Abstract

Neurodegenerative disorders are the disorder caused by the deterioration of certain nerve cells
Identification of Common Target Proteins for Multiple Neurodegenerative Disorders and Reconstruction of Disease Pathway

(neurons). Changes in these cells cause them to function abnormally, eventually bringing about their death. There are following six major neurodegenerative disorders which are most common in human: Alzheimer’s disease, Prion disease, Parkinson’s disease, ALS (Amyotrophic Lateral Sclerosis), DRPLA (Dentatorubropallidoluysian atrophy) and Huntington’s disease. It is observed that there are some genes/proteins which are interlinked with all mentioned neurodegenerative disorders including some other diseases. A common pathway was constructed for neurodegenerative disorders taking Alzheimer’s disease as the centre of the study because this disease is more common and well studied, and it is found that there are many genes or proteins in this disease which are interlinked with all mentioned neurodegenerative disorders including two more diseases, Alexander disease and Pick’s disease. Therefore the reconstruction of common pathway with eight neurodegenerative diseases will add the significance of pre-existing pathways and disease targets.

References


Index Terms

- Computer Science
- Artificial Intelligence

Keywords

- Neurodegenerative disorders
- KEGG
- pathway studio 4.0