



Advancing the Science: The Latest in Alzheimer's and Dementia Research

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The Alzheimer's Association leads the way to end Alzheimer's and all other dementia — by accelerating global research, driving risk reduction and early detection, and maximizing quality care and support.



Our dual mission symbol represents the abstract forms of a human head and a beaker, emphasizing the people and the science behind our cause.



Care & Support



Advocacy



Education & Awareness



Research



Diversity, Equity & Inclusion

Our Time Today

1 About Alzheimer's & Dementia

2 Early Detection & Diagnosis

3 Treatment

4 Risk Reduction

5 Alzheimer's Association Initiatives
& How You Can Get Involved

A microscopic view of neurons, showing their cell bodies and branching processes, rendered in a blue and purple color scheme. The neurons are interconnected, forming a complex network. The central neuron is the most prominent, with several long, thin processes extending outwards. The background is a soft, out-of-focus blue.

About Alzheimer's & Dementia

2024 ALZHEIMER'S DISEASE FACTS AND FIGURES



NEARLY
7 MILLION
AMERICANS ARE LIVING
WITH ALZHEIMER'S

THE LIFETIME RISK FOR
ALZHEIMER'S AT AGE 45 IS

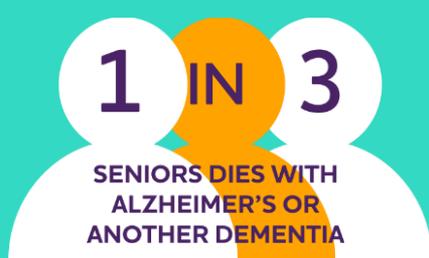


Older Black Americans are
2X AS LIKELY
to have Alzheimer's or other
dementia than Whites.

BETWEEN 2000 AND 2021, DEATHS
FROM HEART DISEASE HAVE
DECREASED 2.1%



WHILE DEATHS FROM
ALZHEIMER'S DISEASE HAVE
INCREASED 141%



IT KILLS MORE THAN
BREAST CANCER AND
PROSTATE CANCER

— + —
COMBINED



Older Hispanic Americans are
1.5X AS LIKELY
to have Alzheimer's or other
dementia than Whites.

What is Dementia?

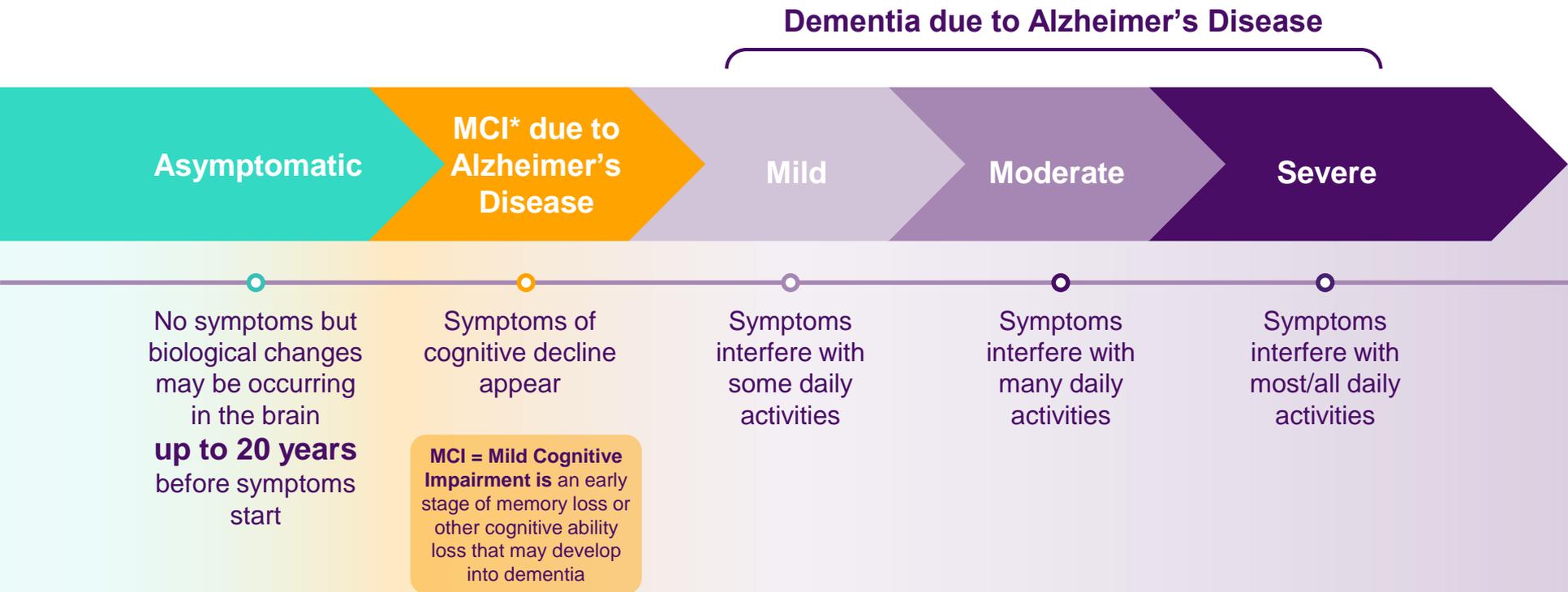
- Dementia is a collection of symptoms related to cognitive decline
- This can include
 - Cognitive symptoms
 - Behavioral symptoms
 - Psychological symptoms
- **Alzheimer's is the most common cause of dementia**
- Not everyone with cognitive decline has dementia. Some causes of cognitive decline are reversible.

TYPES OF DEMENTIA

Dementia is an umbrella term for loss of memory and other thinking abilities severe enough to interfere with daily life.

- Alzheimer's
- Vascular
- Lewy body
- Frontotemporal
- Other, including Huntington's
- * **Mixed dementia:** Dementia from more than one cause

Alzheimer's Disease is a Continuum





Early Detection & Diagnosis

Benefits of an Early and Accurate Diagnosis

Medical Benefits

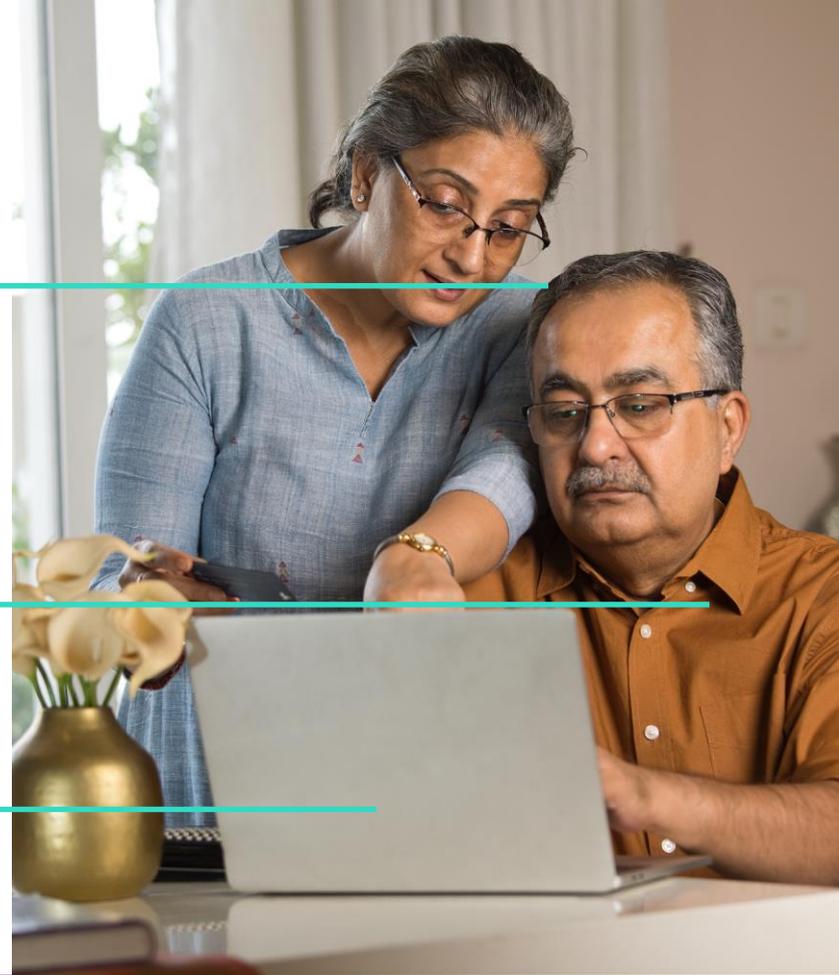
- Access to current treatments
- An opportunity to participate in clinical trials
- A chance to prioritize health, including making lifestyle changes

Emotional and Social Benefits

- More time to plan for the future, access resources
- Time to plan end-of-life decisions

Financial Benefits

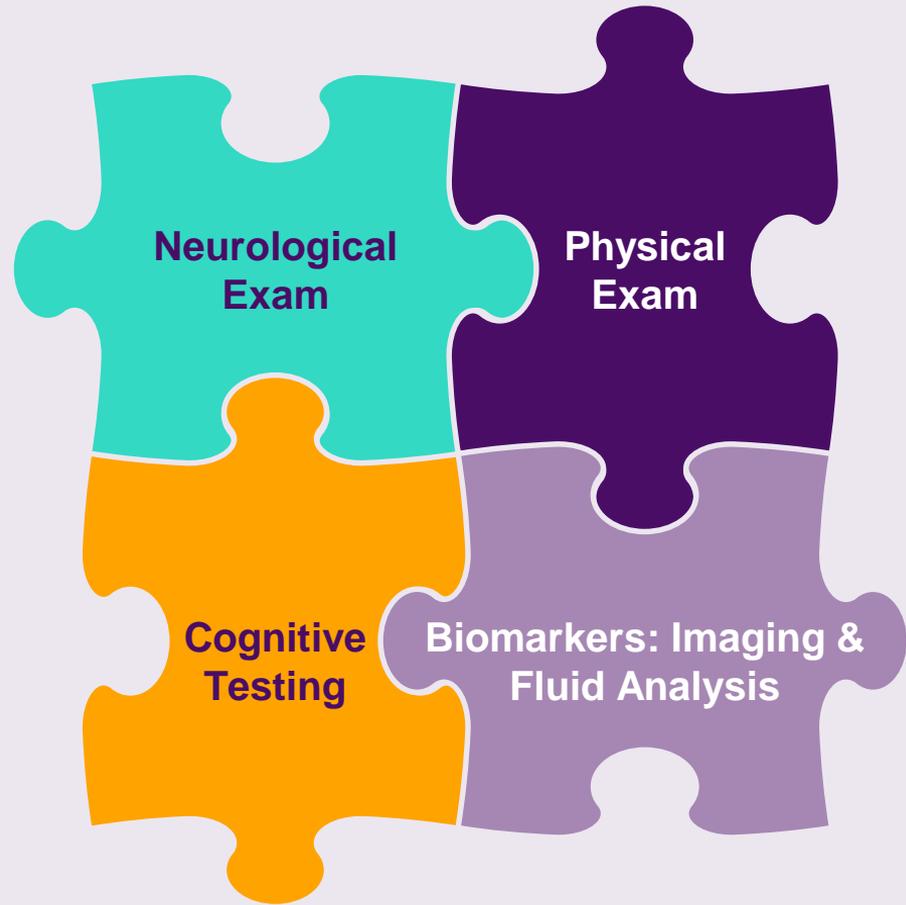
- Cost savings for families
- Cost savings for the U.S. government



How is Alzheimer's Currently Diagnosed?

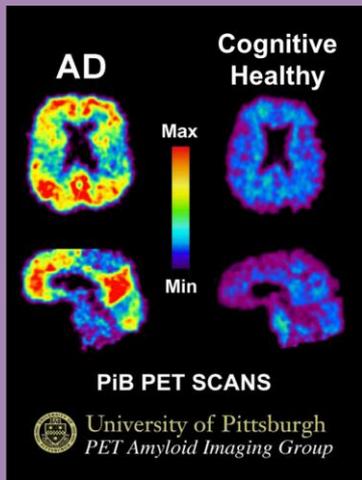
There is no single test that can determine if a person is living with Alzheimer's disease or another dementia.

Doctors use a combination of diagnostic tools combined with medical history to make an accurate diagnosis.



What is a Biomarker?

A biomarker is a biological marker that measures change.



Biomarkers are reliable predictors and indicators of disease and disease progression.

For example:

- Glucose is a biomarker for insulin resistance and diabetes.
- Cholesterol is a biomarker for heart disease



Uses of biomarkers in Alzheimer's disease include:

Diagnostic: used to determine diagnosis

Enrichment: used to determine entry into a clinical trial

Prognostic: used to determine course of illness

Predictive: used to track outcomes and side effects of treatments

Biomarkers

A New Frontier in Alzheimer's Detection, Diagnosis and Research

Cerebrospinal fluid (CSF) analysis can use to detect amyloid in the CSF (taken by a lumbar puncture), which can be predictive of changes in the brain.

There are several emerging **blood tests** on the market that can indicate presence of Alzheimer's markers years before symptoms emerge.

Blood tests for Alzheimer's should be prescribed by a doctor and followed by other methods of diagnosis.



Positron emission tomography (PET) scan results aid doctors in diagnosing and treating memory conditions. There are FDA approved PET scans that measure amyloid and tau.

Magnetic Resonance Imaging (MRI) can help doctors rule out other symptoms that may be causing dementia symptoms, as well as track treatment side effects.

Other **emerging biomarkers** include:

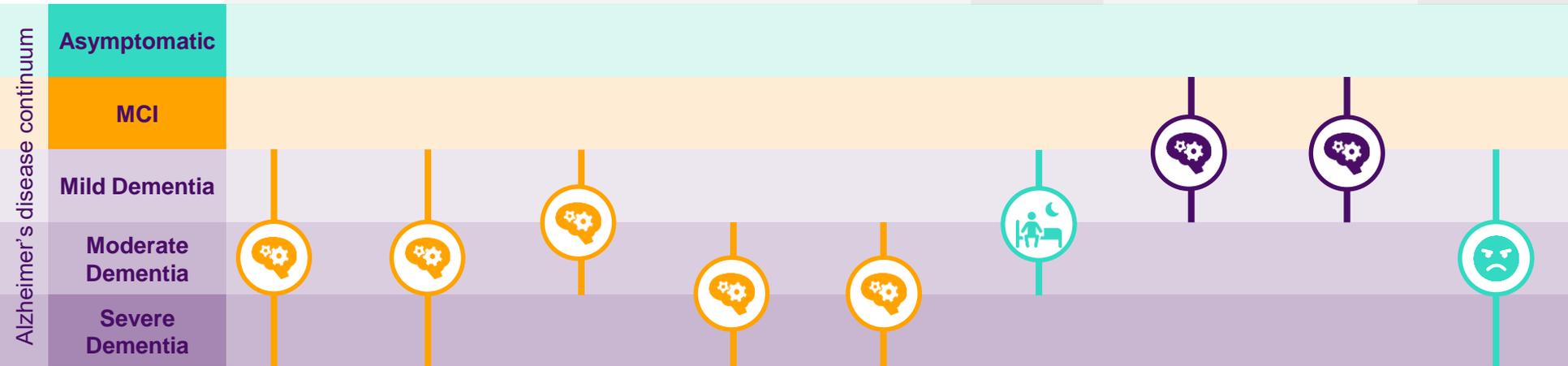
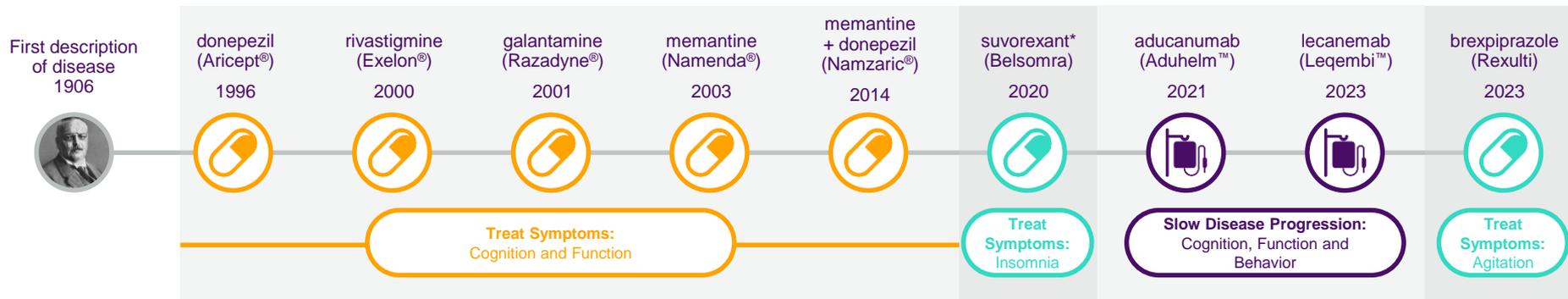
- examining skin and saliva to indicate early biological changes in the brain
- retinal imaging

which show promise to be low cost, accessible detection methods for Alzheimer's.



Treatment

FDA-Approved Therapies for Alzheimer's



An elderly woman and man are practicing Tai Chi in a room. The woman is on the left, wearing a light blue jacket, and the man is on the right, wearing a dark blue jacket. They are both holding their hands out in front of them, palms facing forward. The room has a large potted plant on the left and a window with a wooden frame in the background. The text "Risk Reduction" is overlaid in white on the image.

Risk Reduction



Reducing Risk of Dementia

- Positive, everyday actions can make a difference in brain health, even lowering the risk of cognitive decline and possibly Alzheimer's and dementia.
- Up to **40%** of dementia cases could be prevented or delayed by targeting modifiable risk factors.
- Research suggests **combining multiple healthy factors** may be the most impactful.
- Nonmodifiable risk factors include age, genetics and sex/ gender/ race/ ethnicity.



Alzheimer's Association Initiatives & How You Can Get Involved

The Alzheimer's Association is the world's leading nonprofit funder of Alzheimer's and dementia research.

currently active

\$405M



projects

1100+



countries

56



Research In Your Community



Washington

Total awards: 47
Year: 1993-2024



Total amount:
\$ 8.8 M



University of Washington,
Washington State University,
Seattle Institute for
Biomedical and Clinical
Research, and others



In Summary...

- The Alzheimer's Association is the global leader for Alzheimer's and dementia science
- Exciting time in research
- New tools for detection and diagnosis
- New approved treatments and more in the pipeline
- Strategies for risk reduction
- There is HOPE in research



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& Support**



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Research Resources



Association's Website | [alz.org](https://www.alz.org)



Research at the Association | [alz.org/research](https://www.alz.org/research)



Join a Clinical Trial | [alz.org/trialmatch](https://www.alz.org/trialmatch)



Contact the 24/7 helpline | 800-272-3900



WALK TO
END
**REGISTER
TODAY.**

WALK TO
END
ALZHEIMER'S
ALZHEIMER'S ASSOCIATION

WALK TO
END
ALZHEIMER'S
ALZHEIMER'S ASSOCIATION

**JOIN THE FIGHT
FOR
ALZHEIMER'S
FIRST
SURVIVOR.**



Tri-Cities Walk to End Alzheimer's
October 19th
10am at John Dam Plaza



THANK YOU!

Any Questions?

