Targeting the Treatment of Alzheimer's Disease and other Neurodegenerative Diseases

www.neurotropebioscience.com

January 2014

Safe Harbor Statement

Cautionary language regarding forward-looking statements

Certain statements in this presentation, particularly those pertaining to our strategy, constitute forward-looking statements. Such statements are based upon the current beliefs and expectations of management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements.

Any statements that are not statements of historical fact (including statements containing the words "believes," "plans," "anticipates," "expects," "estimates" and similar expressions) should also be considered to be forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements. These factors are contained in Neurotrope Inc.'s filings with the SEC, including Neurotrope's Form 8-K filings on August 29, August 30, October 9, October 24 and December 16, 2013 and 10-Q filing for quarter ended September 30, 2013.

THESE MATERIALS DO NOT CONSTITUTE AN OFFER TO SELL, OR THE SOLICITATION OF ANY OFFER TO BUY, ANY SECURITIES OF THE COMPANY OR ANY ENTITY WHATSOEVER. ANY SUCH OFFER MAY ONLY BE MADE BY A PRIVATE PLACEMENT MEMORANDUM OR PROSPECTUS ISSUED BY THE COMPANY. ANY REPRESENTATION TO THE CONTRARY BY ANY PARTY SHOULD BE IGNORED.

The full text of Neurotrope's SEC filings can be found at the SEC's website *(http://www.sec.gov)*

Neurotrope BioScience

Neurotrope, Inc. (OTCQB: NTRP)

- **A clinical development stage, publicly-traded diagnostic and pharmaceutical company**
- **Capital invested in technology to-date approaching $100 mm (by BRNI) over 13 years across ongoing R & D investment, facilities / infrastructure, and intellectual property (IP).**
- **License patents in the U.S. and international territories; preclinical & clinical data from BRNI and our subsidiary Neurotrope BioScience, Inc.**
- **Proprietary technology with an exclusive IP position targeting a cardinal defect in AD and other neurodegenerative diseases**
- **Highly promising preliminary human data on an AD diagnostic close to commercialization**
- **Phase 2 clinical development to commence on AD pharmaceutical product**
  - **Compelling efficacy data in preclinical models of AD**
  - **Extensive in-human experience for our lead drug molecule**
- **Seasoned Business and Scientific Management Team**

Neurotrope BioScience

Neurotrope BioScience, Inc. History

- **October 2012 - Company Formed**
- **February 2013 – Technology and Product Licenses transfer from BRNI to Neurotrope; hires Dr. James New as CEO; closes $10.4 million Series A preferred stock capital raise**
- **February to August 2013 - Establishes business plans to develop both AD diagnostic and therapeutic products utilizing BRNI licensed technology**
- **August 2013 - Raises $11.5 million issuing additional Series A preferred stock; merges with BlueFlash Communications, Inc. BlueFlash changes its name to Neurotrope, Inc. (OTCQB: NTRP)**
- **September 2013 – Signs Statement of Work with BRNI to develop diagnostic product; hires Robert Weinstein as CFO; trading begins of its common stock**
- **October 2013 – Adds Dr. Larry Altstiel, neurodegenerative disease researcher, to Scientific Advisory Board. Adds Paul Freiman, seasoned pharmaceutical and biotechnology executive, to Board of Directors. Completes $23 million Series A preferred financing**
- **December 2013 – Adds James Gottlieb to Board of Directors, extensive interaction with FDA and other healthcare-related governmental agencies**

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Management Team

- **Dr. James New – Chief Executive Officer**
  - **Pfizer, Inc. - Senior Director of Licensing**
  - **Novartis - Director M&A and Head of Worldwide Business Development**
  - **Abrika Pharma., Lifecycle Pharma., AIKO Biotechnology – CEO**
- **Dr. John Abeles – Chairman**
  - **Physician and pharmacologist**
  - **Founded several successful entrepreneurial ventures**
  - **Research Analyst – Kidder Peabody, first MD analyst**
- **Dr. Dan Alkon – Chief Scientific Officer**
  - **Physician at Cornell University**
  - **30 year career as medical director in US NIH health services specializing in memory disorders**
  - **14 years as founding scientific director of BRNI**
- **Robert Weinstein, CPA, MBA – Chief Financial Officer**
  - **Experienced healthcare industry CFO and consultant**
  - **Successful private equity fund manager and investment banker**

Trading, Ownership & Capitalization

Trading, Ownership, Financials	Information
Ticker symbol (OTCQB)	NTRP
Current share price (1/10/14)	$1.80
52 week range	$1.32 to $2.25
Implied market capitalization	$39 million
Average daily trading volume	NM
Public Float	2,700,000 shares
Management / Affiliate ownership	26.4% / 50.6%
Cash @ September 30, 2013 plus October 2013 net funding	$16.5 million
Monthly operating burn rate quarter ended September 30, 2013	$500,000

Current Capitalization	Shares
Common Stock	21.7 MM
Series A Convertible Preferred Stock (Convertible @ $1.00 / share)	23.0 MM
Options & Warrants Outstanding (Wtd. Avg. E.P. $0.80 / share)	8.5 MM
Total fully diluted shares	53.2 MM

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Opportunity

Target Alzheimer's Disease Early with an Effective Drug and New Mechanism

Delay the Disease Progression

Estimated $15 - $20 BN in Annual Worldwide Sales

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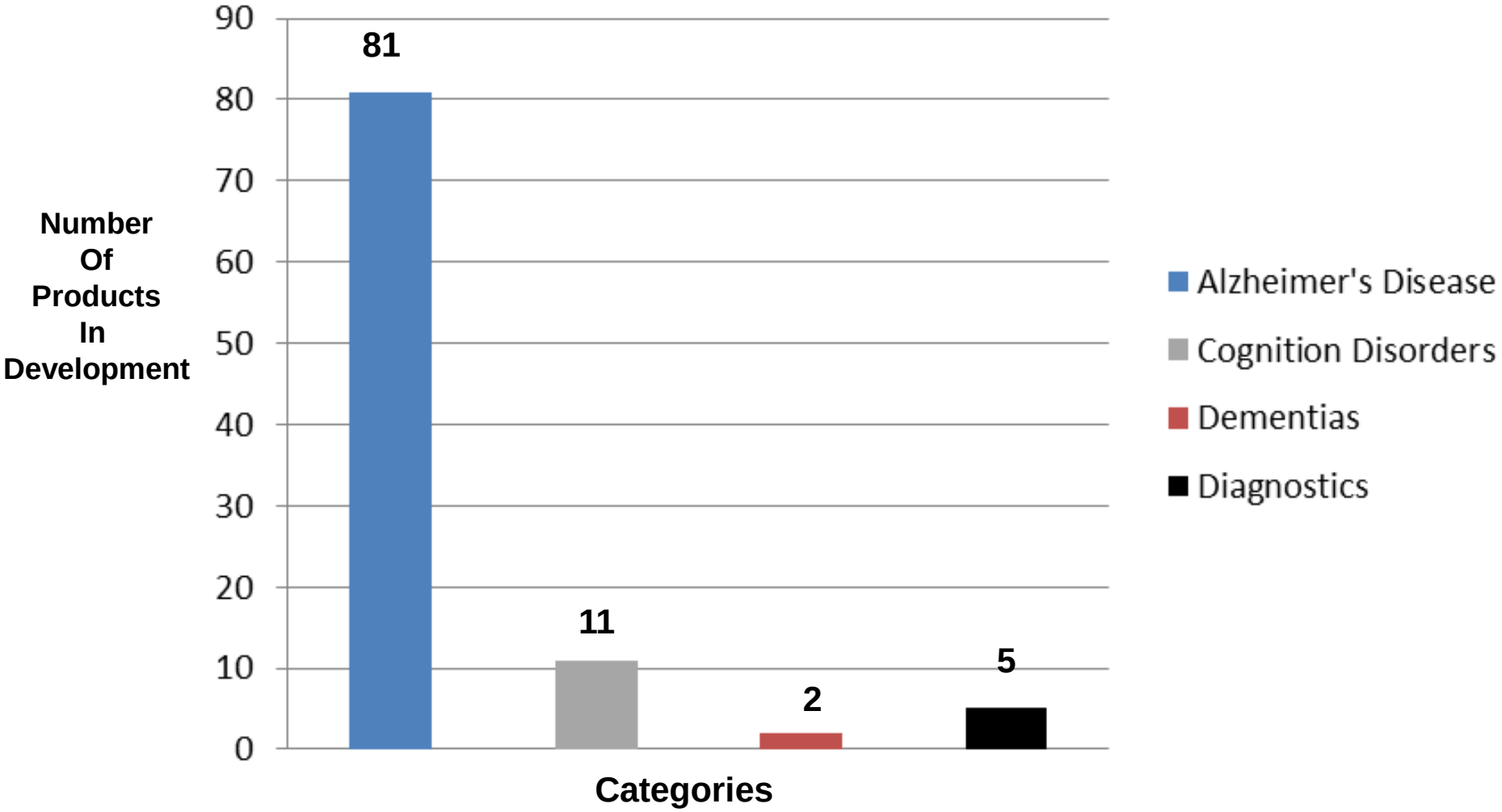
The Industry's Product Development Efforts in the Alzheimer's Field



From 2012 Report " Medicines in Development"
Alzheimer's Disease PHRMA Report

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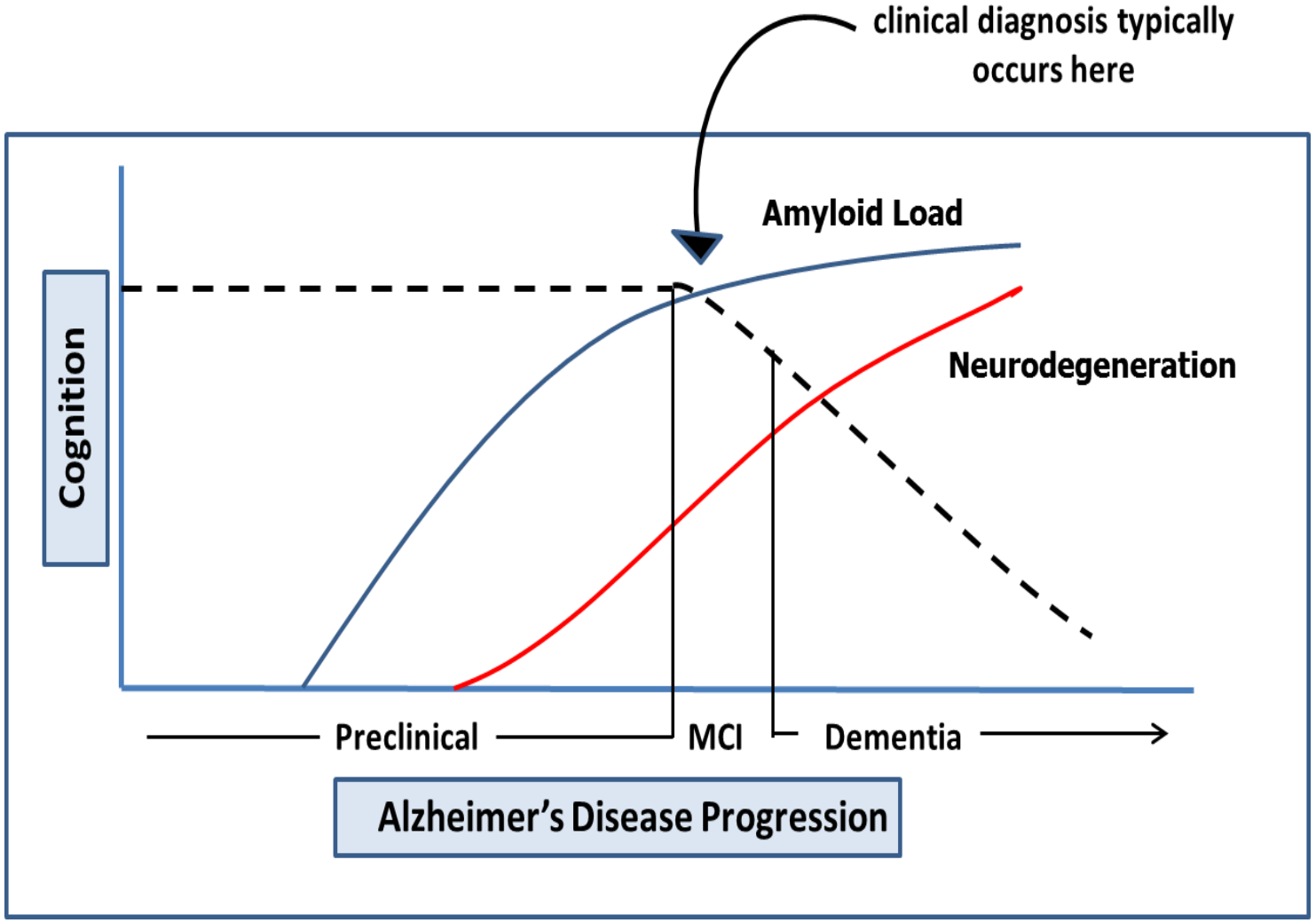
Past Efforts in Developing Drugs for AD have focused on Beta Amyloid



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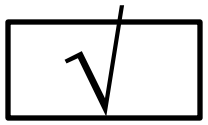
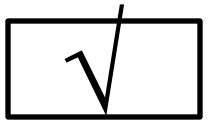
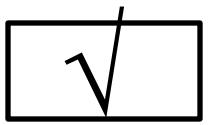
Current Themes Dominating AD Research

		Neurotrope R&D Program
Biomarker Analysis	Critical to early detection of AD pathology	
Early Diagnosis	Allows treatment with a potentially wider range of current and future therapeutics	
Disease Modifying Therapy	Stemming disease progression would represent a breakthrough therapy	

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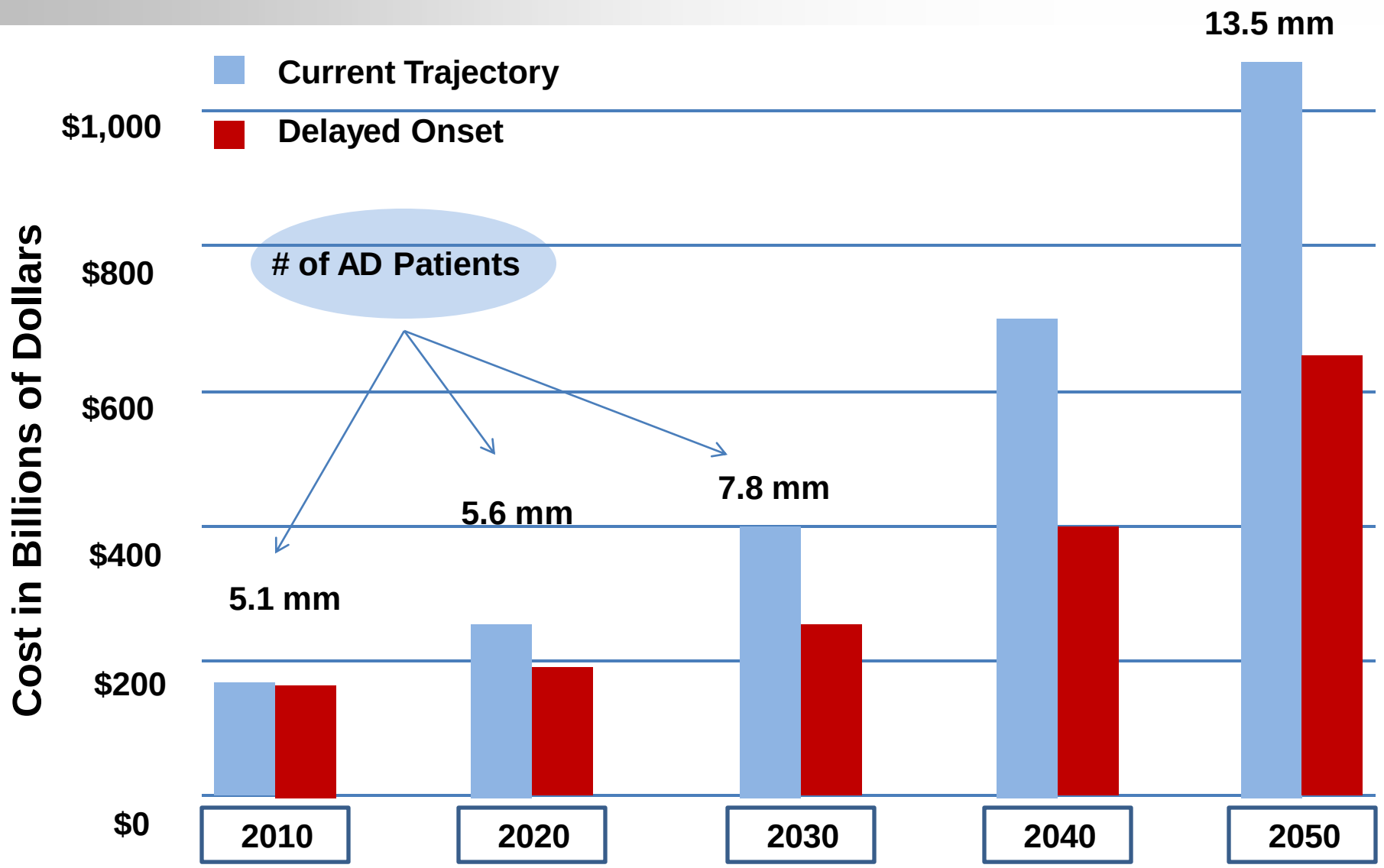
Impact of a 5-year delay in the Onset of AD on Costs

Americans Age 65+ with Alzheimer's Disease 2010-2050



Source: Alzheimer's Association, "Changing the Trajectory of Alzheimer's Disease: A National Imperative" May 2010

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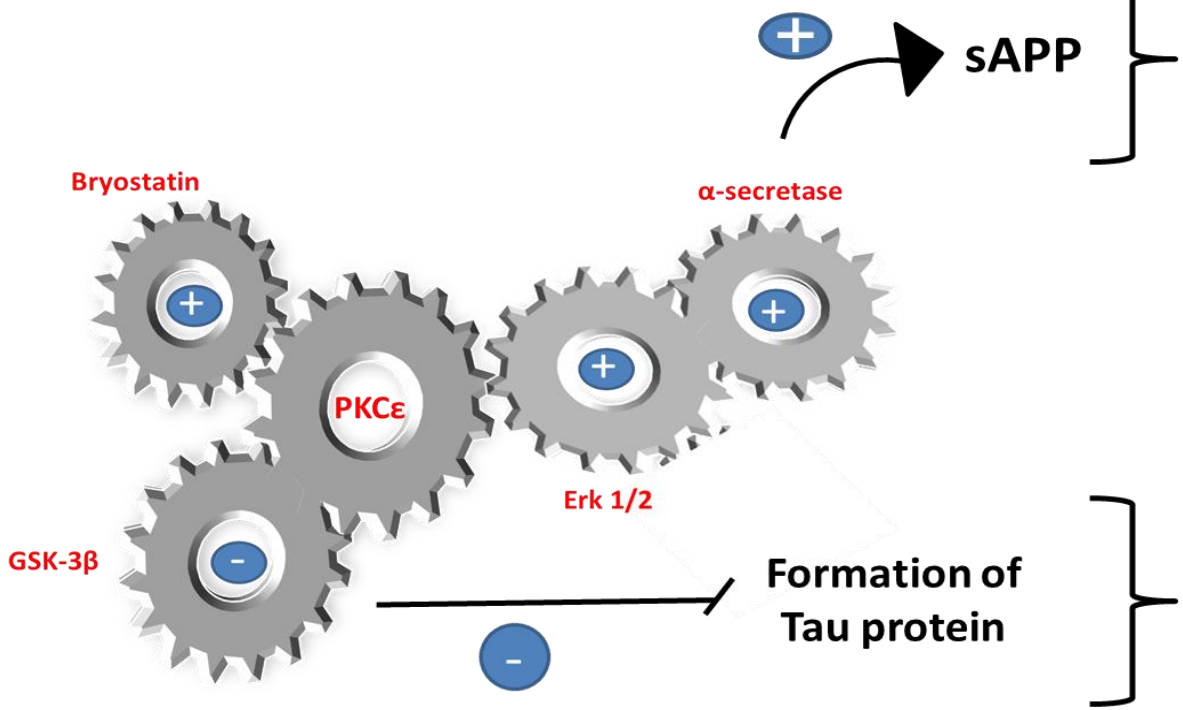
Neurotrope's Core Technology is PKC Activation – Can Restore the Structure & Function of Nerve Cells

- New drug prototypes have been identified which activate Protein Kinase C (PKC) in a highly selective manner - Bryostatin
- "Turning-on" PKC has been shown to "re-boot" neurons in various animal models
- Neuronal regeneration occurs due to the fresh expression of proteins critical to the maintenance and function of the nerve cell
- The results in animals are improved memory and cognition functions
- Our most advanced clinical development program is focused on Alzheimer's Disease, but our drug candidates will also be evaluated in stroke, traumatic brain injury, and mental retardation

PKC Therapeutics provide Neuroprotection through a Multi-Modal Approach

- Anti Aβ
- Anti Ƭ-phosphorylation, and
- Anti apoptosis/ or prevention of cell death through activation of Akt



Hallmarks of AD

Leads to fewer deposits of amyloid plaque in the neuron

Leads to fewer extracellular neurofibrillary tangles

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Profile of Bryostatin vs. other AD Drugs

TEST DRUG	AD TEST SYSTEMS in ANIMAL MODELS			
	Reversal of Amyloid Plaque Deposits	Potency in Slowing Disease Progression in AD Animal Models	Protection against Memory Loss in Ischemic Induced Damage	Protection Against Memory Loss in Models of Traumatic Brain Injury
Donepezil® ***(Inhibits degradation of A-Cholinesterase)***	NO	NO	NO	NO
bapineuzemab ***(antibody to beta amyloid)***	YES	YES	NO	NO
bryostatin ***(stimulation of PKC ε)***	YES	YES	YES	YES

Neurotrope's drug prototype shows activity in a wide panel of test systems where other FDA approved drugs (Donepezil) or experimental drugs (bapineuzumab) have failed.

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Two Lead Drug Candidates: Bryostatin and DHA-CP6

- **Bryostatin – First lead drug candidate**
  - Natural product isolated from a marine organism
  - Developed as an anticancer drug
  - Has been evaluated in 63 clinical studies; > 1,200 cancer patients
  - Well established safety, pharmacodynamics and toxicity information in cancer patients
  - Clinical drug supply could be available through the National Cancer Institute
  - The FDA has approved a Ph.2a clinical trial with this drug in AD
  - Estimated product launch ≈ 2018

- **DHA-CP6 – Second lead drug candidate**
  - Developed by BRNI for the treatment of Alzheimer's Disease
  - Shows comparable efficacy to Bryostatin in pre-clinical studies
  - Expect to enter into Phase 1 in 2015

- **Additional experimental drug prototypes offer fallback candidates to Bryostatin of DHA-CP6**

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Drug Development Pipeline

Product	Therapeutic Indication	Pre-Clinical	Phase 1	Phase 2	Phase 3	Comments
DHA-CP6	AD	Tox. and Safety Evaluation				Novel chemotype, backup to bryo
Bryostatin	FAD	Ph. 2a Compassionate use, multiple dose 4 month trial in early onset AD				2 patients evaluated; ongoing enrollment throughout 2014
Bryostatin	AD	Ph.2a single dose with bryo In AD patients				Start Date – 3Q14
Bryostatin	AD	Ph 2a/b, 4 month multiple dose study in 50 AD patients				Start Date – 1Q15

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Neurotrope's Alzheimer's Diagnostic System

neuroPKC

(proposed Brand Name for the Diagnostic Test)

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Three Steps to Processing the Biopsy Sample for Alzheimer's Diagnostics

neuroPKC

Physician's Office

1

Taking the Biopsy Sample

2

Packaging & Mailing the sample to Neurotrope BioScience

3

Neurotrope's Testing Laboratory in Rockville, Maryland

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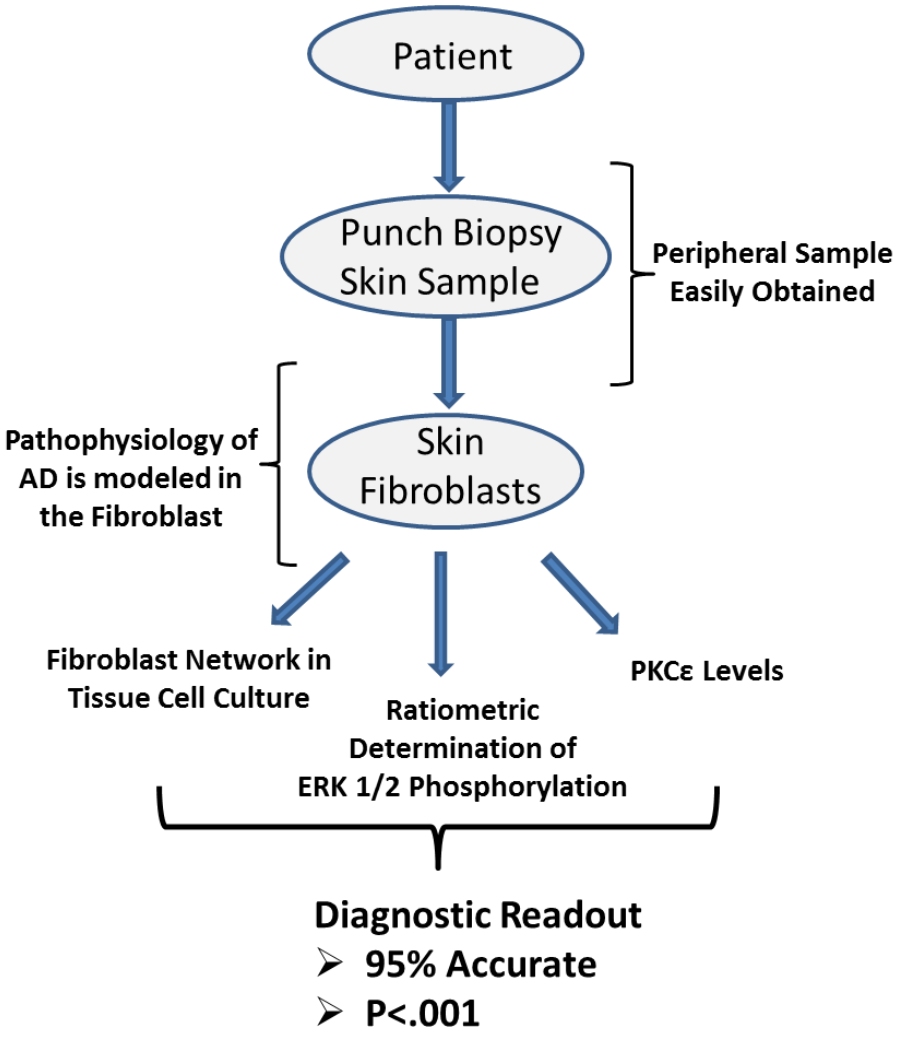
Three Different Peripheral Biomarkers are Monitored for AD Detection

neuroPKC

- Patient / Clinician provides a skin biopsy which is shipped to Neurotrope
- The skin biopsy is used to:
  - Grow cultured fibroblasts in tissue culture
  - Analyzed for levels of PKCε
  - Analyzed for the ratio of ERK 1/2 concentrations
- Analysis is conducted in Neurotrope's Rockville lab
- 48 hour turnaround for the test results
- Over 174 patients analyzed to-date; 64 Dx test results have been confirmed through autopsy
- This is a state-of-the-art diagnostic test that offers accuracy equivalent to brain-imaging techniques, and superiority to other in-vitro test systems currently in development



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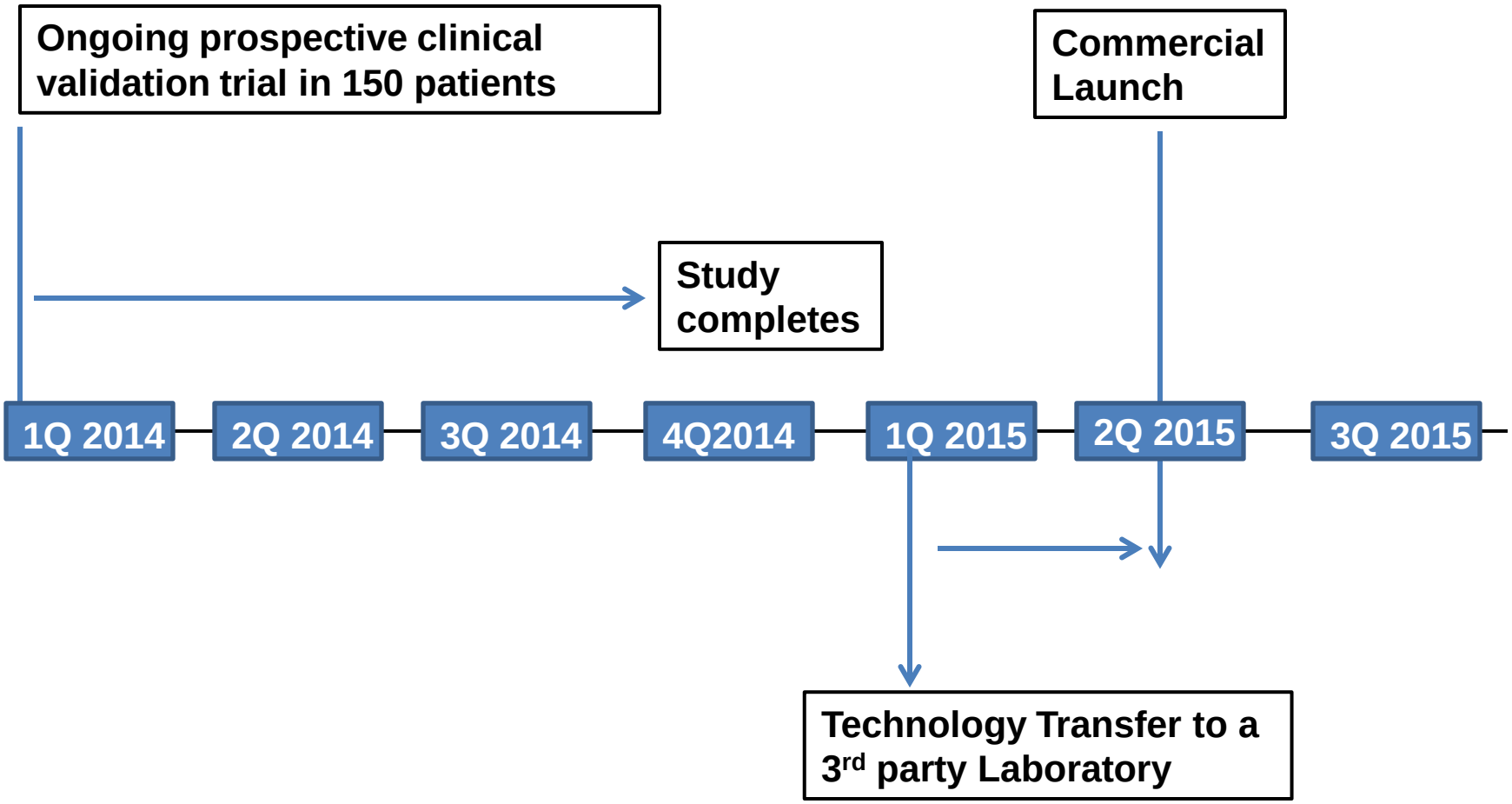
Near Term Milestones in the Development of our AD Dx



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Conclusions: The Power of Teaming an AD Diagnostic with an AD Therapeutic

Potential for Early and Accurate Diagnosis

Potential for Early Therapeutic Intervention Delaying AD Progression

A Paradigm Shift in the Treatment and Management of AD

- **Near term monetization of AD Dx**
- **Enrichment of clinical studies based on more narrow inclusion criteria**
- **Library of bryo back-up candidates provides Pharma partnering opportunities**

Neurotrope BioScience

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