Symic Biomedical Awarded $1.5MM NIH Phase II SBIR Grant to Develop its Proteoglycan Mimetic Therapeutics to Reduce Vascular Access Failures in ESRD

SAN FRANCISCO, Calif., August 26, 2015 – Platform therapeutic company Symic Biomedical, Inc. ("Symic") announced today that it has received a $1.5M Phase II SBIR grant from the National Institutes of Health (NIH) to further develop its therapeutic agent to reduce arteriovenous fistula (AVF) failures, a significant unmet clinical need in end stage renal disease (ESRD) patients undergoing hemodialysis. The two-year project, funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), will allow Symic to perform additional preclinical efficacy studies and advance lead candidate SBCV-030 towards clinical development. Symic will work in collaboration with Prabir Roy-Chaudhury, M.D., Ph.D., Division Director of Nephrology at the University of Arizona College of Medicine and Banner University Medical Center, Tucson and member of the Board of Advisors of the American Society of Nephrology.

SBCV-030 represents a new class of therapeutics intended to target the extracellular matrix (ECM). Symic's therapeutics mimic proteoglycans, native macromolecules that play important structural and functional rolls in the ECM. SBCV-030, which is modeled after the proteoglycan decorin, binds to collagen that is exposed when the vascular endothelium is denuded, an unavoidable consequence during any vascular intervention or surgery. When bound, SBCV-030 locally prevents platelet binding to the exposed collagen and the subsequent platelet activation, which can lead to thrombus formation acutely and neointimal hyperplasia chronically.

"In the past three decades, there have been no major advances in the field of hemodialysis vascular access, resulting in a huge unmet clinical need," said Dr. Roy-Chaudhury. "Symic's therapeutic has the potential to address the underlying cause of both AV fistula and AV graft stenosis, without requiring changes in the process of how these procedures are performed. If successful, Symic's innovative and pioneering approach to prevent vascular access stenosis could not only improve the quality of life and survival of ESRD patients, but also and reduce costs to the healthcare system."

"This grant will allow us to advance preclinical development of our AVF therapeutic candidate, which is designed to address the damage to the vessels that occurs during the creation of the AVF and ultimately improve patient outcomes," stated Ken Horne, Chief Executive Officer of Symic. "We look forward to further exploring the potential of our proteoglycan mimetic compounds in this indication, and leveraging our unique understanding of the extracellular matrix to address serious unmet medical needs."

About Arteriovenous Fistula (AVF) Failures
More than 20 million American adults (1 in 10) have some level of chronic kidney disease (CKD), with a growing incidence in the aging population. Nearly 400,000 ESRD patients receive some form of dialysis, hemodialysis being the most common. Dysfunction of the vascular access site occurs in 16-30% of patients within 3 years after creation of the access, and is associated with major adverse cardiovascular events. Vascular access accounts for 7.5% of Medicare's spending on the ESRD programs, a total of over $1BB per year.

Native AVFs are the preferred method of access for hemodialysis because of their low rates of infection and thrombosis once the fistula has fully matured. However, up to 50% of AVFs in Europe and the US have problems with maturation (early) failure, and either thrombose or need interventions to maintain patency. In addition, some AVFs also develop a later failure following their use for dialysis. Both early and late failures are characterized by vascular stenosis due to an aggressive neointimal hyperplasia (ingrowth of smooth muscle cells and fibrous tissue). While many factors play a role in the development of neointimal hyperplasia in an AVF, the extent of damage to the endothelial layer of a vessel has been directly related to the degree of neointimal hyperplasia that occurs.

About Symic Biomedical (www.SymicBio.com)
Symic Biomedical is developing a new category of therapeutics that offer an exciting and biologically innovative approach to treating disease. Symic's compounds function like proteoglycans, important structural and functional macromolecules native to the ECM (extracellular matrix). The ECM is the non-cellular component of tissues that is critical for healthy tissue function. Components of the ECM, particularly proteoglycans, play a critical role in healing following injury and in chronic diseases – Symic's molecules function in a similar manner. Symic is targeting the ECM using its proprietary and novel proteoglycan mimics, and will advance its compounds in a variety of acute and chronic therapeutic areas with significant unmet clinical needs.

Symic Biomedical, Inc. is a Delaware corporation and a wholly-owned subsidiary of Symic Holdings, LLC, its parent company with the strategic mandate to invest in and develop technology designed to address significant unmet medical needs critical to improved treatments. Symic Holdings, LLC also structures Symic's transactions and investments.

Contact:
Kenneth N. Horne
Chief Executive Officer
Symic Biomedical
Phone: (415) 805-9005
KH@SymicBio.com