UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) July 15, 2020

Cassava Sciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**000-29959**	**91-1911336**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification Number)**

7801 N Capital of Texas Highway, Suite 260
Austin, Texas 78731
(Address of principal executive offices, including zip code)

(512) 501-2444
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2 below):

☐ Written communication pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communication pursuant to Rule 14d-2(b) under the Exchange Act (17CFR 240.14d-2(b))

☐ Pre-commencement communication pursuant to Rule 13e-4(c) under the Exchange Act (17CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value	SAVA	NASDAQ Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).
Emerging growth company ☐
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.☐

Item 7.01. Regulation FD Disclosure.

A copy of the Cassava Sciences, Inc. July 2020 presentation entitled *Early Clinical Results with SavaDx, an Investigational Blood-based Diagnostic/Biomarker for Alzheimer's Disease* is furnished as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibit No. Description

99.1 Cassava Sciences, Inc. SavaDx Intro presentation dated July 2020

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CASSAVA SCIENCES, INC.
a Delaware corporation

Date: July 15, 2020

By: /s/ ERIC J. SCHOEN
Eric J. Schoen
Chief Financial Officer

CASSAVA sciences

Early Clinical Results with SavaDx, an Investigational Blood-based Diagnostic/Biomarker for Alzheimer's Disease

Biomarkers for Alzheimer's Disease Summit
Virtual Scientific Conference - July 15, 2020

George (Ben) Thornton, PhD; Lindsay H. Burns, PhD; Hoau-Yan Wang, PhD

Forward-Looking Statements

Cautionary Note Regarding Forward-Looking Statements: This presentation contains "forward-looking statements" for purposes of the Private Securities Litigation Reform Act of 1995 (the Act). Cassava Sciences claims the protection of the Safe Harbor for forward-looking statements contained in the Act. All statements other than statements of historical fact contained in this presentation, including, but not limited to, statements regarding the status of clinical or technical studies with SavaDx or PTI-125; the interpretation of results of our clinical or technical studies with SavaDx or PTI-125; the ability of SavaDx to detect or to stratify Alzheimer's disease, or to act as a biomarker for PTI-125; potential health benefits, if any, of changes in levels of biomarkers; variability in levels of biomarkers of disease; verbal commentaries made by Cassava Sciences' employees; and potential benefits, if any, of the Company's product candidates for Alzheimer's disease, are forward-looking statements. Such statements are based largely on the Company's current expectations and projections about future events. Such statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, including, but not limited to, those risks relating to the ability to conduct or complete clinical studies on expected timelines, to demonstrate the accuracy, specificity, safety, efficacy or potential health benefits of our product candidates, the severity and duration of health care precautions given the on-going COVID-19 pandemic, any unanticipated impacts of this pandemic on our business operations, and including those described in the section entitled "Risk Factors" in Cassava Sciences' Annual Report on Form 10-K for the year ended December 31, 2019 and future reports to be filed with the SEC. In light of these risks, uncertainties and assumptions, the forward-looking statements and events discussed in this presentation are inherently uncertain and may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not rely upon forward-looking statements as predictions of future events. Except as required by law, the Company disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this presentation. For further information regarding these and other risks related to our business, investors should consult our filings with the SEC, which are available on the SEC's website at www.sec.gov. The Company does not undertake any obligation to update this presentation or any forward-looking statements included therein, except as required by law.

Disclosures

- SavaDx and PTI-125 are proprietary product candidates of Cassava Sciences.
- Lindsay H. Burns, PhD and George (Ben) Thornton, PhD are employees of Cassava Sciences.
- Hoau-Yan Wang, PhD is a consultant to Cassava Sciences and is affiliated with City University of New York (CUNY) School of Medicine.
- Research reported in this presentation was supported by the National Institute on Aging of the NIH under award AG057329 and other research grant awards.
- The content of this presentation is solely the responsibility of the authors and does not necessarily represent the official views of NIH, CUNY or any other third-party.

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CUNY THE CITY UNIVERSITY OF NEW YORK

Lindsay H. Burns, PhD

- SVP Neuroscience, Cassava Sciences; employee 2002-present
- Previously, Neurex/Elan Pharmaceuticals and Abgenix/Amgen
- Harvard BA, University of Cambridge PhD, post-doc Harvard Med School
- Publications in neurodegeneration; reward processing; discriminative learning; Parkinson's and Huntington's disease; and mu opioid receptor signaling

I. Introduction

II. Diagnostic Data

III. Clinical Data

IV. Conclusions

SavaDx – A Novel Diagnostic/Biomarker for AD

- **SavaDx is a blood-based diagnostic/biomarker for Alzheimer's disease (AD).**
  - Program benefits from significant financial support from the National Institute on Aging (NIA).
- **SavaDx was discovered in collaboration with Prof. Hoau-Yan Wang, PhD (CUNY) under academic research funding provided by Cassava Sciences.**
  - Worldwide commercial rights owned exclusively by Cassava Sciences.
- **SavaDx is an investigational product candidate.**
  - The U.S. Food and Drug Administration has not reviewed or approved SavaDx for its proposed use as a diagnostic/biomarker of AD, or any other clinical indication.

SavaDx Detects an AD Proteopathy

- **A 'proteopathy' refers to a protein that become structurally abnormal, and disrupts the normal function of cells, tissues and organs.**
- **We discovered a new proteopathy in AD: an altered form of the scaffolding protein, Filamin A (FLNA).**
- **SavaDx detects protein changes in blood from altered FLNA.**
  - Detects abnormal protein-protein interactions in lymphocytes
  - Detects unique proteolytic products in plasma

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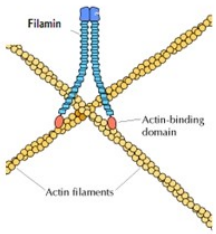
SavaDx Detects the Filamin A (FLNA) Proteopathy

FLNA is an intracellular scaffolding protein anchored in the cell membrane.

FLNA interacts with > 90 proteins, influencing many signaling pathways.



The AD brain carries an *ALTERED* conformation of FLNA.

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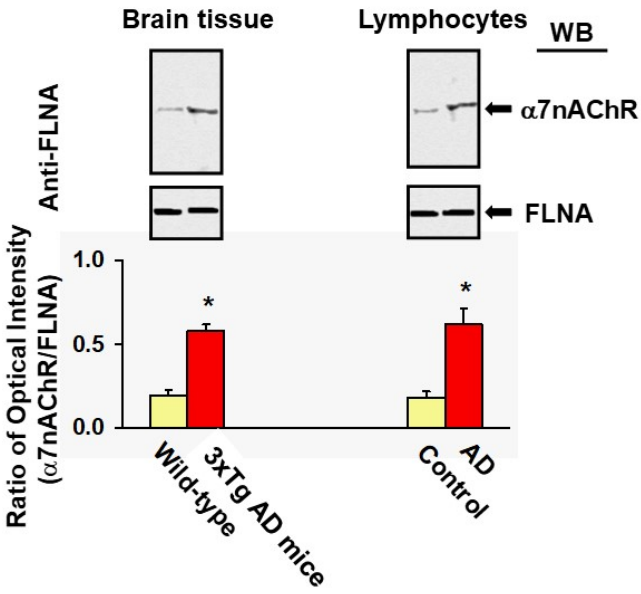
The FLNA Proteopathy in AD Brain

- **Altered FLNA links to two different receptors to enable $A\beta_{42}$ signaling:**
  - i. **α7-nicotinic acetylcholine receptor (α7nAChR)** ⟶ hyperphosphorylates tau
  - ii. **Toll-like receptor 4 (TLR4)** ⟶ releases inflammatory cytokines

FLNA – α7nAChR Increases in 3xTg AD Mice & AD Patients



PTI-125 Reverses the FLNA Proteopathy

- **PTI-125 is our investigational drug candidate for AD.**

- **PTI-125 binds *altered* FLNA, restores its native shape, un-links FLNA from:**
  - i. **α7-nicotinic acetylcholine receptor (α7nAChR)**  hyperphosphorylates tau
  - ii. **Toll-like receptor 4 (TLR4)**  releases inflammatory cytokines

- **Through a single target, PTI-125 suppresses $A\beta_{42}$ signaling, reducing both neurodegeneration and neuroinflammation.**

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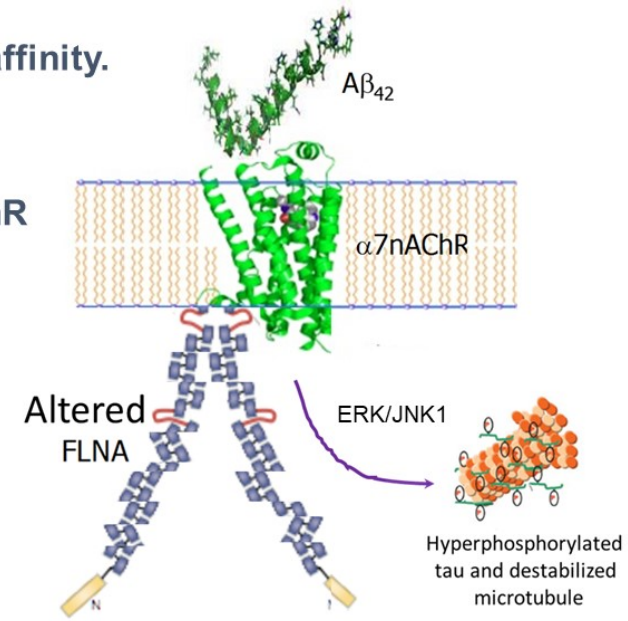
Altered FLNA links to α7-nicotinic acetylcholine receptor

- $A\beta_{42}$ binds α7nAChR with femtomolar affinity.
- Altered FLNA linkage to α7nAChR enables $A\beta_{42}$ signaling through α7nAChR to hyperphosphorylate tau.



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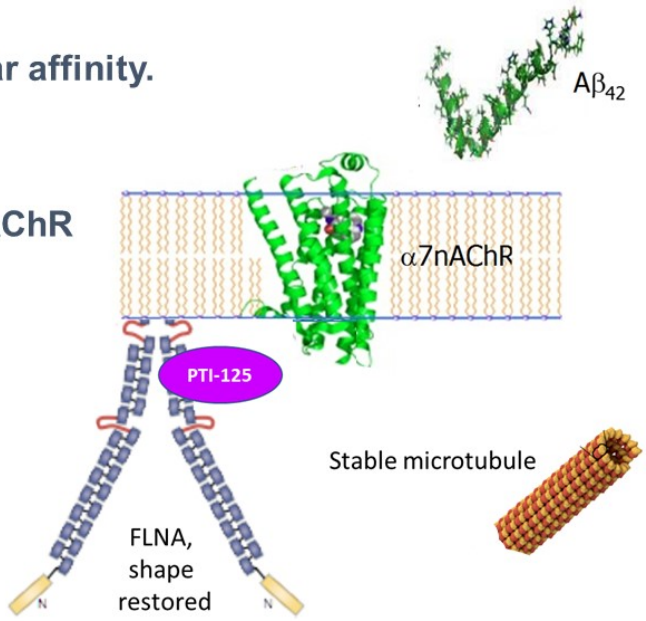
Altered FLNA links to α7-nicotinic acetylcholine receptor

- $A\beta_{42}$ binds α7nAChR with femtomolar affinity.
- Altered FLNA linkage to α7nAChR enables $A\beta_{42}$ signaling through α7nAChR to hyperphosphorylate tau.
- ***PTI-125 binds altered FLNA, restores its normal shape, suppresses $A\beta_{42}$ signaling and tau hyperphosphorylation.***



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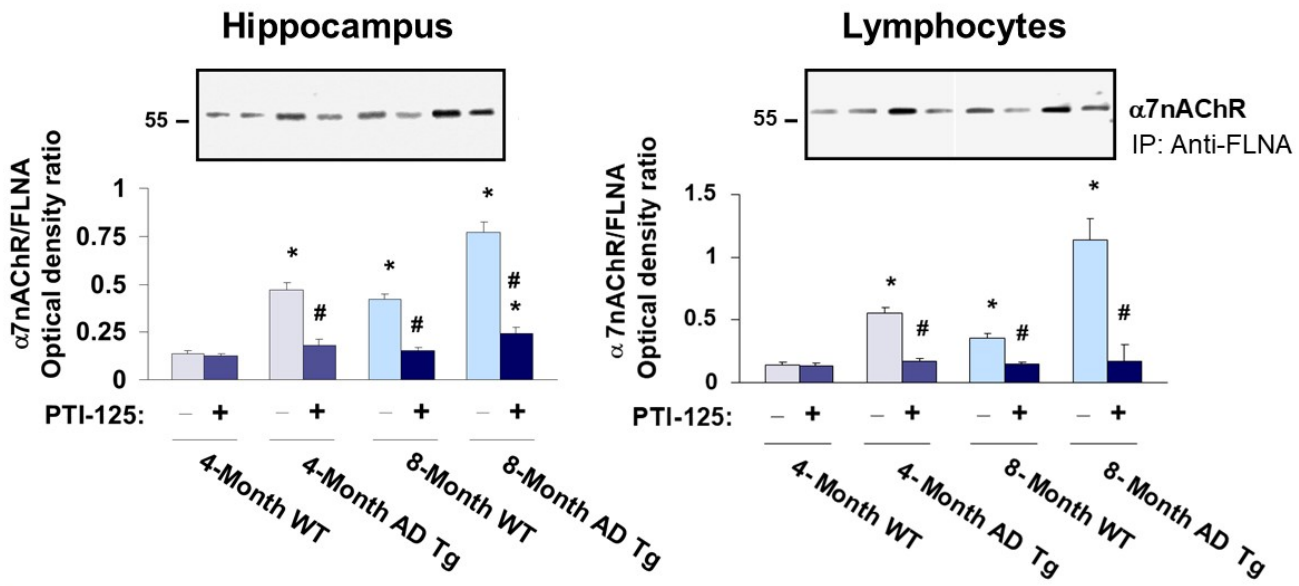
α7 – FLNA Linkage in Brain and Lymphocytes in Tg Mice



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SavaDx - Pilot Diagnostic Studies

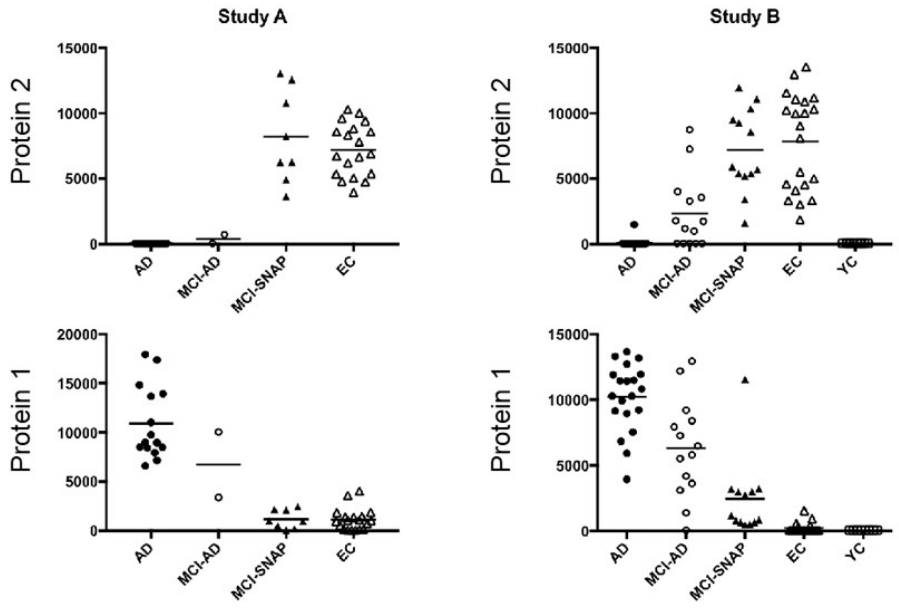
Study A (n=44; Dr. Joel Ross; AD confirmed by Amyvid or FDG-PET)

	AD	MCI-AD	MCI-SNAP	Elderly Normal Controls
n	15	2	8	19
Age	75.3 (11.9)	77.5 (3.5)	77.4 (4.6)	75.6 (4.3)
Sex	9M, 5F (1 na)	1M, 1F	5M,3F	13M, 6F
MMSE	19.9 (3.3)	25.0 (0.0)	27.0 (2.5)	29.2 (0.7)
Protein 1	10906 (3698)	6722 (4717)	1183 (944.70)	1127 (1124)
Protein 2	50 (0.0)	381 (468)	8215 (3551)	7222 (1995)
Ratio 1 / 2	218.1 (73.96)	102 (138)	0.172 (0.188)	0.148 (0.136)

Study B (n=78; Dr. Steven Arnold; AD confirmed by CSF Tau/pTau)

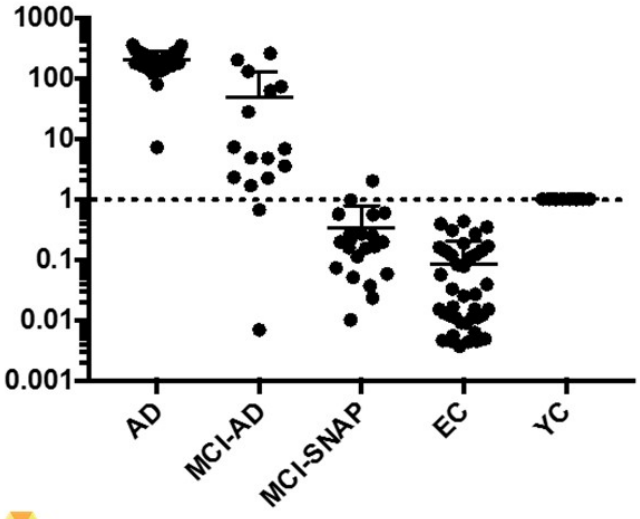
	AD	MCI-AD	MCI-SNAP	Elderly Normal Controls	Young Normal Controls
n	20	13	14	21	10
Age	68.27 (8.6)	71.51 (6.750	73.64 (16.46)	70.24 (5.99)	23.2 (4.32)
Sex	12F, 8M	6F, 8M	4F, 9M	14F, 7M	5F, 5M
MMSE	16.9 (7.1)	24.3 (3.3)	28.1 (2.4)	29.3 (1.0)	na
Protein 1	10201 (2691)	6293 (3735)	2451 (2972)	217.5 (379.8)	50 (0.0)
Protein 2	122.4 (323)	2348 (2784)	7184 (3155)	7815 (3705)	50 (0.0)
Ratio 1 / 2	193.5 (67.82)	41.44 (73.24)	0.4258 (0.54)	0.02798 (0.04)	1 (0.0)

Western Blot Band Densities



SavaDx – Positive Results in Studies A & B Combined (N=122)

SavaDx identified and stratified blood samples from:



- AD patients
- Mild Cognitive Impairment due to AD (MCI-AD)
- MCI with Suspected Non-Amyloid Pathology (MCI-SNAP)
- Elderly Controls (EC)
- Young Controls (YC)

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Lessons Learned

- **Additional samples tested with SavaDx showed meaningless results.**
  - Samples were analyzed using commercial antibodies.
- **Lot-to-lot variability of commercial mAbs, differences in affinity and avidity.**
  - We are developing proprietary antibodies, with funding provided by NIH.
- **Variability in sample handling/processing between sites.**
  - We are standardizing collection procedures.
    - PGE1 added to plasma could have affected results.
    - Keeping whole blood at room temperature until centrifugation may disrupt results.

I. Introduction

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SavaDx and PTI-125

- PTI-125 is our investigational drug candidate for AD.
- PTI-125 targets and reverses altered FLNA.
- SavaDx is a biomarker to track treatment effects of PTI-125 because SavaDx detects protein changes in blood from altered FLNA.

PTI-125 Phase 2a Study Design

- **Objective:** Safety, PK and biomarkers under an IND filed by Cassava Sciences
- **Study Design:** First-in-patient, open-label treatment at 5 sites in the US
- **Patients:** Mild-to-moderate AD, MMSE ≥ 16 ≤ 24, age 50-85
- **Key Inclusion:** CSF Total tau/$A\beta_{42}$ ≥ 0.30
- **Enrollment:** Thirteen (13) patients
- **PTI-125 Dose:** 100 mg oral tablets, b.i.d. for 28 days
- **Biomarkers:** CSF samples collected at screening and Day 28
  Blood samples for plasma/lymphocyte markers at Days 1, 14 and 28

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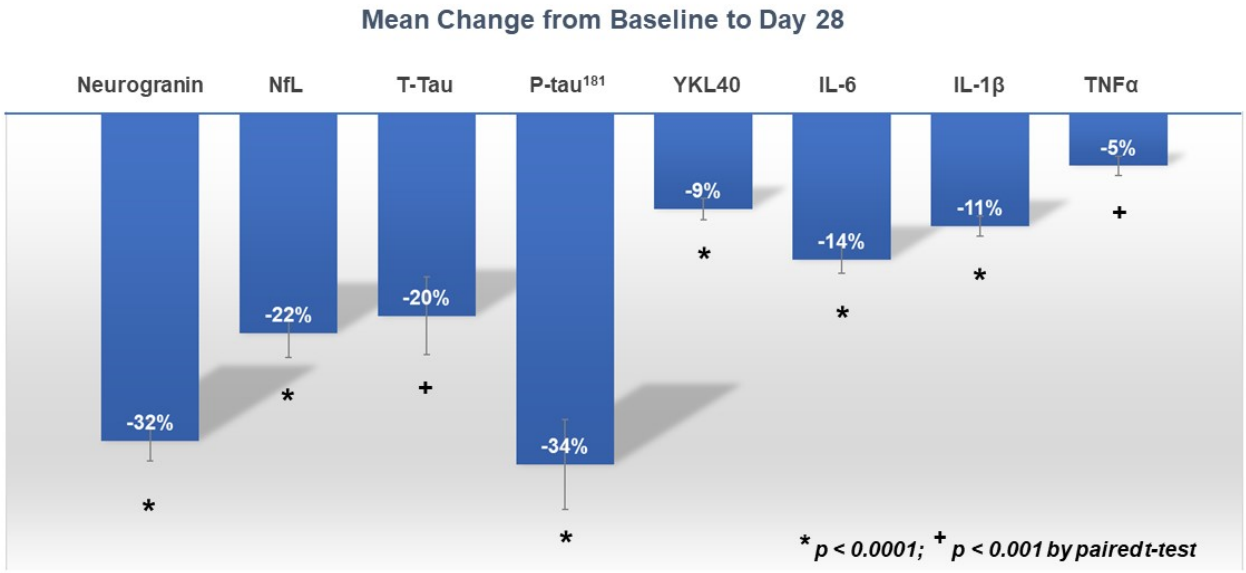
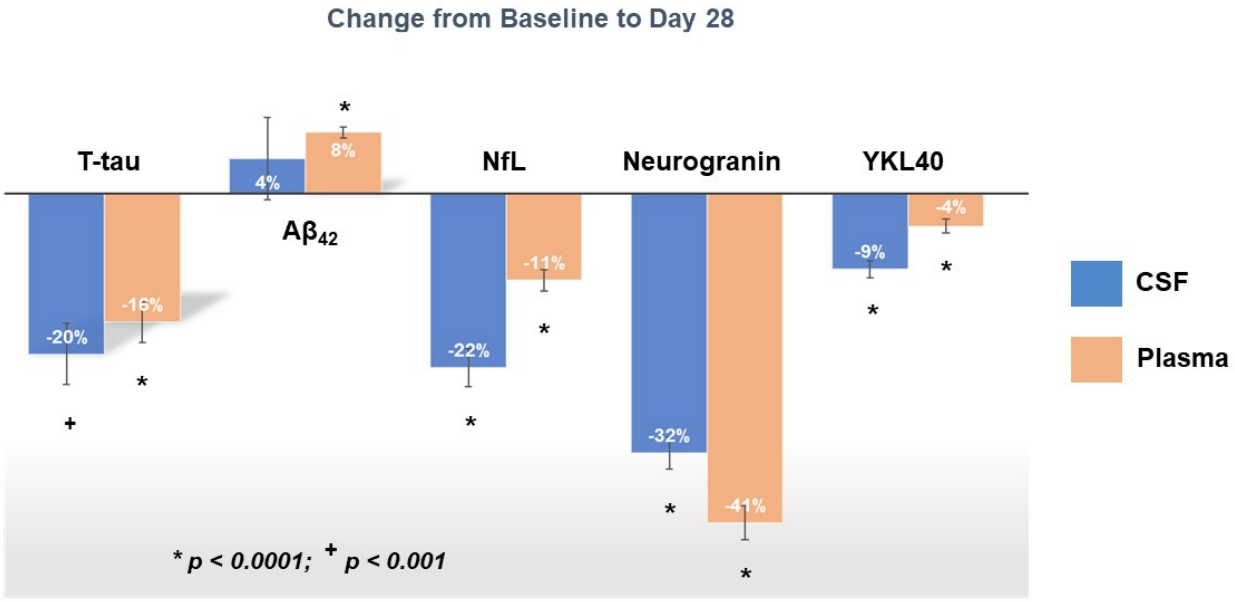
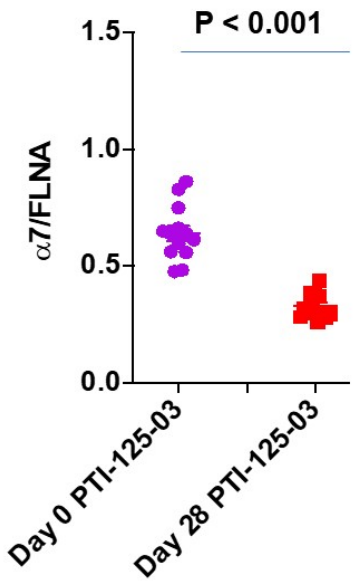
Phase 2a Summary Results - CSF Biomarkers



Phase 2a Biomarkers – CSF vs. Plasma



Phase 2a Biomarkers – SavaDx in Lymphocytes



PTI-125 significantly reduced SavaDx values over 28 days, demonstrating target engagement and treatment effect of PTI-125 in AD.

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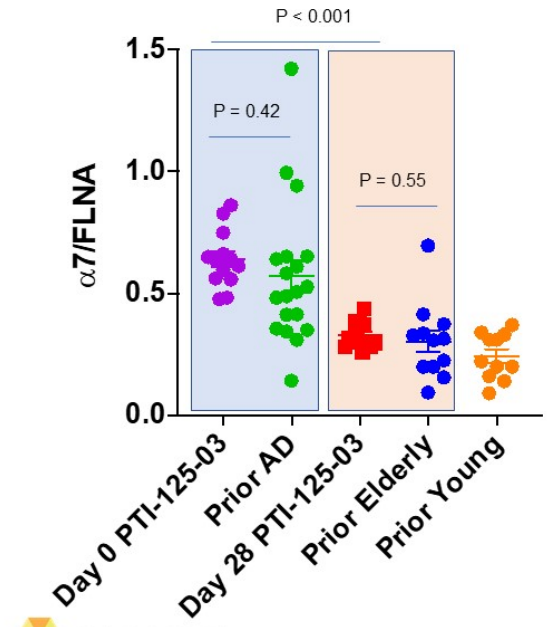
Phase 2a Biomarkers – SavaDx in Lymphocytes



- Before dosing (i.e., Day 0), patients showed SavaDx values in lymphocytes that matched our historical AD values.
- After 28 days of dosing with PTI-125, patients showed SavaDx values that matched historical values for both Elderly and Young controls, illustrating the magnitude of treatment effect of PTI-125 in AD.

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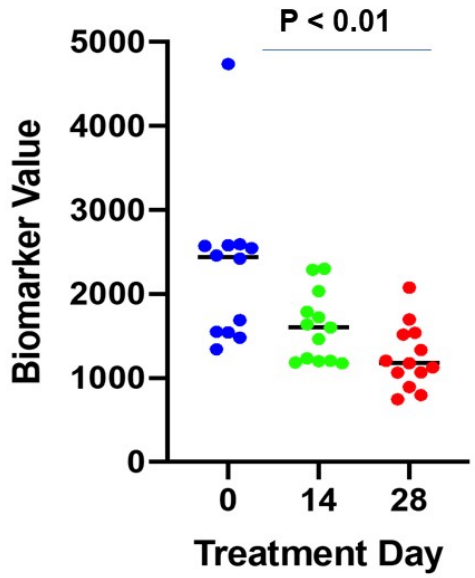
Phase 2a Biomarkers – SavaDx in Plasma



SavaDx values in plasma were significantly reduced (p<0.01) in AD patients dosed with PTI-125 for 28 days, demonstrating additional evidence of target engagement and treatment effect.

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Phase 2a Clinical Trial of PTI-125

I. Introduction

II. Diagnostic Data

III. Clinical Trial Treatment Effects

IV. Conclusions

Next Steps

- **Future studies with SavaDx intend to demonstrate sensitivity and specificity as a diagnostic/biomarker of AD.**
  - We are developing proprietary antibodies for use with SavaDx, with funding by a research grant award from NIH.
  - Validation studies are planned for 2nd half 2020 and beyond.

- **SavaDx will be used to evaluate treatment effects of PTI-125 in a recently completed randomized, placebo-controlled Phase 2b study in AD.**

Conclusions

- SavaDx is a simple blood test for AD, funded by NIH.

- Early data are encouraging!
  - SavaDx diagnosed AD patients vs. non-AD subjects in 122 samples.
  - SavaDx stratified AD patients into distinct groups.
  - SavaDx demonstrated target engagement/treatment effect of PTI-125 in a Phase 2a study.

SavaDx shows potential as a simple, non-invasive tool to diagnose and stratify AD, and to confirm treatment effects of PTI-125.

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