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) December 5, 2019

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. presentation at the *12th International Conference on Clinical Trials on Alzheimer's Disease (CTAD)* on December 5, 2019 is furnished as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

Item 8.01. Other Events.

On December 5, 2019, Cassava Sciences, Inc. issued a press release, a copy of which is attached hereto as Exhibit 99.2 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibit No. Description

99.1	Cassava Sciences, Inc. CTAD presentation dated December 5, 2019
99.2	Cassava Sciences, Inc. CTAD press release dated December 5, 2019

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: December 6, 2019

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

One-month Oral Treatment with PTI-125, a New Drug Candidate, Reduces CSF & Plasma Biomarkers of Alzheimer's Disease

Late Breaking Oral Communication
12th Clinical Trials on Alzheimer's Disease (*CTAD*)
December 5, 2019 - San Diego, CA

Lindsay H. Burns, PhD; **Hoau-Yan Wang, PhD**;
Zhe Pei, PhD; Kuo-Chieh Lee; Carrie Crowley;
Michael Marsman, PharmD; Nadav Friedmann, PhD, MD

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this presentation including, but not limited to, statements regarding the status of Phase 2 clinical studies; the interpretation of clinical results, including potential health benefits, if any, of changes in levels of biomarkers; commentaries made by Cassava Sciences' employees; and other 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 trials on expected timelines, to demonstrate the specificity, safety, efficacy or potential health benefits of our product candidates 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, 2018 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. The content of this presentation is solely the responsibility of the Company and does not necessarily represent the official views of the National Institutes of Health.

The Company does not undertake any obligation to update this presentation or any forward-looking statements included therein, except as required by law.

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Disclosures and Contributions

- PTI-125 is a proprietary compound of Cassava Sciences, Inc.
- Lindsay H. Burns, PhD; Nadav Friedmann, PhD, MD; and Carrie Crowley are employees of Cassava Sciences.
- Michael Marsman, PharmD and Hoau-Yan Wang, PhD are consultants to Cassava Sciences.
- Hoau-Yan Wang, PhD; Zhe Pei, PhD; and Kuo-Chieh Lee performed biomarker assays and are affiliated with City University of New York School of Medicine.
- *J Neurosci, Neurobiol Aging* and *Neuroimmunol Neuroinflammation* publications on PTI-125 are online: *www.CassavaSciences.com.*

Research reported in this presentation was supported by the National Institute on Aging of the NIH under award AG060878. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIH.

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CUNY THE CITY UNIVERSITY OF NEW YORK

I. Background

II. Clinical Results

III. Mechanism of Action

IV. Conclusions

PTI-125 – A Novel Drug for Alzheimer's disease

- **PTI-125 is our proprietary, small molecule drug candidate to treat Alzheimer's disease (AD) and other dementias.**
  - Our AD program benefits from significant, long-term scientific and financial support from the National Institutes of Health (NIH).
- **By binding a single target, PTI-125 reduces both neurodegeneration and neuroinflammation.**
- **Clinical results from a first-in-patient study support PTI-125's mechanism of action.**
  - Clinical biomarker results are consistent with > 10 years of basic science and preclinical data.

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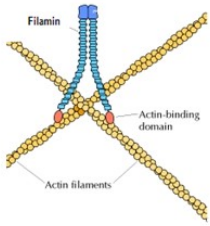
The Target of PTI-125 is *Altered* Filamin A (FLNA)

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.

Altered FLNA is critical to amyloid beta's toxicity.

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PTI-125 Mechanism of Action

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

- **PTI-125 preferentially binds *altered* FLNA, restores its proper shape/function, potently suppressing $A\beta_{42}$ signaling via α7nAChR and TLR4.**
  - Through a single target, PTI-125 reduces both neurodegeneration and neuroinflammation.

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Phase 2a Clinical Trial of PTI-125

I. Background

II. Clinical Results

III. Mechanism of Action

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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 Safety and Pharmacokinetics

- Drug was well-tolerated, no drug-related adverse events observed
- PK parameters of PTI-125 100 mg b.i.d. in AD patients:

Day	C_{max} (ng/mL)	T_{max} (h)	C_{last} (ng/mL)	T_{last} (h)	λz (1/h)	AUC_{last} (h*ng/mL)	$T_{1/2}$ (h)	CSF/ plasma
Day 1	1,020	2.00	176	12	0.176	5,320	4.51	---
Day 28	1,100	2.06	238	12	0.174	6,700	4.35	0.61

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CSF Biomarker Methods

- CSF biomarkers were measured by CUNY using commercial ELISA kits (LifeSpan BioSciences, Inc.) according to manufacturer's instructions.
- Samples were pre-treated with protease and phosphatase inhibitors.
- Screening and Day 28 samples were run in the same ELISA plate, in triplicate, for each biomarker.
- Assays used 50 µl CSF per well (YLK40 used 100 µl), subtracting background for chromogen and the no-CSF control.
- Values were fit to standard curves; standard curves had R^2 values of 0.85-0.99.
- CSF samples were tested blind to Baseline/Day 28.
- Statistical analyses were conducted by an independent biostatistician.

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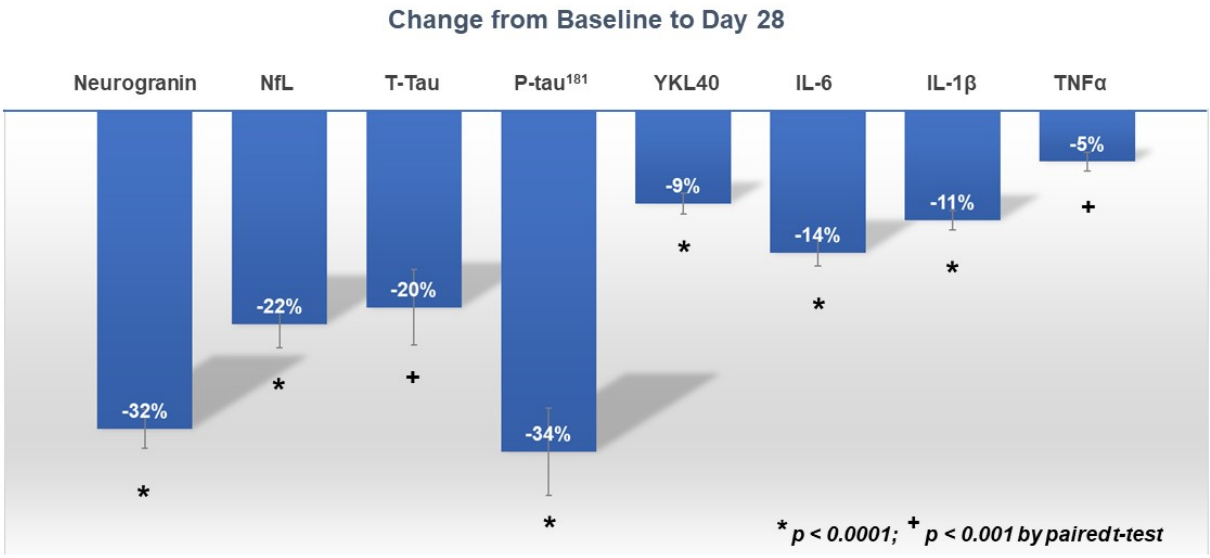
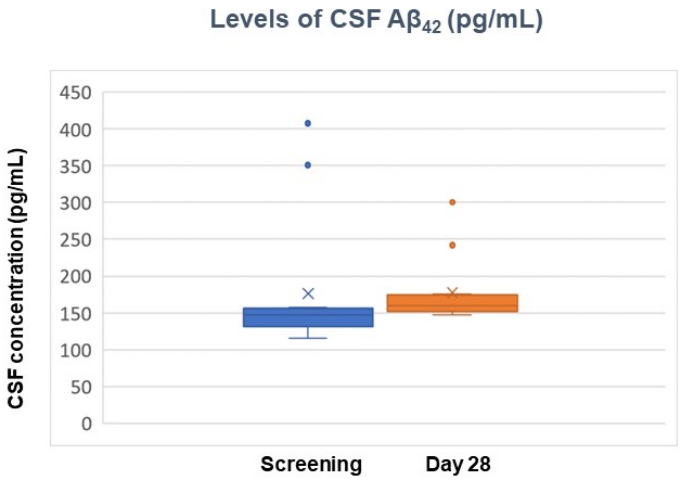
Phase 2a Summary Results - CSF Biomarkers



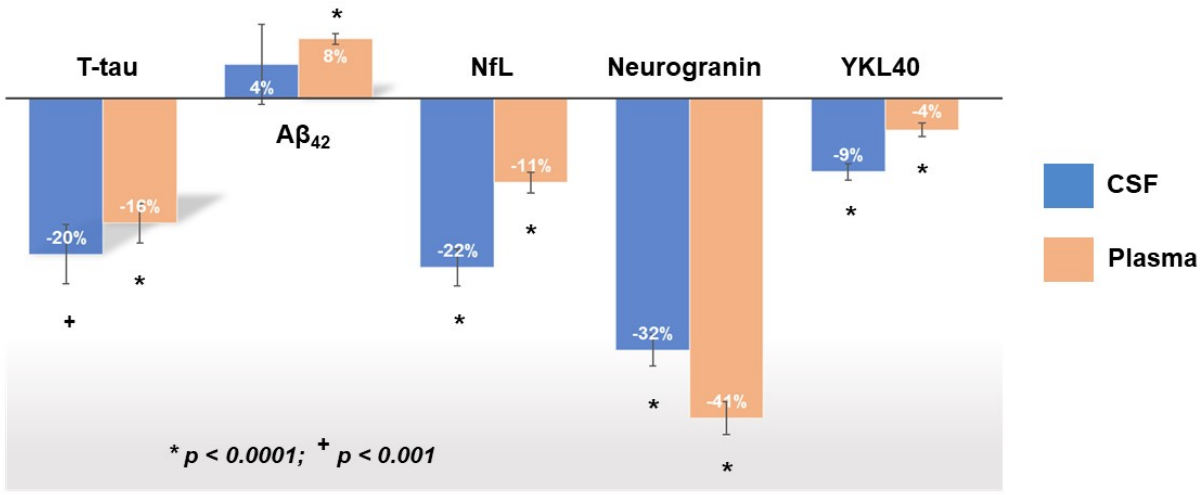
Slight Increase in CSF Amyloid-beta ($A\beta_{42}$)



Note: Low CSF levels of $A\beta_{42}$ indicates Alzheimer's disease.

Phase 2a Biomarkers – CSF vs. Plasma

Change from Baseline to Day 28



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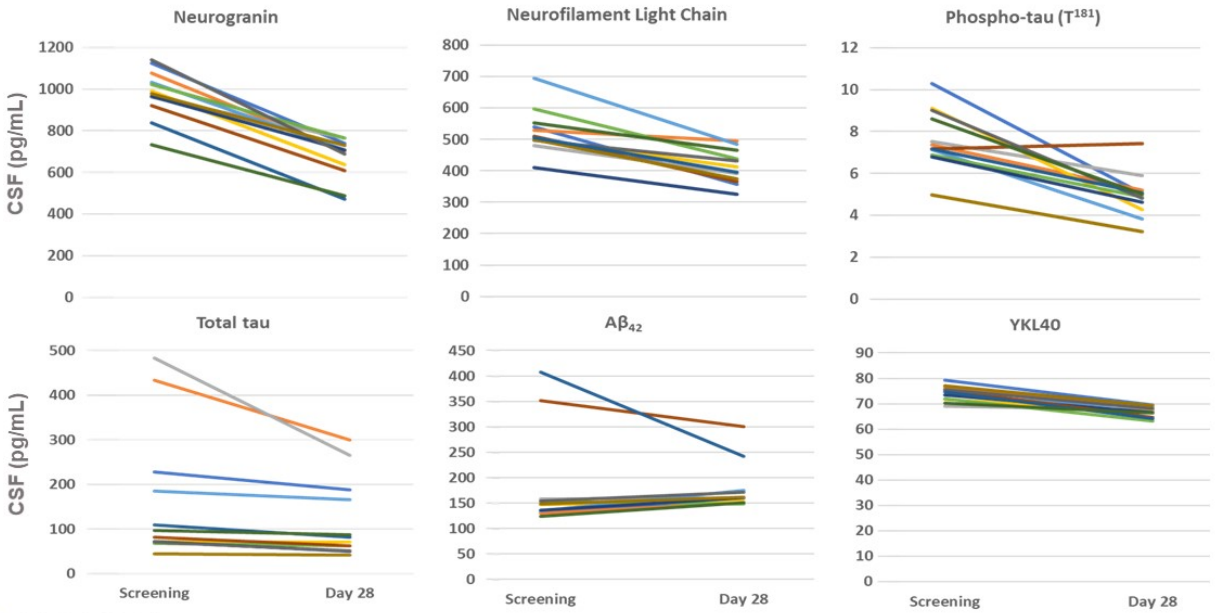
CSF Biomarkers – Individual Patient Responses



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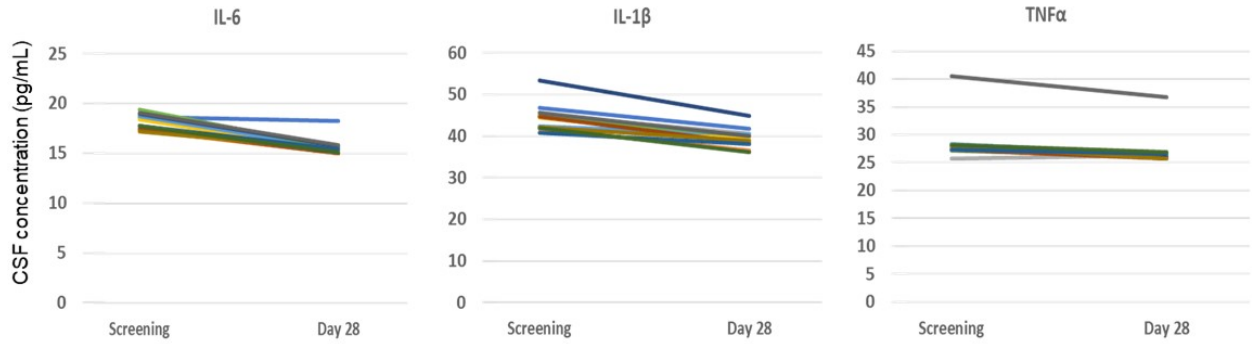
CSF Cytokines – Individual Patient Responses



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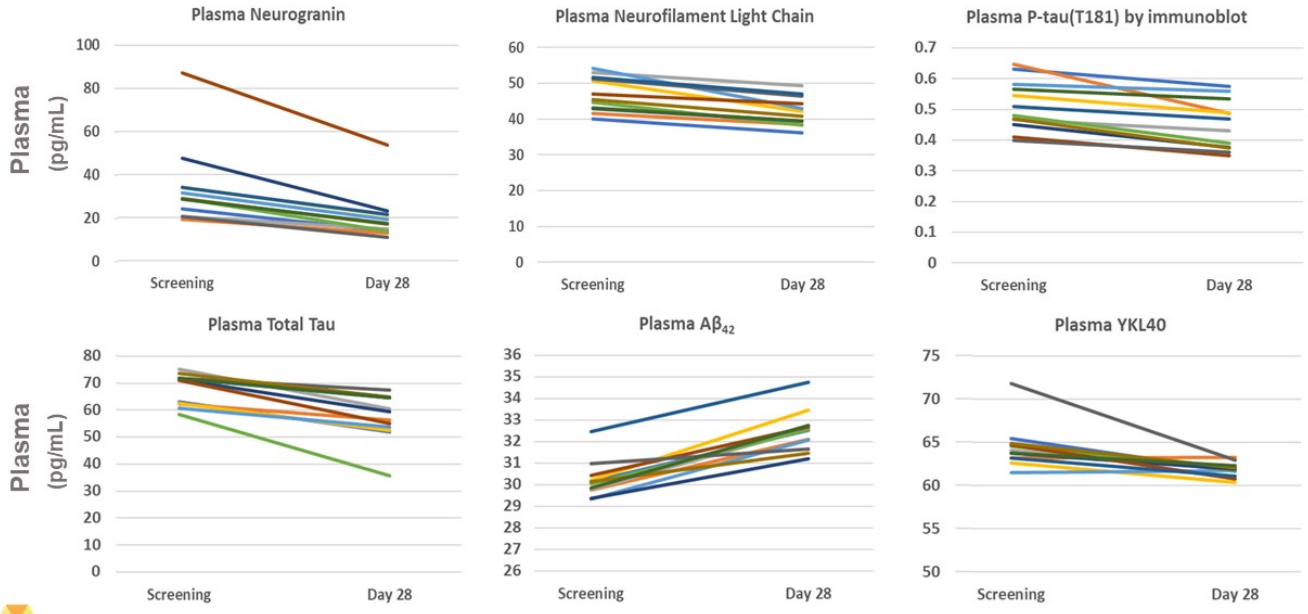
Plasma Biomarkers – Individual Patient Responses



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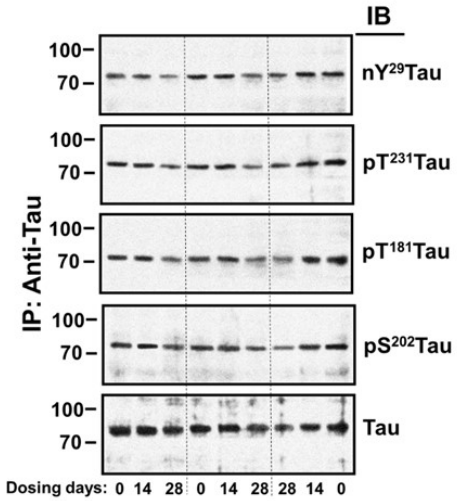
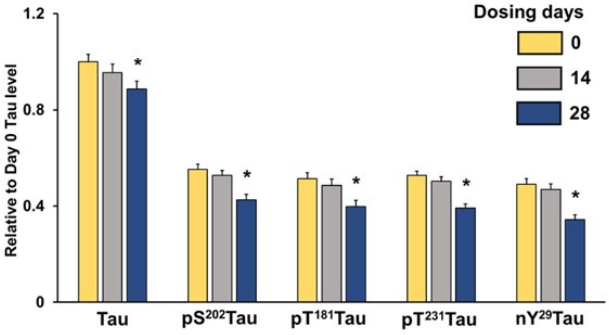
P-Tau and Nitrated Tau Reduced in Plasma



Reductions in Tau, P-tau and N-tau:
Baseline to Day 14 & Day 28



*** p < 0.001 Baseline vs. Day 28**

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Phase 2a Clinical Trial of PTI-125

I. Background

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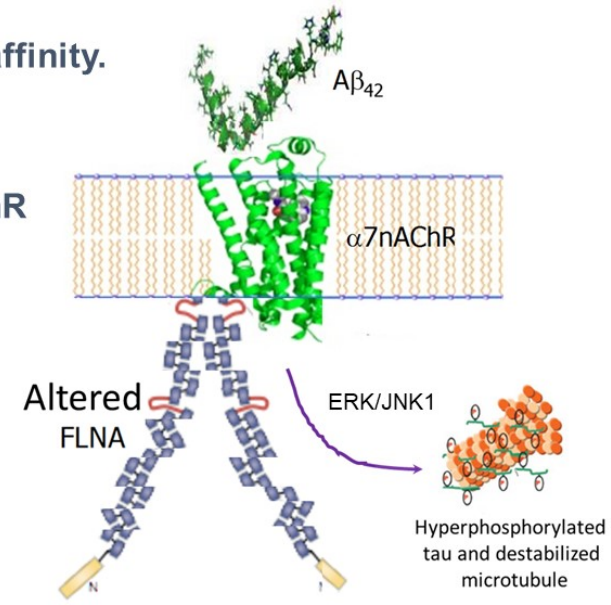
Altered FLNA links to α7-nicotinic acetylcholine receptor

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



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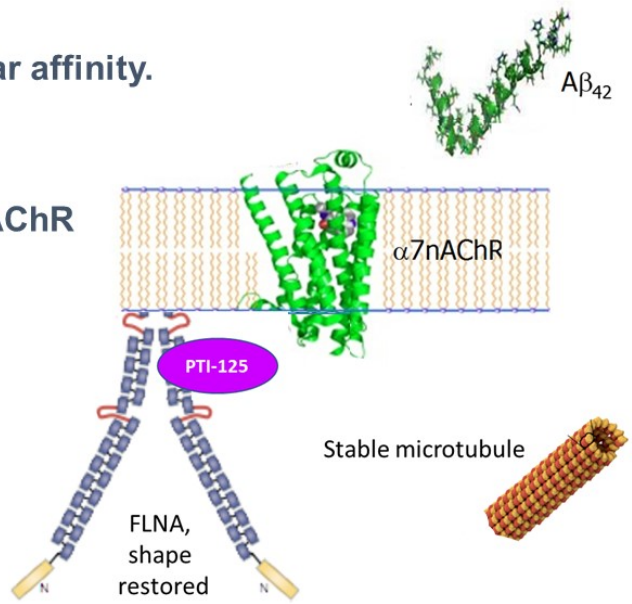
- ***PTI-125 binds altered FLNA, restores its normal shape, stops $A\beta_{42}$ signaling and tau hyperphosphorylation.***



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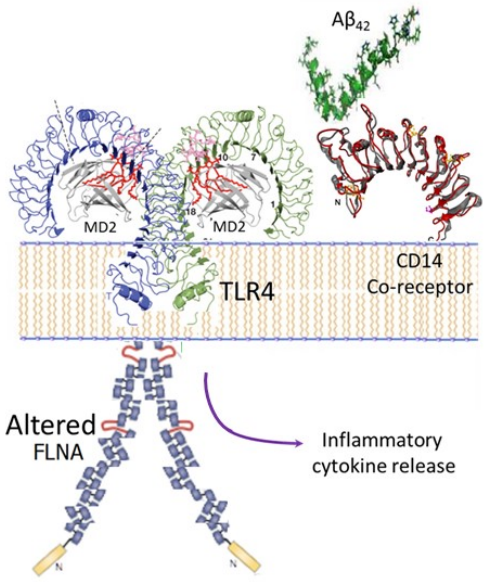
Altered FLNA links to Toll-like Receptor 4 (TLR4)

- **Altered FLNA linkage to TLR4 enables $A\beta_{42}$ to activate TLR4.**
- **Persistent TLR4 activation results in chronic neuroinflammation.**



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Altered FLNA links to Toll-like Receptor 4 (TLR4)

- Altered FLNA linkage to TLR4 enables $A\beta_{42}$ to activate TLR4.
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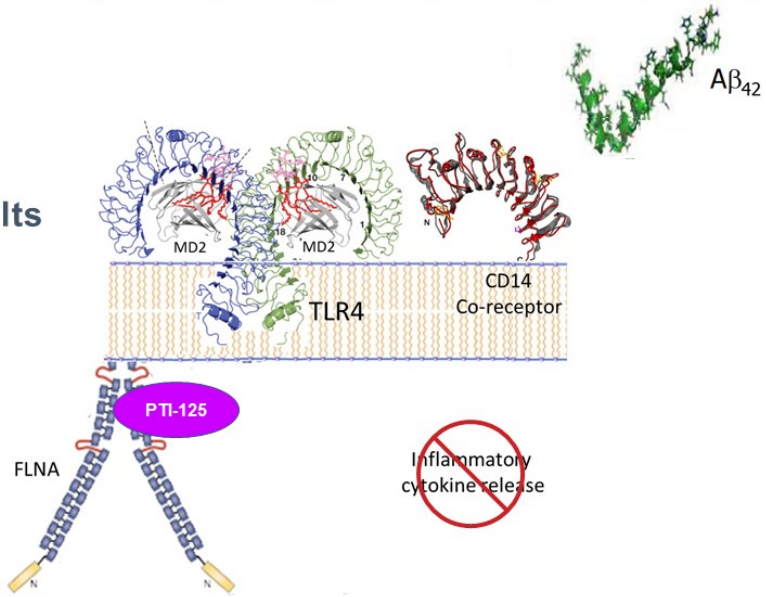

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Target Engagement & Mechanism of Action

Evidence in patient lymphocytes from Day 0 to 14 to 28 by three methods:

i. Reversal of altered conformation of FLNA
   Assessed by isoelectric focusing point

ii. Reduced FLNA linkages to α7nAChR and TLR4
   Assessed by co-immunoprecipitation

iii. Reduced $A\beta_{42}$ complexed with α7nAChR and CD14
   Assessed by co-immunoprecipitation

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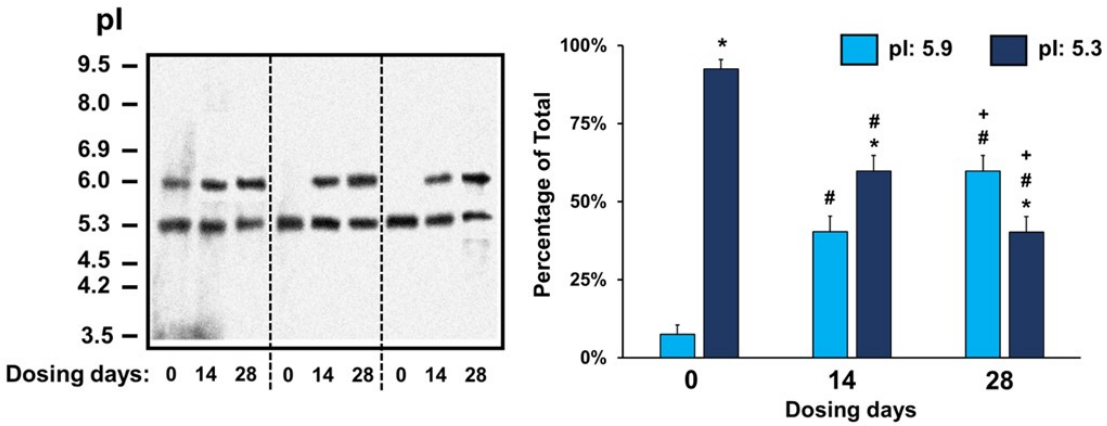
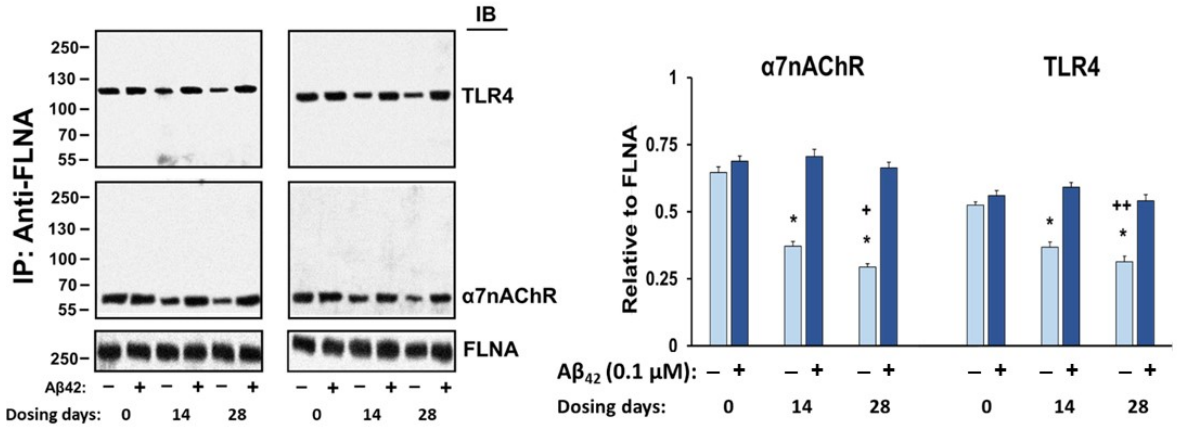
FLNA's Native Shape Restored in Patient Lymphocytes



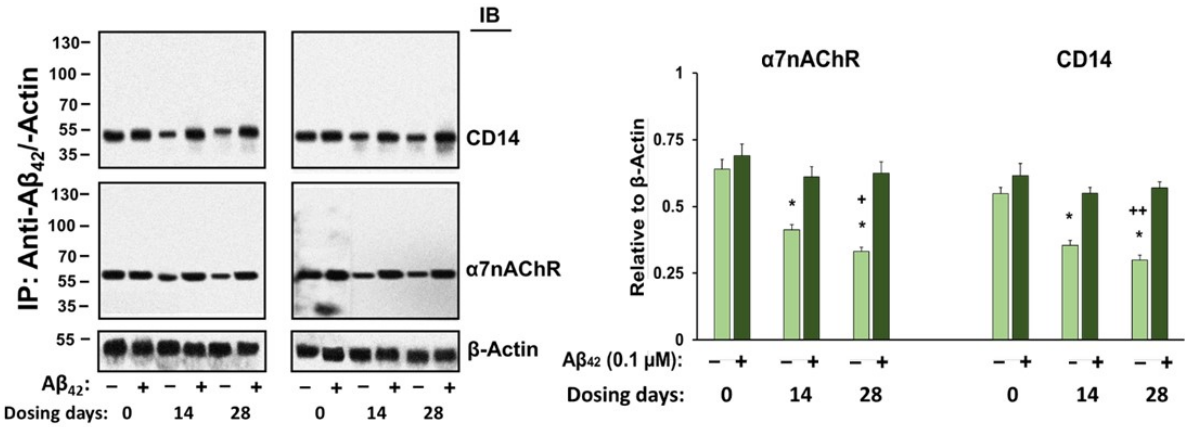
** p < 0.0001 vs. pI 5.9; # p < 0.0001 vs. Day 0; + p < 0.0001 vs. Day 14*

FLNA Linkages to α7 and TLR4 Reduced in Lymphocytes



** p < 0.001 vs. Day 0; + p < 0.01, ++ p < 0.05 vs. Day 14*

$A\beta_{42}$ Bound to α7nAChR or CD14 Reduced in Lymphocytes



** p < 0.001 vs. Day 0; + p < 0.01, ++ p < 0.05 vs. Day 14*

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Phase 2a Clinical Trial of PTI-125

I. Background

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Summary of PTI-125 Effects

- **Validated CSF biomarkers of AD pathology improved in all patients treated with PTI-125:**
  - Reduced post-synaptic damage: Neurogranin -32%
  - Reduced tau: Total tau -20%, P-tau -34%
  - Reduced axonal degeneration: Neurofilament light chain -22%
  - Reduced neuroinflammation: YKL40, IL-6, IL-1β, TNFα reduced 5-14%
- **Consistent improvements in biomarkers across CSF, plasma and lymphocytes.**

PTI-125 at 100 mg b.i.d. for 28 days appeared to slow the rate of neurodegeneration and suppress neuroinflammation, consistent with the drug's mechanism of action and preclinical data.

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Phase 2a data are…..

Promising because:

- **PTI-125 improved all biomarkers of AD pathology, neurodegeneration and neuroinflammation.**
  - Consistent effects across CSF, plasma, lymphocytes
  - All patients responded to PTI-125
  - Drug was safe and well-tolerated
- **Clinical results are consistent with PTI-125's mechanism of action and > 10 years of basic science.**
- **Biomarker data imply disease-modifying effects.**

Viewed conservatively because:

- **Treatment was open-label.**
- **The number of patients is small.**
- **Dose-response remains undefined.**

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Conclusions

This first-in-patient study of PTI-125, a new drug candidate, demonstrated:

- ✓ Evidence of target engagement and mechanism of action in AD patients
- ✓ Significant improvements in biomarkers of AD
- ✓ Clinical validation for FLNA as a target for AD drug development

These data highlight PTI-125's potential as a disease-modifying drug therapy for Alzheimer's disease.

Clinical results are being confirmed in an ongoing 60-patient, blinded, randomized, placebo-controlled clinical trial.

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Cassava Sciences Announces Additional Positive Phase 2a Clinical Data in Alzheimer's Disease at CTAD 2019

- New Data Shows Clinical Evidence of Target Engagement and Target Validation –

- Company Expects Data Publication in a Peer-reviewed Medical Journal –

AUSTIN, Texas – December 5, 2019 – Cassava Sciences, Inc. (Nasdaq: SAVA), a clinical-stage biopharmaceutical company focused on Alzheimer's disease, today announced additional clinical data from a Phase 2a study of PTI-125, its investigational drug candidate for Alzheimer's disease. Company scientists presented the new data during a late-breaking oral presentation today at the *12th International Conference on Clinical Trials on Alzheimer's Disease* (CTAD), in San Diego, Ca.

Consistent with over 10 years of basic research and pre-clinical data, the new data show clinical evidence of PTI-125's mechanism of action and drug-target engagement, including:

- Improvements in biomarkers of Alzheimer's disease in plasma and lymphocytes;
- Consistency across biomarker improvements in CSF, plasma, and lymphocytes;
- Significant reductions ($p<0.01$) in both nitrated and phosphorylated forms of tau protein;
- Evidence that each individual patient showed biomarker responses to PTI-125;
- Evidence that PTI-125 reversed the shape of altered filamin A in lymphocytes;
- Early clinical validation of the drug target – altered filamin A – as a facilitator protein between amyloid beta and both neuroinflammation and tau pathology.

Cassava Sciences expects to publish a manuscript of these new clinical data in a peer-reviewed medical journal.

"Today's data milestone is exciting because it provides additional support for the clinical benefits of slowing down both neurodegeneration and neuroinflammation in patients with Alzheimer's," said Remi Barbier, President & CEO of Cassava Sciences. "We're eager to gain more insight on the effects of PTI-125 in Alzheimer's after we conclude, in 2020, an on-going Phase 2b study."

Details of CTAD Presentation:

Title: "One-Month Oral Treatment With PTI-125, A New Drug Candidate, Reduces CSF and Plasma Biomarkers of Alzheimer's Disease."

Presentation Type:	Late-Breaking Oral Presentation
Presenter:	Lindsay H. Burns, PhD, VP Neuroscience
Date/Time:	Thursday, December 5th at 6:00 pm Pacific time
Location:	Hilton Bayfront, San Diego

The CTAD presentation is available on-line at CassavaSciences.com under the 'Investors' page.

PTI-125 targets both neurodegeneration and inflammatory components of Alzheimer's disease. As previously reported, in a Phase 2a study funded by the National Institutes of Health (NIH), open-label treatment with PTI-125 for 28 days significantly improved key CSF biomarkers of Alzheimer's pathology, neuroinflammation and neurodegeneration ($p<0.001$).

Cassava Sciences is now evaluating PTI-125 in a confirmatory Phase 2b study. This blinded, randomized, placebo-controlled, multi-dose study is enrolling approximately 60 patients with mild-to-moderate Alzheimer's disease. The primary endpoint is improvement in biomarkers of Alzheimer's disease from baseline to Day 28. Top-line study results are expected in 2020.

About PTI-125

The target of PTI-125 is an altered form of filamin A (FLNA), a scaffolding protein. Published studies have shown that altered FLNA in the brain disrupts the normal function of neurons, leading to Alzheimer's pathology, neurodegeneration and neuroinflammation. Cassava Sciences' lead drug candidate, PTI-125, is a small molecule that restores the normal shape and function of FLNA in the brain. This action improves the function of certain receptors in the brain, which slows neurodegeneration and exerts powerful anti-neuroinflammatory effects.

Cassava Sciences is also developing an investigational diagnostic to detect Alzheimer's disease with a simple blood test. This program, called PTI-125Dx, also receives significant scientific and financial support from NIH.

The underlying science for Cassava Sciences' programs in neurodegeneration is published in prestigious peer-reviewed technical journals, including *Journal of Neuroscience*, *Neurobiology of Aging*, and *Journal of Biological Chemistry*. As previously announced, NIH has awarded Cassava Sciences two research grants following an in-depth, confidential review of its science and technology. These two grant awards represent up to $6.7 million of non-dilutive financing.

About Alzheimer's Disease

Alzheimer's disease is a progressive brain disorder that destroys memory and thinking skills. Currently, there are no drug therapies to halt Alzheimer's disease, much less reverse its course. In the U.S. alone, approximately 5.8 million people are currently living with Alzheimer's disease, and approximately 487,000 people age 65 or older will develop Alzheimer's in 2019.[1] The number of people living with Alzheimer's disease is expected to grow dramatically in the years ahead, which may also result in a growing social and economic burden.[2]

About Cassava Sciences, Inc.

The mission of Cassava Sciences is to detect and treat neurodegenerative diseases, such as Alzheimer's disease. Over the past ten years, Cassava Sciences has combined state-of-the-art
technology with new insights in neurobiology to develop novel solutions for Alzheimer's disease. Cassava Sciences owns worldwide development and commercial rights to its research programs in Alzheimer's disease, and related technology, without royalty obligations to any third-party.

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Kirsten Thomas, SVP
The Ruth Group
kthomas@TheRuthGroup.com
(508) 280-6592

[1], [2] Source: Alzheimer's Association. 2019 Alzheimer's Disease Facts and Figures. Available online at: https://www.alz.org/media/documents/alzheimers-facts-and-figures-2019-r.pdf

Acknowledgment and Disclaimer*: Research reported in this press release was supported by the National Institute of Aging of the NIH under award AG060878. The content is solely the responsibility of Cassava Sciences and does not necessarily represent the official views of NIH.*

Cautionary Note Regarding Forward-Looking Statements*: This press release 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 press release including, but not limited to, statements regarding the status of Phase 2 clinical studies; the interpretation of clinical results, including potential health benefits, if any, of changes in levels of biomarkers; commentaries made by Cassava Sciences' employees; and other 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 press release 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 trials on expected timelines, to demonstrate the specificity, safety, efficacy or potential health benefits of our product candidates 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, 2018 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 press release 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 press release. 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.*

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