



VasQ™ improves functional maturation: Randomised controlled multinational study results

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

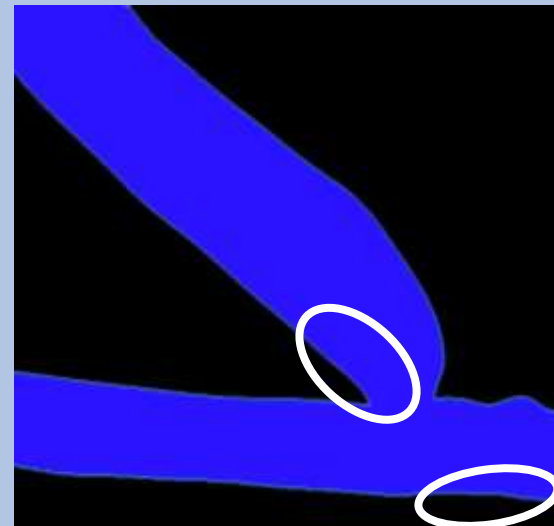
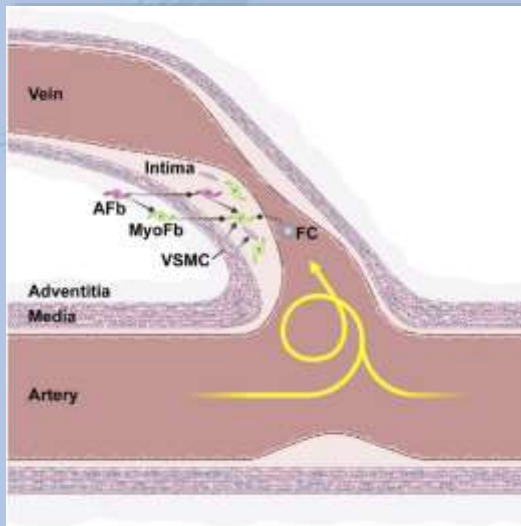
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)



I do not have any potential conflict of interest

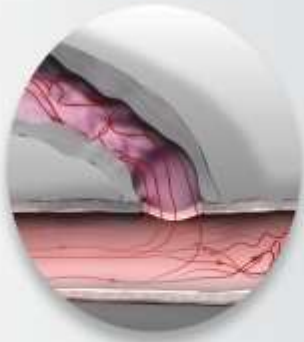
Hemodynamic changes promotes intimal Hyperplasia

- › High wall tension
- › Areas of turbulent flow promote low shear stress
- › Low Shear stress and High wall tension promotes intimal hyperplasia



The Brace

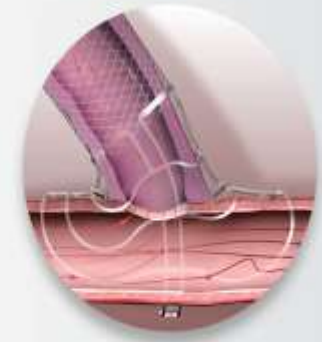
Inducing Unidirectional Flow



Multidirectional/turbulent flow



Optimized peri-anastomotic geometry



Unidirectional/Laminar flow



Angle



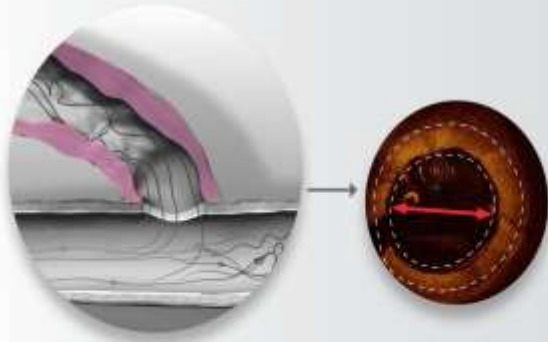
Radius of curvature



Pressure at the heel of the artery

The Braid

Increase Wall Shear Stress, Reduce Wall Tension



Unsupported



High wall tension



Decreased shear stress



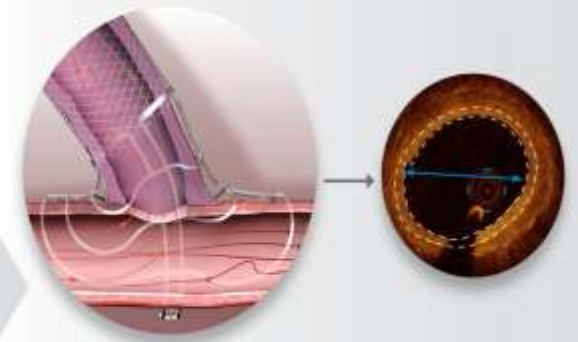
Optimized vein configuration



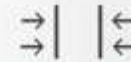
Conical configuration



Optimized proximal/
distal diameter ratio



Supported vein segment



Relieves wall tension



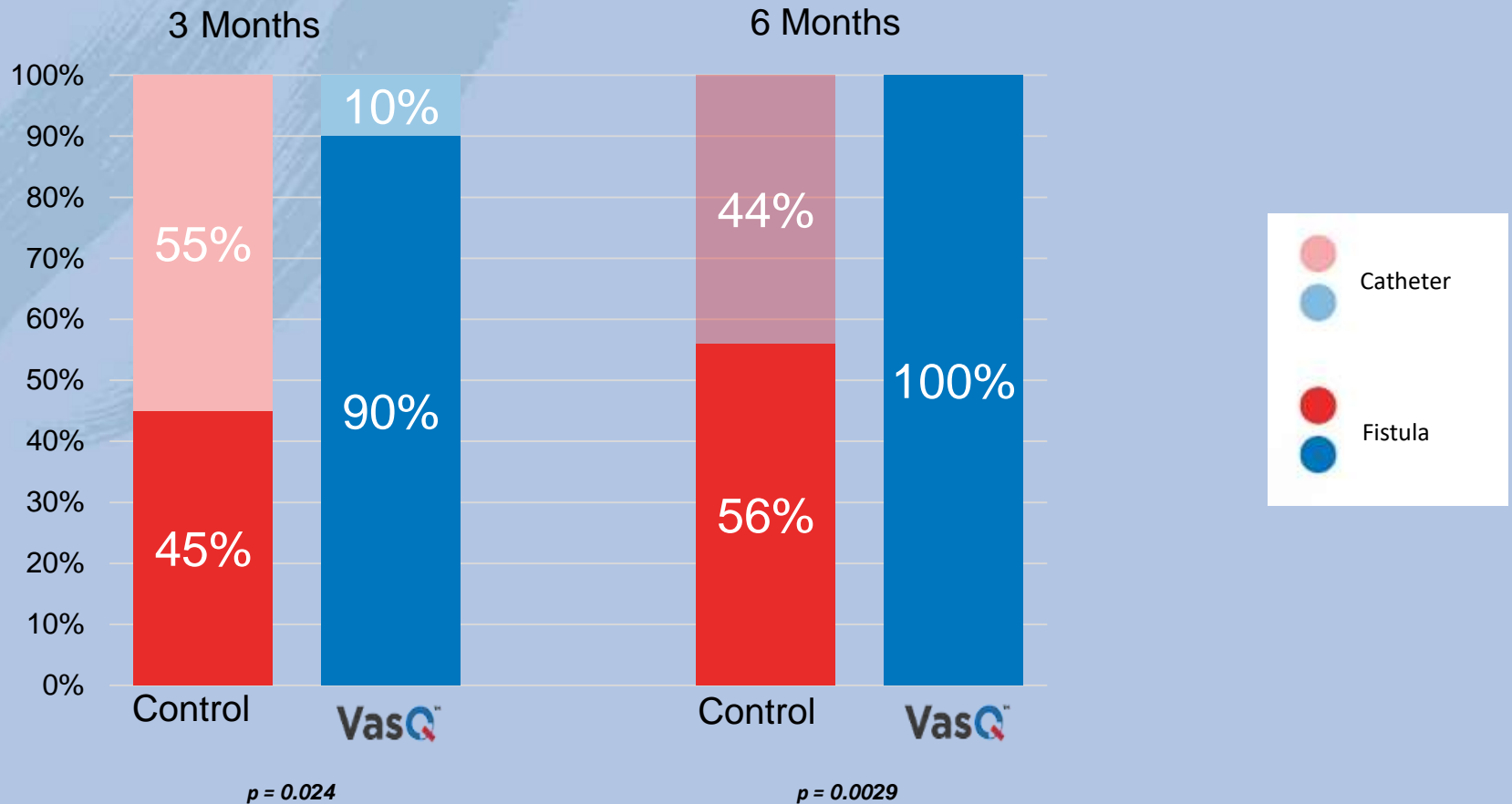
Increased shear stress



Implantation Procedure

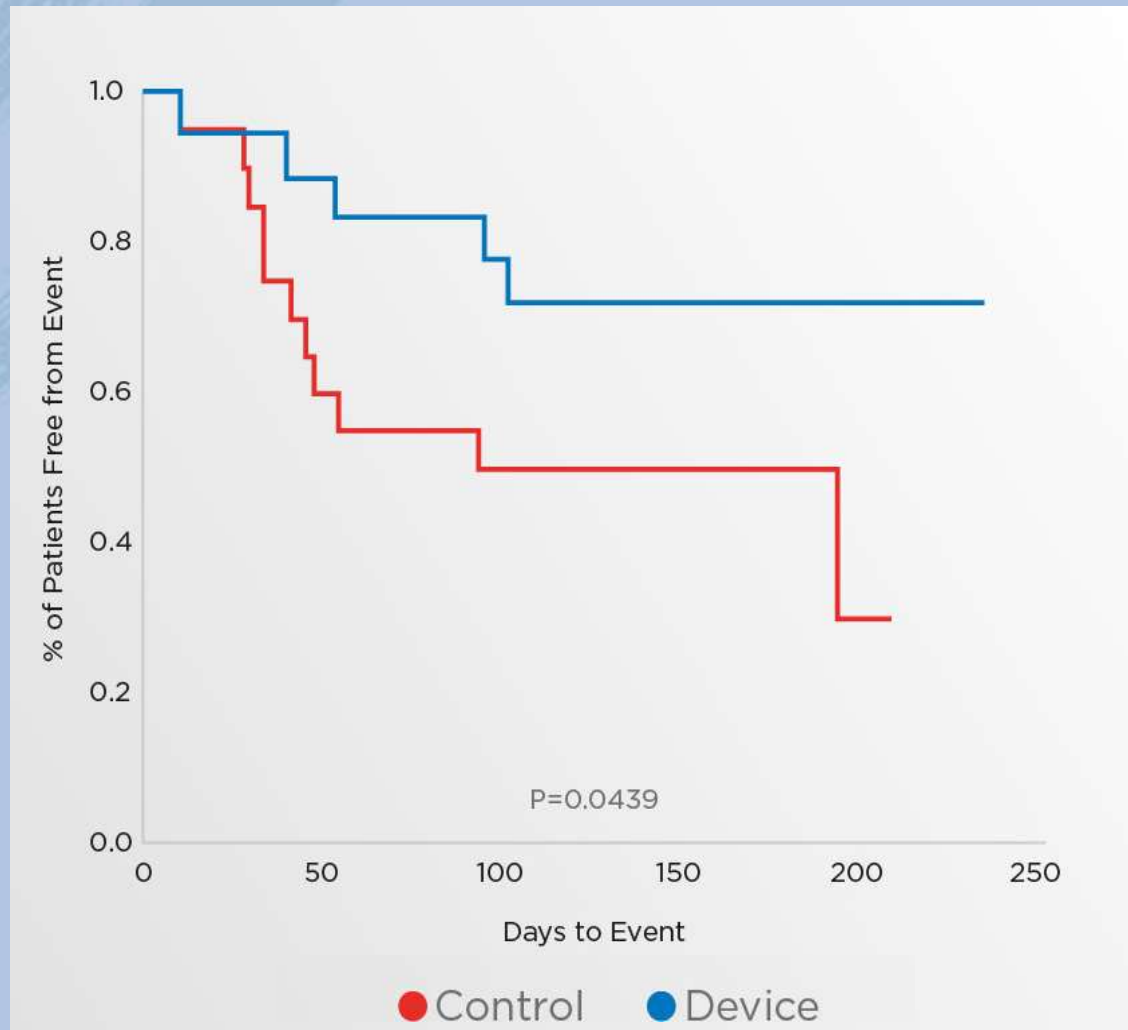


Functional Maturation



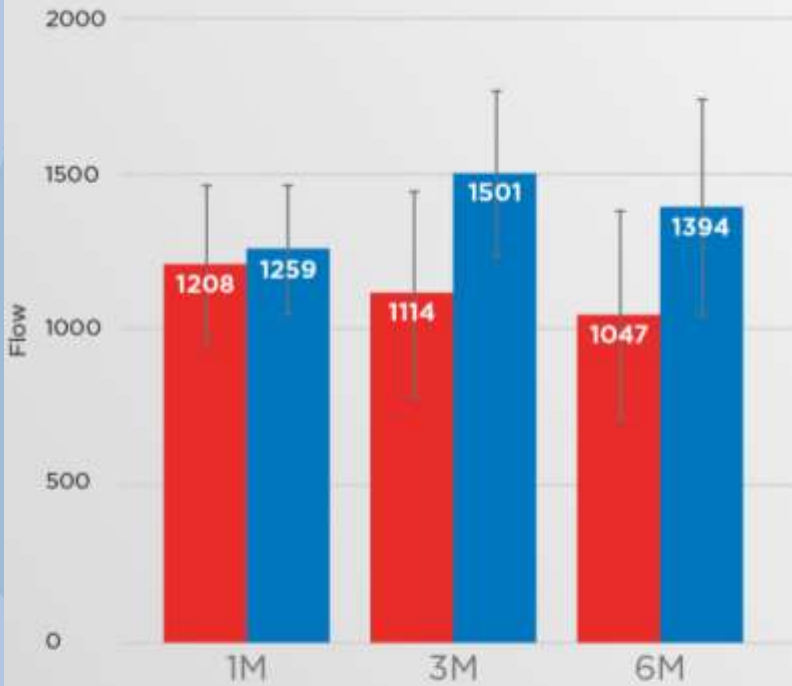
Functional maturation: Patient with patent fistula, needing dialysis and using fistula as access

Higher Freedom from Stenosis and Occlusion

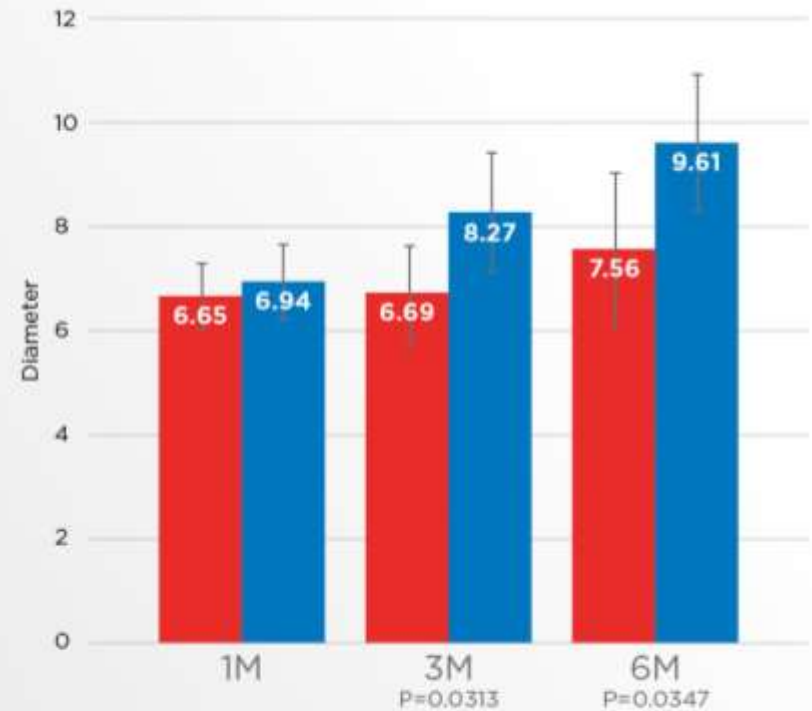


Improved vein remodeling

Mean Outflow (mL/min)



Mean Vein Diameter (mm)



● Control ● Device [95% CI

Barcelona Single Center Experience

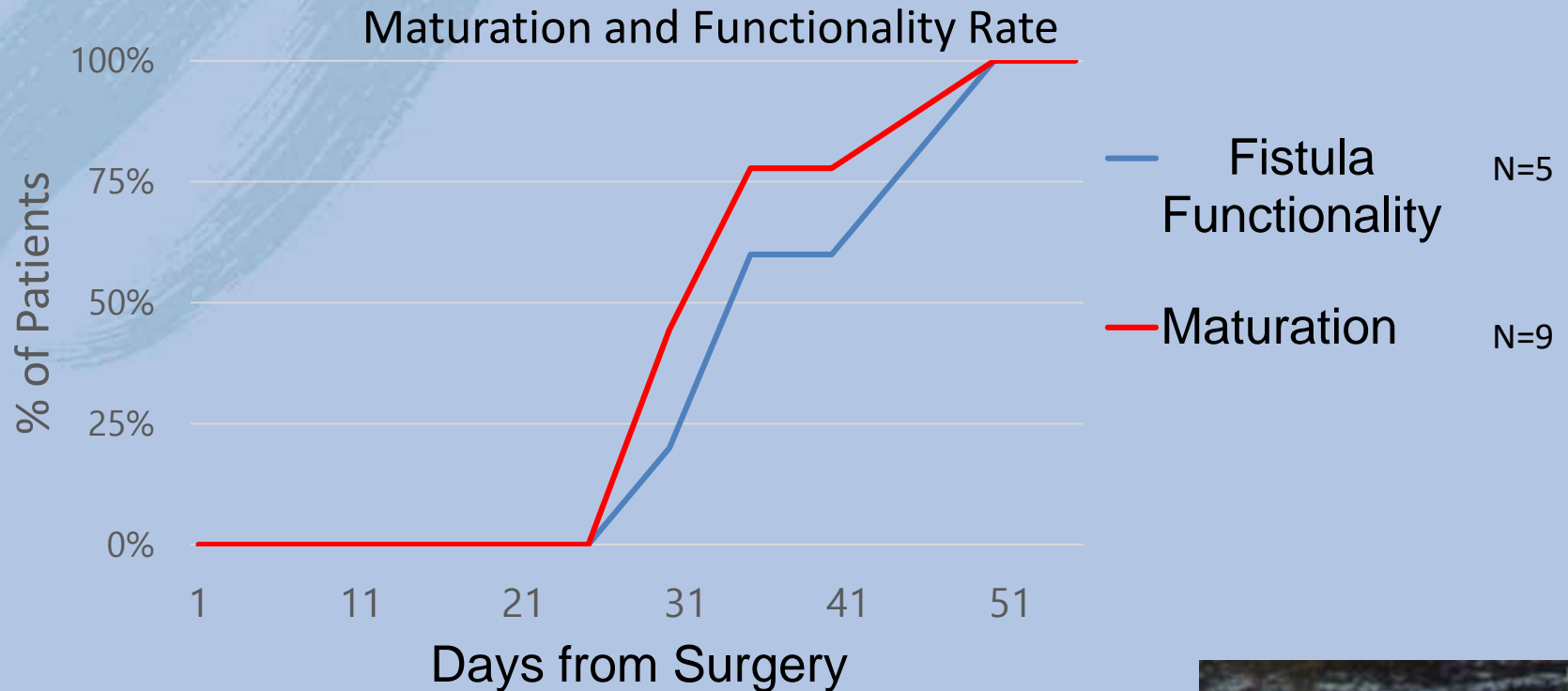
- › **9 patients** received BrachioCephalic Fistula with VasQ™ between Aug. 2017 and Jan. 2018
- › Patients selection based on standard of care with no exclusions

Results

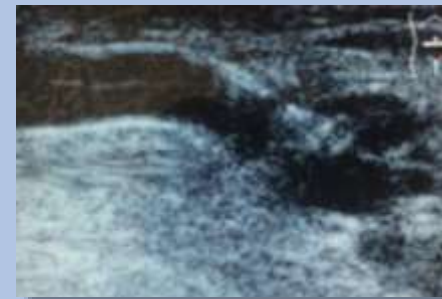
- › Perfect Primary Patency
 - › **No** Occlusions and Stenosis
 - › Average Time from Operation to fistula use: **38 days**
-
- ❖ One patient needed **superficialization** due to obesity



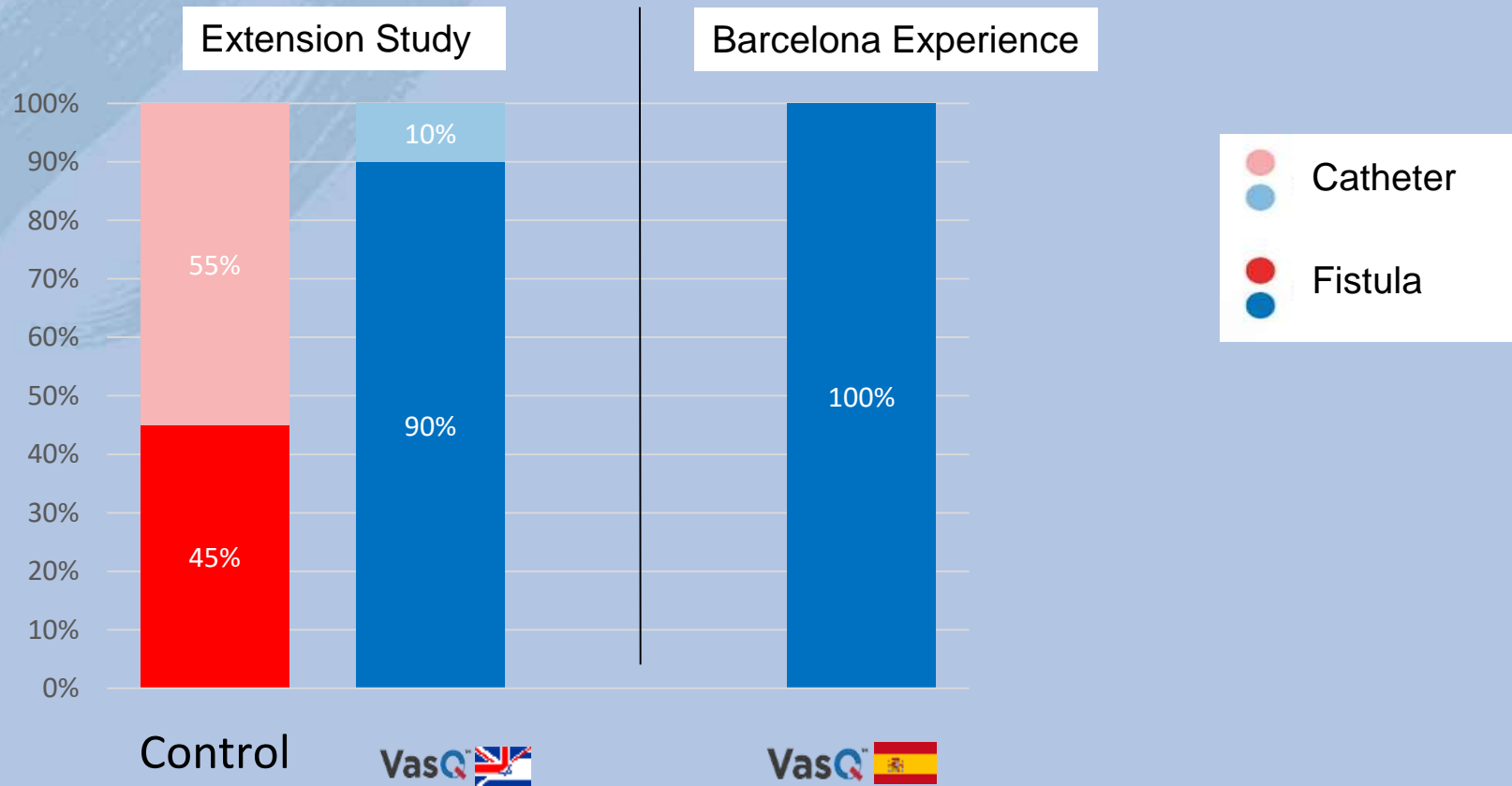
Short Time for Fistula Use



❖ Fistula Functionality - % of patients on dialysis using fistula



Improved Fistula Functionality at 3 Months



$p=0.024$

Conclusions

Use of **VasQ** shows promising results in:

- ✓ Promote improved **patency**
- ✓ Shorten **time to use** of the fistula
- ✓ Increase **functionality** of the fistula