



Welcome to The Memory Class

An Introduction to Memory Problems
and the Memory Center

Agenda For Today's Class

- ▶ Importance of the Questionnaire
- ▶ Description of the Memory Center Program
- ▶ Advanced Care Planning
- ▶ Lecture about Memory Impairment

QUESTIONNAIRE: Why is it important?

- ▶ History, is critical to making a diagnosis of a memory problem.
- ▶ There is no lab test or brain image that can diagnose dementia.
- ▶ You are registered for today's visit by turning in your completed questionnaire. Your Memory Center visit is scheduled from the questionnaire.

What is the Memory Center?

We are a multidisciplinary team of:

- ▶ Geriatricians, Nurse Practitioners, Social Workers and Pharmacists.
- ▶ We evaluate patients for memory problems.
- ▶ Give recommendations for treatment to PCP and other providers.
- ▶ We offer ongoing support for patients with dementia and their families, ongoing symptoms management if needed.

Location

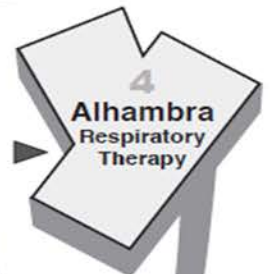
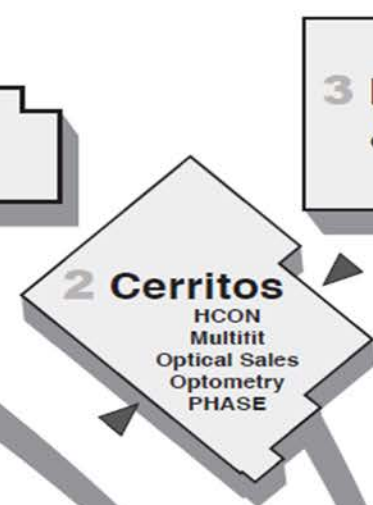
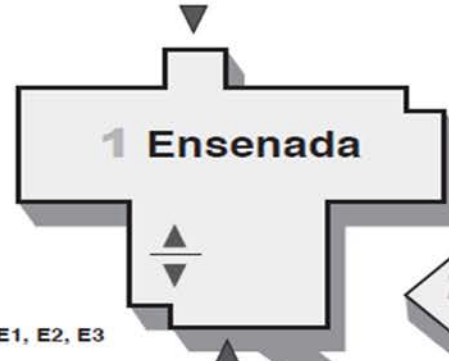
- ▶ 200 Muir Rd
Martinez, CA 94553
- ▶ Hacienda Building, 2nd Fl
- ▶ 925-313-4577



Martinez Way Finding

Administration: (925) 372-1355

- First Floor**
- EKG
- Intusion
- Pelvic Pain
- Women's Health
- Second Floor**
- Adult Injection
- Adult Medicine
- Family Medicine
- Pedi Injection
- Pediatrics
- Third Floor**
- Adult Injection
- Adult Medicine
- Conference Rooms E1, E2, E3
- Dermatology
- Health Education
- Member Services Pharmacy

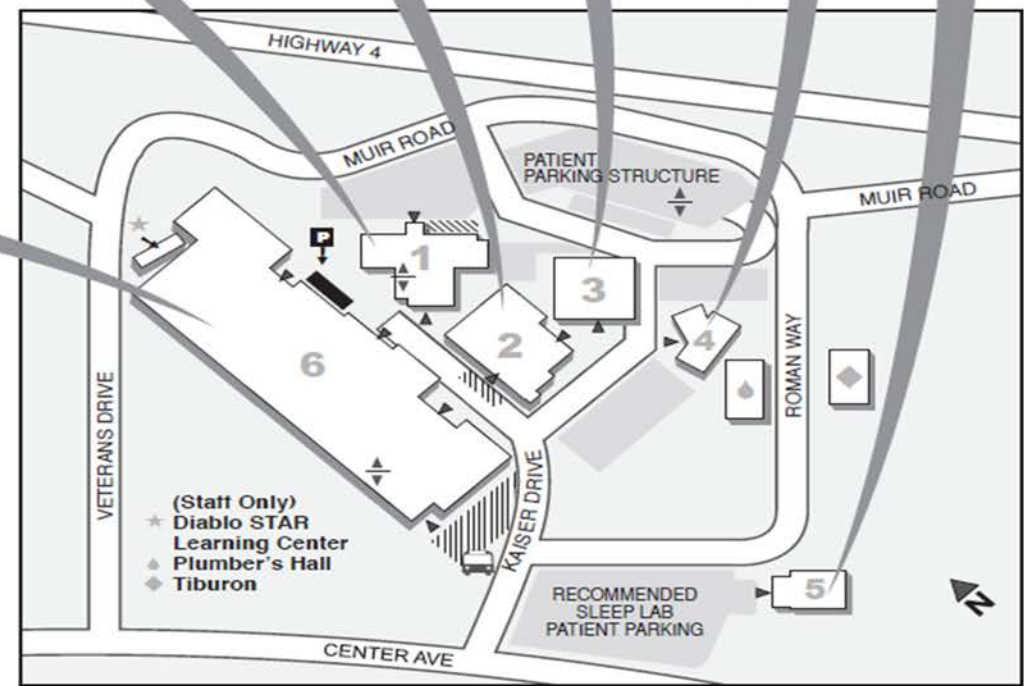


- First Floor**
- Acupuncture
- Administration
- Cateteria
- Chronic Pain
- Conference Rooms
- H1A/B, H2, H12-H16
- Diagnostic Imaging/Radiology
- Bone Density
- Breast Imaging Center
- Ultrasound
- Endocrinology
- Gift Shop
- Lab
- Occupational Health
- Physical Medicine & Rehabilitation
- Physical Therapy
- Release of Medical Information (ROMI)
- Special Procedures Center
- Spine Clinic
- Second Floor**
- Memory Center
- Peritoneal Dialysis

Register Here, 1st floor

- Elevator
- Entrance/Exit
- Occupational Health/Physical Therapy Permit Parking
- Bus Stop
- Disabled Parking
- Patient Parking

Map not to scale. 1/23/18



Memory Center Program: 4 Steps

Step 1: Memory Orientation Class

- ▶ Provide information to patients/families about memory loss and how normal age related memory loss is different from dementia.
- ▶ Through the questionnaire we gather information for the memory evaluation.

Memory Evaluation

Step 2: Individual Memory Evaluation

- ▶ 75 minute individual appointment with Memory Care Team to evaluate memory, provide a diagnosis, offer community resource information, and prescribe medication for memory and/or agitation if needed
- ▶ Must bring :
 - ▶ All prescription and over-the-counter medication bottles that you are currently taking
 - ▶ Family member/caregiver/friend who is familiar with your situation
 - ▶ Copy of advance care directive

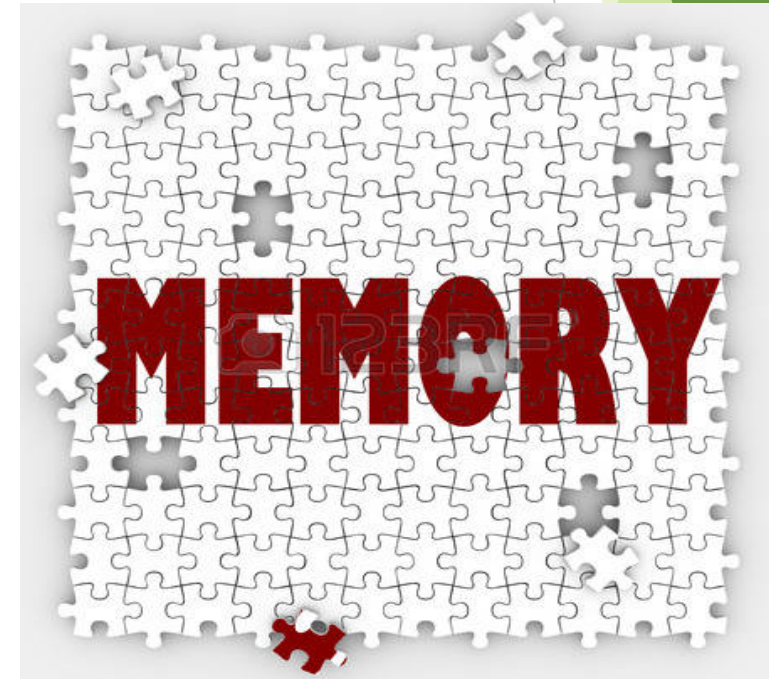
Individual Memory Evaluation: Step 2

- ▶ **Patient History** - obtained from questionnaire and interview with friends/family
- ▶ **Review of Medical Chart** - look for other medical problems, family history, labs, brain scans, medications
- ▶ **Memory Evaluation**
- ▶ **Physical and neurologic exam**
- ▶ **Rule out dementia-mimicking conditions**
 - ▶ (depression, delirium, medication side effects)
- ▶ **Neuropsychology evaluation** (if appropriate)
- ▶ **There is only one definitive test - AUTOPSY !**



At the end of Memory Evaluation:

- ▶ Diagnosis is given in most cases, unless further testing is needed
- ▶ Creation of a Plan of Care
- ▶ Referral to appropriate supportive services



Step 3 and Step 4 Classes

AFTER DEMENTIA DIAGNOSIS:

Step 3: Dementia Basics Class

- ▶ Help prepare for the changes ahead by discussing the stages of dementia, treatment, and legal documents for advance care planning

Step 4: Caregiver Skills Class

- ▶ Provide information regarding how to deal with late stage dementia behaviors to support caregivers

Advanced Health Care Directive

A legal document that does 2 important things.

- ▶ It names a person to make health care decisions for you if you cannot.
- ▶ It allows you to state your wishes for care should you become seriously ill or injured.

It must be notarized OR witnessed by two unrelated people to be valid.

You may have one if you have a Trust or Will.

Lecture Outline

1. Memory loss: What is normal and what is abnormal?
2. Mild cognitive impairment
3. Depression and delirium
4. Dementia:
 - ▶ Definition
 - ▶ How we diagnose it
 - ▶ Types/ Alzheimer Disease
 - ▶ Treatment

Memory loss: Normal vs Abnormal???

- ▶ Age-Appropriate memory change
 - ▶ Mild decline in memory is normal as we age
 - ▶ “Senior moments”
 - ▶ Due to mild loss of some neurons (brain cells) and overall decreased brain volume
 - ▶ Usually does not affect daily function
- ▶ Use of lists, calendars, and other reminders may be helpful
 - ▶ We encourage their use



"I remember the face but I've forgotten your name."

Mild Cognitive Impairment (MCI)

- ▶ More pronounced memory deficits than normal but **the ability to function in daily life is still preserved.**

Why is it important to identify MCI?

- ▶ Studies have shown that 1/3 of patients improve, 1/3 remain stable, and 1/3 will develop Dementia
 - ▶ To find and treat reversible causes and decrease the risk of developing permanent decline in brain function
 - ▶ To provide education, preventive interventions, and lifestyle modifications which may **improve quality of life for patients and families**

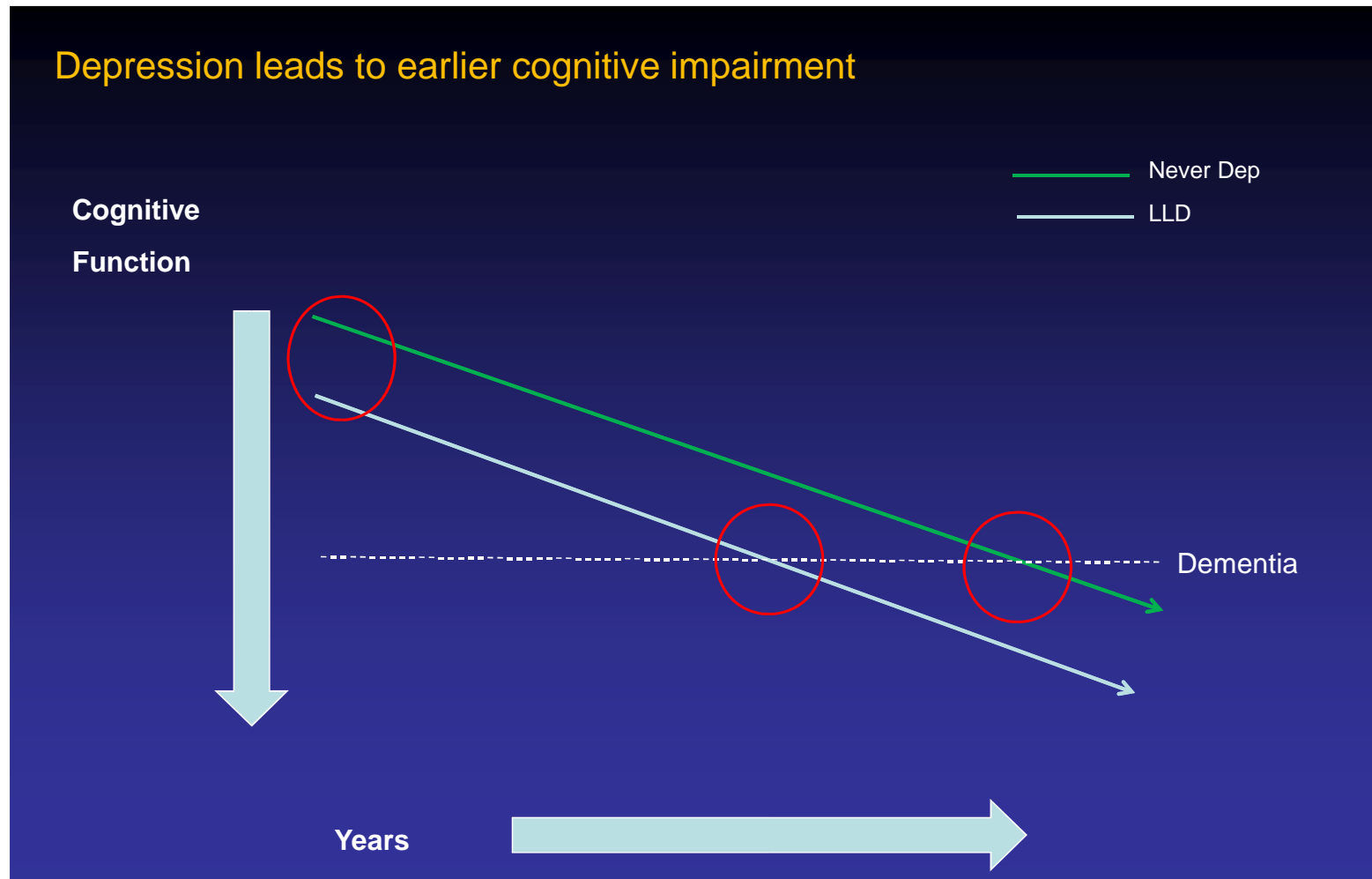
MCI: Reversible Causes

1. Untreated depression or other psychiatric disorders
2. Vitamin B12 deficiency
3. Electrolyte abnormalities (sodium, calcium, magnesium)
4. Abnormal thyroid function
5. Sleep disorders (including obstructive sleep apnea)
6. Alcohol toxicity
7. Certain medications (including sedatives and opiates)
8. Unaddressed issues with hearing or vision

Depression/Anxiety May Mimic Dementia

- ▶ Patients with depression:
 - ▶ More likely to complain about memory loss than those with dementia
 - ▶ Demonstrates signs of poor concentration, slow information processing, and poor effort on testing (“I just can’t do this”)
- ▶ Depression and dementia may occur at the same time
- ▶ It is important to reevaluate someone after depression is treated
- ▶ Studies suggest that Depression is a major risk factor for Dementia

Late Life Depression (LLD) is a Risk Factor for Dementia



Delirium

- ▶ An acute/temporary state of confusion
- ▶ Possible causes: certain medications, excessive alcohol, acute illness, and hospitalization
- ▶ Delirium is reversible. However, it can severely disrupt medical and overall recovery, which may lead to functional and cognitive decline. Delirium does not always mean that patient has a Dementia
- ▶ Patients with Dementia have a higher risk of developing Delirium

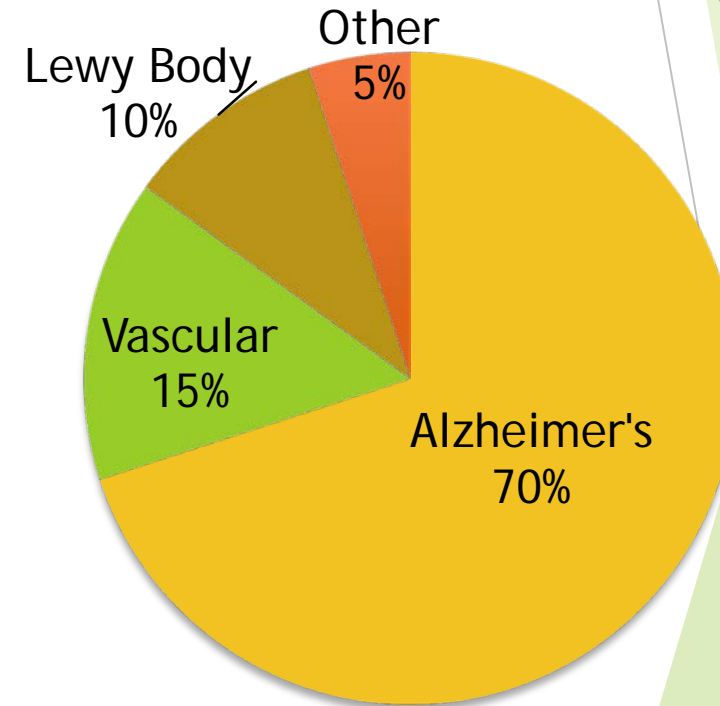
What is Dementia?

- ▶ It is a general term for a decline in memory and other thinking skills
- ▶ Has a gradual onset and worsens over time
- ▶ Must be significant enough to interfere with daily function
- ▶ Must be global, affecting more than one function:
 1. Memory
 2. Speech and Language
 3. Orientation
 4. Calculation
 5. Judgment
 6. Planning and Problem solving



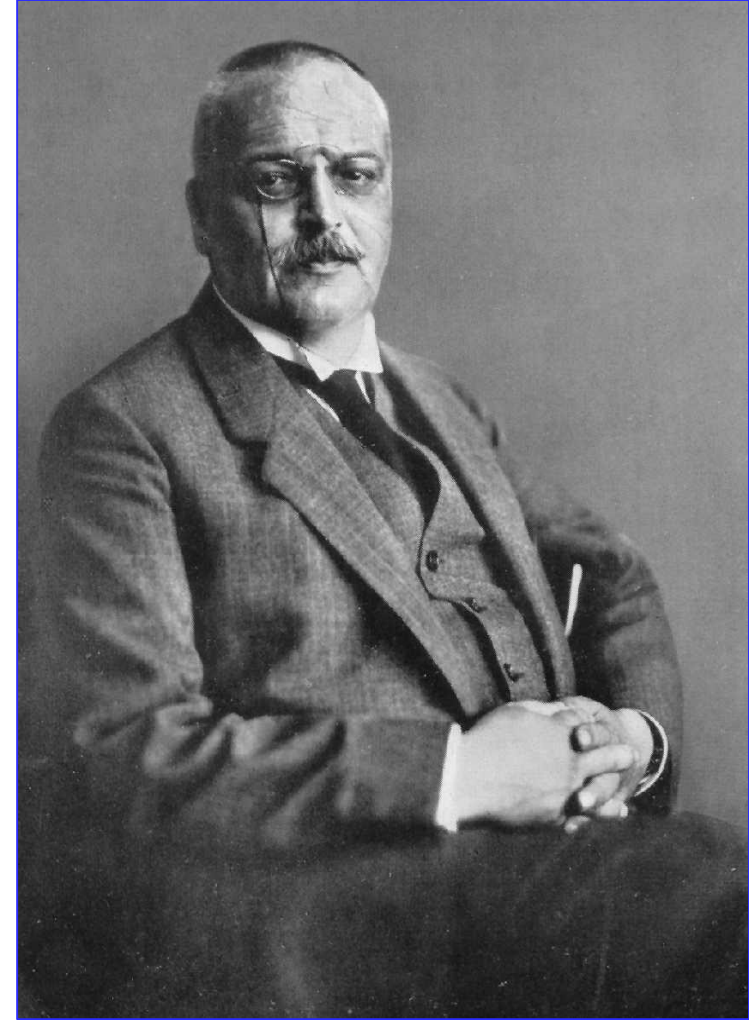
Types of Dementia

- ▶ Alzheimer's disease
- ▶ Vascular (multi-infarct) dementia
- ▶ Lewy body dementia
- ▶ Other types
 - ▶ Frontotemporal dementia
 - ▶ Parkinson disease with dementia (PDD)
 - ▶ Huntington's disease (HD)
 - ▶ Creutzfeldt-Jacob disease
 - ▶ Alcoholism
 - ▶ HIV related encephalopathy
 - ▶ Traumatic Brain Injury
- ▶ Often more than one type co-exist



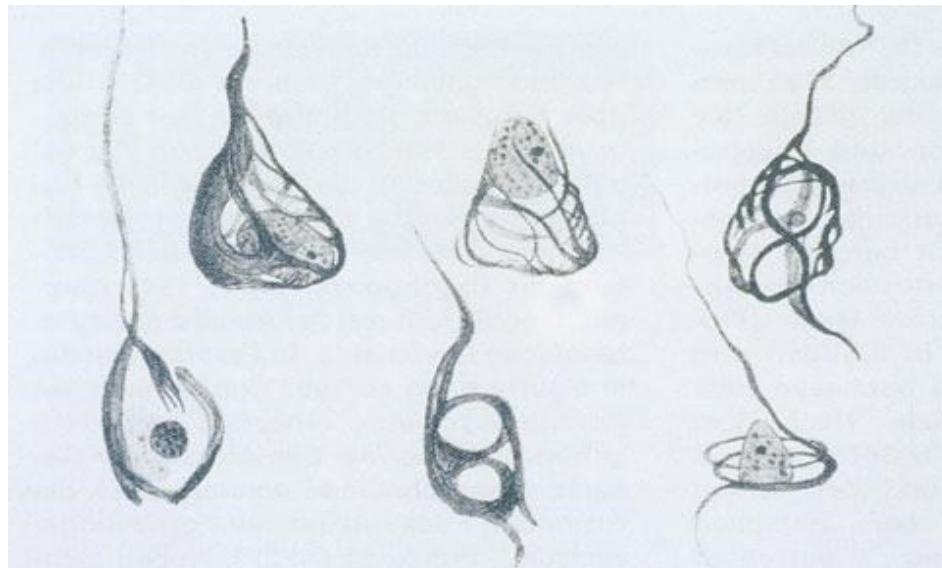
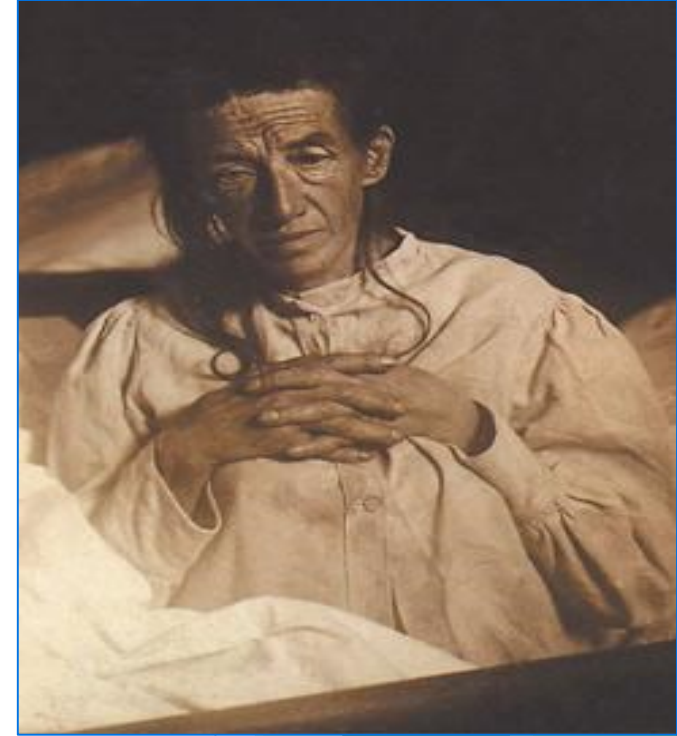
Alzheimer's Disease: History

- ▶ Known since 1901
- ▶ Dr. Alois Alzheimer was a Neurologist, Psychiatrist and Pathologist
- ▶ First patient was Augusta Deter, a 51-year-old woman in Germany
 - ▶ Brought to a psychiatric hospital after a several-month history of progressive memory impairment and severe behavioral disturbances (agitation and paranoia)



Alzheimer's Disease: History

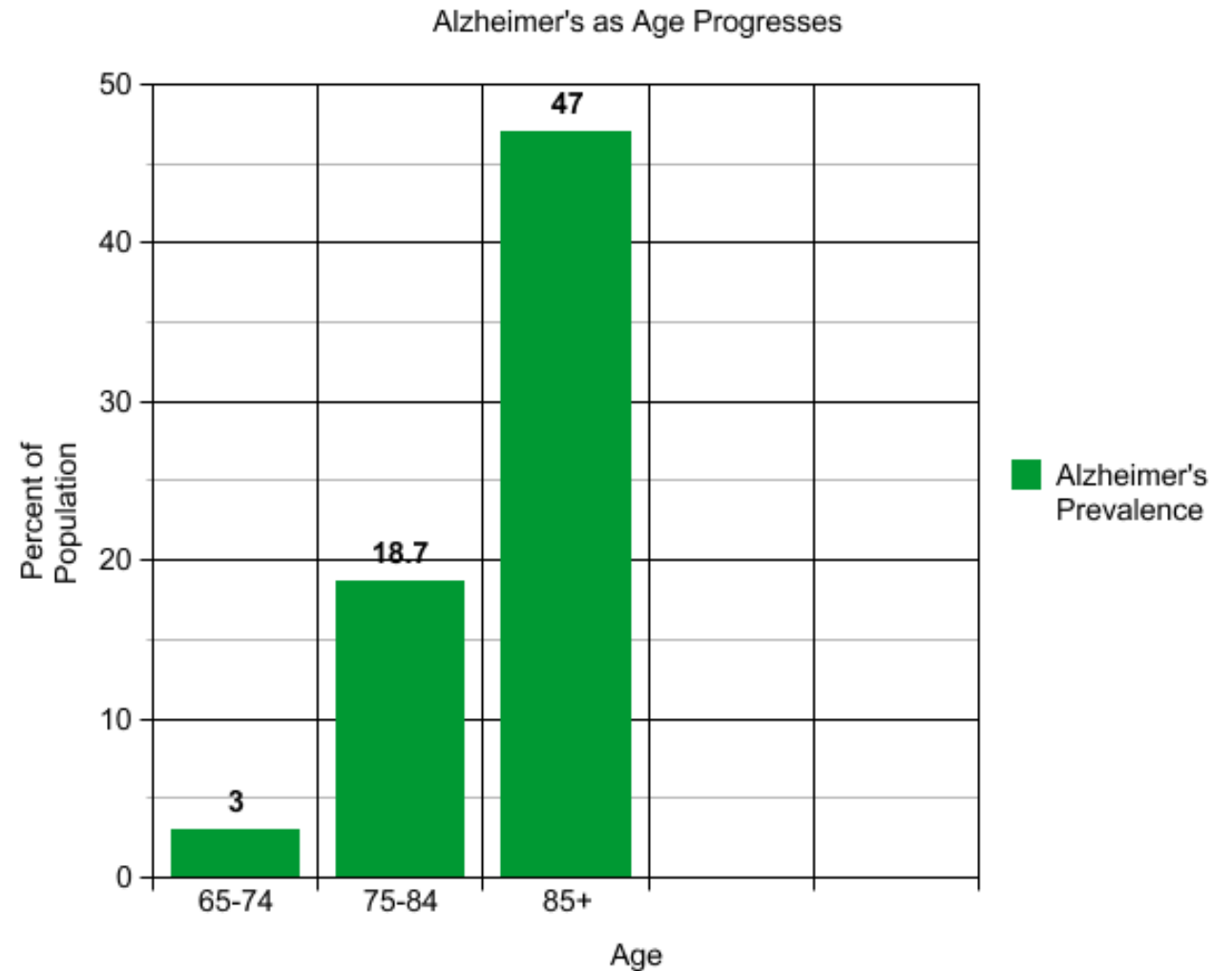
- ▶ Augusta was followed for 4 years
 - ▶ Dr. Alzheimer charted her downward course of increasing cognitive impairment, psychiatric disturbances, and eventual vegetative state before death
- ▶ Brain autopsy showed **Plaques and Tangles**, the pathologic hallmark of the disease



Original drawing of Alois Alzheimer (1864-1915)

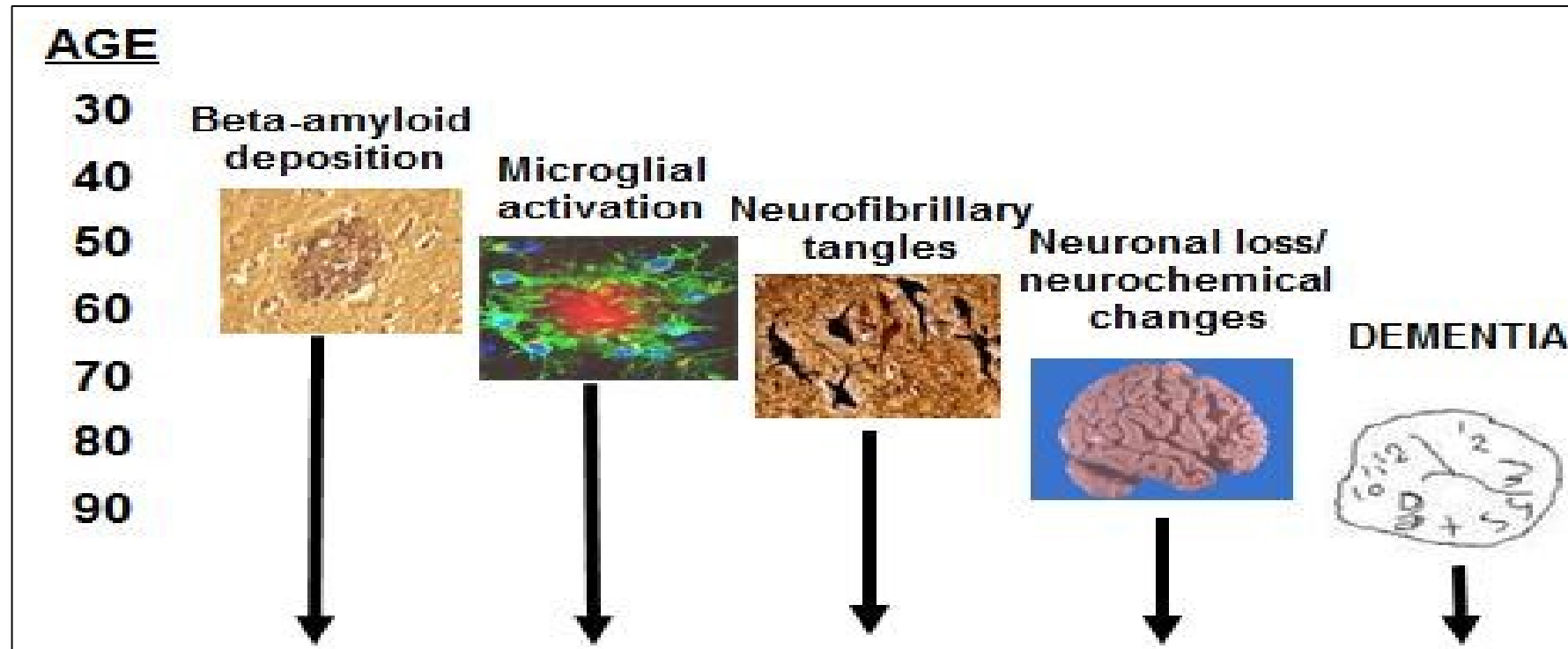
Alzheimer's Disease: A Disease of Aging

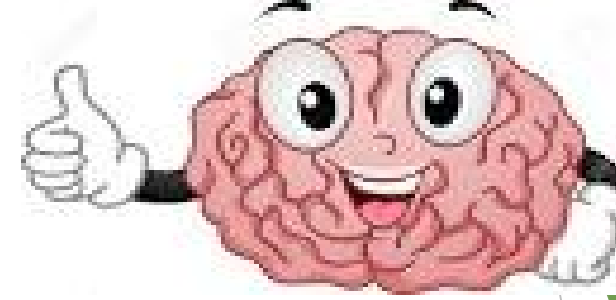
- ▶ Age (greatest risk factor)
 - ▶ Alzheimer's prevalence will double in the next 30 years
- ▶ Genetics <5%
- ▶ High blood pressure, blood glucose, cholesterol
- ▶ Depression/stress
- ▶ Physical and mental inactivity



Stages of Alzheimer's Dementia: on cellular level

- ▶ Changes in the brain start at least 20 years before symptoms noticeable





A Brain-Healthy Lifestyle

- ▶ Regular physical exercise (brisk walking 30 min, 4-5 times a week) can delay onset and progression.
- ▶ Low-fat diet rich with fruits and vegetables, fish or nuts (Mediterranean diet)
- ▶ Regular mental and social stimulation (adult education programs, brain games, music, theater, volunteer work, socializing with family and friends)
- ▶ Reduce risk factors (control blood pressure, diabetes, cholesterol, stress reduction, stop smoking)
- ▶ Always use protective headgear when engaging in sports

What is *My Go4Life*?

Online Fitness Tools help you to:

- ▶ Set fitness goals
- ▶ Track your progress
- ▶ Get coaching tips
- ▶ Celebrate your success
- ▶ It's free!

TV program : "Sit and Be Fit"



Memory Enhancers

| Drug | Brand Name | Indication | Year Approved |
|--------------|------------|------------------------|-----------------------------|
| Tacrine | Cognex | Mild-moderate AD | 1993 since taken off market |
| Donepezil | Aricept | Mild-severe AD | 1996 |
| Rivastigmine | Exelon | Mild-severe AD; PDD | 2000 |
| Galantamine | Razadyne | Mild-moderate AD | 2001 |
| Memantine | Namenda | Mod-severe AD | 2003 |

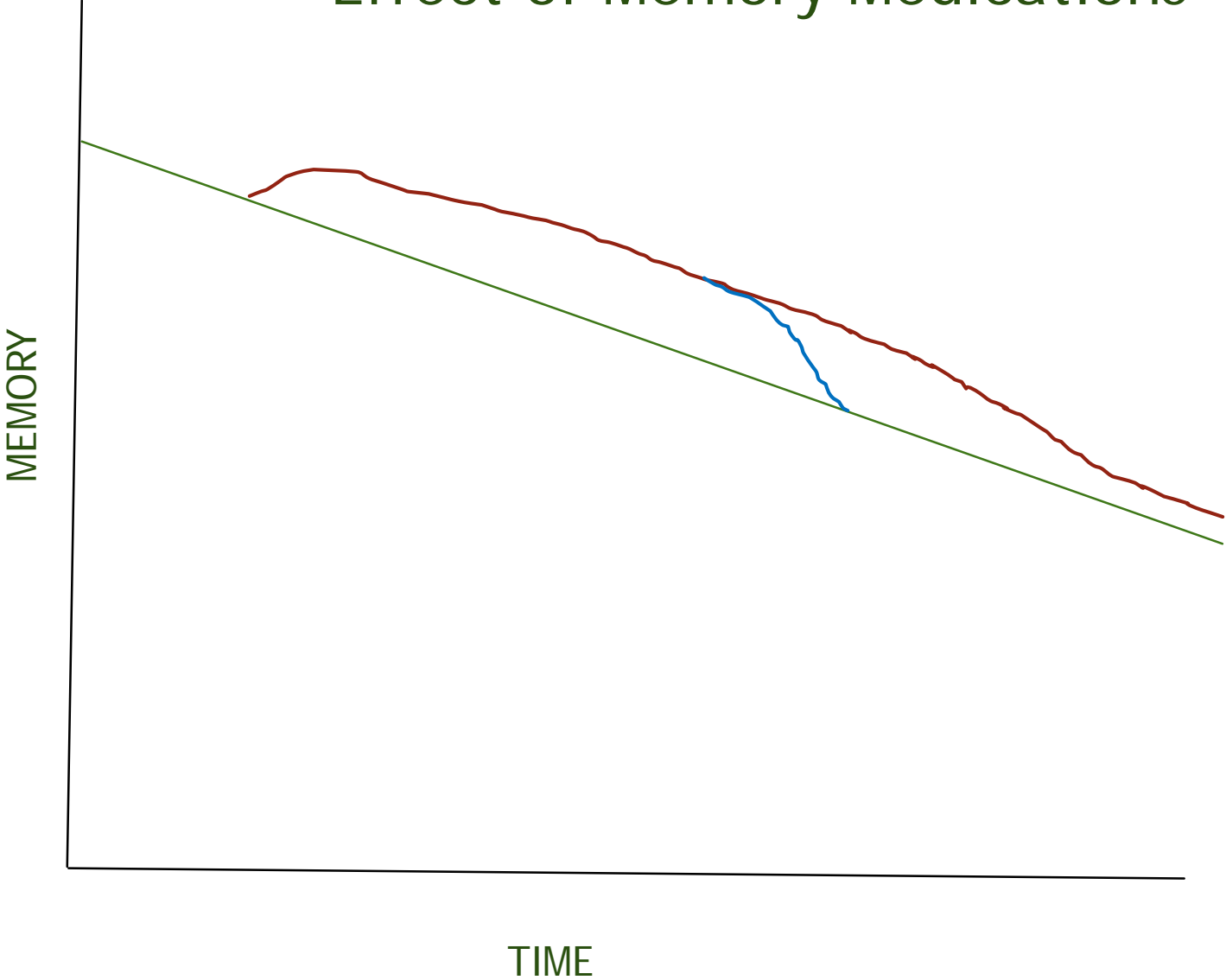
Memory Enhancers: Cholinesterase Inhibitors

- ▶ Prevent the breakdown of **acetylcholine**, a chemical messenger important for learning and memory
- ▶ Works by **supporting communication among nerve cells**
 - ▶ **DONEPEZIL = ARICEPT**
 - ▶ **GALANTAMINE = RAZADYNE**
 - ▶ **RIVASTIGMINE = EXELON**
- ▶ For mild to severe dementia
- ▶ Only Aricept is approved for all stages

Memory Enhancers: NMDA Receptor Antagonist

- ▶ Regulates the activity of **Glutamate**, a different chemical messenger involved in learning and memory
- ▶ It is proposed to be neuroprotective- however data are lacking
 - ▶ MEMANTINE = NAMENDA
- ▶ Approved for moderate to severe stages of AD

Effect of Memory Medications



Positive Response to Medications:

- ▶ Delay in the worsening of symptoms for 6-12 months, sometimes longer
- ▶ Symptoms may improve **slightly**: patient might feel little bit “**brighter**” or more confident
- ▶ May help with mood or **behavioral problems** (anxiety, agitation)
- ▶ Not all patients respond to treatment (about 30%)
- ▶ Possible side effects:
 - ▶ Headache, dizziness, stomach issues (diarrhea), heart-related symptoms (slow heart rate, change in blood pressure), interactions with other medications

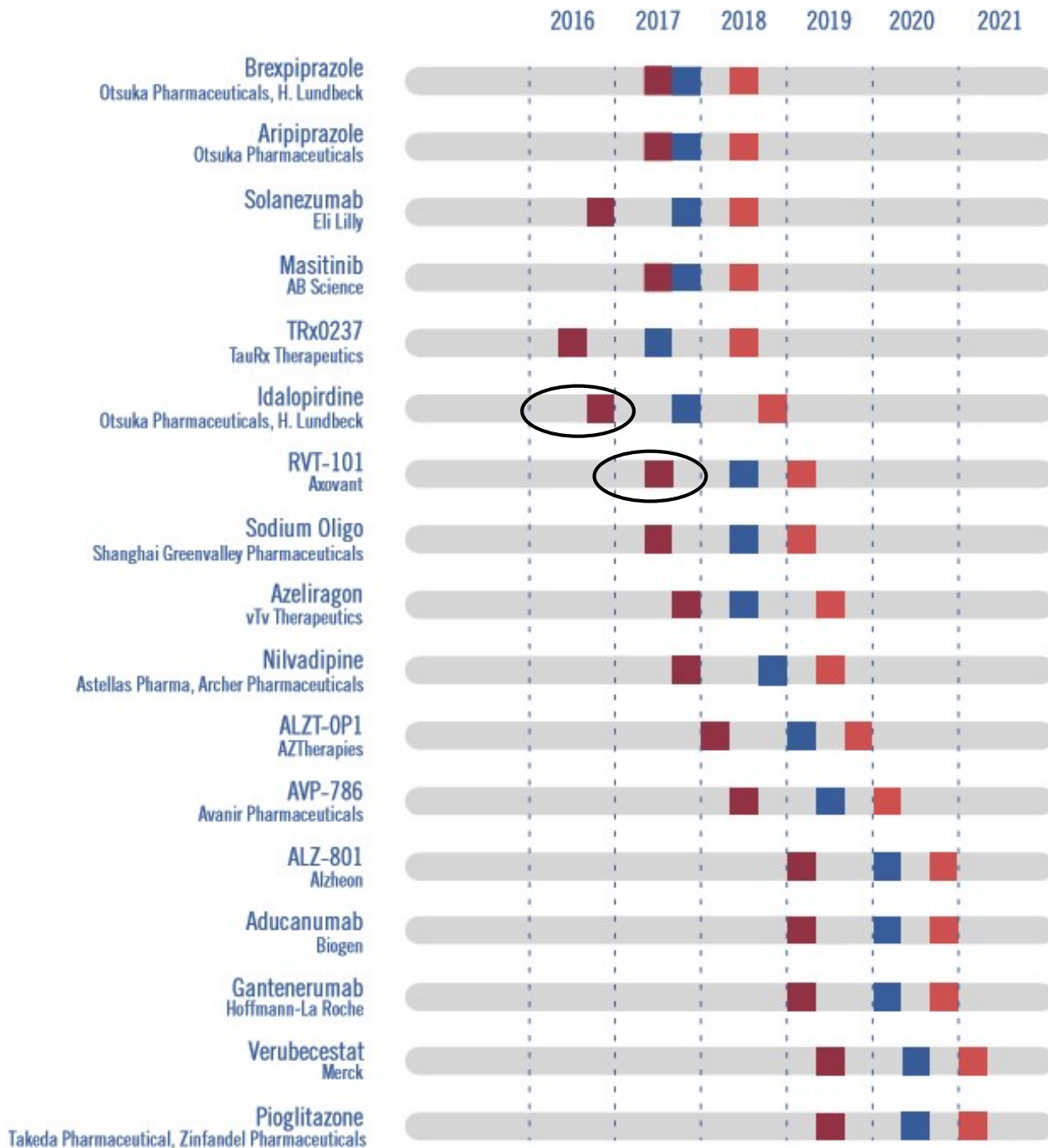
Consider the Following Analogy:

- ▶ You are in the boat with a hole in the bottom, slowly sinking. You do not have a way to plug the hole (there is no cure), but you can bail out water to stay afloat for a longer period.
- ▶ This is what medications do - keep cognitive abilities “afloat” longer

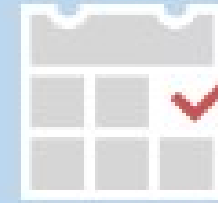


“Of course I brought the emergency flares.”





The 5 Year Horizon



PIPELINE OUTLOOK

There are approximately 50 drugs in Phase 2 trials and about a dozen drugs in Phase 2/3 trials.²

Drugs to Avoid

- ▶ **Benzodiazepines** (Lorazepam/Ativan, Diazepam/Valium, Alprazolam/Xanax)
 - ▶ Side effects include worsening balance and falls, potential increased agitation, and possible physical dependence
 - ▶ Benzodiazepine use should be limited to brief stressful episodes, such as a change in residence or an anxiety-provoking medical event
- ▶ **Benadryl** (diphenhydramine, Tylenol PM, Advil PM, etc.)
 - ▶ Side effects include dizziness, sedation, blurred vision, and confusion
 - ▶ Use melatonin instead as needed for sleep

Dementia and Driving

- ▶ California's Health & Safety Code [Section 103900] requires health care providers to submit a confidential report to the County Department of Public Health when an individual is diagnosed as having Alzheimer's Disease or related disorders (other types of dementia), severe enough to impair a person's ability to operate a motor vehicle.
 - ▶ This information is forwarded to the Department of Motor Vehicles (DMV).
 - ▶ According to the DMV: only drivers with dementia in the **mild stages** may still have the cognitive functions necessary to continue driving safely.
 - ▶ DMV requires **re-examination** for all individuals reported to have mild dementia with concern about safety.

Unsafe Driving: Warning Signs

- ▶ Drives too slowly
- ▶ Stops in traffic for no reason or ignores traffic signs
- ▶ Becomes lost on a familiar route
- ▶ Lacks good judgment
- ▶ Has difficulty with turns, lane changes, or highway exits
- ▶ Drifts into other lanes of traffic or drives on the wrong side of the street
- ▶ Signals incorrectly or does not signal
- ▶ Has difficulty seeing pedestrians, objects, or other vehicles.
- ▶ Falls asleep while driving or gets drowsy
- ▶ Parks inappropriately
- ▶ Gets ticketed for traffic violations
- ▶ Is increasingly nervous or irritated when driving
- ▶ Has accidents, near misses, or “fender benders”
- ▶ Family not comfortable to be in the car with the senior driving

Conclusion:

- ▶ Not all memory problems equal Dementia.
- ▶ Brain-healthy activities work better than pills.
- ▶ Do you want an in office evaluation? We will schedule that today if possible.
- ▶ Hand in the Questionnaire on the way out. Return any pen you borrowed.
- ▶ ALZ.ORG very helpful website.
- ▶ Hope you enjoyed the class.