

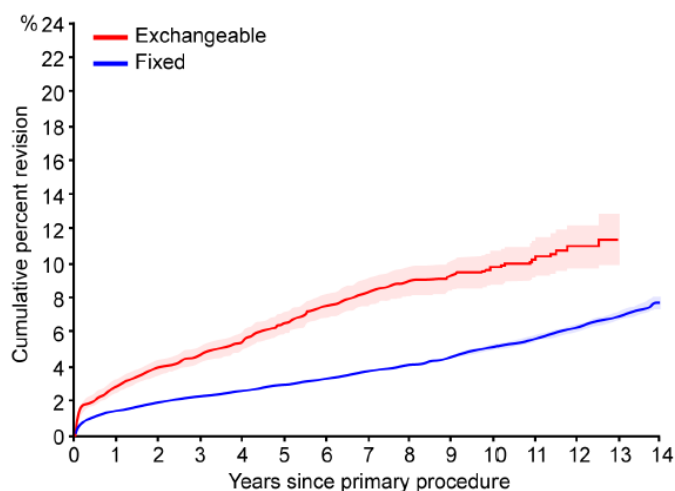
Fixed Vs Modular Neck THA performances

A closer look to the registries data

The chart on the right shows the cumulative percent of revisions of all fixed neck stems Vs all the modular neck ones in the Australian Joint Registry(*)

Findings seem to be conclusive:

Modular neck implant have higher failure rate Vs Fixed neck ones.

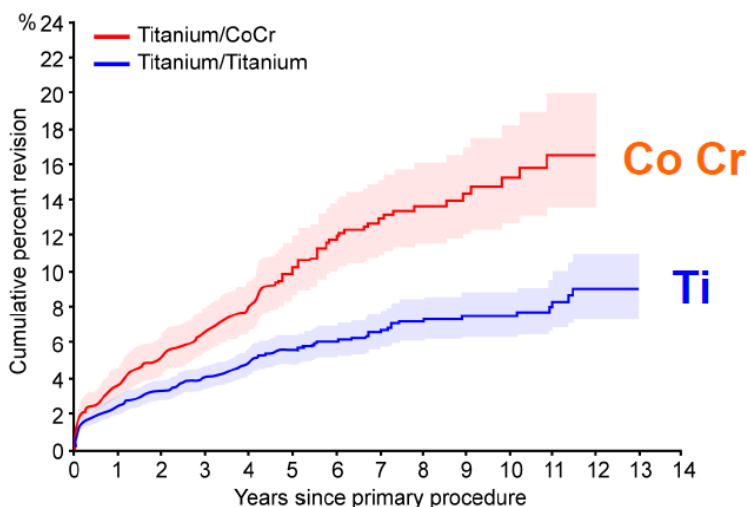


However things are not so simple

a more accurate scrutiny of the registry findings shows a different reality.

Chart showing Modular neck implants cumulative percent of revisions segmented by the alloy employed for necks manufacturing (*)

Implants with Titanium alloy modular necks show a revision rate substantially lower Vs the ones with CoCrMo necks.



Conclusion. Modular necks are not all the same: Titanium alloy necks have better survival rate, with CoCrMo necks showing much higher revision rate.

Chart showing survival curve at 10 years for the Apta stems with the 1st generation **Modula**® Modular necks system (2004-2011) (*)

(*) Source: RIPO Registry 2014 report

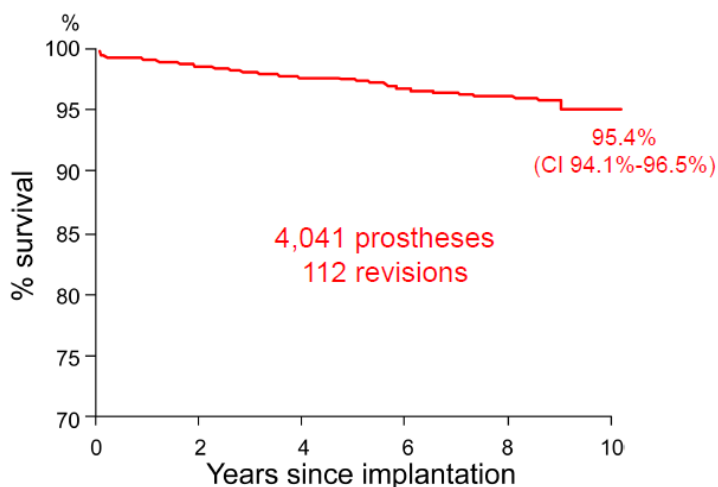
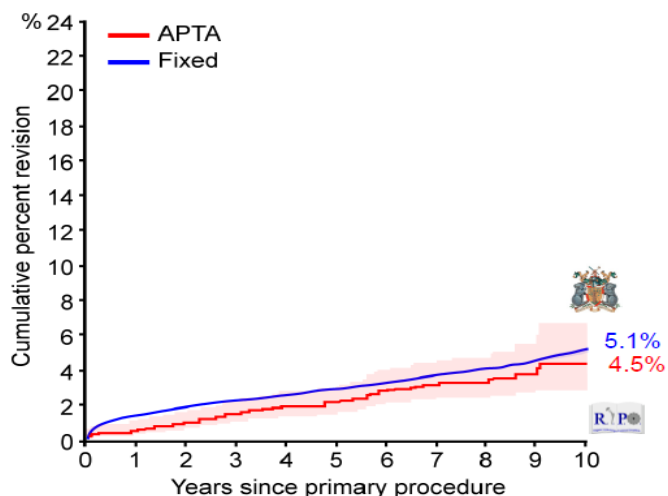


Chart showing a comparison between the cumulative percent of revisions for all the fixed neck stems included in the Australian National Joint Registry Vs the cumulative percent of revision for the Apta stem with the 1st generation **Modula**® modular neck system (*)

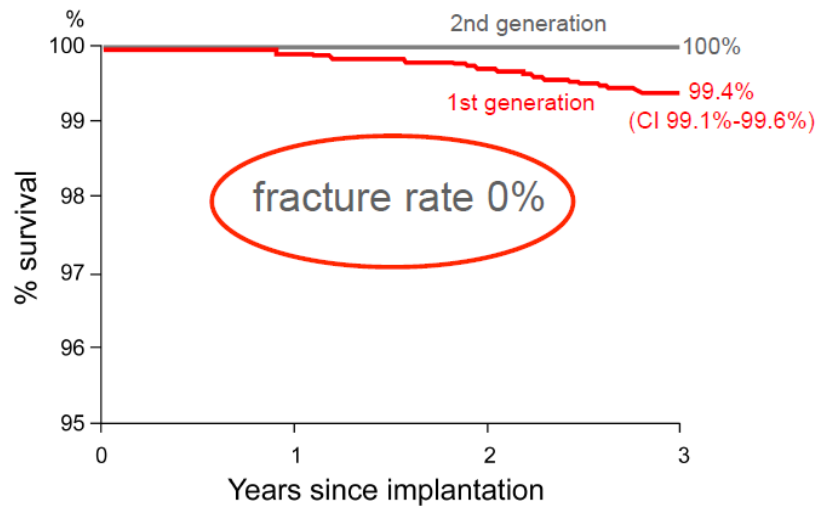
(*) Sources: RIPO Registry 2014 report, and the Australian National Joint Registry 2015 report.



Conclusion. It's not true that modular stems long term revision rate is always higher than fixed necks one.

The Apta stem coupled with the 1st generation **Modula**® modular neck system shows a revision rate at 10 year 0.6% lower Vs the one of the fixed neck implants included in the Australian Joint Registry.

Chart Showing the comparison of the survival rates at 3 years for neck fractures between the 1st generation and the 2nd generation **Modula**[®] modular neck system coupled with Apta stems. (*)



(*) Source: RIPO Registry 2014 report

Latest RIPO findings on Modula[®] SF necks performances(*)

- ✓ Number of **Modula**[®] SF (2nd generation Modular necks) Included in the Registry: **1,873**
- ✓ Number of neck fractures so far recorded: **0**
- ✓ Dislocation rate observed in the cohort: **0.4%**

(*) Source: RIPO Registry 2014 report

Conclusions.

- Titanium alloy showed to be superior to CoCrMo for modular necks manufacturing.
- Implants coupled with the 1st generation **Modula**[®] necks showed a 10 years revision rate lower Vs monolithic implants.
- 2nd generation **Modula**[®] necks demonstrated a further performances improvement Vs 1st generation ones.
- Adler Ortho modular implants, coupled with **Modula**[®] SF neck showed a survival rate comparable or better than monolithic ones, coupled with a very low dislocation rate.