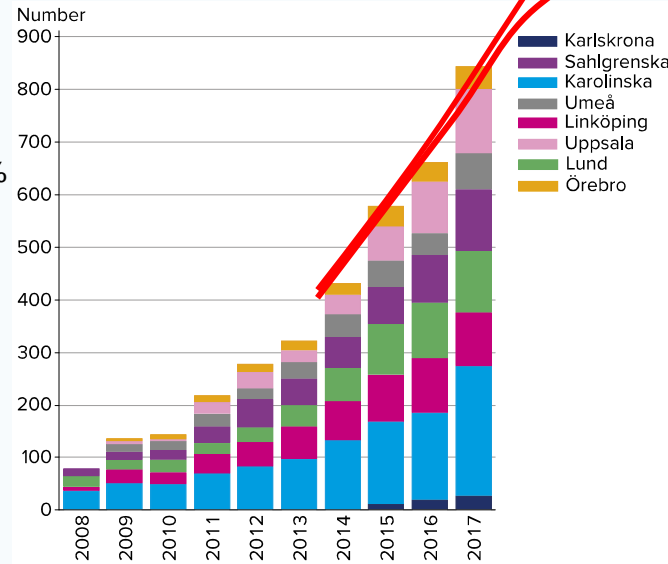


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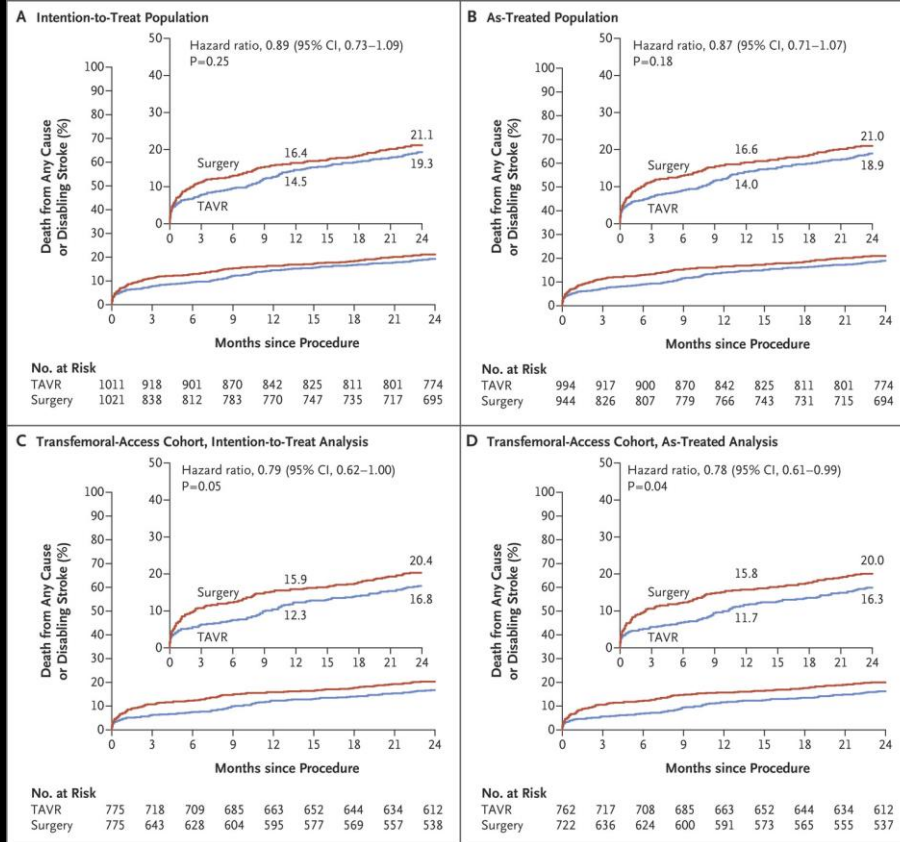
FUTURE???

Trials, trials....

- ✓ PARTNER RCT- high risk
- ✓ PARTNER 2 RCT- intermediate
- ✓ PARTNER 3 RCT- low risk
- ✓ SURTAVI RCT- intermediate risk
- ✓ NOTION RCT- low risk >70 y. (Presented, not published!)
- ✓ NOTION 2 RCT- low risk, ongoing
- ✓ Evolut Low Risk RCT- ongoing
- ✓ REPRISE III Lotus vs Evolut/Corevalve

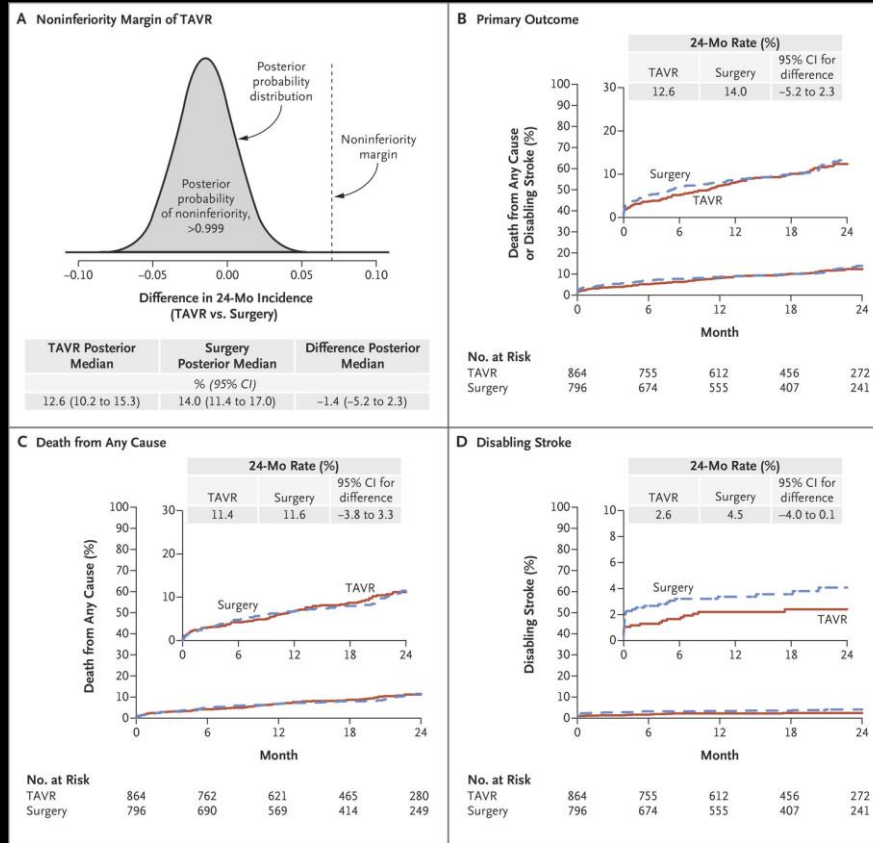
PARTNER II

Edwards Sapien, Intermediate risk



SURTA VI

CoreValve, Intermediate risk



Results in summary

- TAVR at least equal to SAVR in high risk patients
- TAVR at least equal to SAVR in “intermediate” risk patients
- TAVR seems to be equal to SAVR in low risk patients

*** FUTURE LOOKS BRIGHT FOR TAVR, NO DOUBT ***

The end of SAVR?

Some questions remain!

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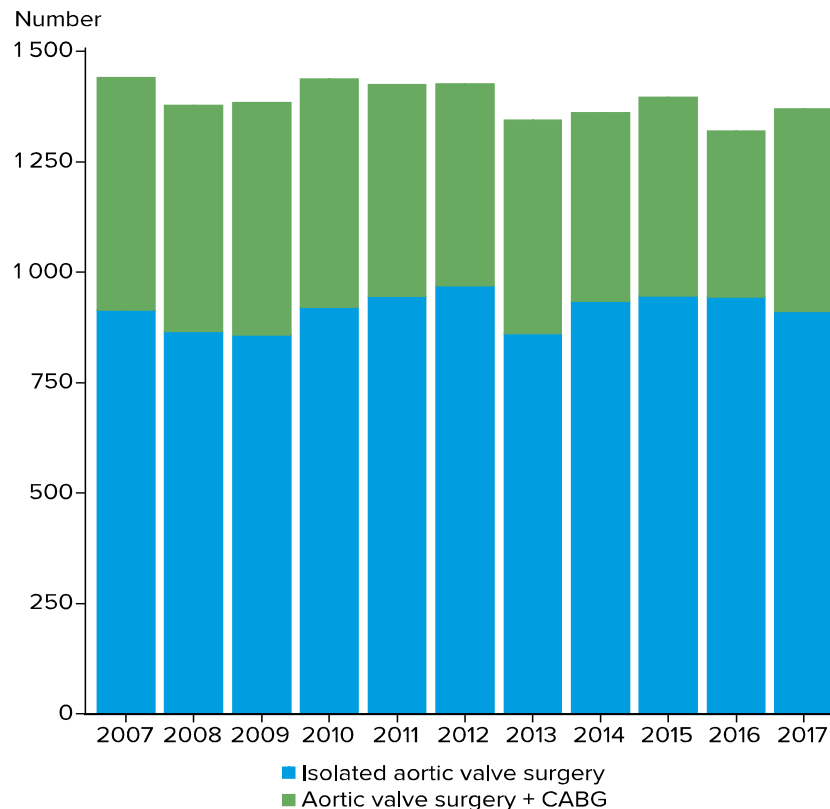
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- The **cost**...



Figure 33. Number of aortic valve procedures, isolated or concomitant CABG, 2007–2017.

Interestingly, the number of isolated aortic valve procedures still seems unaffected by the continuous increase in TAVI procedures.



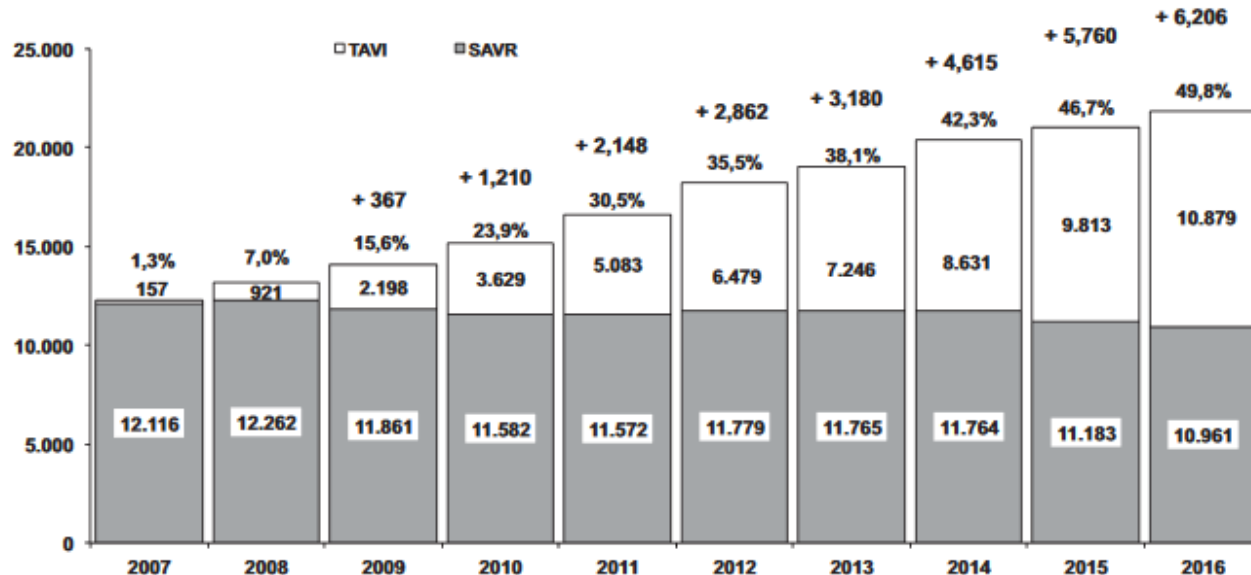
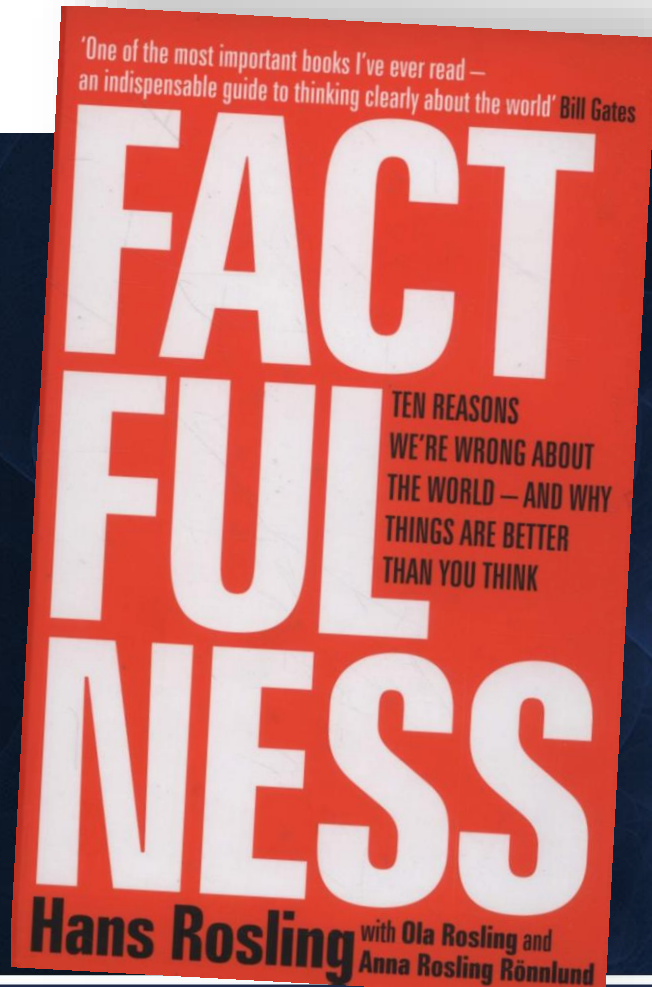


Fig. 5 Isolated aortic valve replacement and transcatheter aortic valve implantation (TAVI) The annual count of TAVI submitted to the voluntary registry of German Society for Thoracic and Cardiovascular Surgery does not represent all TAVI procedures performed in Germany in 2016.

¹Additional TAVI procedures calculated from the German legal quality assurance program, § 137 SGB V.



- We tend to “over-extrapolate” current trends into the future
- We tend to pay more attention to alarmists than to thoughtful, knowledgeable opinions
- Companies, interest groups and activists often have a personal interest in exaggerating

=> Stay calm. Do not “follow the crowd”. Look at facts!

The future?

- Technical development will continue
- New issues will arise along the way
- TAVR volumes will keep increasing
- Some decrease in numbers of isolated SAVR
- Marginal effect on total volumes of cardiac surgery
- Best TAVR results in centers with fairly high volumes and a multidisciplinary approach. Heart team!
- TAVR will/should be considered natural part of cardiac surgery

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But I have been wrong before....



Galett Burgess 1866 - 1951

Thank you