

Title

The pro-angiogenic role of hypoxia inducible factor stabilizer FG-4592 and its application in an in vivo tissue engineering chamber model

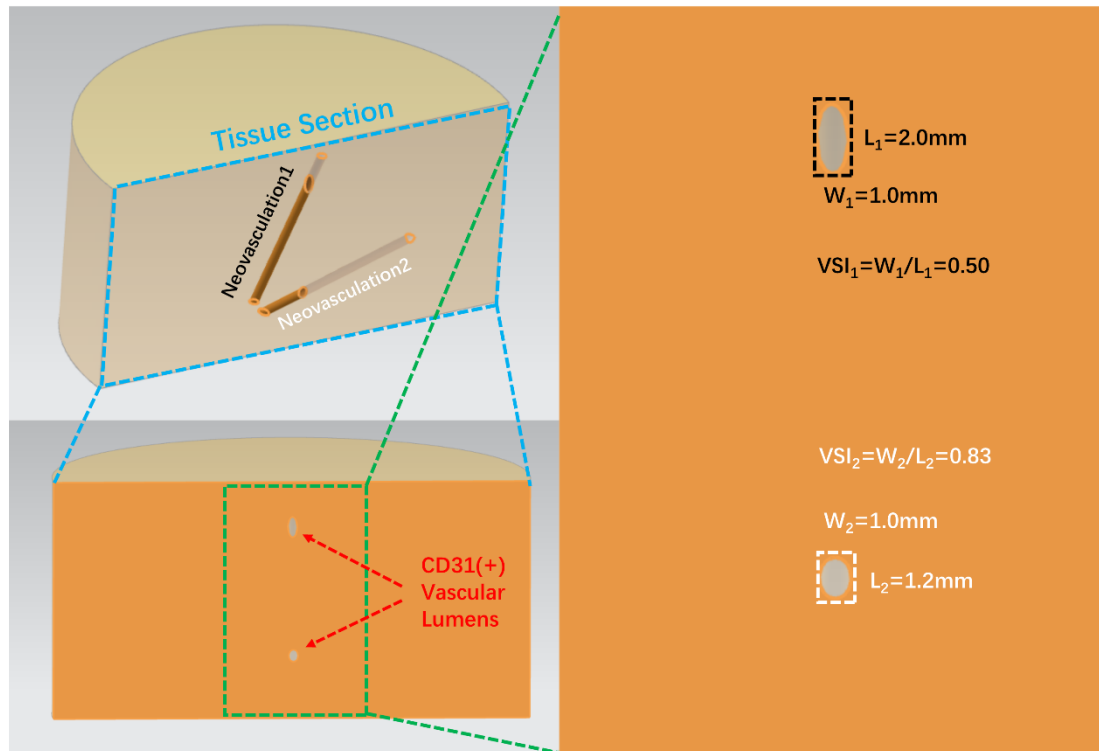
Authors

Muran Zhou¹, Jinfei Hou¹, Yuan Li¹, Shan Mou¹, Zhenxing Wang¹, Raymund E Horch²,
Jiaming Sun¹, Quan Yuan¹

Affiliations

¹Department of Plastic Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, 1277 JieFang Avenue, Wuhan 430022, China

²Department of Plastic and Hand Surgery, University Hospital of Erlangen, Friedrich Alexander University, Erlangen Nuernberg, (FAU), Germany



Supplementary Figure 1. The description of vessel shape index (VSI)

During the tissue sectioning procedures, neovasculatures in the fibrovascular tissue were cross-cut and the ellipse shaped vascular sections were colorized after CD31 immunohistological staining process. As a morphometric analysis method, we introduced vessel shape index (VSI), which was calculated by dividing the width (W) of the vessel section by its length (L). The smaller the VSI value, the slenderer the vascular section, and the VSI value provides information on whether the vascular tended to grow upwards or sideways.

Supplementary Video 1. The regulation of Hypoxia Inducible Factor-1 α .

Supplementary Video 2. The production of fibrin gel.