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Genetics of Diabetic Retinopathy

Satagopan Uthra¹, Rajiv Raman², Bickol N. Mukesh³, ²Rani Padmaja Kumari², Tarun Sharma², Catherine A McCarty³ and Govindasamy Kumaramanickavel¹

¹SN ONGC Department of Genetics and Molecular Biology, ²Shri Baghawan Mahavir Vitreoretinal Service², Medical and Vision Research Foundations, Sankara Nethralaya, 18, College Road, Chennai 600 006, Tamil Nadu, India ³Marshfield Clinic Research Foundation, Marshfield, WI, USA

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ABSTRACT Diabetic retinopathy (DR), a microvascular complication of diabetes in the retina, is one of the leading causes of adult blindness worldwide. Complex interplay of environmental and genetic factors has been known to contribute to its pathology. Variations in several genes have been found to be associated with risk for developing DR in different populations worldwide, which is discussed in this article. Identification of genetic variations underlining the disease would immensely lead to recognition of presymptomatic diabetic individuals susceptible to develop DR and help in planning appropriate clinical management and genetic counseling of patients.