

# Blood test shows promise for early diagnosis of Alzheimer's disease

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Elderly people exhibiting memory disturbances that do not affect their normal, daily life suffer from a condition called "mild cognitive impairment" (MCI). Some MCI patients go on to develop Alzheimer's disease within a few years, whereas other cases remain stable, exhibiting only benign senile forgetfulness. It is crucial to develop simple, blood-based tests enabling early identification of these patients that will progress in order to begin therapy as soon as possible, potentially delaying the onset of dementia.

A group of investigators, led by Professor Massimo Tabaton of the University of Genoa, Italy, have data that sheds light on this issue. The results of their research are published in the October issue of the *Journal of Alzheimer's Disease*.

The investigators report that the concentration in blood of amyloid beta "42," the toxic molecule that is believed to be the main cause of Alzheimer's disease, is, on average, higher in MCI cases that went on to develop Alzheimer's disease approximately three years later. The values of amyloid beta in blood vary considerably among the patient groups examined (MCI that develop [Alzheimer's disease](#); MCI stable; normal subjects).

"This variability is likely very important," Dr. Tabaton noted and went on to add, "but means that this needs further work before we can use this test for a definitive diagnosis." For example, the scientists are going to set up a test that picks up a variant of amyloid beta potentially more

specific of the disease.

More information: Cammarata, Sergio, Roberta Borghi, Luca Giliberto, Matteo Pardini, Valeria Pollero, Cristina Novello, Michele Fornaro, Antonella Vitali, Laura Bracco, Carlo Caltagirone, Paola Bossù, Patrizio Odetti and Massimo Tabaton. Amyloid- $\beta_{42}$  Plasma Levels are Elevated in Amnestic [Mild Cognitive Impairment](#). *J Alzheimers Dis* 18:2 (October 2009).

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