

Feasibility and safety of the new coronary non-compliant balloon catheter **River NC[®]**

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Aim

In this preliminary study we aimed to check the clinical utility and safety aspects of **the new non-compliant balloon catheter River NC (Balton, Poland)**.

Methods

The primary study endpoint was to verify balloon diameters calculated in quantitative coronary angiography (QCA) to diameters prespecified by the manufacturer and obtained at given pressures in subjects undergoing percutaneous coronary interventions.

Results

A total of 42 subjects were enrolled (73.8% – multivessel disease, type B1 lesions – 40.5%; device success – 100%).

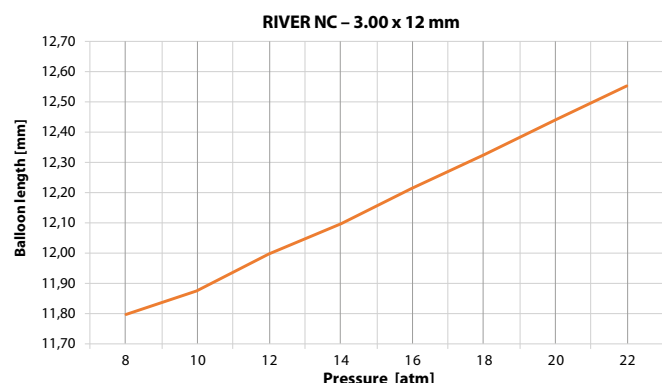
No clinically significant differences between expected balloon diameters and QCA were registered in predilatation (2.36±0.11 mm vs. 2.43±0.07 mm) and postdilatation (3.18±0.19 mm vs. 3.21±0.31 mm).

Conclusions

Our study results suggested that the River NC balloon was effective and safe. In the QCA evaluation, River NC balloon obtained prespecified diameters and lengths at applied pressures.

The compliance index of the River NC balloon catheter was no larger than 2,9%.

CBN3X12 Pressure [atm]	length [mm]			mean
	s1	s2	s3	
8	11,85	11,79	11,75	11,80
10	11,92	11,85	11,85	11,87
12	12,00	12,00	12,00	12,00
14	12,09	12,13	12,08	12,10
16	12,20	12,27	12,17	12,21
18	12,31	12,40	12,26	12,32
20	12,43	12,52	12,37	12,44
22	12,55	12,65	12,46	12,55



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Pressure [atm]	length [mm]			
	s1	s2	s3	mean
8	11,80	11,74	11,82	11,79
10	11,90	11,83	11,90	11,88
12	12,00	12,00	12,00	12,00
14	12,13	12,14	12,11	12,13
16	12,27	12,29	12,24	12,27
18	12,41	12,45	12,44	12,43
20	12,56	12,59	12,53	12,56
22	12,72	12,69	12,62	12,68

