

How and Why BioMimics 3D® and Swirling Flow® Protect Against Restenosis:

A symposium sponsored by Veryan Medical

London Room

Tues 24th April. Time: 15.30 - 16.00

A prestigious panel of experts, chaired by Gunnar Tepe MD (Academic Hospital RoMed Clinic of Rosenheim, Germany), will take part in a symposium entitled *How and Why BioMimics 3D® and Swirling Flow® Protect Against Restenosis*. The BioMimics 3D Stent is unique among the currently available endovascular technology options used to prevent restenosis in the femoropopliteal segment due to its three-dimensional (3D) helical centreline that imparts curvature to the stented segment, generating swirling flow (Figures 1a and 1b).

The first presentation will be given by Sebastian Carpenter MD (University Herzzentrum Hamburg, Germany) who will discuss Swirling Flow®; what is it, and why is it so important? He will review the unique features of BioMimics 3D and why it is so ideally suited to the hostile environment of the femoropopliteal segment. As well as its ability to shorten with the vessel upon knee and hip flexion,¹ Dr Carpenter will review how BioMimics 3D can reintroduce swirling flow into this long, straight vessel, something which has been shown to be patency protective.²



Figure 1a
BioMimics 3D Stent



Figure 1b
BioMimics 3D stent with swirling flow represented by computational fluid dynamics

The next speaker, Michael Lichtenberg MD, (Klinikum Arnsberg, Arnsberg, Germany) will focus on demonstrating how this theoretical concept has been proven in clinical practice. Dr Lichtenberg is the Principal Investigator of the on-going MIMICS-3D registry. He was also a leading enroller in MIMICS-2 (a pre-market, prospective single arm study of 271 patients) and has personally implanted over 300 BioMimics 3D stents in his clinical practice in the last three years. Dr Lichtenberg uses BioMimics 3D for both primary stenting and in conjunction with a DCB. In conversation with the CX Daily News Dr Lichtenberg said "it would appear that in common clinical practice a stent is required in a significant proportion of DCB-treated lesions. If a stent is used to support a DCB it is sensible to use a device with good outcomes that would not only provide the scaffolding that DCB-only therapy lacks but could extend the period of low CDTLR past the initial 12 months when DCBs become less effective."



Gunnar Tepe



Sebastian Carpenter



Michael Lichtenberg



Thomas Zeller

The final speaker will be Professor Thomas Zeller (University-Herzzentrum, Freiburg-Bad Krozingen, Germany). He was PI for MIMICS-RCT (a randomised controlled trial of 76 patients which randomised BioMimics 3D to a straight stent control), co-PI of MIMICS-2 and a lead investigator in the on-going MIMICS-3D registry and so he has a wealth of personal experience with BioMimics 3D. Professor Zeller will present the one-year results of the MIMICS-2 study, which validate the compelling MIMICS-RCT results in a larger, more challenging patient population: both the primary safety and effectiveness endpoints were met; there were no stent fractures; the Kaplan-Meier estimate of freedom from loss of primary patency at 12 months was 81.9% at Day 365 and the Kaplan-Meier estimate of freedom from clinical events committee (CEC)-adjudicated CDTLR at 12 months was 88.4%.³ The symposium promises to be lively and informative.

The BioMimics 3D Stent System is CE Marked

The BioMimics 3D Stent System is not approved for sale in the US or Japan

