Less invasive, biventricular cardiac assist for heart recovery

Abstract: Ventricular assist devices continue to improve, and the use of such devices for end-stage heart failure is increasing. Conventionally, assist technology has been in the form of blood pumps that improve systemic blood flow; however, the heart motion is adversely effected. Direct cardiac contacting devices, on the other hand, can be utilized to improve heart motion. Moreover, the latest generation of these devices can be inserted through a mini-thoracotomy. As is evidenced by physical therapy, restoring motion can lead to recovery of musculoskeletal tissue; and similarly, improvement of heart motion may lead to further recovery of heart function.