

Title: Tissue Engineering Review: Advances in Cardiac Tissue Engineering & Cardiac Tissue Replacement Modalities

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Congenital and acquired diseases of the heart, such as heart valve degradation, great artery dysfunction, and coronary artery blockage are the leading causes of morbidity and mortality in the United States and developed countries today.^{1,6,7} A large fraction of the total costs that the nation spends on health care can be attributed to tissue loss or organ failure, especially with accumulating costs from heart damage and heart failure, totaling almost \$100 billion yearly.¹⁴ These costs are not only of monetary value, but more importantly, of value in human life and quality of life. Thus, there has been an urgent demand for more effective pharmaceuticals to treat heart disease, as well as new tissue engineering methods to repair and replace damaged cardiac tissue.

References and Notes

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