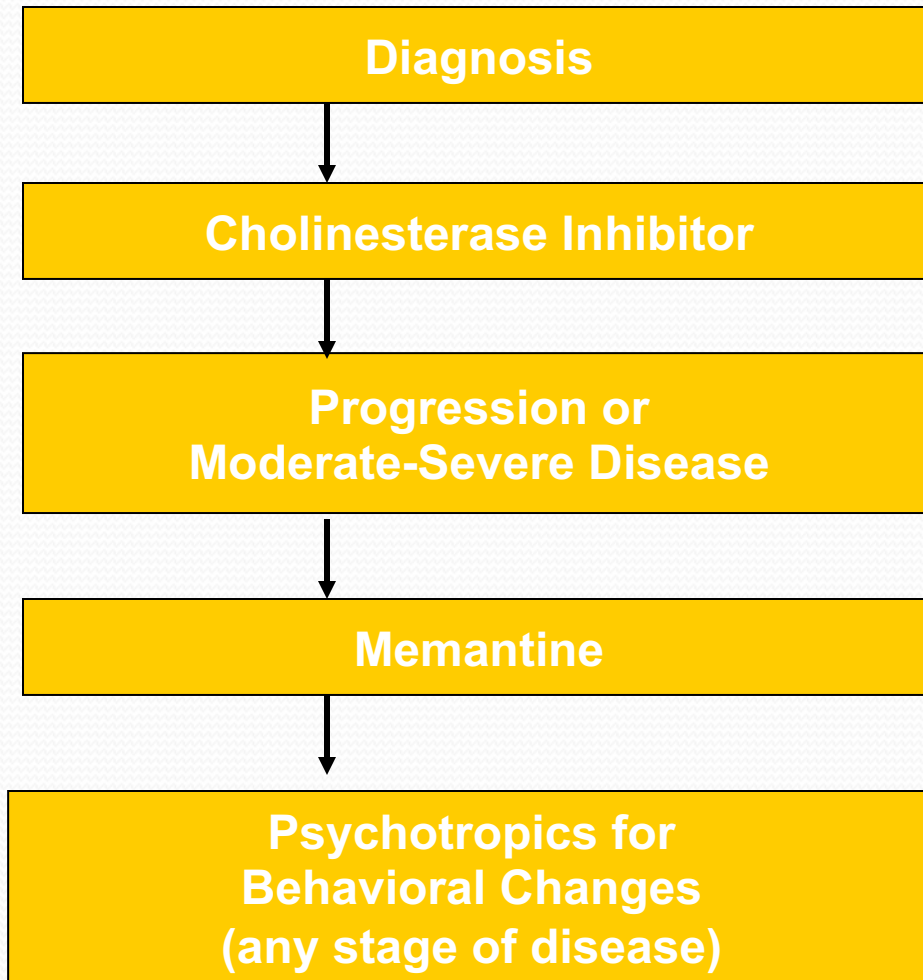


Disease Modifying Drugs for Alzheimer's – The Current Landscape



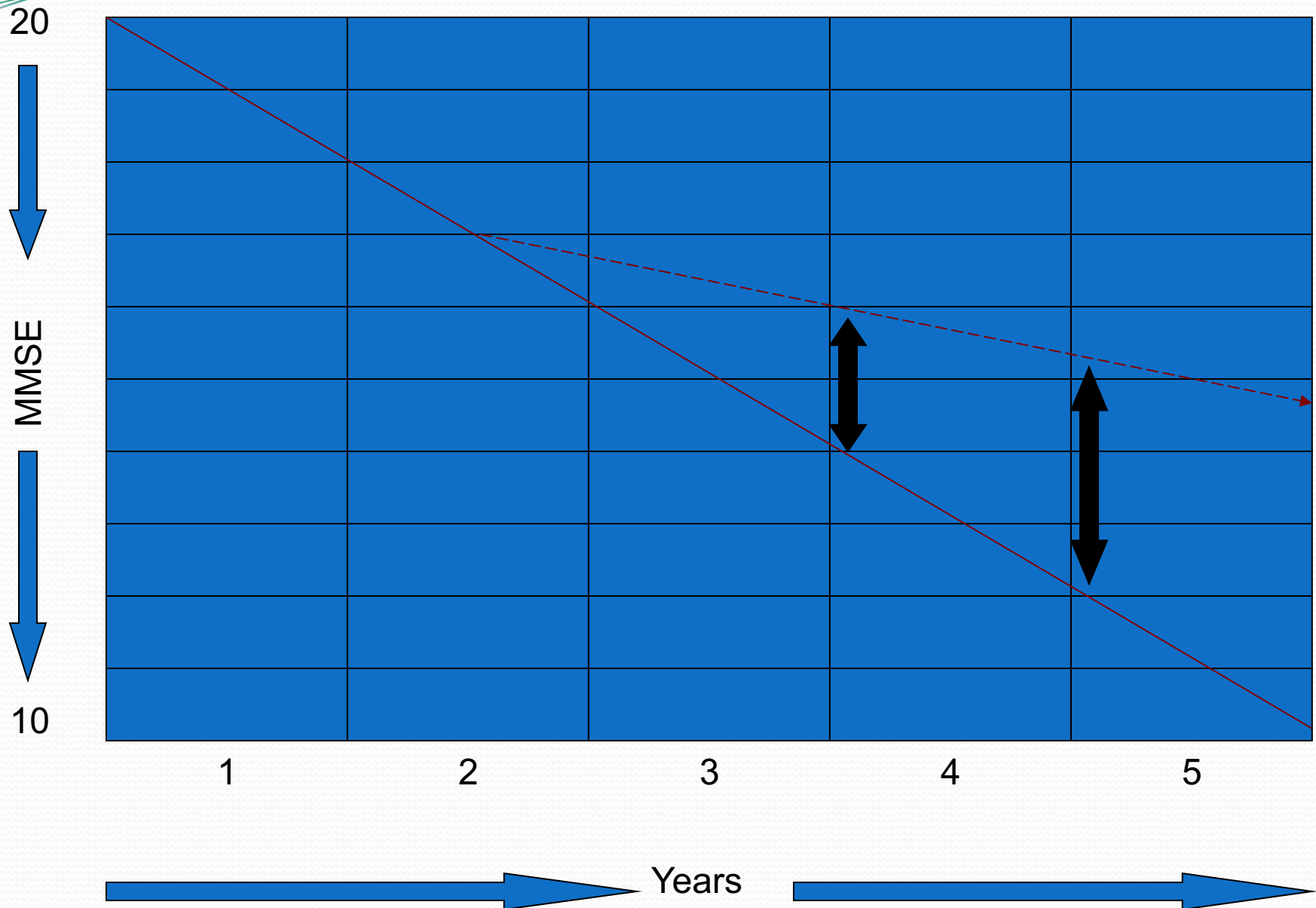
AD: Current Therapy Algorithm



Disease-Modifying AD Therapies

- A disease-modifying agent must:
 - Affect the underlying process leading to cell death
 - Produce a meaningful impact on disease course

D-M: Increasing Drug-Placebo Difference Over Time



The Original Amyloid Cascade Hypothesis

Alzheimer's is the cumulative product of a series of pathological events that may begin with the deposition of beta-amyloid in the brain

AGE

30

40

50

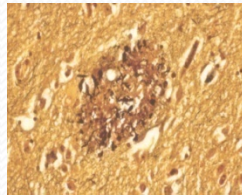
60

70

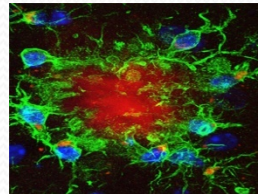
80

90

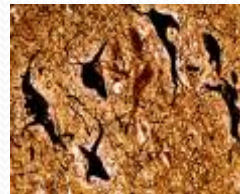
**Amyloid
deposition**



**Microglial
activation**



**Neurofibrillary
tangles**

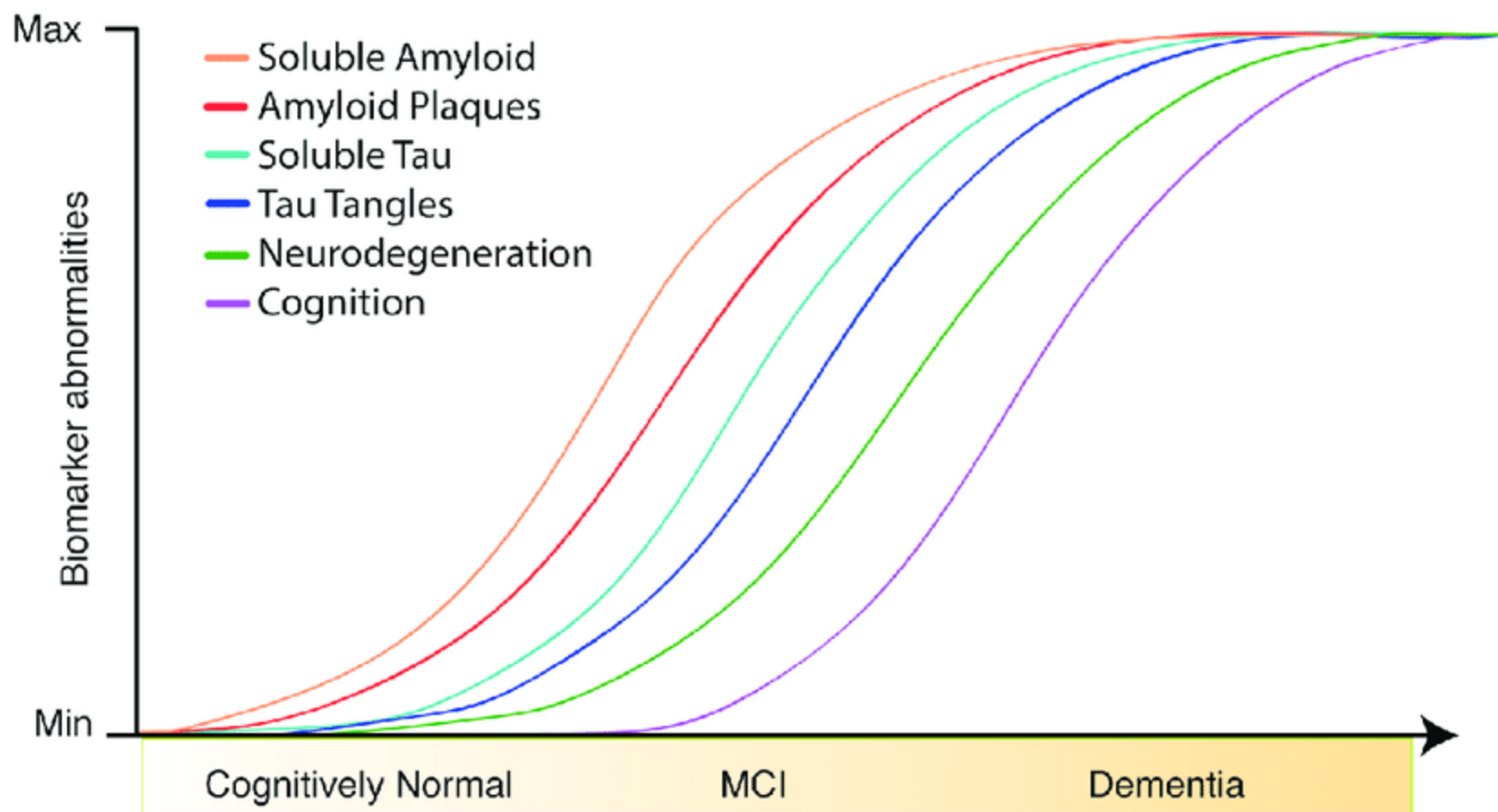


**Neuronal loss/
neurochemical
changes**



DEMENTIA





Welcome to the Evolution/ Revolution

Around the corner



Aducanumab

May be first disease modifying therapy

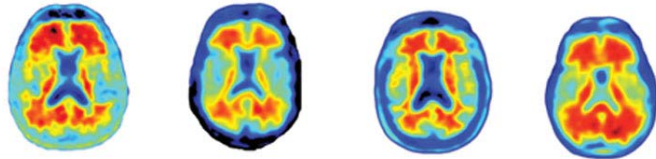
Removes amyloid from brain

Best effect when started early

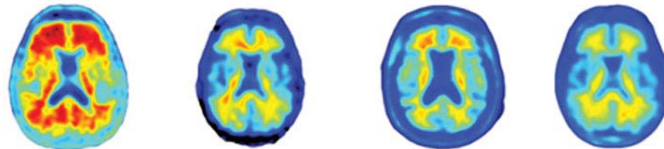
FDA reviewing

Aducanumab

Before treatment



After one year of treatment



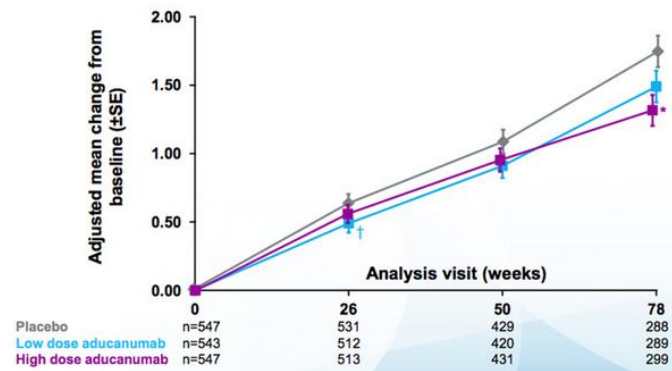
Placebo

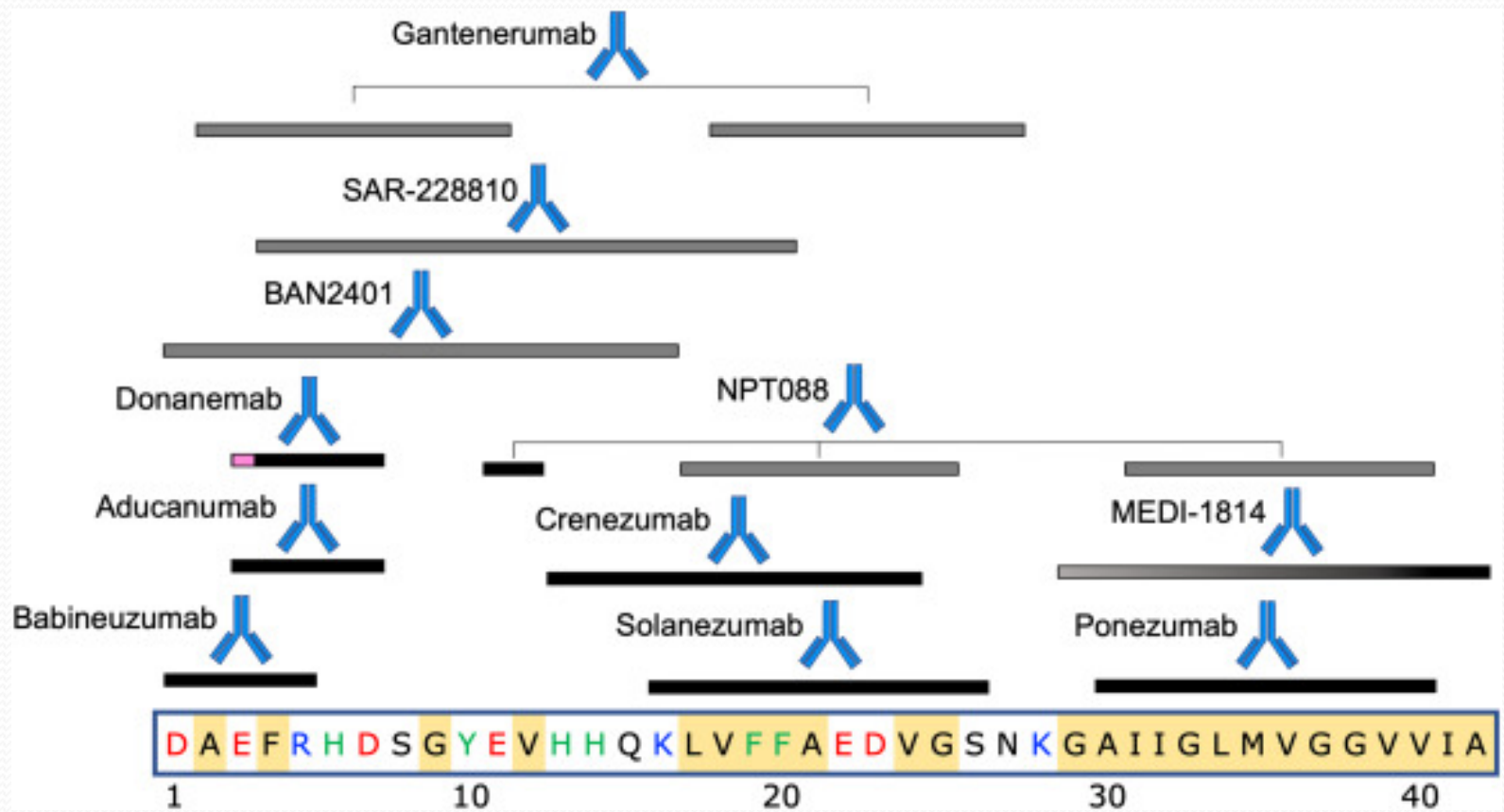
Low dose

Medium dose

High dose

EMERGE: Longitudinal change from baseline in CDR-SB

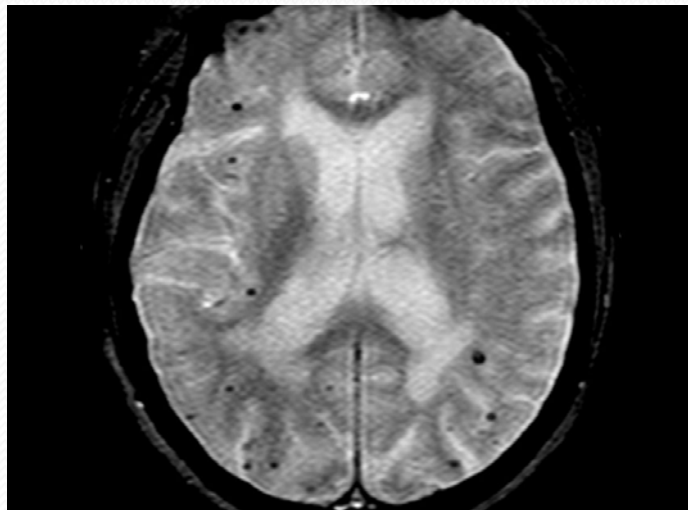
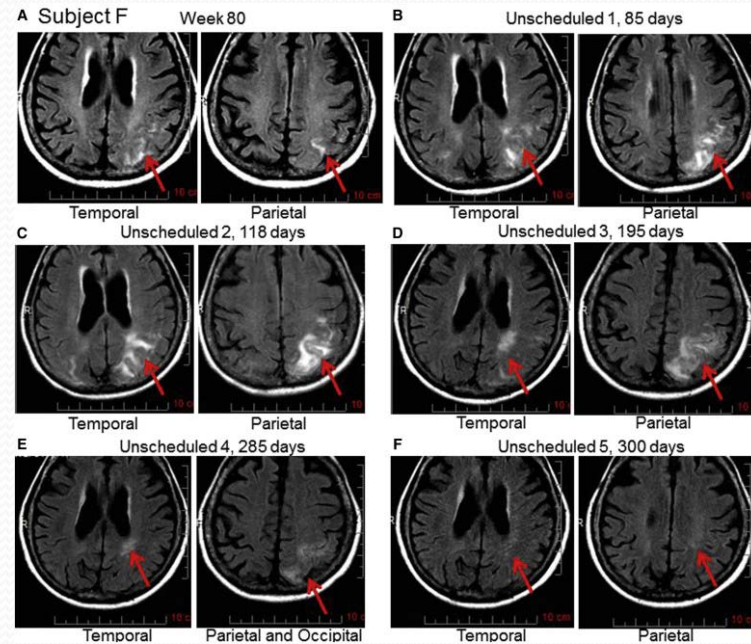




Side Effects

- Aria E

- Aria H



Operational Issues

- Identification of candidates
- Mild sx, amyloid +
- Infusion center capacity
- Surveillance for ARIA

1986

Larson



"Mr. Osborne, may I be excused? My brain is full."

言謝