

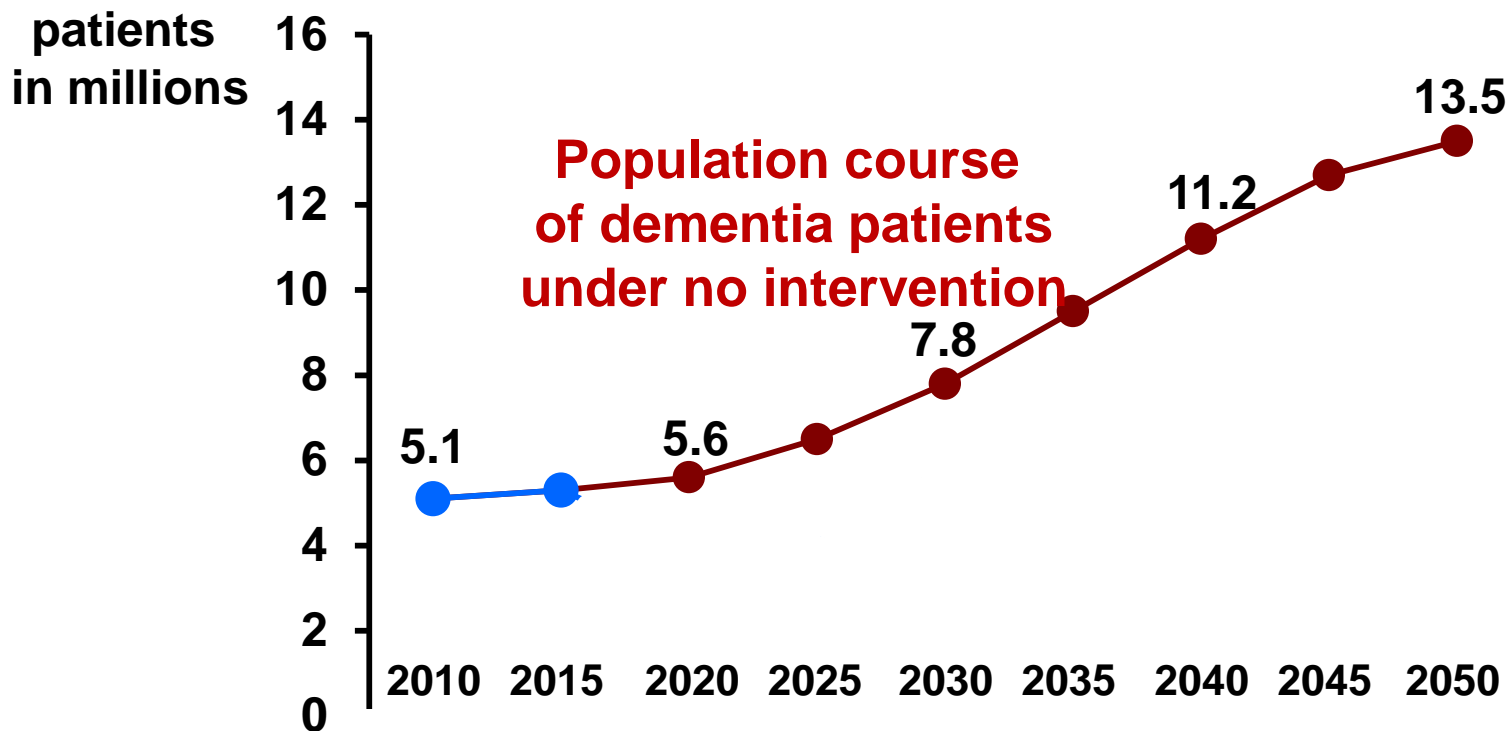
# **Efficient prevention of dementia based on medical evidence and an financial view**

**Predident, Japan Society of Dementia Research**

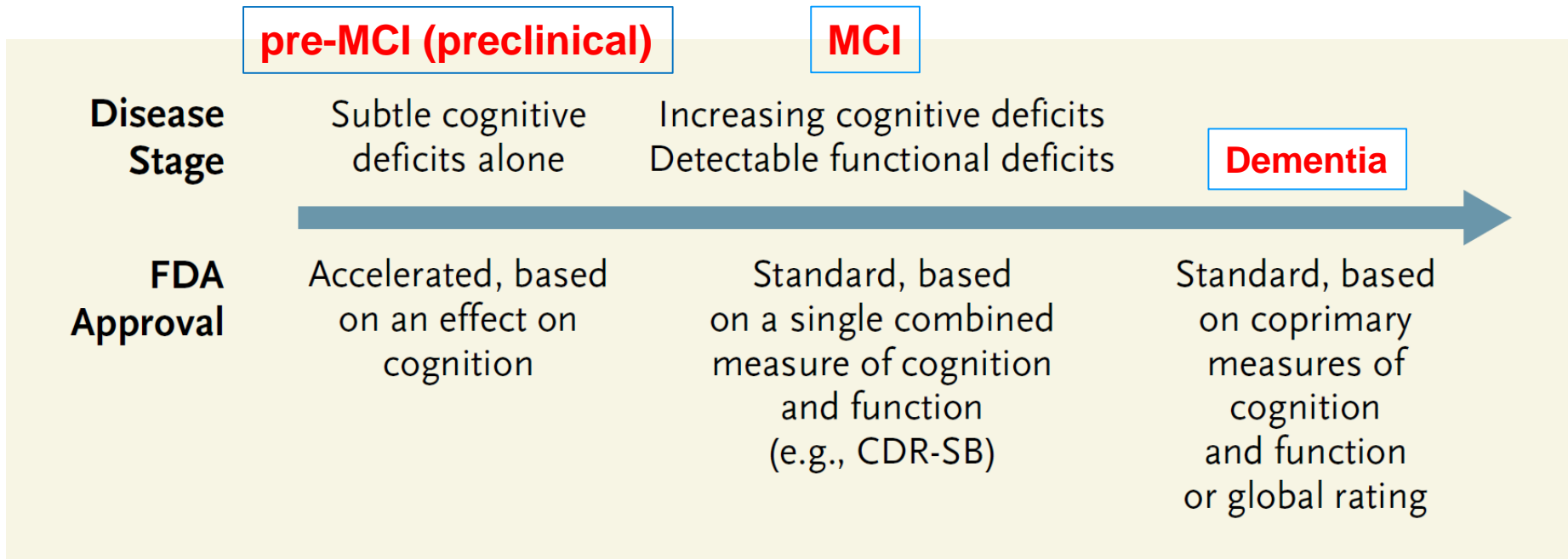
**Professor, Osaka City University, Medical School**

**Hiroshi Mori**

# A 5-yr delay of disease onset result in a big reduction of AD patients.



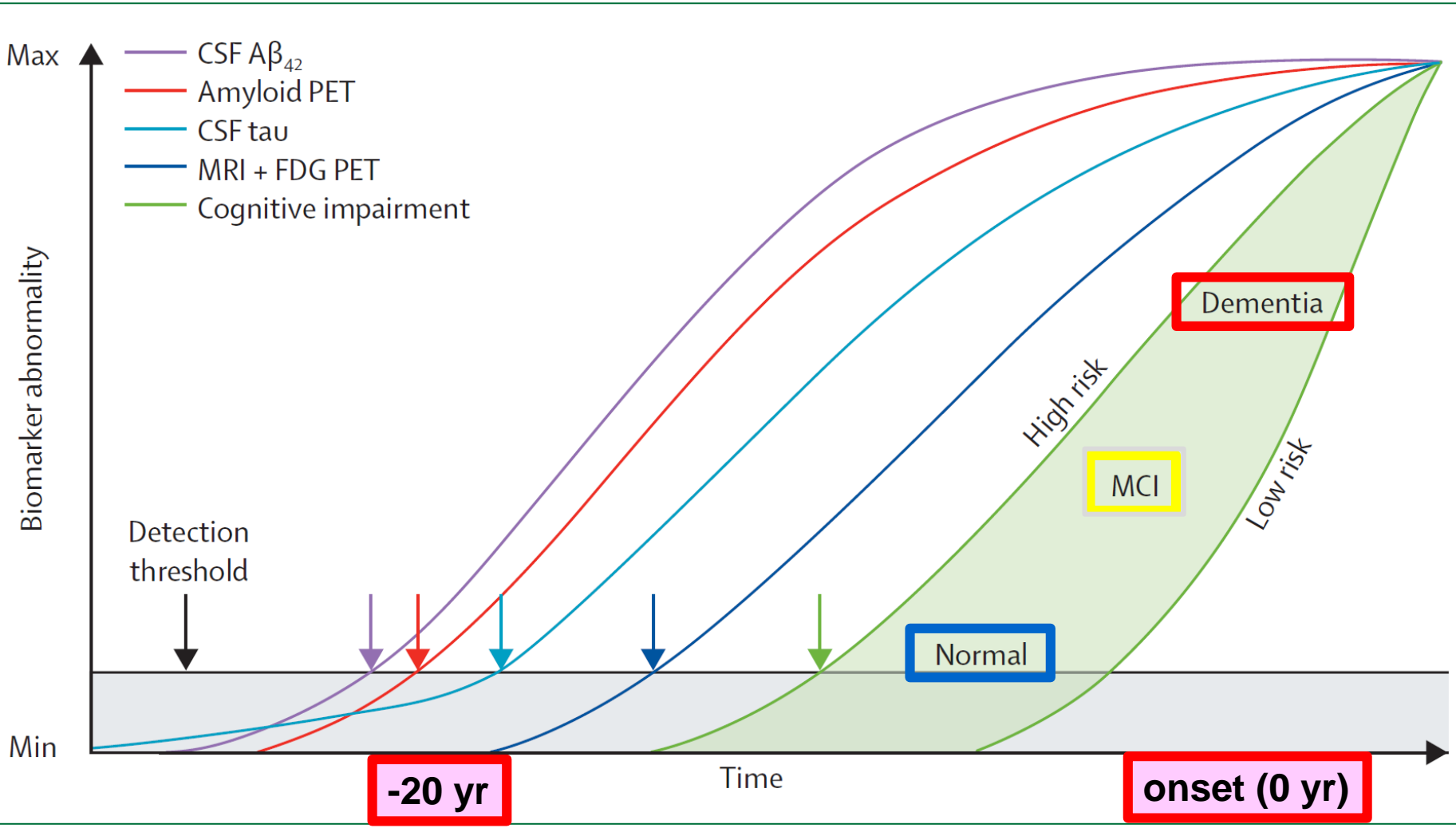
# From cure to prevention of dementia



**The US-FDA has developed guidance for the design and execution of clinical trials involving patients who do not present with dementia.**

*from Kozauer N and Katz R., New Engl J Med 2013; 368: 1169.*

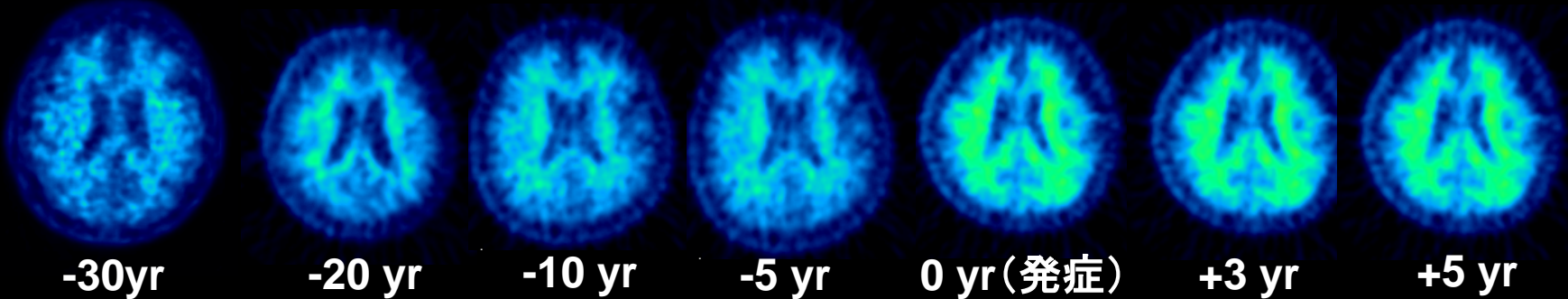
# Revised model from ADNI & DIAN studies



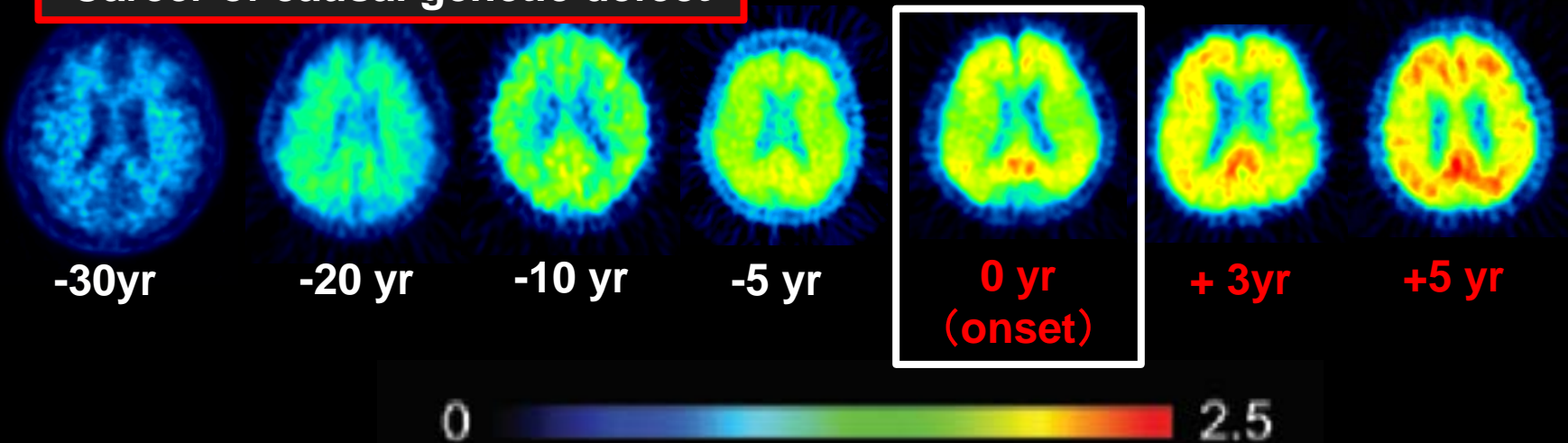
*Petersen RC (2010) Lancet neurol 9: 4-5.;  
Juck Jr, C. et al (2013) Lancet neurol 12: 207-16.  
Bateman RJ (2012) N Eng J Med 367: 795-802.*

# A pathological course of amyloid-PET (DIAN)

Non-career (normal)



Career of causal genetic defect



# Clinical challenges

Clinical trials	participants	Drugs (new concepts)	Target to challenge	Budgets million US\$
① ADNI project (Weiner M)	200 healthy, 400 MCI, 200 AD <i>Also, Japan running</i>	Observation	① Cognitive state ② biomarker	67
② Anti-Amyloid Treatment of Asymptomatic Alzheimer's (A4) (Sperling R)	1,500 amyloid-PET positive	Solanezmab	① Cognitive state ② biomarker	36
④ Dominantly Inherited Alzheimer Network (DIAN, DIAN-TTU) (Morris J, Bateman R)	240 familial AD in US, UK, Germany, Australia <i>Also, Japan just joining</i>	Observation + Solanezmab Gantenezmab One more?	① Cognitive state ② biomarker	6
⑤ Banner project (Reiman E, Tariot P)	1,300 healthy subjects in 60-75yr ApoEε4/4	BACE-I CAD106	Disease onset & more?	45 + more
③ Alzheimer's Prevention Initiative (API) (Reiman E, Lopera F)	300 familial AD in Colombia, Presenilin-1 E280A	Crenezmab	① Cognitive state ② biomarker	116

# Current situation of dementia in Japan

**Dementia : 4,620,000 patients**



**general practitioner : 100,000 doctors**  
**(dementia supporter educated : 3,000 doctors)**



**Specialists to see dementia** authorized by two academic societies (Japan Society of Dementia Research & Japanese Psychogeriatric Society) : **1,800 doctors**

# Perspective for dementia science

medical challenge

medical & Social care

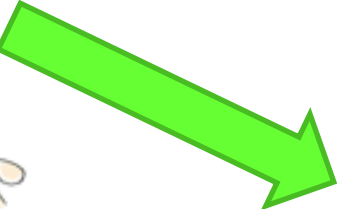
early phase



middle phase



late phase



Terminal care including tube-feeding & ethical view

Modified from Mori, H. (1996) J Japan Medical Association 115: 729-734.



***Thanks a lot for  
your attention***