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Genetics of Diabetic Retinopathy

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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.