AGENEBIO

Developing Innovative Therapeutic Solutions for Patients at Risk of Neurodegeneration

October 29, 2014

About AgeneBio

- Science and intellectual property based upon decades of research at Johns Hopkins focused on cognitive neuroscience and the neurobiology of the aging brain
- Leadership team with track record of success from basic research through commercialization
- Phase III ready candidate (AGB101) targeting large, unserved population with amnestic mild cognitive impairment (aMCI)
  - AGB101 restores normal brain function and memory in aMCI patients
- Novel $GABA_A$ α5 program in late discovery stage (IND 4Q15/1Q16)
  - Multiple cognition-related indications: aMCI, autism, schizophrenia
- ABG101 and $GABA_A$ α5 programs both with key issued patents

AGENEBIO

Management Team and BOD with Expertise Aligned to the Mission

Management

Jerry McLaughlin, President, CEO, Board of Directors

24-year veteran of the pharmaceutical industry: Merck, Endo, NuPathe

Michela Gallagher, PhD, Founder, CSO, Board of Directors

>20 years researching the neurobiology of aging: Johns Hopkins University, UNC-Chapel Hill

Sharon Rosenzweig-Lipson, PhD, VP, R&D

>20 years developing compounds for neurologic indications: Pfizer, Wyeth, AHP

Board of Directors (non-management)

Pat LePore, Chairman

Former Chairman & CEO, current Director for Par Pharmaceuticals

Floyd Bloom, MD

Founder and Director of Alkermes Inc., former Editor-In-Chief of *SCIENCE*

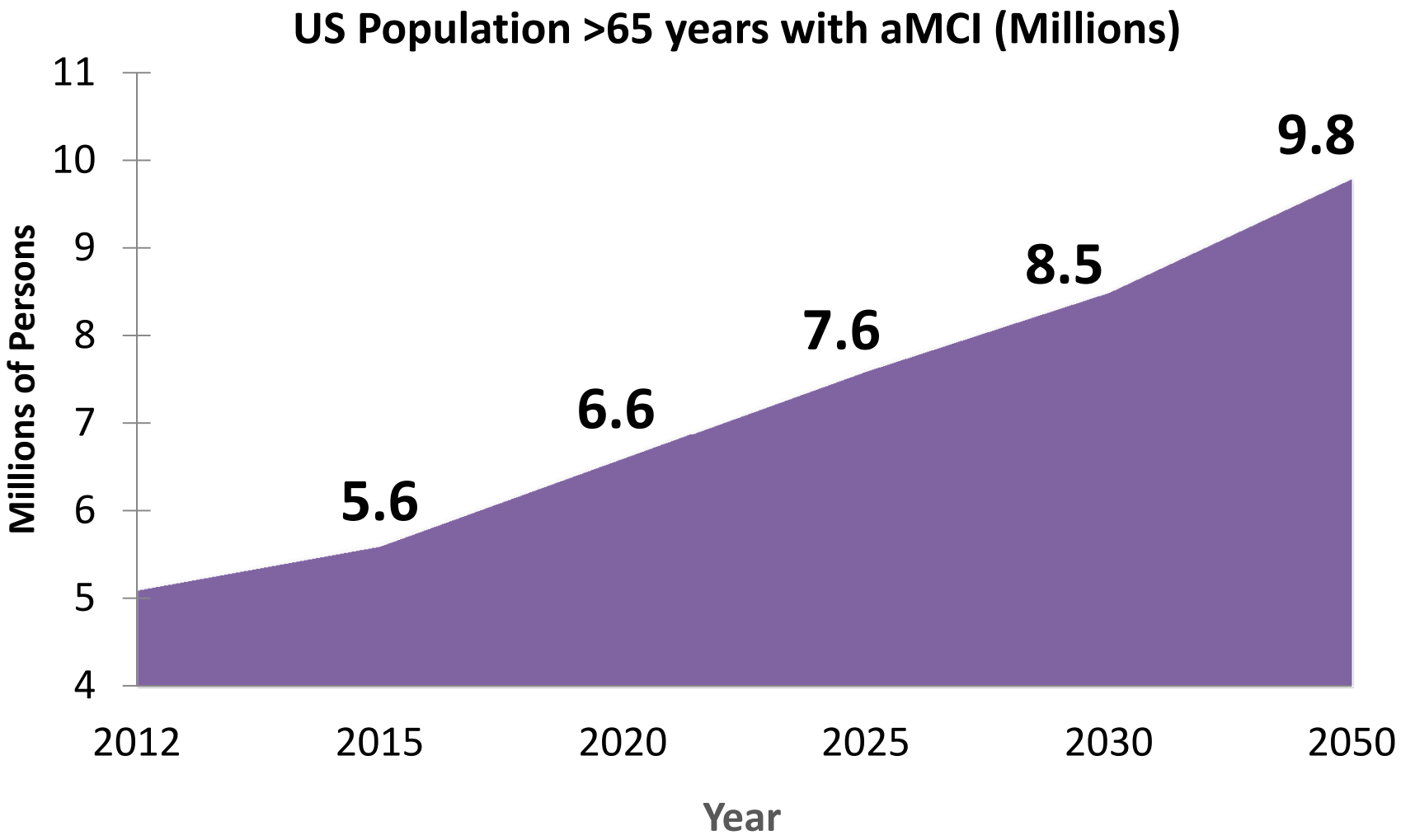
Charles Clarvit

CEO of Vinci Partners US, former Co-Head of BlackRock Alternative Advisors, Johns Hopkins Trustee

Ronald Nordmann

Former Partner at Deerfield Management, PaineWebber Group , Inc. , Johns Hopkins Trustee Emeritus

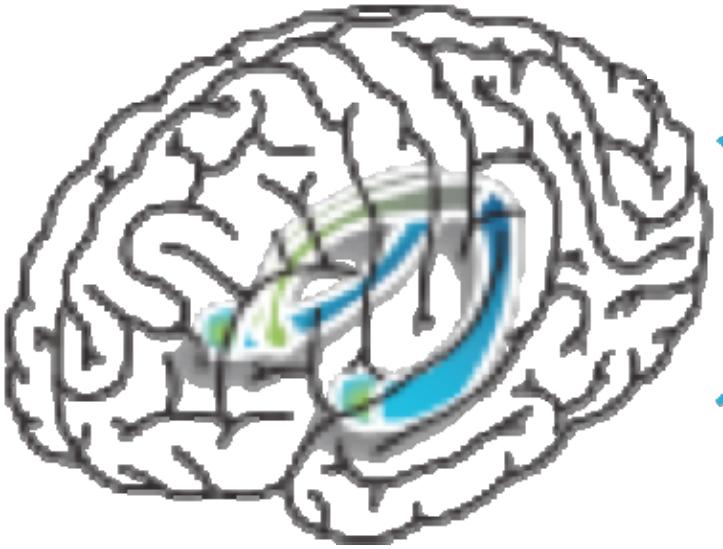
US Population with aMCI Exceeds 5 Million Today and May Nearly Double by 2050



AGENEBIO

aMCI Manifests as the Result of Neurodegeneration in the Medial Temporal Lobe

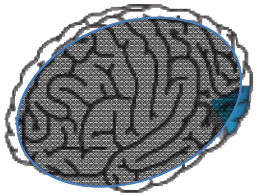
aMCI



Hippocampus and Entorhinal Cortex (Medial Temporal Lobe)

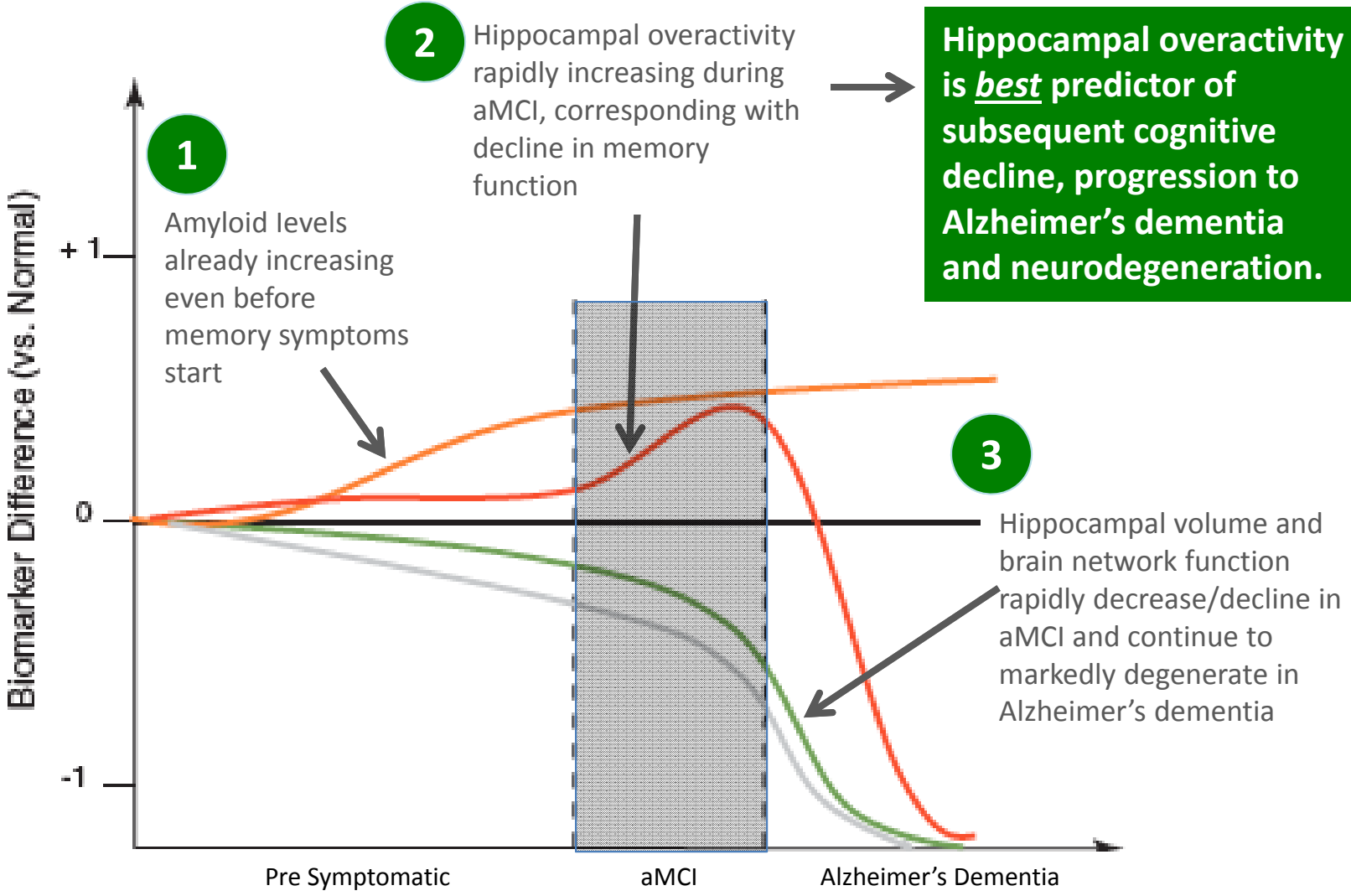
Memory Loss

Alzheimer's Dementia

Mild	Moderate	Severe
		
Spreads to Lateral Temporal & Parietal Lobes	Spreads to Frontal Lobe	Widespread Brain Atrophy
Symptoms include: Reading problems Poor object recognition, Poor direction sense	Symptoms include: Poor judgment Impulsivity Short attention	Symptoms include: loss of language, basic motor skill function problems

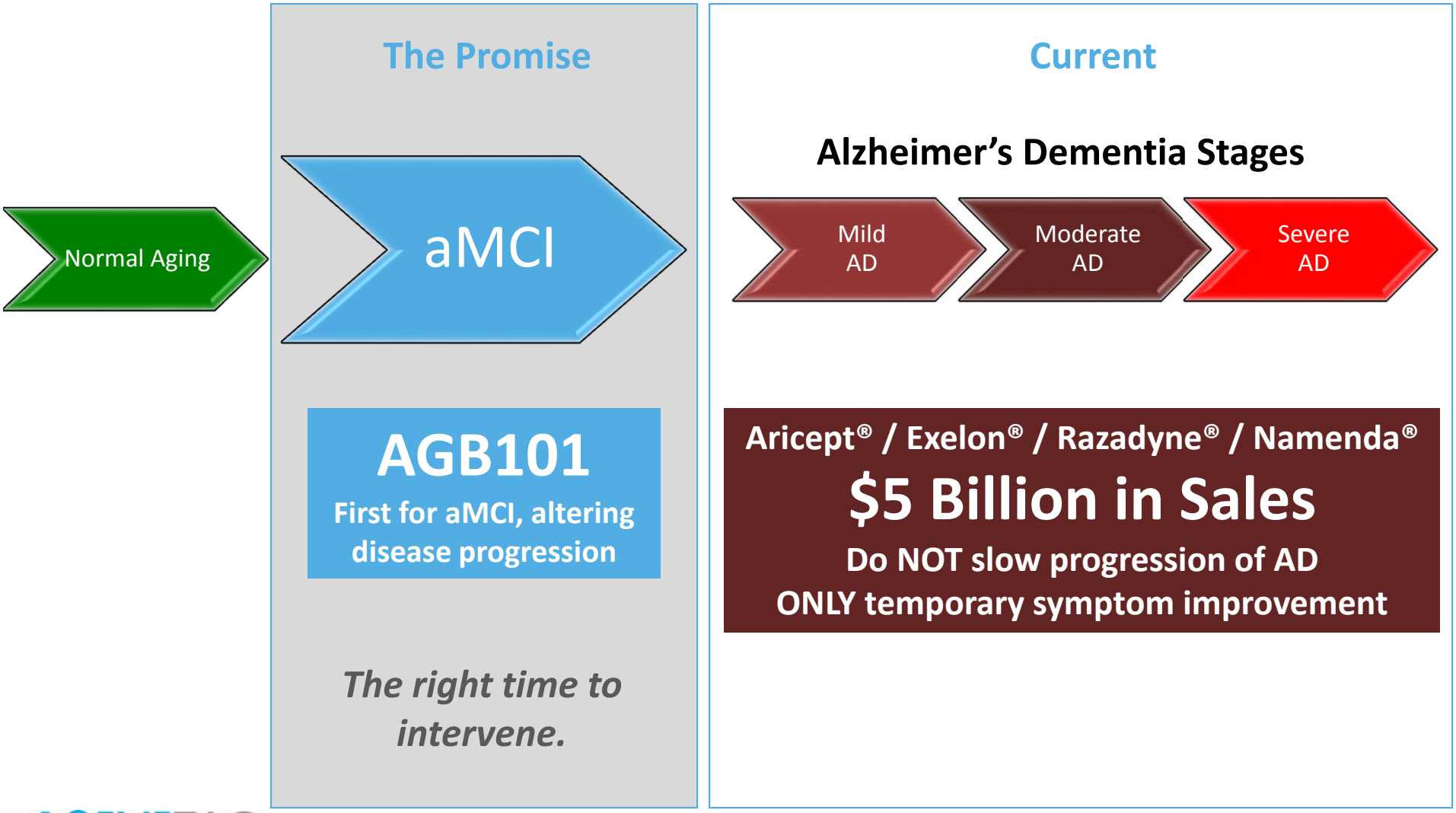
AGENEBIO

aMCI: Period of Rapid Changes in Hippocampal Activity and Memory Decline



Adapted from Ewers et al.. Trends in Neuroscience 34:430-442, 2011.

No Approved Treatments for aMCI and Nothing Today Alters Disease Progression



AGENEBIO

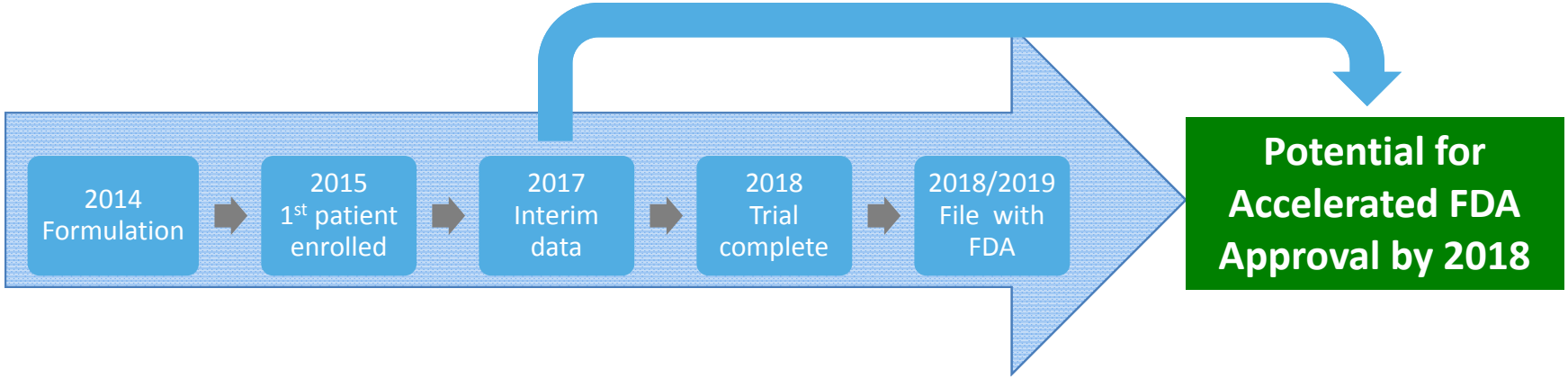
AGB101 Restores Normal Brain Circuitry and Improves Memory in aMCI Patients

- Active ingredient: levetiracetam
  - Mechanism of action: modulates neuronal firing in the hippocampus
  - Commercially successful atypical antiepileptic (~2B in peak sales)
  - ABG101 is dosed once-a-day at 1/5 the antiepileptic dose
- Preclinical data in age-impaired and AD rodent models
  - AGB101 improves the entorhinal cortex - hippocampal network & memory
- Phase II clinical data in aMCI - AGB101:
  - Attenuates hippocampal overactivity
  - Restores entorhinal cortex activity
  - Improves memory function

AGENEBIO

Development Program for AGB101 is Significantly De-risked

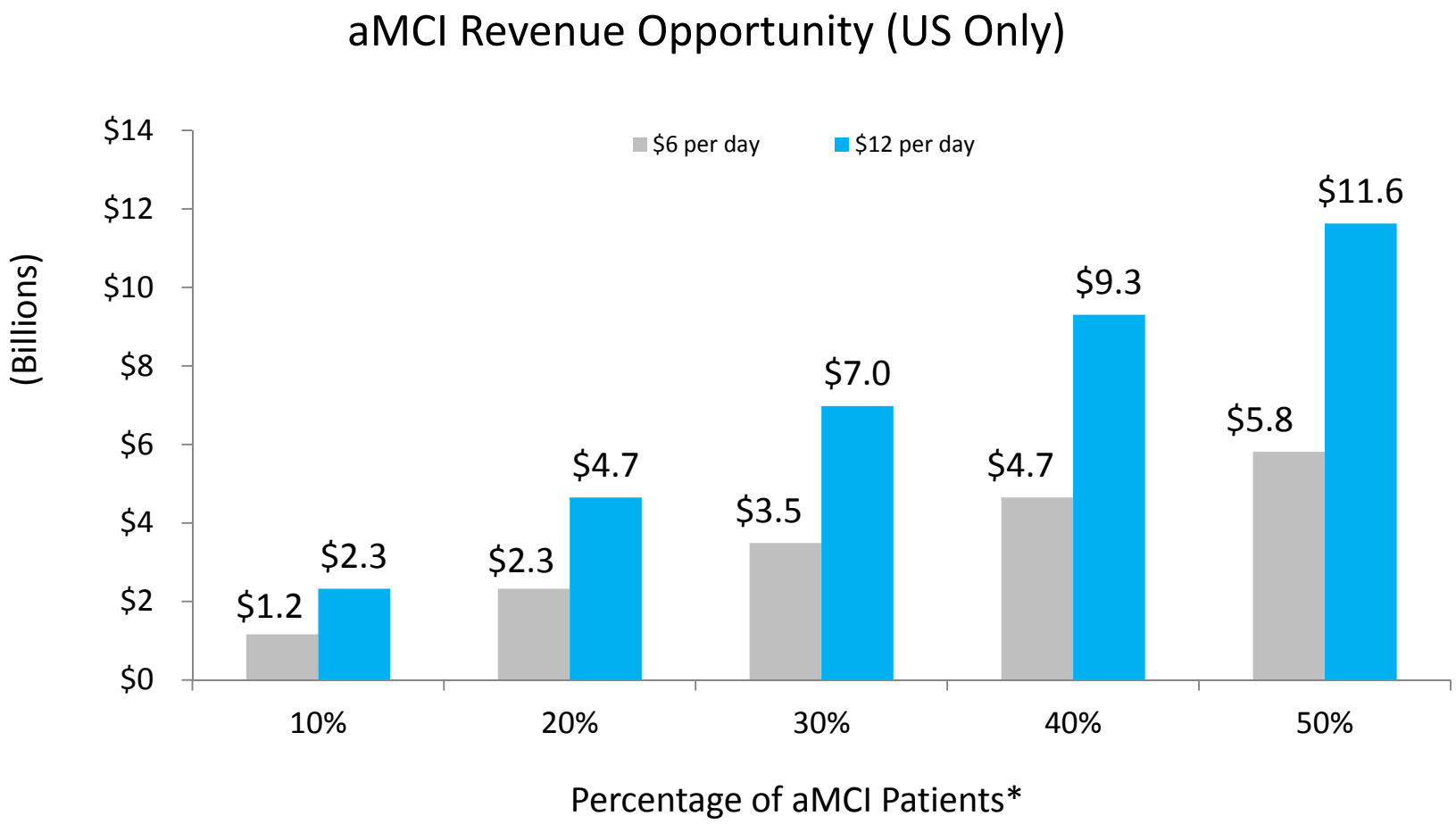
- ✓ Efficacy consistent from preclinical through Phase II
- ✓ Established safety at 5X the AGB101 dose
- ✓ Regulatory path - Phase III plan complies w/FDA guidance
  - Primary endpoint: CDR-SB
  - Key Secondary: Entorhinal cortex thinning



- ✓ U.S. patent 8,604,075 - Low dose levetiracetam in cognition (2029)
  - Additional patents in process

AGENEBIO

aMCI Population Presents a Substantial Market Opportunity



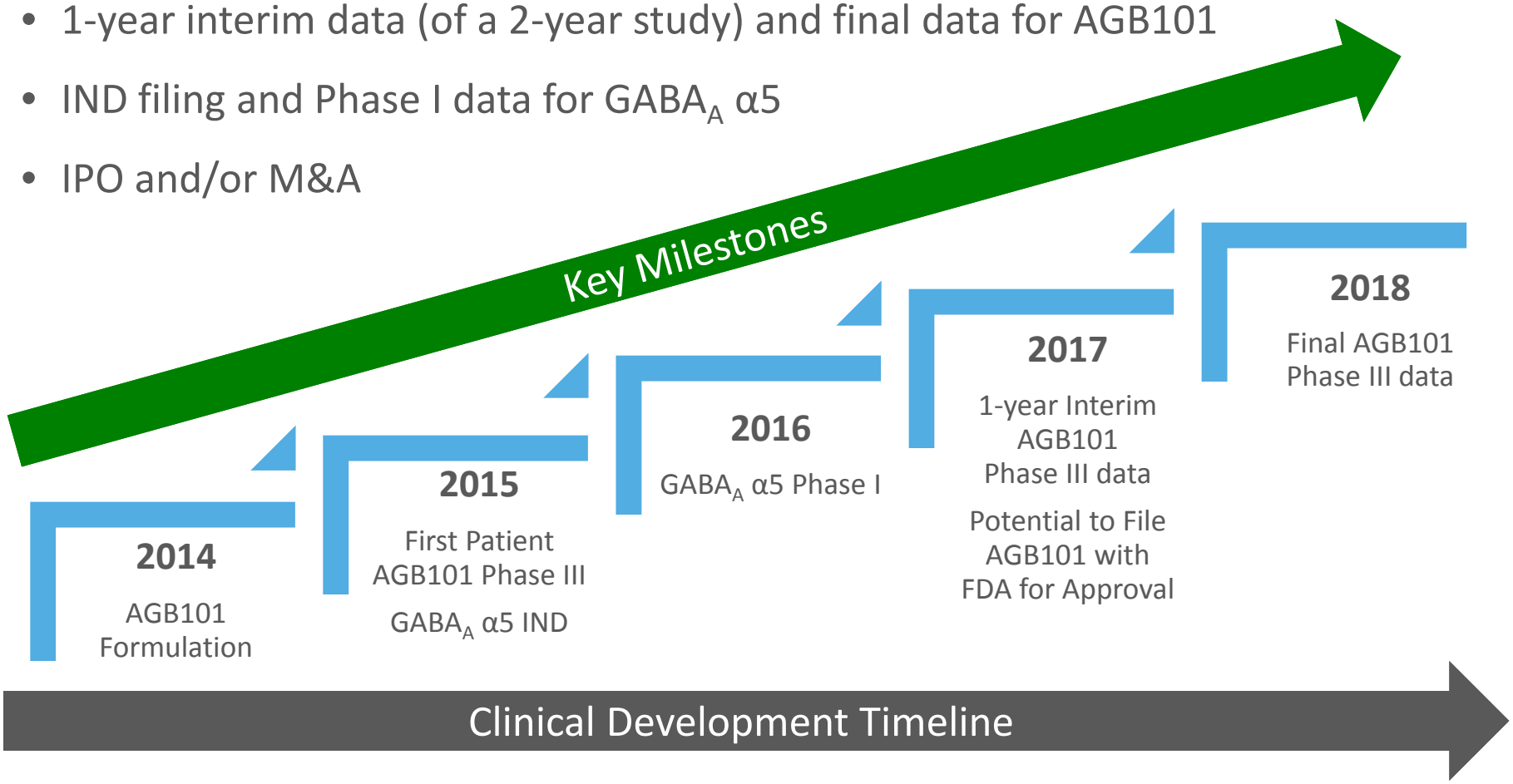
* 2025 aMCI patient estimates. Based upon prevalence of aMCI in the US of 5 million in 2012 with an annual growth rates of 3%. Assumes 70% compliance rate.

AGENEBIO

Milestones Provide Multiple Valuation Drivers and Liquidity Opportunities

Key Drivers

- 1-year interim data (of a 2-year study) and final data for AGB101
- IND filing and Phase I data for $GABA_A$ α5
- IPO and/or M&A



AGENEBIO

AgeneBio Summary

- Unparalleled science driving development assets
- Next-stage team in place to rapidly advance the pipeline
- Regulatory pathway with FDA buy-in for lead program
- IP protection in place for all pipeline assets
- Attractive commercial opportunities

AGB101

Potential to be the first therapeutic for aMCI and first to delay the onset of Alzheimer's dementia

AGENEBIO

AGENEBIO

Developing Innovative Therapeutic Solutions for Patients at Risk of Neurodegeneration

October 29, 2014