

Down syndrome is the most prevalent genetic disorder of intellectual disability and is caused by trisomy of Homo sapiens chromosome 21 (HSA21). A piece of chromosome 21 may potentially translocate (connect to another chromosome) prior to or during conception, resulting in the development of down syndrome. Down syndrome may result from any one of the following three genetic variations: Trisomy 21, in which chromosome 21 has three copies rather than the normal two in all cells, accounts for approximately 95% of cases of Down syndrome. The genetic basis of Down syndrome and the correlation between various genotypes and phenotypes are the subject of various hypotheses. A gene dosage imbalance involving an excess of the Hsa21 gene or its genes is one of them. Translocation Down syndrome.