**Supplementary Figures**

**Figure S1:** The geographical distribution of LHON families shown in India map, the (circle) states in which samples were collected, and the number within the (bracket) are the number of individuals studied.
**Figure S2A and S2B:** The phylogenetic tree of LHON patients with m.11778G>A mutation. The synonymous and non-synonymous coding-region variants are denoted by “s” and “ns”, respectively. Variations in the transfer RNA and the ribosomal RNA genes are denoted by “t” and “r”, respectively. The insertions, deletions, and non-coding variants are denoted by “ins” and “del” and “nc” respectively, and mutations that are underlined are recurrent.