

Coming soon: A blood test for Alzheimer's disease?

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People with symptoms of Alzheimer's disease (AD), such as cognitive difficulties, behavior changes and mood swings, may wait months or even years to get a definitive diagnosis. That's because doctors lack a

simple, accurate and inexpensive test for it. But according to an article in *Chemical & Engineering News* (C&EN), the weekly newsmagazine of the American Chemical Society, researchers are getting much closer to developing the elusive blood test for AD.

About 5.5 million Americans are living with AD, according to the National Institute on Aging. Most do not seek treatment until their symptoms are well advanced, freelance contributor Jyoti Madhusoodanan writes. By then, substantial and irreversible damage to the brain has already occurred. Current tests for AD, such as [positron emission tomography](#) (PET) and [lumbar puncture](#), are invasive, cost thousands of dollars and aren't covered by most health insurance plans in the U.S. For nearly 20 years, researchers have been trying to develop a blood test for AD, but they've been stymied by the low amounts of potential biomarkers in blood.

Recently, new biomarkers and assays have moved a reliable blood test closer to the clinic. For example, instead of measuring the total amount of amyloid—the protein that forms clumps in the brains of AD patients—in blood, researchers can more accurately diagnose AD by looking at ratios of different peptides that form when amyloid breaks down. Sensitive new assays can detect smaller amounts of these peptides in blood. These and other developments have made many researchers optimistic that a [blood test](#) for AD will be available within the next five years. Such a test would not only aid in diagnosis, but might also help in the search for better AD treatments because it could identify participants for clinical trials.

More information: Jyoti Madhusoodanan. A Blood Test for Alzheimer's Disease Draws Near, *ACS Central Science* (2018). [DOI: 10.1021/acscentsci.8b00821](https://doi.org/10.1021/acscentsci.8b00821)

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