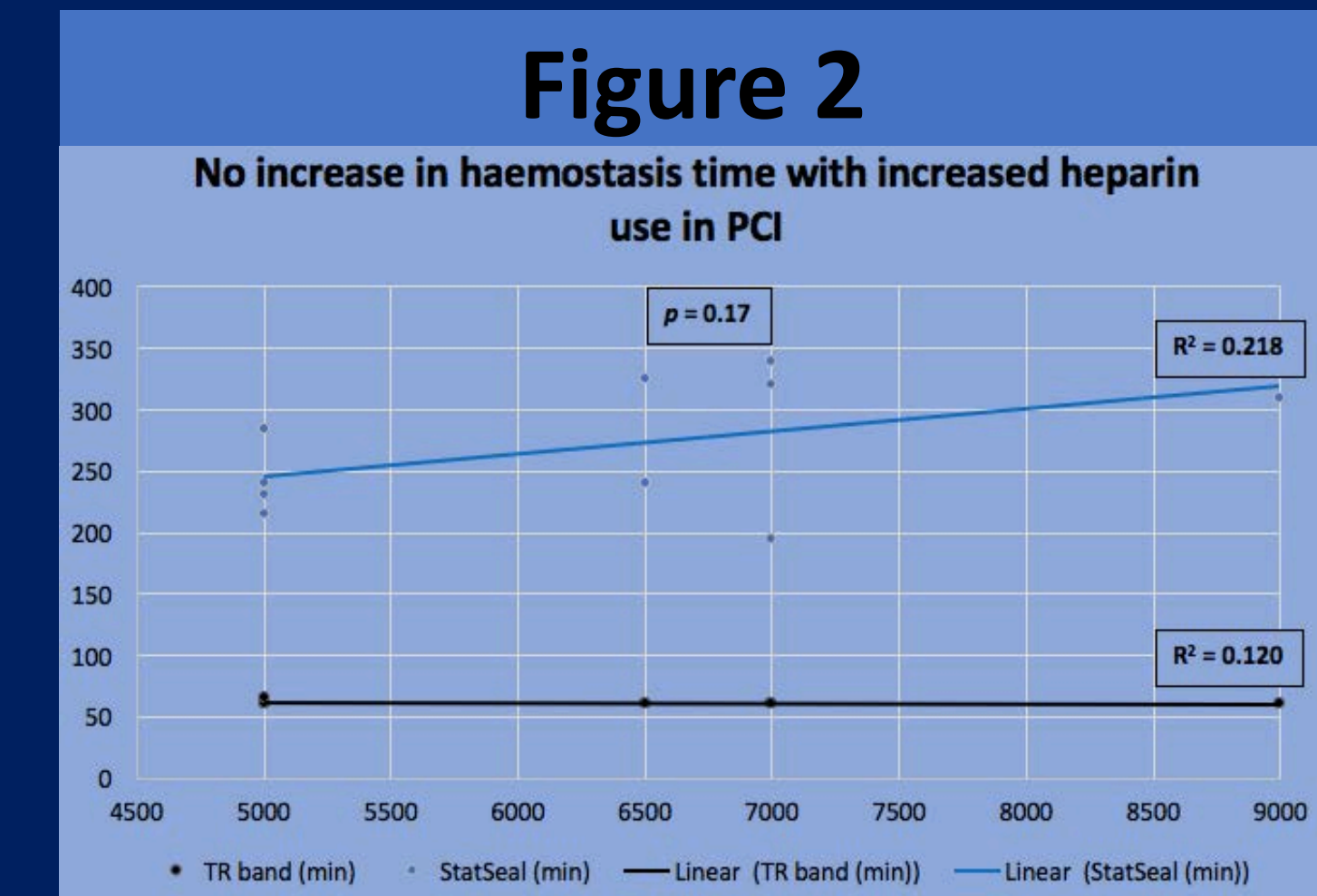


The quest for a radial lounge: StatSeal™ reduces transradial coronary angiography turn-around time and cost

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BACKGROUND

Transradial (TR) bands have traditionally been used to achieve haemostasis post-procedure. Novel haemostasis-promoting discs have been designed to reduce haemostasis time and in turn facilitate patient flow, increase capacity and increase patient satisfaction if quicker discharge can be facilitated. StatSeal™ is a potassium ferrate based coagulant disc that promotes haemostasis and compared to other similar devices³ it is neither immunogenic nor allergenic¹.

AIM

We tested the StatSeal™ device (Biolife, LLC, Sarasota, Florida) to see if a reduction in haemostasis time resulted in cost-savings for our cardiology department

METHODS

We enrolled 100 consecutive patients attending for elective angiography and percutaneous intervention (PCI) via the radial route to take part in the evaluation. After radial sheath removal, half of the patients had a TR band applied only, while the other half had StatSeal™ in addition to the TR band.

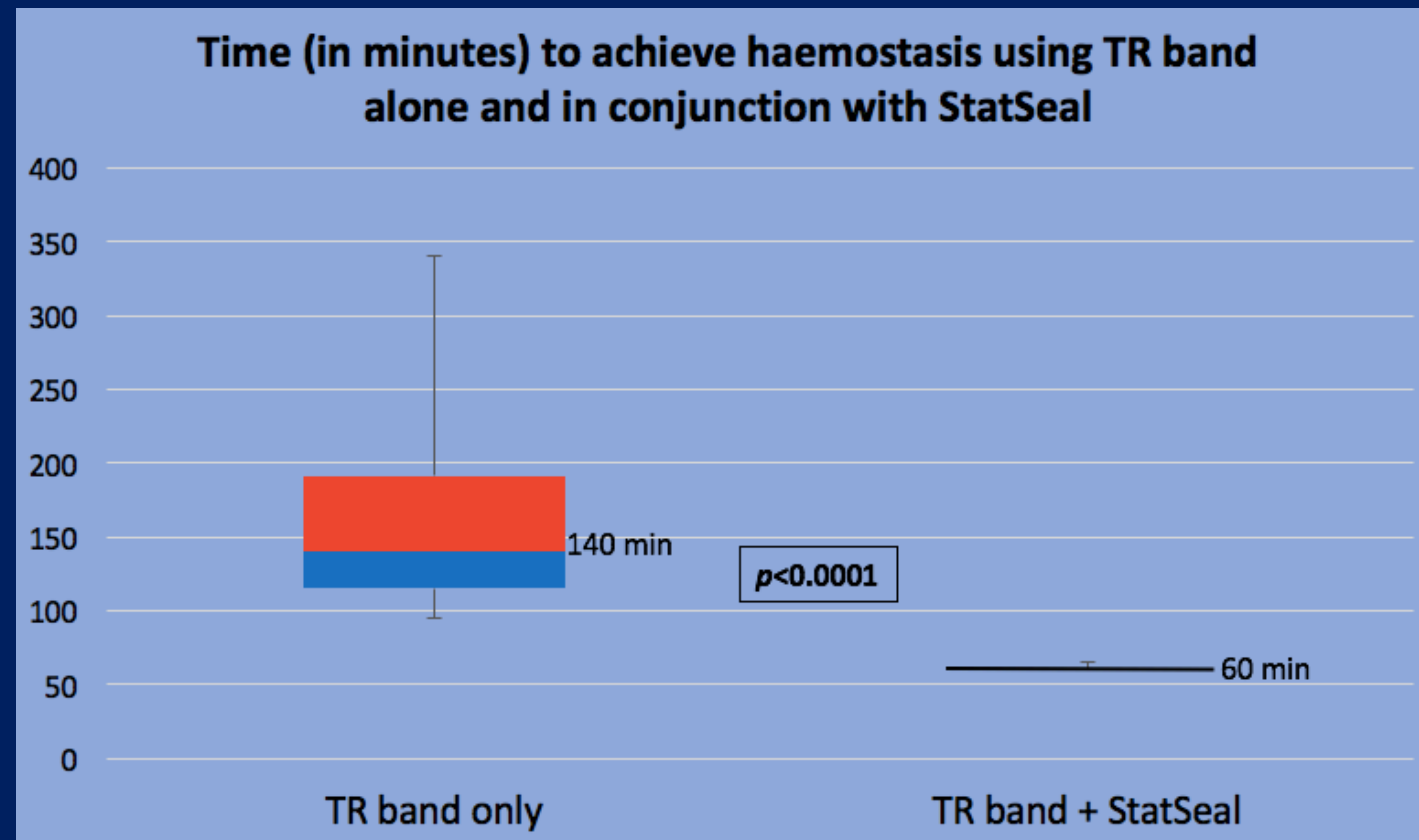
CONCLUSIONS

We therefore conclude that the StatSeal™ device is both safe and cost effective in securing haemostasis and should be routinely adopted in all centres who are currently using the radial artery as the default access for coronary angiography and PCI.

References

- 1) Van Meter C, Vasudevan A, Cuccerre JM and Schussler JM. Time to discharge following diagnostic coronary procedures via transradial artery approach: A comparison of Terumo band and StatSeal hemostasis. Cardiovasc Revasc Med. 2018; 19 (7 Pt A):759-761
- 2) NHS improvement. 2017/18 reference cost data. [ONLINE] Available at: <https://improvement.nhs.uk/resources/reference-costs/>
- 3) Mitchell MD, Hong JA, Lee BY, Umscheid CA, Bartsch SM, Don CW. Systematic Review and Cost-Benefit Analysis of Radial Artery Access for Coronary Angiography and Intervention (2012). Circ Cardiovasc Qual Outcomes. 1;5(4):454-62

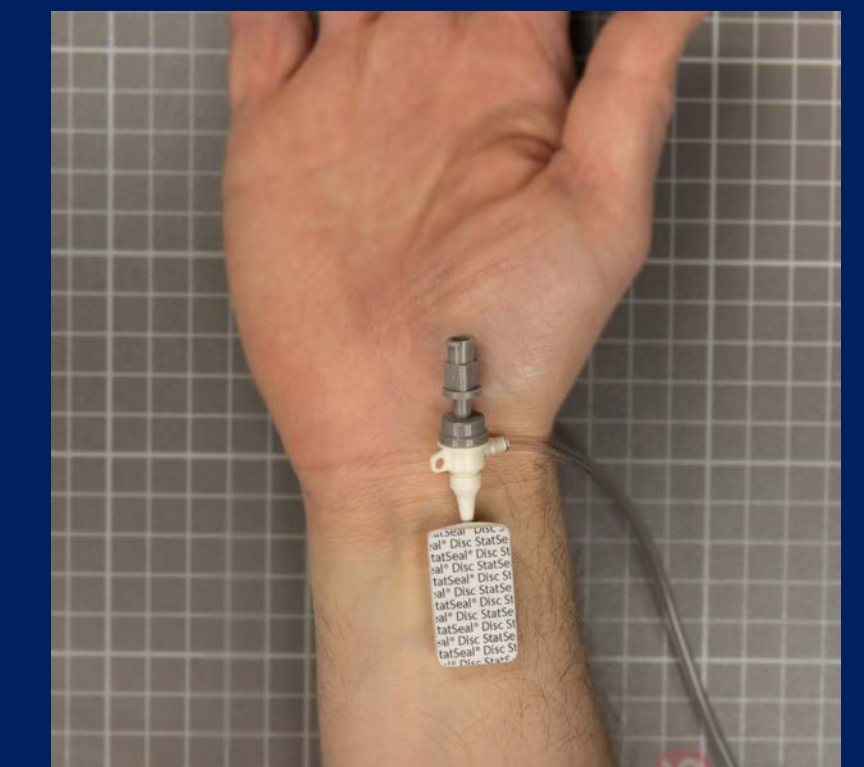
RESULTS



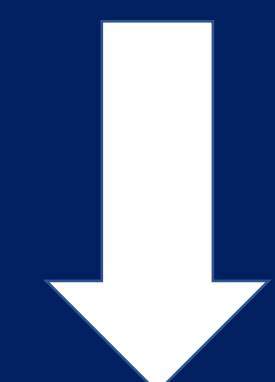
SUMMARY OF RESULTS

- 1) **Figure 1** - Time to haemostasis decreased significantly using the StatSeal™ disc after
 - Angiography (135.1 vs 60.9 min, $p < 0.0001$)
 - PCI (270 vs 60.5 min, $p < 0.0001$)
- 2) **Figure 2** – No significant increase in haemostasis time with increasing doses of heparin ($R^2 = 0.218$, $p = 0.17$) or the size of the radial sheath inserted (5F and 6F)
- 3) **Cost saving of £12 (\$14.97) per angiogram**, and **£52.20 (\$65.10) per PCI procedure** as estimated using the **UK** National Schedule of Reference costs data²
 - Or using **US** equivalent data³ a mean of **\$104.90 per angiogram** and **\$341.69 per PCI procedure**

HOW IT WORKS



StatSeal disc applied prior to TR band application



- 1) Hydrophilic polymer – rapidly dehydrates the blood upon contact forming a seal
- 2) Potassium Ferrate – agglomerates the solids and proteins to the seal
- 3) Complete stasis in the tract enhances healing at the arterial puncture site



Patient is discharged with StatSeal and clear dressing in place. Removed after 24 hours.