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## Poster Presentation

### Primary Progressive MS and Affecting Genes

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#### **Abstract**

Multiple sclerosis is a CNS autoimmune disease configured by demyelination, inflammation, and degeneration of axons. This disease inflict great harms to patients. The most common problem is inability to control musculoskeletal system and decrease in mobility. These consequences could vary from patients to patients. About 10-15% of all MS patients develop primary progressive MS (PPMS). Despite the most common appearance of MS, which is progressive-relapsing MS (PRMS), PPMS affects older adults. Its process has no recovery periods, and gender distribution measurements indicate no differences. Etiology of MS is still unclear but it is believed both environmental and hereditary factors are involved. MS susceptibility in population of a specific region and immigrants indicates possibility of environmental role and knowledge, there isn't a definite way to cure PPMS. Thus, identifying risk factors might be very useful. As far as we know, there isn't a single and specific gene with certain role in PPMS susceptibility, but nearly all studies came to an agreement that Human leukocyte antigen (HLA) genes are probably the most impressive genes in MS occurrence and its process. Although some other researches mentioning non HLA genes such as Interleukin 4 (IL4) and NAD (P) H: quinone reductase 1 (NQO1), could have undeniable effects on the disease course. Thus, in this review article we divided affecting genes into HLA and non HLA related genes. Moreover there are external factors that influence genes expression such as retroviruses. With these great expansion in PPMS affecting factors, we suggest further investigations in order to achieve a certainty and remedy production improvement.

**Keywords:** Primary progressive MS, Gene, Risk factors

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