

ABSTRACT:

Alzheimer's disease is a severe illness affecting the elderly and its incidence increases markedly every year. To date, there is no effective treatment for this condition available, and the precise mechanism of the pathogenesis remains elusive (apart from the identification of certain genetic mutations as causes in a small percentage of cases). Also, no suitable animal model of this disease has been found so far. This paper provides a summary of non-transgenic models currently in use as well as newly introduced models, their characteristics and examples of their use in practice. It covers both rodent models mostly generated by external interventions to the brain tissue homeostasis of the experimental animals, and vertebrate species that have been reported to spontaneously develop Alzheimer's disease-like pathology: the so-called "natural models". Thus, this review might provide better orientation in the up-to-date progress of research of this disease.