

## NuVascular Technologies develops devices for hemodialysis patients

4 June 2015

US-based nanotechnology firm NuVascular Technologies has developed a product line, including access grafts and sutures, which can supply the drug directly to a precise site for patients suffering from kidney ailments.

Backed by its nanotechnology, such medical devices for hemodialysis patients can be filled with specific drugs and delivered for a prescribed period of time with less risks.

The nanofibers, developed by NuVascular Technologies, resemble a natural biological scaffold in which native human tissue grows. Complications can be minimised by applying drugs with a customised release rate and duration.

**"The nanofibers, developed by NuVascular Technologies, resemble a natural biological scaffold in which native human tissue grows."**

The license for these nanofiber-based products can also be made available to other medical device manufacturers.

NuVascular co-founder Eugene Anton said: "The problems associated with current hemodialysis treatments are destroying millions of lives and the tragedy is getting worse each day.

"Our patented solutions would prevent so much anguish and the burden of unnecessary costs by preventing infection, rejection, clotting and cell overgrowth."

More than 2.8 million people, including 450,000 Americans, undergo hemodialysis and a person subjected to such treatment has to pay \$89,000 a year. It has been observed that a malfunction in accessing devices could contribute to an annual cost of \$2.9bn in the US, according to the company.

NuVascular co-founder Matthew Phaneuf said: "It's all about compatibility. The fiber size in a medical device really does matter when it comes to healing.

"The structural integrity of our nanofiber devices combined with the ability to release drugs in a controlled manner sets these products apart."

The company is currently in talks with US Food and Drug Administration for clinical trials.