



The Chinese University of Hong Kong
Non-confidential Abstract of Technology Disclosure

Title:

A Method for Assessing the Genetic Risk for Cataract

CUHK Ref. No.:

01/MED/074

Inventor:

Professor Chung Ngor Juliana CHAN, Department of Medicine & Therapeutics

Patent Status:

- ◆ HK Short-Term Patent no. HK1034643
- ◆ Chinese Patent Pending
- ◆ US Patent Pending
- ◆ HK Standard Patent Pending
- ◆ Chinese Divisional Patent Pending

Non-confidential abstract:

Cataract is a leading cause of blindness in elderly and diabetic patients. Poor glycemic control can lead to increased conversion of glucose to sorbital via the aldose reductase pathway. Increased accumulation of sorbital has been implicated in the development of cataract. Our group has found an association between a microsatellite marker of the aldose reductase gene and the occurrence of cataract in patients with Type 2 diabetes. The microsatellite alleles can be identified using polymerase chain reaction-based techniques followed by polyacrylamide gel electrophoresis. The presence of the microsatellite allele Z confers an increased risk for cataract. Whereas, another allele (allele Z-4) reduces the risk for the eye disease. We now declare that our genetic test (i.e., using the microsatellite marker) can be used to identify subjects with increased susceptibility towards cataract formation, at least in individuals with Type 2 diabetes. Identification of these high risk subjects will allow more intensive treatment including the use of aldose reductase inhibitors.

For further queries, please contact:

Mr Billy Lam
Technology Licensing Coordinator
Tel: (852) 2609 8882
Fax: (852) 2603 5451
Email: billylam@cuhk.edu.hk

Address:
Technology Licensing Office
The Chinese University of Hong Kong
Room 226, Pi Ch'iu Bldg, Shatin, New Territories
Hong Kong SAR