
**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): January 7, 2019

INTELLIA THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-37766
(Commission
File Number)

36-4785571
(I.R.S. Employer
Identification No.)

40 Erie Street, Suite 130
Cambridge, Massachusetts
(Address of principal executive offices)

02139
(Zip Code)

Registrant's telephone number, including area code: (857) 285-6200

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:

- 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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 2.02 Results of Operations and Financial Condition.

Although it has not finalized its full financial results for the fourth quarter and fiscal year ended December 31, 2018, Intellia Therapeutics, Inc. (the "Company") announced on January 7, 2019, that it expects to report that it had approximately \$314 million of cash, cash equivalents and marketable securities as of December 31, 2018.

The information contained in Item 2.02 of this Form 8-K is unaudited and preliminary and does not present all information necessary for an understanding of the Company's financial condition as of December 31, 2018 and its results of operations for the three months and year ended December 31, 2018. The audit of the Company's consolidated financial statements for the year ended December 31, 2018 is ongoing and could result in changes to the information set forth above.

The information in this Item 2.02 is being furnished and 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 (the "Securities Act"), or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 7.01 Regulation FD Disclosure.

Commencing on the week of January 7, 2019, the Company intends to meet with, and present to, current and potential investors and other stakeholders regarding its business, scientific and financial accomplishments and plans. A form of the slide presentation that will be used at these meetings is being furnished as Exhibit 99.1 to this Current Report on Form 8-K. The Company undertakes no obligation to update, supplement or amend the materials attached hereto as Exhibit 99.1.

The information responsive to Item 7.01 of this Form 8-K, including Exhibit 99.1 attached hereto, is being furnished and shall not be deemed "filed" for purposes of Section 18 of 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 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(d) The following exhibits are included in this report:

<u>Exhibit No.</u>	<u>Description</u>
99.1	Form of Presentation as of January 7, 2019.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this Report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: January 7, 2019

Intellia Therapeutics, Inc.

By: /s/ John M. Leonard

Name: John M. Leonard

Title: Chief Executive Officer and President



Corporate Overview
January 2019

Intellia Therapeutics' Legal Disclaimer

This presentation contains "forward-looking statements" of Intellia Therapeutics, Inc. ("Intellia") within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, express or implied statements regarding Intellia's ability to advance and expand the CRISPR/Cas9 technology to develop human therapeutic products, as well as our CRISPR/Cas9 intellectual property portfolio; our ability to achieve stable or effective genome editing; our ability to effectively administer one dose or multiple doses of our CRISPR/Cas9 product candidates; the potential timing and advancement of our preclinical studies, including continuing non-human primate studies for our Transthyretin Amyloidosis ("ATTR") program and other studies for our other programs (such as, alpha-1 antitrypsin deficiency ("AATD")), and human clinical trials; the timing and potential achievement of milestones to advance our pipeline including initiation of investigational new drug ("IND")-enabling studies and filing INDs; our ability to replicate results achieved in our preclinical studies, including those in our ATTR, AATD, primary hyperoxaluria type 1 ("PH1") and Wilms' Tumor 1 ("WT1")/acute myeloid leukemia programs, as well as central nervous system-related efforts, in any future studies, including human clinical trials; our ability to generate data and replicate results relating to enhancements to our proprietary lipid nanoparticle ("LNP") technology, including its formulation and components, in preclinical or clinical studies, or that any enhancements will result in an improved product candidate profile; the potential development of our proprietary LNP- adeno-associated virus ("AAV") hybrid delivery system to advance our complex genome editing capabilities; the potential development of other *in vivo* or *ex vivo* cell therapeutics of all types, and those targeting WT1 in particular, using CRISPR/Cas9 technology; our ability to conduct successful IND-enabling studies of a lead ATTR development candidate and subsequently submitting an IND application that will be accepted by the regulatory agencies; our intent to generate and present additional data for organs beyond the liver, additional insertion/repair data, and preclinical data in support of our first *ex vivo* programs on immuno-oncology during 2019 or thereafter; the intellectual property position and strategy of Intellia's licensors or other parties from which it derives rights, as well as third-parties and competitors; actions by government agencies; our growth as a company and the anticipated contribution of the members of our board of directors and our executives to our operations and progress; the impact of our collaborations on our research and development programs; the potential timing of regulatory filings regarding our development programs; the potential commercialization opportunities, including value and market, for our product candidates; our expectations regarding our uses of capital, expenses, future accumulated deficit and other 2018 financial results; and our ability to fund operations into 2021.

Any forward-looking statements in this presentation are based on management's current expectations and beliefs of future events, and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: uncertainties related to the initiation and conduct of studies and other development requirements for our product candidates; the risk that any one or more of Intellia's product candidates will not be successfully developed and commercialized; the risk that the results of preclinical studies will not be predictive of future results in connection with future studies; and the risk that Intellia's collaborations with Novartis or Regeneron or its other *ex vivo* collaborations will not continue or will not be successful; and risks related to Intellia's ability to protect and maintain our intellectual property position; risks related to the ability of our licensors to protect and maintain their intellectual property position. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause Intellia's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Intellia's most recent annual report on Form 10-K and quarterly reports on Form 10-Q filed with the Securities and Exchange Commission, as well as discussions of potential risks, uncertainties, and other important factors in Intellia's other filings with the Securities and Exchange Commission. All information in this presentation is as of the date of the release, and Intellia Therapeutics undertakes no duty to update this information unless required by law.

Our Mission

Developing curative genome editing treatments that can positively transform the lives of people living with severe and life-threatening diseases



Elements for Our Success



**Develop Curative
CRISPR-Based
Medicines**



**Advance
Our Science**



**Be the Best
Place to Make
Therapies**



**Build for
Long-Term
Sustainability**

Overview



> Full-Spectrum Genome Editing Company

> Modular Approach Drives Diversified Pipeline



Significant *in vivo* preclinical validation



At least two programs entering development in 2019

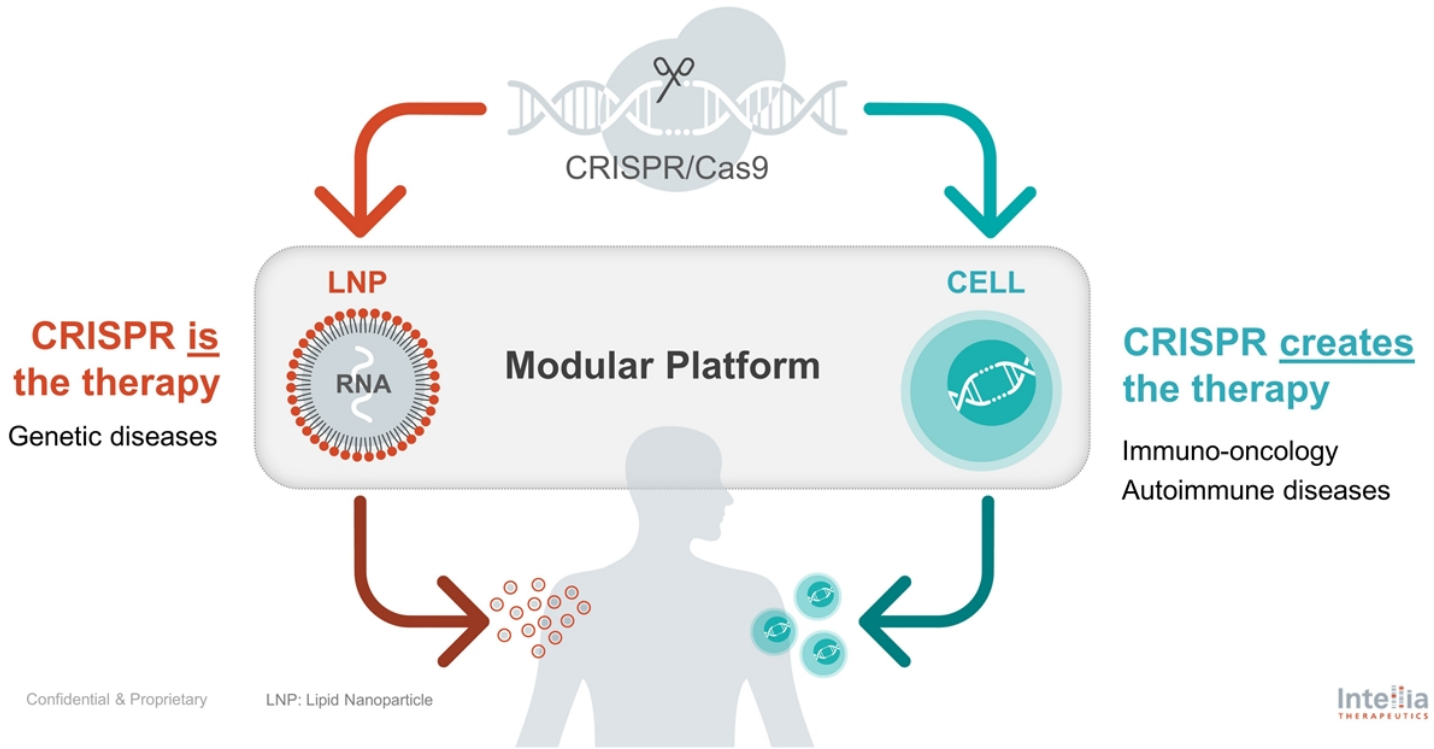


Experienced management team



Well capitalized to achieve milestones

Building a Full-Spectrum Genome Editing Company



Confidential & Proprietary

CRISPR/Cas9 is an Effective Tool for Modifying the Genome



KNOCKOUT

Inactivation/deletion of disease-causing DNA sequence



REPAIR

Correction of "misspelled" disease-driving DNA sequence



INSERT

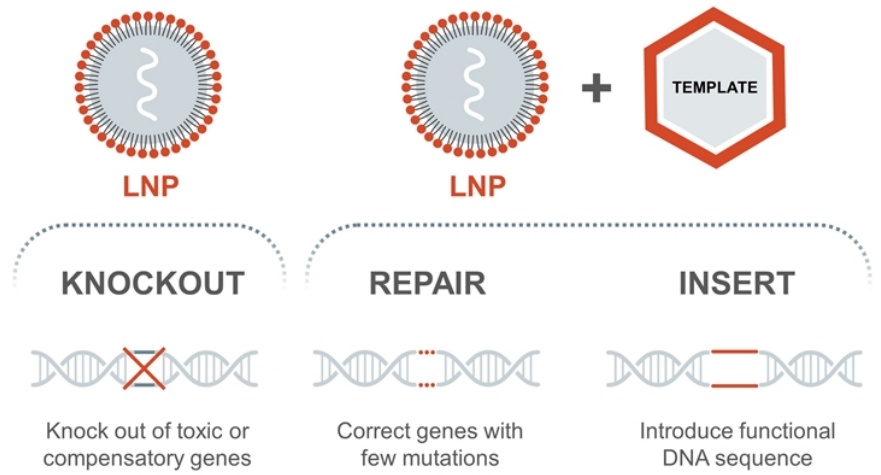
Insert new DNA sequence to manufacture therapeutic protein

Delivering CRISPR/Cas9 to Treat Patients With Genetic Diseases

CRISPR is the therapy

DELIVERY SYSTEM: PROPRIETARY AND MODULAR

- LNP lipids
- mRNA
- gRNA
- Template design
- Template delivery system



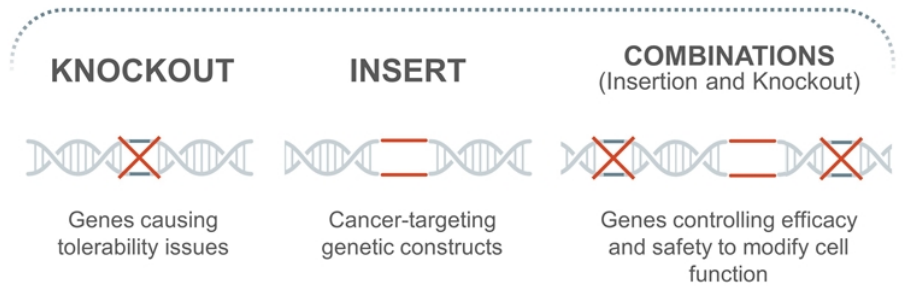
CRISPR creates the therapy

ENGINEERING SYSTEM: *PROPRIETARY AND MODULAR*

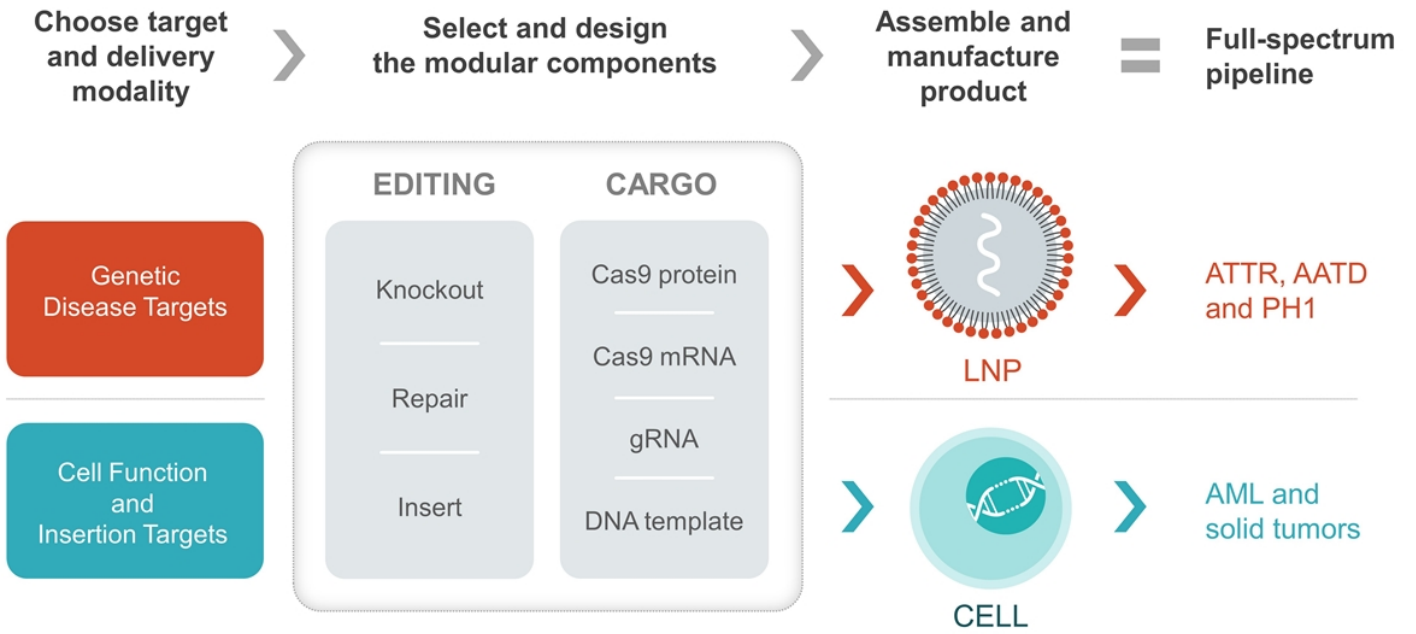
- Targeted and efficient insertion
- Efficient multiplexing
- Template design
- Synthetic biology capabilities



STEM CELL / T CELL



Genome Editing Platform Generates Full-Spectrum Pipeline



Confidential & Proprietary

AATD: Alpha-1 Antitrypsin Deficiency
PH1: Primary Hyperoxaluria Type 1

10

Significant Preclinical Validation



Editing cells *in vivo*

Knockout

- >95% reduction in TTR protein levels in NHPs
- >95% protein reduction (TTR and A1AT) in mice
- Well-tolerated editing durability in ATTR studies

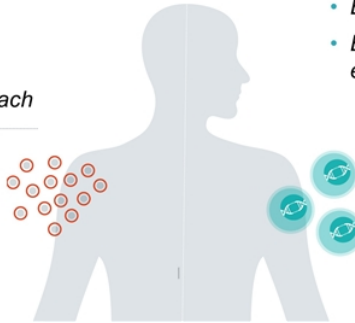
Insertion

- First to demonstrate insertion of F9 and SERPINA1 in the liver of mice
- First to achieve therapeutic levels of Factor IX and Alpha-1 Antitrypsin
- Achieved proprietary LNP-AAV delivery approach

Delivering Beyond the Liver

- LNP delivery to CNS in mouse and NHP

Confidential & Proprietary



Engineering cells

Knocking out Functionality

- Knocked out endogenous TCR to prevent GvHD
- Knocked out class I and II HLA to prevent transplant rejection
- Efficient multiplex knockouts

















Inserting Functionality

- Efficient template insertion after multiplex knockouts
- Engineered T cells to kill myeloid leukemic blasts expressing WT1 antigen

AAV: Adeno-Associated Virus
CNS: Central Nervous System
GvHD: Graft-Versus-Host Disease
NHP: Non-Human Primate
TCR: T Cell Receptor
WT1: Wilms' Tumor 1

Inte:ia
THERAPEUTICS

R&D Programs Poised to Move to the Clinic

PROGRAM	RESEARCH	EARLY DEVELOPMENT	PARTNER
 Transthyretin Amyloidosis			  <i>Lead development and commercial party</i>
Alpha-1 Antitrypsin Deficiency			
Primary Hyperoxaluria Type 1			
Undisclosed			
 Acute Myeloid Leukemia			
Additional Immuno-Oncology Programs			
Novartis Programs: - Selected Hematopoietic Stem Cells - Allogeneic CAR-T - Ocular Stem Cells	UNDISCLOSED		  <i>Milestones and royalties</i>

Transthyretin Amyloidosis (ATTR)

Caused by accumulation of misfolded transthyretin (TTR) protein, which affects **nerves, heart, kidneys and eyes**



First Liver Knockout Program Advancing Toward the Clinic

50,000

ATTR patients worldwide¹

2-15 yrs

Typical life expectancy from onset of symptoms¹

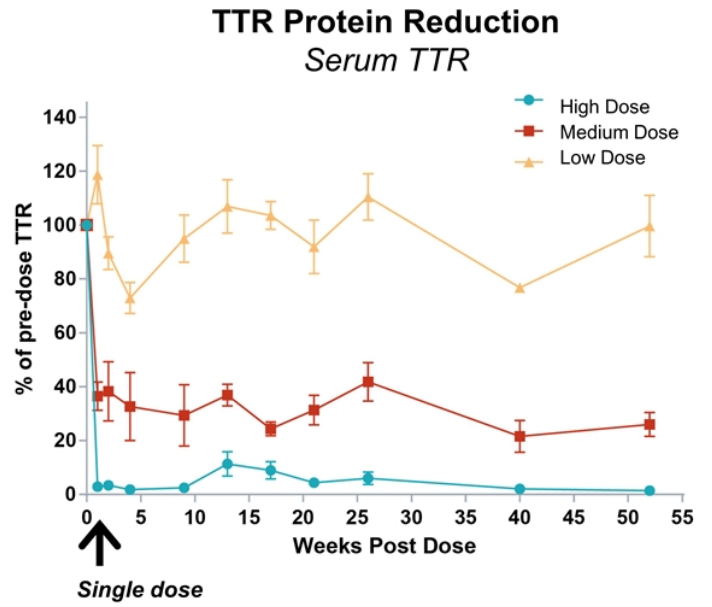
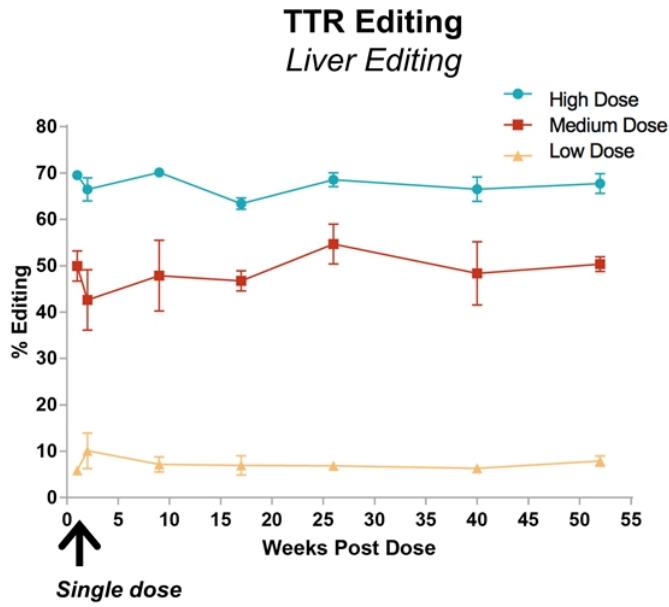
Only chronic treatment options currently available

ATTR Program Achievements

- First to show dose-dependent CRISPR/Cas9 editing in NHP
- Achieved incremental editing in NHP through repeat dosing
- Achieved therapeutically relevant reduction of serum TTR protein in NHP in a single dose

¹Ann Med. 2015; 47(8): 625–638.

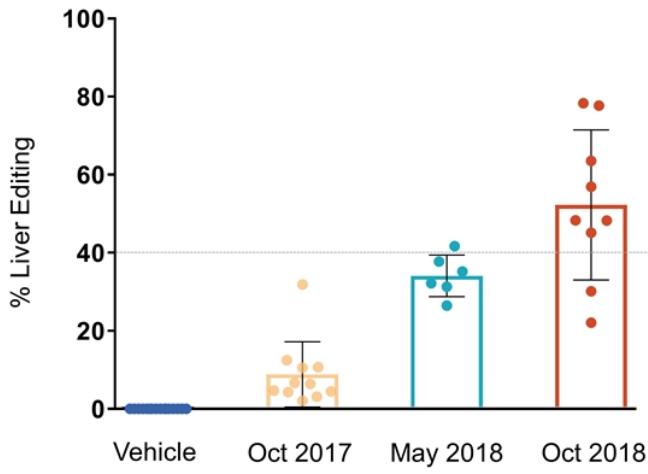
Achieved Persistent Protein Reduction for 12 Months in Mice



Improved Delivery Formulations Achieve Therapeutic Liver Editing Levels in NHPs

Single-Dose TTR Editing

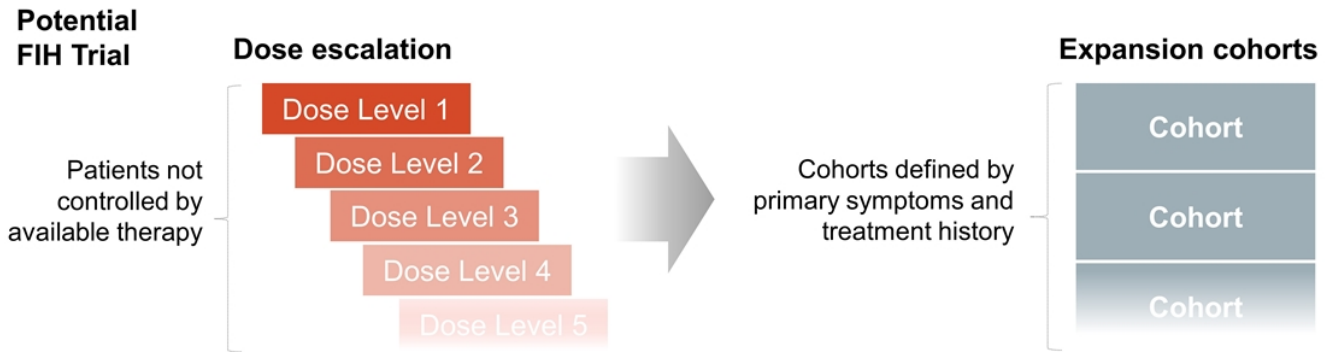
Chart includes single administration within a range of dose levels



- Tested formulations show >75% liver editing and >95% reduction in circulating levels of TTR protein
- Liver editing of 35-40% is sufficient to achieve a reduction of >60% of TTR protein
- Therapeutically Relevant Range: >60% TTR Knockdown

Early Development Considerations

- **First-in-human (FIH) study:** Suitability of open label, dose escalation design
- **Primary objectives:** Safety, tolerability and indications of efficacy
- **Secondary endpoints:** Relevant biomarkers and symptomology measures to assess efficacy
- **Potential expansion:** Cohorts based on symptoms and prior treatment to inform future pivotal study designs



Acute Myeloid Leukemia (AML)

Cancer of the blood and bone marrow that is rapidly fatal without immediate treatment

Most common type of acute leukemia in adults¹



First Wholly Owned Engineered Cell Therapy

~20,000

New cases in the U.S. in 2018¹

>40,000

New cases in the 7MM² in 2018¹

<30%

5-year overall survival¹

AML Program Achievements

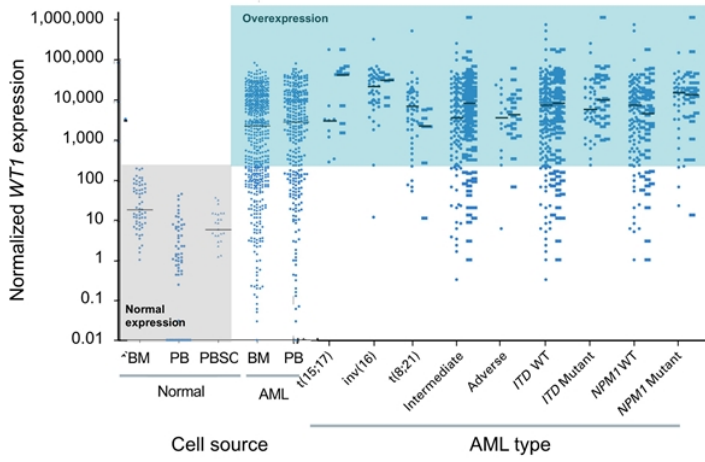
- Identified natural TCRs that target key epitopes of WT1, an attractive tumor target
- Observed selective elimination of AML blasts upon co-culture with WT1-specific T cells
- Demonstrated multiplex functional modulation to T cells

¹ NIH SEER Cancer Stat Facts: Leukemia – Acute Myeloid Leukemia (AML)

² GlobalData EpiCast Report: Acute Myeloid Leukemia July 2017, 7MM: Seven Major Markets (includes U.S.)

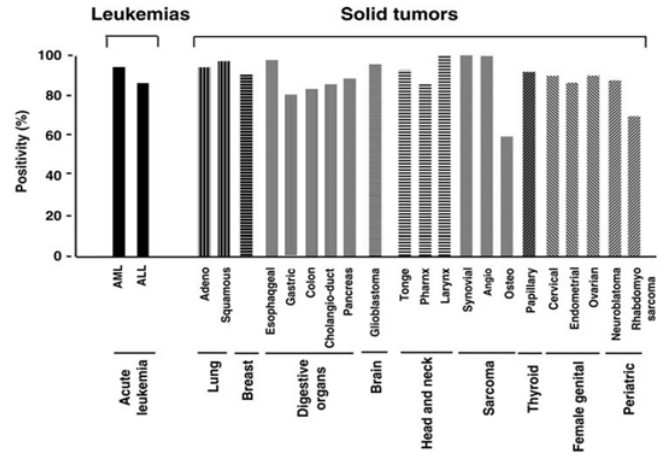
Wilms' Tumor 1 (WT1) is an Attractive Tumor Target

WT1 is Overexpressed in >90% of AML Blasts



Cilloni et al., J Clin Oncol, 2009

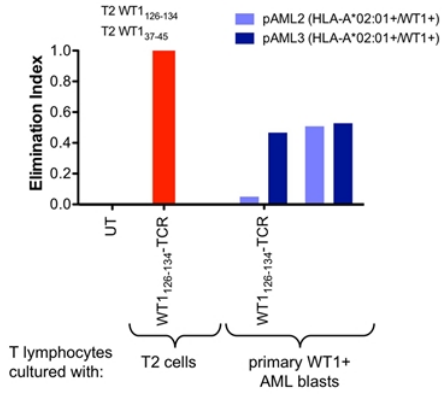
WT1 is Overexpressed in >90% of Solid Tumors



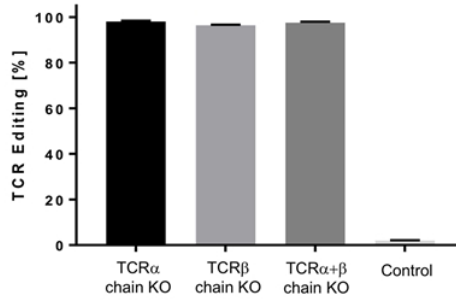
Sugiyama et al., Jap J Clin Oncol, 2010

Driving Our First Engineered Cell Therapy Towards the Clinic

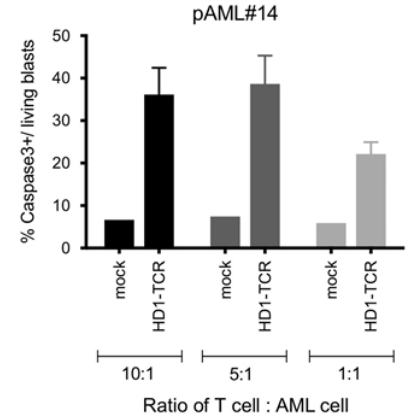
Identified natural TCRs with equal binding to WT1 while effective against many cancers



Removal of competing TCRs



Cells with original TCR KO plus insertion of new TCRs kill patient-derived AML blasts



Building for Long-Term Sustainability

PROGRESSION

Multiple INDs

- Genetic Diseases
- Immuno-Oncology
- Early Development

Human POC / Pivotal Trials

- Late-Stage Development
- Production Scale-Up
- Commercial Readiness

PIPELINE

LNP



TTR

AATD

PH1

Genetic Diseases
(targeting liver)

Genetic Diseases
(targeting other tissues)

CELL



AML

Immuno-Oncology
Programs

Hematological
Malignancies

Solid Tumors

CAPABILITIES

LNP



Modular Platform

Delivery to the liver



Delivery to other tissues (CNS, muscle, etc.)

CELL



Autologous



Allogeneic

Hematological



Solid Tumors

Experienced Management Team Driving Intellia to Deliver Innovative Therapies



John Leonard, M.D.
President and
Chief Executive Officer



Glenn Goddard
Executive Vice President,
Chief Financial Officer



José Rivera
Executive Vice President
and General Counsel



Andrew D. Schiermeier, Ph.D.
Executive Vice President,
Corporate Strategy



Thomas Barnes, Ph.D.
Senior Vice President,
Innovation Sciences



Nishla Keiser, Ph.D.
Senior Vice President,
Deputy General Counsel



Jennifer King, Ph.D.
Senior Vice President,
Business Development



Jennifer Mound Smoter
Senior Vice President,
External Affairs and Communications



Lindsey Trickett
Vice President,
Investor Relations



Partnerships Provide R&D Capabilities to Enhance Pipeline Growth

REGENERON

NOVARTIS

Collaboration

- Multi-year collaboration
- Up to 10 *in vivo* targets
- Key deal components
 - Liver-centric product development
 - Platform development

- Multi-year collaboration
- Product-focused discovery for CAR-Ts and HSCs
 - Expanded in 2018 to include ocular stem cells
- Draft pick process for HSC targets

Economics

- Deal economics
 - Up to \$320M in milestones per target
 - High single-digit to low-teen royalties
 - \$75M upfront
 - \$50M equity investment
- Co-development and co-commercialization options
 - ATTR first selected co-co program

- Deal economics
 - Up to \$230M in milestone payments per product
 - Mid single-digit royalties
 - Up to \$50M in committed collaboration funding
 - \$18M equity investment
 - \$10M one-time payment in 2018 for access to ocular stem cells

Benefits

- Partnership with leading pharmaceutical company
- Access to:
 - Regeneron Genetics Center
 - Animal model development
 - Tools and reagents

- Leading cell therapy pharmaceutical company provides near term insights into development
- Access to:
 - LNP library utilized for genome editing
 - HSC expansion technology
 - Regulatory and manufacturing expertise

Intellia Milestones

2018

- ✓ ATTR: Achieved improved NHP liver editing and protein reduction through LNP cargo modifications
- ✓ Demonstrated *in vivo* delivery and editing in CNS of NHPs
- ✓ Demonstrated therapeutically relevant insertion data for *F9* and *SERPINA1* in mice
- ✓ AML: Isolated novel active TCRs and showed *in vitro* killing of AML blasts in engineered T cells
- ✓ 2018 year-end cash at ~\$314 million providing cash runway into 2021

2019

- ATTR: Initiate IND-enabling GLP toxicology studies
- AML: Nominate first engineered cell therapy development candidate by the end of 2019
- Present additional *in vivo* insertion data at upcoming scientific conferences

2020

- ATTR: Submit IND application

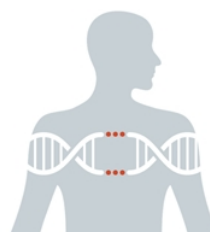
Elements for Our Success



**Develop Curative
CRISPR-Based
Medicines**



**Advance
Our Science**



**Be the Best
Place to Make
Therapies**



**Build for
Long-Term
Sustainability**



Intellia

THERAPEUTICS