Special Issue

The Role of Growth Factors in Cardiovascular Development

Message from the Guest Editors

We welcome review and original article contributions that increase our understanding of growth factor pathway regulation in cardiovascular development and disease. Multifunctional growth factors and cytokines such as TGF⊠s, FGFs, and BMPs are produced in most cardiac cell types during cardiovascular development and in adult cardiovascular tissues and regulated by integrins, extracellular matrix proteins. Transcription factors, such as TBX5 and NKX2-5, are involved in activation of Wnt and FGF signaling. Mutations and/or dysregulated expression of TGFB pathway genes, Fibrillin 1, TBX5 and ADAMTSL2 result in altered growth factor signaling and cardiovascular disease (CVD). We suggest the following themes for this Special Issue:

- Growth factors in cardiovascular development and congenital heart defects, aortopathy, valvular heart disease, adult cardiac remodeling and disease, agerelated CVD and cardiac cachexia;
- Growth factors signaling mechanism using in vitro cell and tissue culture models of CVD;
- Novel models of growth factor signaling and its regulatory transcriptional factors in the cardiovascular system;
- Growth factors-based therapies of CVD and cardiotoxicity.

Guest Editors Dr. Mohamad Azhar

Dr. Timothy J. Mead

Dr. Irfan Kathiriya

Deadline for manuscript submissions

closed (15 June 2025)



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About the Journal

Message from the Editor-in-Chief

The primary goal of the *Journal of Cardiovascular Development and Disease (JCDD*, ISSN 2308-3425) is to provide cardiovascular scientists a platform to publish their work in a quick and efficient way. Topics can range from studies designed to decipher the events underlying early heart development to studies focusing on the origins of congenital and acquired heart disease. Papers submitted to *JCDD* undergo a fast, yet thorough, peer-review process. In this process, we will apply strict ethical policies and standards. *JCDD* guarantees fast dissemination of results to a large scientific audience

Editor-in-Chief

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