

# Alzheimer's Disease Diagnosis Patient Journey



Alzheimer's disease (AD), the most common cause of dementia, progresses clinically over one to two decades. **The accumulation of amyloid and tau proteins in the brain, two pathological hallmarks of disease, can happen 10-20 years before the onset of memory decline and other symptoms.**<sup>1,2</sup>

Despite this evidence, **more than half of patients with dementia have never been formally diagnosed.**<sup>3</sup> Even once patients notice the early signs of cognitive issues, a **diagnosis can take two years or longer.**<sup>4</sup>

## What is Cognitive Impairment?

Cognitive impairment is when a person **has trouble remembering, learning new things, concentrating, or making decisions that affect their everyday life.** Cognitive impairment ranges from mild to severe. With mild impairment, people may begin to notice changes in cognitive function, but still be able to manage everyday activities.

## What is Dementia?

Dementia is **a general term for loss of memory, language, problem-solving and other thinking abilities that are severe enough to interfere with daily life.** Dementia has many potential causes, including the most common, Alzheimer's disease, which accounts for 60% to 80% of cases.<sup>6</sup>

## What is a Biomarker?

A biomarker is **an objective medical sign used to measure the presence or progress of disease, including analysis of one's own blood, tissues, heart rate, etc.** Biomarker evidence of Alzheimer's disease pathology has been shown to increase clinician confidence in diagnosis.<sup>7</sup>

## The Typical Diagnosis Journey

Every diagnosis journey is different, and patients may experience any of the following:



### Cognitive assessment by a general practitioner.

Assessments include various types of questions to test a patient's memory, orientation and awareness.<sup>5</sup>



### AD biomarker testing.

These tests are currently limited to specialty clinics, but have the potential to become more widely available to aid in a diagnosis of AD when evaluating patients with cognitive impairment.<sup>2</sup>



### Referral to a specialist.

If cognitive impairment is detected, further cognitive, functional and behavioral testing may take place as well as a magnetic resonance imaging (MRI) to rule out other causes of dementia and potentially diagnose AD.<sup>2</sup>

## Biomarker-Driven Diagnostics

After a cognitive assessment, biomarker diagnostics can be used to detect key signs of disease and aid in the confirmation of AD pathology including:

### BIOMARKER PET SCANS



A brain scan that visualizes and assesses the presence of abnormal brain protein buildup, a sign of AD.<sup>8</sup>

### BLOOD-BASED BIOMARKER TESTS



A blood test that identifies the presence of abnormal protein clumps in the brain, a sign of AD. Potentially offers a faster, less invasive and cost-effective method to identify the presence or absence of biomarkers to aid in the diagnosis of the disease.<sup>9,10</sup>

### CEREBROSPINAL FLUID (CSF) TESTS



A spinal tap test that measures levels of abnormal brain protein buildup, a sign of AD.<sup>11</sup>

*CSF is a clear fluid that surrounds the brain and spinal cord. Proteins made by brain cells can be detected in this fluid.<sup>12</sup>*

**CLINICAL ASSESSMENT AND PATHOLOGY CONFIRMATION** of AD are important because they may lead a patient to initiate informed disease management at an earlier stage and allow for earlier consideration of available treatment options to slow disease progression.<sup>2</sup>

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