

Don Geer  
r4 Vascular, Inc.  
Phone: 763-494-8400  
Fax: 763-494-8484  
dgeer@r4vascular.com  
[www.r4vascular.com](http://www.r4vascular.com)

## **New Dialysis Catheter Reduces Thrombus Accumulation**

### FOR IMMEDIATE RELEASE

Maple Grove, Minnesota – March 11, 2010 - r<sup>4</sup> Vascular announces the commercial availability of the new Duraspan™ Biomimetic Coated long-term hemodialysis catheter. A novel coating on the catheter surface mimics the glycocalyx layer found on natural endothelial tissue surfaces in vessel walls. Laboratory tests of the Duraspan™ catheter have demonstrated an 87% reduction in platelet adhesion and thrombus accumulation compared to uncoated catheters.

According to Kyle Smith, DO, Vascular Access Center of Southwest Louisiana, “Thrombus accumulation is one of the leading causes of failure among long-term hemodialysis catheters. Initially, thrombus may cause reduced flow rates, significantly decreasing the efficiency of even the largest catheters. Ultimately, thrombus may have catastrophic effects to the patient as it may prevent use of the venous access site for permanent forms of dialysis. My experience with Duraspan™ thus far has shown excellent performance and patency.”

Studies have shown almost 30% of prevalent hemodialysis patients use catheters for vascular access. Catheter complications are a major cause of morbidity and mortality for hemodialysis patients and increase the burden on the health care system. Surface treated catheters have been developed to combat the three most common causes of catheter failure: infection, fibrin sheath formation and thrombus formation. Thrombotic reducing coatings reduce platelet adhesion, inhibit the inflammatory response, and reduce thrombus formation on coronary stents, ventricular assist devices, central venous catheters, and vascular grafts.<sup>1</sup>

R4 is committed to improving dialysis patient catheter outcomes according to r4 Vascular's President, Don Geer, "physicians have long thought that if one was able to make the catheter less recognizable as a foreign object in the body it could revolutionize catheter-based hemodialysis. Developing the catheter, r<sup>4</sup> Vascular engineers utilized stealth coating technologies, approaching the thrombus problem by camouflaging the catheter in a biomimetic coating." The catheter is available in either a 3.5cm tip stagger or a 7cm tip stagger version, providing reduced recirculation.

R4 will be "launching" sales of the catheter at the S.I.R. (Society of Interventional Radiology) conference March 13<sup>th</sup> through March 18<sup>th</sup> in Tampa, FL.

The Duraspan<sup>TM</sup> hemodialysis catheter is part of r<sup>4</sup> Vascular's technologically-advanced portfolio of products for the vascular access marketplace. In 2009, r<sup>4</sup> Vascular launched the Zeus<sup>TM</sup> Biomimetic Coated CT PICC which is the first non-valved PICC to receive FDA clearance for saline-only maintenance, the company also launched the Pherocious Apheresis catheter which is the first power-injectable, triple lumen Apheresis catheter.

r<sup>4</sup> Vascular is a privately-held vascular access company driving innovation in vascular access medical technology. r<sup>4</sup>'s passion is "uncomplicating" venous access, chemotherapy, and drug delivery, through product improvements that help catheters remain patent and effective, with reduced risk of complications.

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<sup>1</sup> Dwyer A. Reducing Tunneled Hemodialysis Catheter Morbidity : Surface Treated Catheters-A Review. Seminars in Dialysis-Vol 21, No 6 (November-December) 2008. 542-546.