

BUILDING A ROBUST DIAGNOSTIC PATHWAY FOR ALZHEIMER'S DISEASE

Obtaining a timely clinical and accurate pathological diagnosis of Alzheimer's disease (AD) will ensure the most appropriate patients are identified for management and care.¹

Understanding Alzheimer's Disease

Alzheimer's disease (AD) is a progressive neurodegenerative disease that damages healthy cells in the brain causing cognitive impairment and affecting every-day ability to function.²

AD progresses along a **continuum** from **preclinical AD**, characterized by normal cognition and abnormal brain biomarkers, to **mild cognitive impairment** (MCI) and then clinically apparent dementia.⁵

Supporting earlier detection of AD



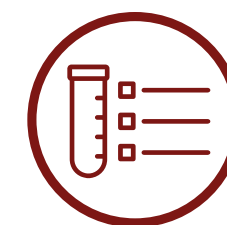
Diagnosing AD in the early stages of the disease (i.e., MCI) provides a greater opportunity to slow disease progression, allows patients and caregivers to plan for the future and may result in substantial cost savings.⁶

Evidence suggests that the presence of **amyloid plaques** and **tau neurofibrillary tangles** contribute to clinical decline in those living with the disease.⁸ These proteins may accumulate in the brain years before clinical symptoms are observed,⁵ offering a target for early diagnosis.

Initiating AD diagnosis



General Practitioners (GPs) serve as a frontline resource in identifying **cognitive changes** and initiating the appropriate steps for further evaluation of those with suspected AD.¹²



GPs may use brief **cognitive screening tools** and carry out **standard blood tests**, as part of routine assessments. These tools can help identify individuals who may need further evaluation.¹²

Clinical assessment & biomarker confirmation

Dementia specialists will carry out a full diagnostic assessment:¹⁴



1. A detailed **cognitive and functional assessment**



2. **Biological biomarkers** to identify amyloid plaques and tau fibrillary tangles to confirm the diagnosis.

These include:¹⁹



Lumbar puncture



Blood based biomarkers*



Neuroimaging (MRI, tau/amyloid PET scans)

*Currently under evaluation for clinical use.

** MRI: Magnetic resonance imaging. PET: Positron emission tomography.

THE FUTURE OF AD DIAGNOSTICS

The use of biomarkers combined with the assessment of clinical symptoms is key to ensure the timely and accurate diagnosis of AD in those exhibiting initial symptoms of the disease. This technique may add accuracy and confidence to physicians' diagnosis and subsequently impact patient management.

