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### ***Danio rerio* as a Momentous Model of Cardiovascular Research: A Review**

Ivy Ghosh<sup>1\*</sup>, Samrat Bose<sup>1</sup>

<sup>1</sup>Guru Nanak Institute of Pharmaceutical Science and Technology.  
157/F, Nilgunj Road, Panihati Sodepur, Kolkata-700114, India

**Abstract :** Cardiac development is a composite process which may include cell specification and differentiation along with detailed morphological study. Combinatorial application of optical clarity along with large scale of mutant makes the zebrafish most important vertebrate model for the identification and justification of various cardiac problems. *Danio rerio* has become a robust exemplar to elucidate the basic molecular and cellular mechanisms and genetic approaches of cardiac development and function. Origin of the cells of the cardiac progenitor can be analyzed in this oviparous model and the formation of the heart tube can also be examined by the process of serial sectioning of the embryos. Summarization of the knowledge of the recent discovery of second heart field of zebrafish has been discussed in this review. Comparing with the humans, zebrafish has given a wide range of information to express and to study the human disease related gene variants which helps to identify the mechanisms of the disease. In this review we mainly focus on the cardiac developmental study and specification in which zebrafish has been applied as a model system in human congenital and acquired cardiac diseases.

**Keywords :** Zebrafish, Cardiac outflow, Trabeculation, Valvulogenesis, Conduction system, Congenital, Cardiomyopathy.

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