



Letter to the Editor

Reply to Letter to Editor by S Tong, L Zhang, J Joseph, and X Jiang “A potential and novel therapeutic approach to ischemic heart failure: Algisyl-LVR”

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Dear Dr. Tong,

We appreciate the positive appraisal of our recent publication [1]. We also share in your enthusiasm for the potential of Algisyl therapy to treat heart failure (HF). Although there is currently no therapy that can fully restore the structure and function of the heart, AUGMENT-HF is promising given the surgical approach, and the relatively short follow up (improving trend was observed from 6 to 12 months). It has been debated whether structural changes are necessary to observe functional improvements [2]. Regardless, the outcome of AUGMENT-HF can be improved by (1) Using a percutaneous rather than surgical approach, and (2) Treating the septum and free wall rather than just the free wall. Treatment of the septum and left ventricular (LV) free wall, which is only possible percutaneously, should improve both safety and efficacy. This aligns with our novel proposed mechanism of action

whereby the polymer injectates provide a LV midwall constraint (LVMC), which in turn reduces wall stress. The study by Lee et al. [3] showed remarkable improvement in HF symptoms and outcomes by reducing wall stress in patients. In fact, stress reduction is the corner stone of all therapies in HF. Hence, the full circumscription of the injection polymer plane should allow a more effective LVMC. Furthermore, the advent of the percutaneous approach will allow future clinical trials to be blinded. The proposed developments should not only improve the outcome of AUGMENT-HF but also advance a promising percutaneous therapy for the epidemic of HF.

References

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