## Stem Cells: A Promising Candidate for cardiovascular Diseases

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Despite the development of new therapeutic strategies and surgical treatments, heart attacks and congestive heart failure remain among the Nation's most prominent health challenges despite many breakthroughs in cardiovascular medicine. Various experimental studies prove that the infusion of stem cells may improve cardiac regeneration in several ways. Moreover, predominantly bone marrow derived cells were shown to restore blood flow, thereby providing a novel therapeutic option for the prevention and/or treatment of heart failure.

Recent research is providing early evidence that adult and embryonic stem cells may be able to replace damaged heart muscle cells and establish new blood vessels to supply them. Thus the adult stem cell therapy today holds the promise of replacing lost heart muscle and enhancing cardiovascular revascularization, thereby treating the cardiovascular diseases promisingly. This is due to plasticity of adult stem cells.

**Keywords:** Stem cells; Cardiac regeneration, Cardiovascular revascularization; Plasticity.

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