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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 8-K**

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

**Date of Report (Date of earliest event reported): March 31, 2016**

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**ALDEYRA THERAPEUTICS, INC.**

(Exact name of Registrant as specified in its charter)

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**Delaware**  
(State or other Jurisdiction  
of Incorporation)

**001-36332**  
(Commission  
File No.)

**20-1968197**  
(IRS Employer  
Identification No.)

**131 Hartwell Avenue, Suite 320**  
**Lexington, MA 02421**  
(Address of principal executive offices and zip code)

**Registrant's telephone number, including area code: (781) 761-4904**

**Not Applicable**  
(Former Name or Former Address, if Changed Since Last Report)

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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:

- Written communications 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 communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**ITEM 7.01. REGULATION FD DISCLOSURE**

On March 31, 2016, David J. Clark, M.D., Chief Medical Officer of Aldeyra Therapeutics, Inc. (“Aldeyra”) will be making a presentation during the 2016 SSADH Symposium in Boston, Massachusetts at 12:15 p.m. ET. The presentation will include information and data regarding Aldeyra’s Succinic Semi-Aldehyde Dehydrogenase (SSADH) Deficiency development program. SSADH Deficiency is an inborn error of aldehyde metabolism characterized by motor planning dysfunction, speech impairment, intellectual disability, and autism. The slides that will be used for such presentation are furnished as Exhibit 99.1 to this Form 8-K.

The information in Item 7.01 of this Current Report on Form 8-K and the slides attached as Exhibit 99.1 hereto shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

**ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS.**

**(d) Exhibits.**

<u>Exhibit No.</u>	<u>Description</u>
99.1	Presentation Slides

**SIGNATURES**

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 hereunto duly authorized.

ALDEYRA THERAPEUTICS, INC.

By: /s/ Todd C. Brady, M.D., Ph.D.  
Name: Todd C. Brady, M.D., Ph.D.  
Title: President and Chief Executive Officer

Dated: March 31, 2016



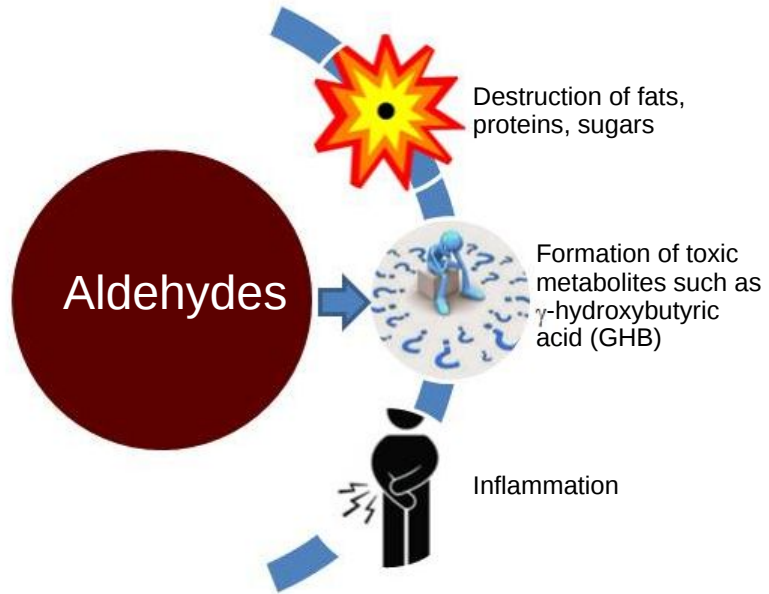
A Novel Therapy for SSADH:  
An Aldehyde Trap for an Aldehyde-Mediated Disease

March 2016

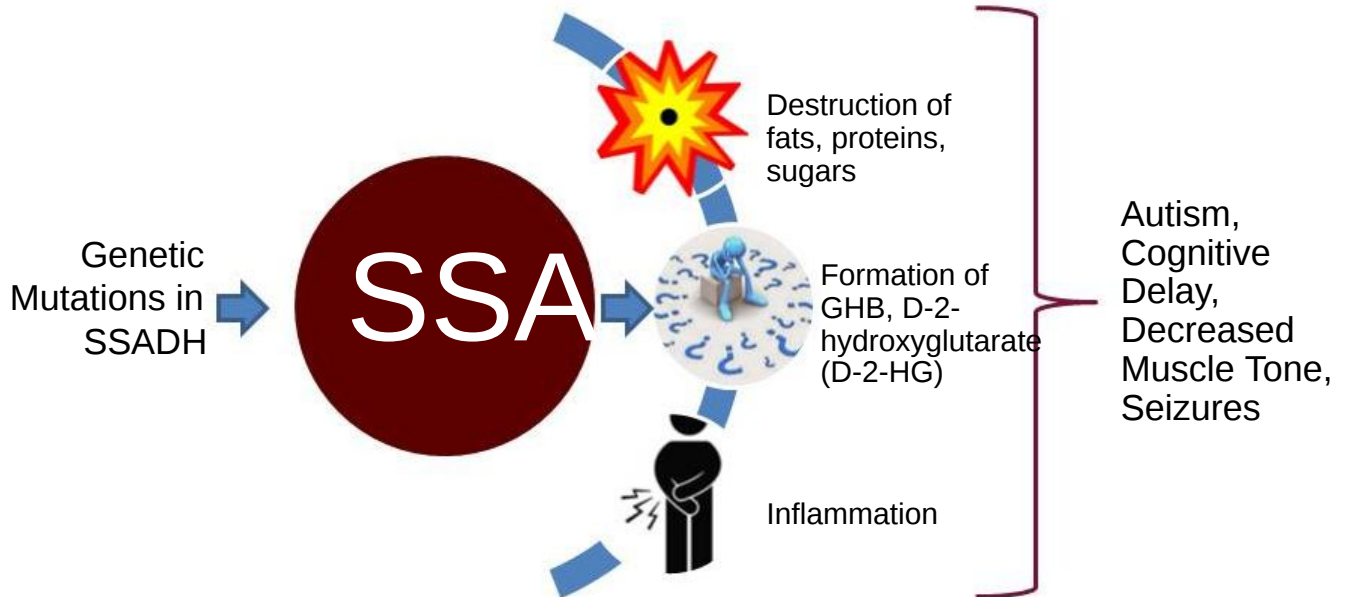
# Disclaimers and Forward-Looking Statements

- This presentation contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding Aldeyra's possible or assumed future results of operations and expenses, business strategies and plans, research and development plans or expectations, trends, market sizing, competitive position, industry environment and potential growth opportunities, among other things. Forward-looking statements include all statements that are not historical facts and, in some cases, can be identified by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or similar expressions and the negatives of those terms.
- Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Aldeyra's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Aldeyra is at an early stage of development and may not ever have any products that generate significant revenue. Important factors that could cause actual results to differ materially from those reflected in Aldeyra's forward-looking statements include, among others, the timing of commencement, enrollment and completion of Aldeyra's clinical trials; the timing and success of preclinical studies and clinical trials conducted by Aldeyra and its development partners; the ability to obtain and maintain regulatory approval to commercialize Aldeyra's product candidates, and the labeling for any approved products; the scope, progress, expansion, and costs of developing and commercializing Aldeyra's product candidates; the size and growth of the potential markets for Aldeyra's product candidates and the ability to serve those markets; Aldeyra's expectations regarding its expenses and revenue, the sufficiency or use of Aldeyra's cash resources and needs for additional financing; the rate and degree of market acceptance of any of Aldeyra's product candidates; Aldeyra's expectations regarding competition; Aldeyra's anticipated growth strategies; Aldeyra's ability to attract or retain key personnel; Aldeyra's ability to establish and maintain development partnerships; Aldeyra's expectations regarding federal, state and foreign regulatory requirements; regulatory developments in the United States and foreign countries; Aldeyra's ability to obtain and maintain intellectual property protection for its product candidates; the anticipated trends and challenges in Aldeyra's business and the market in which it operates; the use or sufficiency of Aldeyra's cash or cash equivalents; and other factors that are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Aldeyra's Annual Report on Form 10-K for the year ended December 31, 2015, which is on file with the Securities and Exchange Commission (SEC) and available on the SEC's website at [www.sec.gov](http://www.sec.gov).
- In addition to the risks described above and in Aldeyra's other filings with the SEC, other unknown or unpredictable factors also could affect Aldeyra's results. No forward-looking statements can be guaranteed and actual results may differ materially from such statements. The information in this presentation is provided only as of March 31, 2016, and Aldeyra undertakes no obligation to update any forward-looking statements contained in this presentation on account of new information, future events, or otherwise, except as required by law.

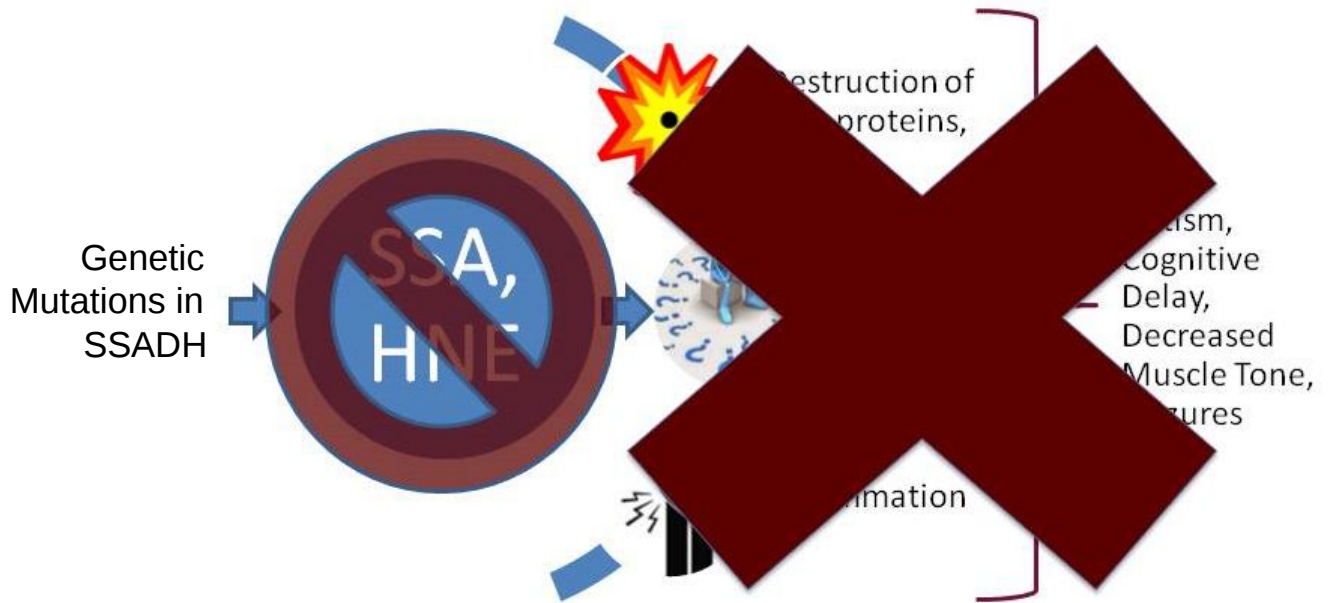
# Aldehydes Are Toxic



# Symptoms of SSADH Deficiency Believed to be Due to Aldehydes

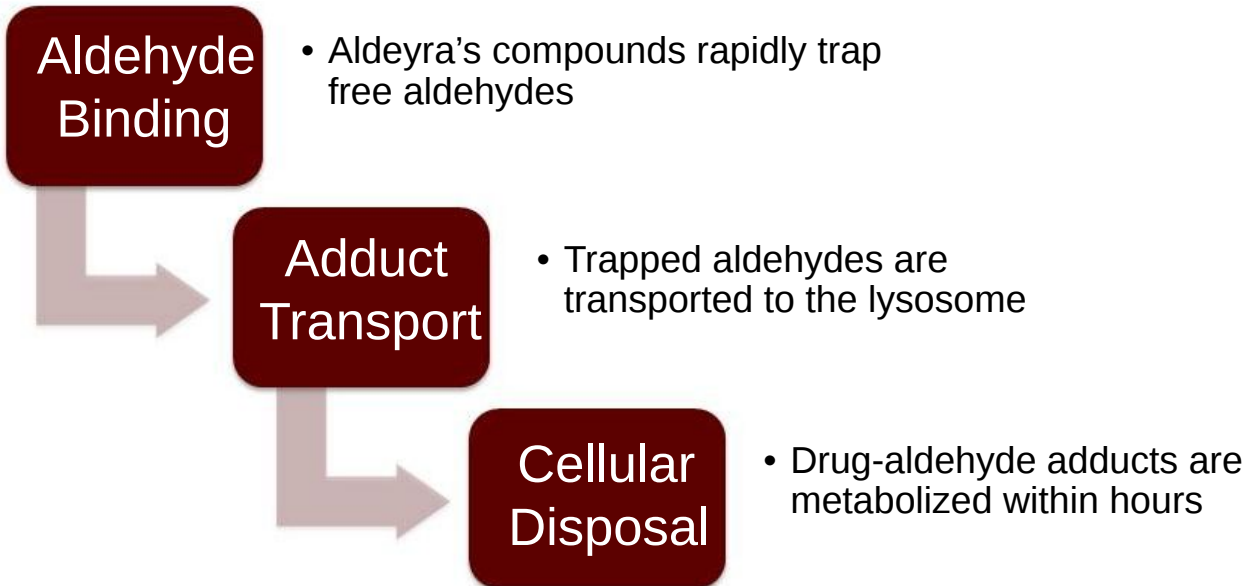


# An Aldehyde Trap Could Diminish the Symptoms of SSADH Deficiency





# Aldehyde Traps: A Novel Therapeutic Approach



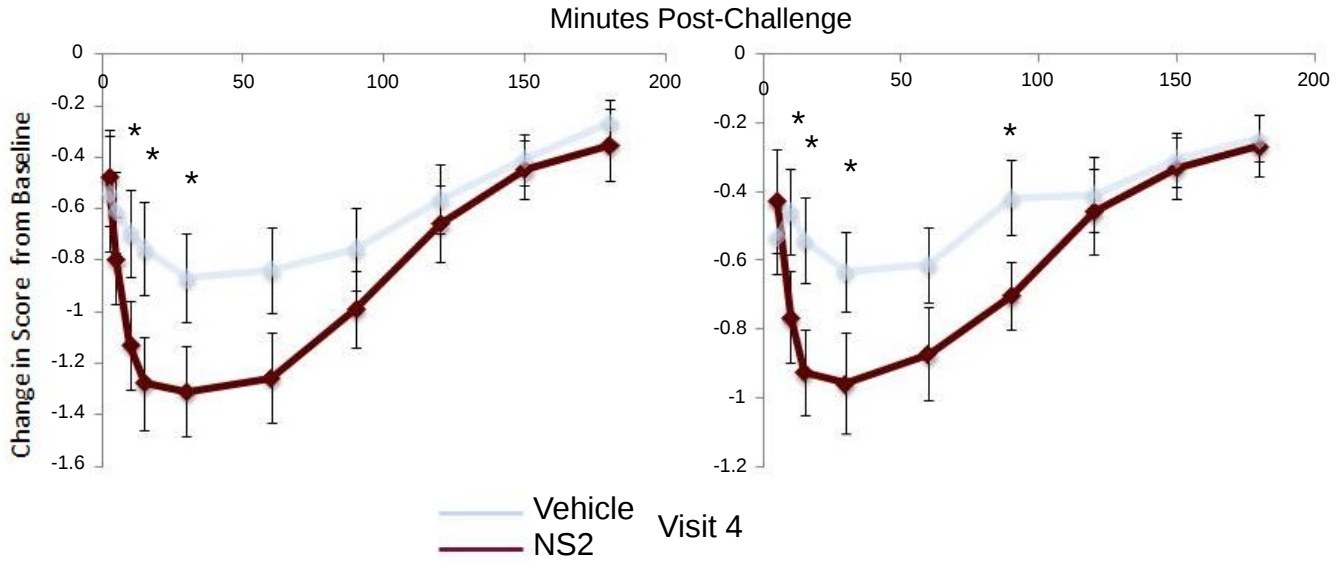
Aldeyra's lead aldehyde trap, NS2, appears to have minimal pharmacology, with no known effects on receptors, enzymes and other proteins. In clinical trials to date, NS2 has been observed to be safe and well-tolerated. Aldeyra is not aware of any similar technology.

# An Aldehyde Trap is Proven to Reduce Inflammation in Humans

## Phase II Allergic Conjunctivitis Clinical Trial (February, 2016)

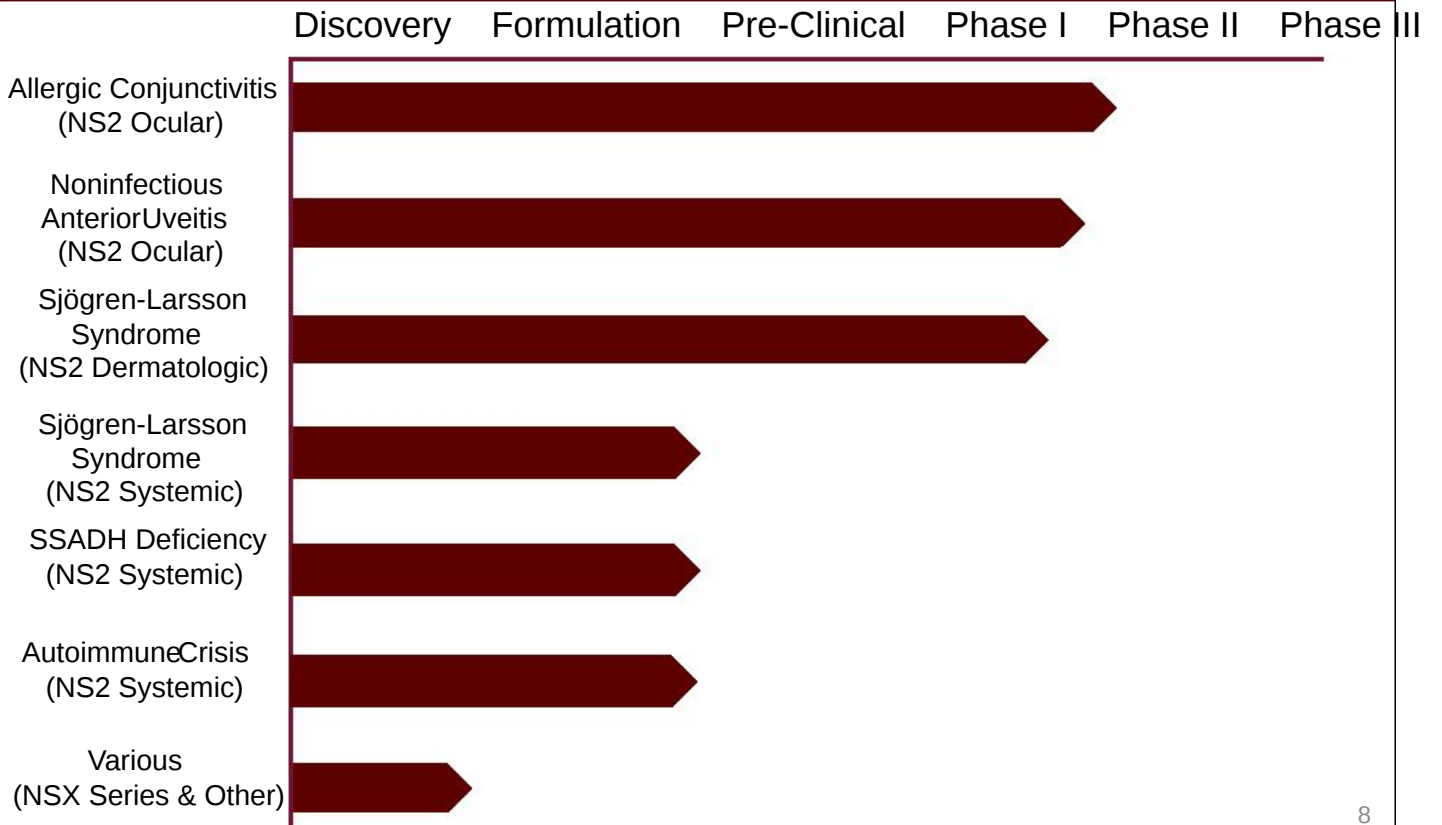
### Ocular Itching

### Ocular Tearing



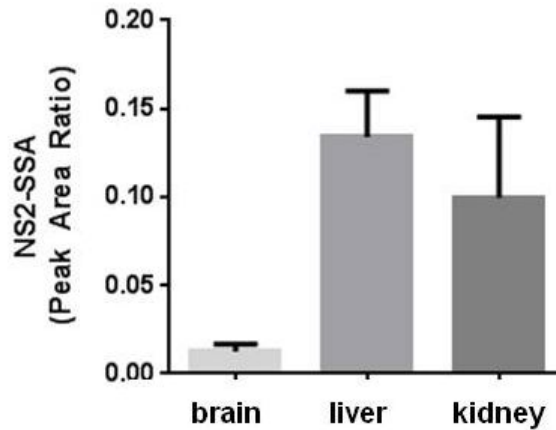
\*p<0.05; p values are subject to change based on quality control analysis

# Aldeyra is Clinically Testing Aldehyde Traps in Several Diseases



# Our Lead Candidate, NS2, Traps the Toxic Aldehyde in SSADH Deficiency

NS2 administered as a single dose to SSADH knock-out mice

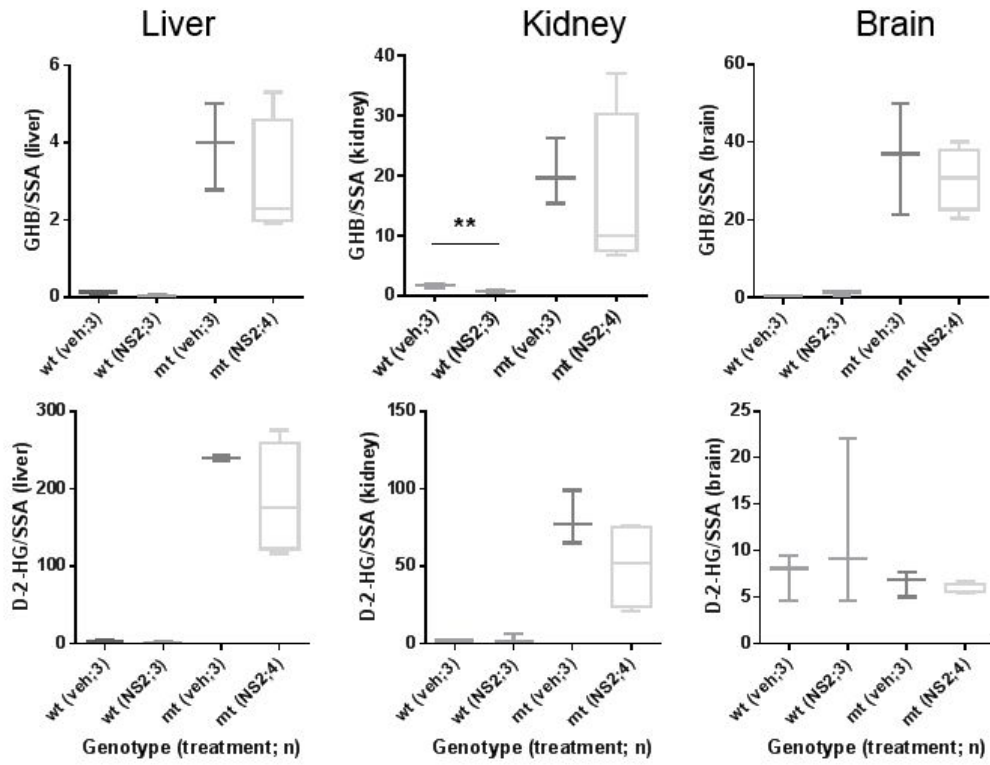


By trapping SSA, NS2 may prevent the formation of pathologic metabolites that are thought to be responsible for the severe neurological complications of SSADH Deficiency.

Data presented at the 2015 American Society of Human Genetics Annual Meeting

*Ainslie, Vogel, Cullen, Young, Brady and Gibson, 2015  
Washington State University and Aldeyra Therapeutics*

# NS2 May Reduce GHB and D2HG Levels in SSADH KO Mice



Ainslie, Vogel, Cullen, Young, Brady and Gibson, 2015  
Washington State University and Aldeyra Therapeutics

t test (\*\*p<0.01)

# Next Steps in the Development of NS2 for SSADH Deficiency

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1. Generate additional preclinical data supporting the use of NS2 in SSADH patients
  - Identify endpoints to assess clinical efficacy of NS2
  
2. Natural History Study
  - Understand levels of metabolites and clinical endpoints in patients
  - Use data to confirm endpoints for Phase II study in SSADH
  
3. Healthy Volunteer Safety Study
  - Confirm safety and pharmacological activity of systemic NS2 in adults
  
4. Phase II study in SSADH patients
  - Metabolites and clinical endpoints
  - Progress to longer duration dosing evaluating disease modification

“In 2016, we expect to build on our accomplishments from last year by initiating clinical development of aldehyde traps that are administered systemically. We are excited to continue to advance NS2 and other aldehyde traps as a novel therapeutic approach for inflammatory disease and inborn errors of aldehyde metabolism.”

*Aldeyra Therapeutics Reports Full Year 2015 Financial Results*  
Press Release, March 30, 2016