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Daniorerio, as a Model for Embryogenic Toxicity Study: A Review

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Abstract : According to the animal welfare legislation, the fish embryo model is not regulated by recent established enactment. It is considered as a substituent of animals such as rodents. The Zebrafish (*Daniorerio*) is the most promising oviparous vertebrate model for the identification of wide ranges of human diseases and discovery of drugs. Due to the transparency of embryos, genetic resemblance with mammals, short reproduction cycle as well as the low cost and ease of maintenance, this ex vivo vertebrate model has been widely used for the developmental neurotoxicity study. Fish embryo exemplary is a significant model for the assessment of chemicals in the environmental toxicity study. This aquatic model is also useful for understanding the proper mechanisms of toxicants in the adverse and long term effects of developmental organogenesis. For numerous advantages and significance of using this oviparous model it provides several opportunities in the field of research in future.

Key words : Zebrafish, neurotoxicity study, environmental toxicity, acute fish test.

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