

Cover illustration:

Differential impact of Wnt11 signaling on cell fate in vitro. Pluripotent ESCs give rise to cardiac tissue with a contractile phenotype with Wnt11 treatment. However, Wnt11-treated cord blood-derived CD133+ progenitors undergo endothelial lineage commitment; and Wnt11-treated bone marrow-derived cells show considerable divergence with regard to lineage commitment and acquisition of phenotypic characteristics. In fetal HSCs, Wnt11 promotes red blood cell commitment and favors monocyte precursor formation. Wnt11-treated bone marrow-derived multipotent adult stem cells express skeletal and cardiac markers, and Wnt11-treated CPCs adopt a cardiac phenotype when cocultured with neonatal rat cardiomyocytes. BMMNC, bone marrow mononuclear cell; EPC, endothelial progenitor cell; ESC, embryonic stem cell; HSC, hematopoietic stem cell; MSC, mesenchymal stem cell. (Reproduced from Flaherty et al. *Trends Cardiovasc Med* 2008;18:260-68 with permission from Elsevier).



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