



Molecular and Genetic Mechanism of Cataracts

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Message from the Guest Editor

Non-syndromic bilateral congenital cataract is the most prevalent cause of reversible congenital blindness worldwide. It is estimated that in approximately 50% of patients suffering from it, it has a genetic origin.

Congenital cataract was the first autosomal disease to be genetically mapped in humans. About one third of isolated congenital cataracts are inherited; most inherited cataracts are autosomal dominant with full penetration, while variable expression, autosomal recessive, and X-linked inheritance patterns are less common. There are more than 100 genes associated with cataract.

The prevalence varies from 2.2 to 2.49 cases out of 10,000 live births in developed countries and about 13.6 out of 10,000 cases in the developing countries of the world.

Despite surgical treatment of congenital cataract, the expected visual acuities are usually low, and most patients require specific visual adaptation.

This Special Issue explores the multidisciplinary approach to the molecular basis of congenital bilateral cataracts, from bench to bedside, and from molecular and bioinformatic studies using new generation technologies to patient diagnosis.





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Message from the Editor-in-Chief

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