POLYMER-FREE YUKON DES, 2-YEAR FOLLOW-UP

Study Title:

Catch-up in anti-restenotic efficacy in the drug-eluting stent era. Results of systematic angiographic follow-up at 6-8 months and 2 years after coronary stenting

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Abstract:

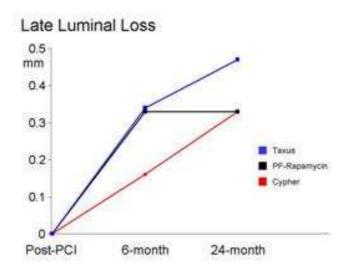
Background: Drug-eluting stent (DES) therapy is associated with low levels of late luminal loss (LLL) at 6-8 months. Whether these findings endure over a more prolonged period is unknown. The objective of this study was to assess changes in the anti-restenotic efficacy of DES by restudying subjects at 2 time points post coronary stenting, namely 6-8 months and 2 years. Furthermore, we sought to assess relative differences in time courses of luminal loss between 3 different stent platforms in clinical use at our institution.

Methods: Systematic 6-8-month and 2-year angiographic follow-up post index stenting procedure was planned for patients undergoing coronary stenting with Cypher, polymer-free rapamycin Yukon DES (PF rapa) or Taxus stents. Eighty percent had valid 6-8 month data. Of these, patients not requiring re-intervention were scheduled for further follow-up at 2 years. The primary endpoint was interval in-stent LLL between 6-8 months and 2 years.

Results: A total of 2341 patients were enrolled: 1036 patients received Cypher, 565 Yukon DES (PF rapa) and 740 Taxus stents. Overall mean LLL at 6-8-month angiographic follow-up was 0.37±0.56 mm [0.25±0.50 mm in the Cypher group, 0.46±0.57 mm in the PF rapa stent group and 0.46±0.59 mm in those receiving a Taxus stent (p< 0.001)]. At 2 year re-angiography, data was available for 1580 patients (82.0% of eligible patients). Overall mean interval LLL was 0.12±0.49 mm. Interval LLL in the Cypher, Yukon DES (PF rapa) and Taxus groups was **0.17±0.50 mm**, **0.01±0.42 mm** and **0.13±0.50 mm** respectively (p < 0.001).



Conclusion: Ongoing erosion of luminal calibre beyond 6-8-months post index procedure may be observed following DES therapy. There appears to exist a device-specificity in this late reduction in anti-restenotic efficacy in favour of a platform devoid of permanent polymer.



Late luminal loss of the polymer-based Cypher and Taxus stents in comparison with the polymer-free Translumina Yukon DES stent, 2%Rapamycin-coating (PF-Rapamycin).

