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(54) Title: P53 POST-TRANSLATIONAL MODIFICATIONS AS MARKERS IN THE DIAGNOSIS AND PROGNOSIS OF A NEURODEGENERATIVE DISEASE

(57) Abstract: The present invention refers to p53 sequence and post translational modifications (PTMs) and to their use as biomarkers in the diagnosis of neurodegenerative disease and cognitive decline and/or in the prognosis of Alzheimer's disease at different stages and/or of neurodegenerative disease in a biological sample. The invention also provides for a 1) diagnostic method based on a highly accurate mass spectrometry analysis for the diagnosis of neurodegenerative disease, including Mild Cognitive Impairment (MCI), Alzheimer's disease (AD), fronto-temporal dementia (FTD), Lewi's Body (LB), and vascular dementia (VD) in a subject, by evaluating the PTMs to the said p53 linear sequence protein and possible cut of its full sequence specifically in human plasma of patients; and 2) prognosis of AD in CU and MCI patients.



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