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An Early Diagnosis of Alzheimer's Disease:

Why you should care

Introduction

Traditionally, **AD treatment has focused on symptom management**, rather than addressing the underlying mechanisms of disease or other factors important to patients and their families.

However, the landscape is changing. There is renewed emphasis on identifying patients with early stage AD for both current and future treatment options.

Why early diagnosis matters

1) More treatment options

- **Anti-amyloid MABs are approved for use in AD at the MCI and mild dementia stages,** and have been shown to slow progression of cognitive impairment[5]
- **Cholinesterase inhibitors are most commonly indicated in mild-to-moderate AD dementia[6]**
- Potential **future treatments are prioritizing earlier intervention**

127 AD drugs currently in the pipeline[1*]

30% Of these, 30% are being trialed in MCI and mild AD[1*]

2) Early diagnosis allows people to make:

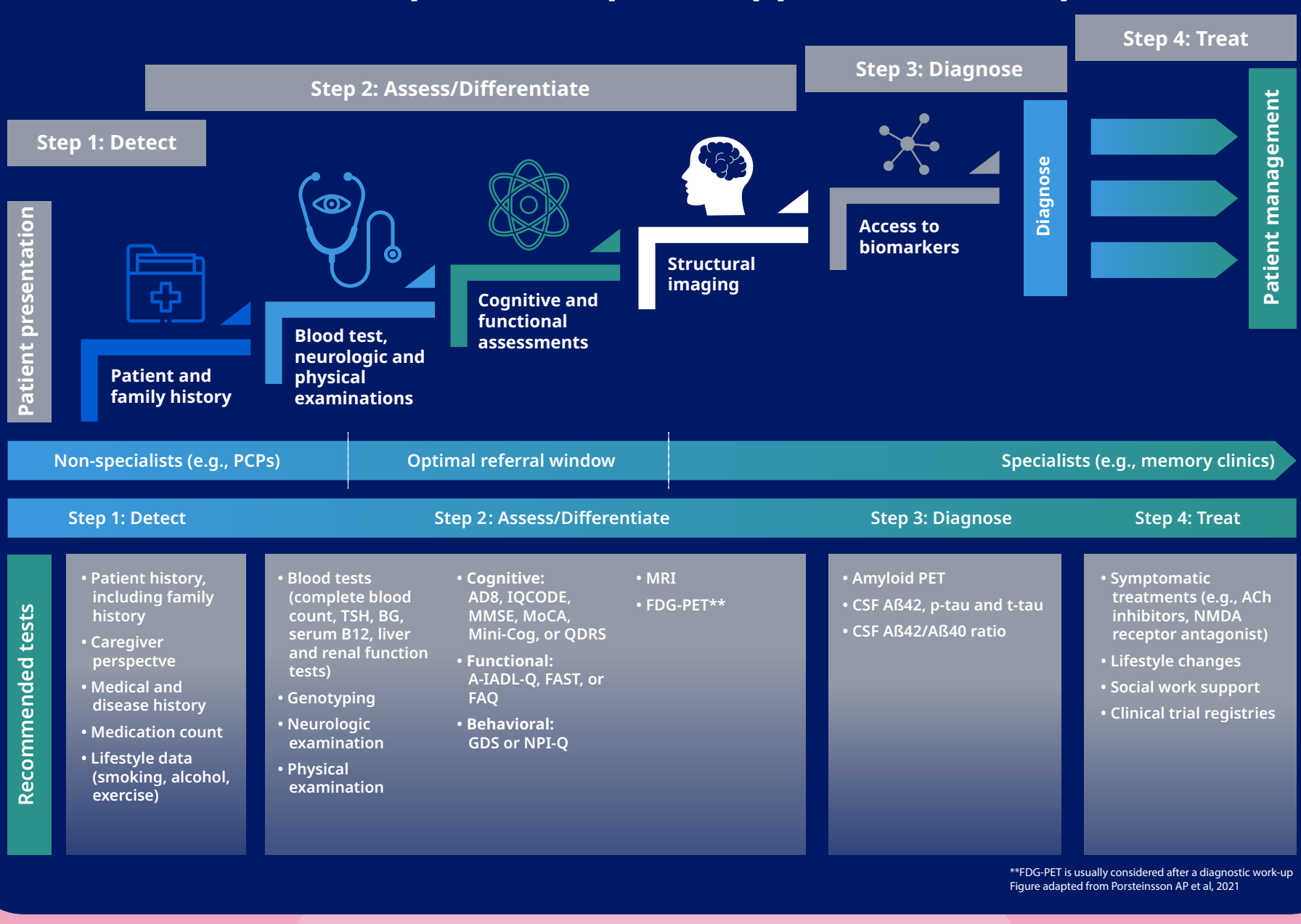
- Decisions regarding retirement, finances, and safety[8]
- Lifestyle changes that could modify risk factors for AD, or preserve quality of life[9]

3) Patients and physicians want earlier diagnosis

85% • In a survey of 2,434 adults in the USA, **85%** said they would want to know if they had AD early[7]

90% • In a survey of 801 primary care physicians, **90%** said it is important to diagnose MCI due to AD[7]

AD is complex. A stepwise approach can help.



**FDG-PET is usually considered after a diagnostic work-up
Figure adapted from Porsteinsson AP et al, 2021

Establishing an etiology

MoCA and MMSE testing are commonly used to detect signs of cognitive impairment, but an **etiology of the cognitive impairment needs to be established.[10]**

However, currently available tools to confirm an AD diagnosis have some limitations:
- Assessment of CSF biomarkers is invasive[11]
- PET imaging is resource intensive and access can be limited[11]

Figure adapted from Alzheimer's Association, 2022

New diagnostics are coming

Early data suggest that blood-based approaches currently being validated could:

- Have a sensitivity and specificity of ≥90% in patients with AD with cognitive symptoms[12]
- Reduce the need for CSF or PET imaging by 83%[12]

Key Takeaways

- Earlier diagnosis of AD allows patients the opportunity for more management options
- The diagnostic and treatment landscape for AD is rapidly evolving

Abbreviations:
ACh: acetylcholine; AD: Alzheimer's disease; AD8: Ascertain Dementia 8; A-IADL-Q: Amsterdam IADL: Instrumental Activity of Daily Living Questionnaire; BG: blood glucose; CSF: cerebrospinal fluid; FAST: Functional Assessment Staging Tool; FAQ: Functional Activities Questionnaire; FDG: fluorodeoxyglucose; GDS: Geriatric Depression Scale; IQCODE: Informant Questionnaire on Cognitive Decline in the Elderly; MCI: mild cognitive impairment; MAbs: monoclonal antibodies; MoCA: Mini-Cog: Mini Cognitive Assessment Instrument; Montreal Cognitive Assessment; MMSE: Mini-Mental State Examination; Mini-Cog: Mini Cognitive Assessment Instrument; NPI-Q: Neuropsychiatric Inventory Questionnaire; PCP: Primary care physician; PET: positron emission tomography; p-tau: phosphorylated tau;TSH: thyroid-stimulating hormone; QDRS: Quick Dementia Rating System; t-tau: total tau.

* Investigational compounds are not approved for the treatment of Alzheimer's disease. Safety and efficacy are not established. There is no guarantee that investigational compounds will become commercially available for the use(s) under investigation

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