Intellia Therapeutics 42nd Annual J.P. Morgan Healthcare Conference

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President and Chief Executive Officer

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Intellia Therapeutics' Legal Disclaimer

This presentation contains "forward-looking statements" of Intellia Therapeutics, Inc. ("Intellia", "we" or "our") 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 beliefs and expectations regarding: the safety, efficacy and advancement of our clinical programs for NTLA-2001 for the treatment of transthyretin ("ATTR") amyloidosis with cardiomyopathy ("ATTR-CM"), NTLA-2002 for the treatment of hereditary angioedema ("HAE") and NTLA-3001 for the treatment of alpha-1 antitrypsin deficiency, including dosing the first patient in the pivotal Phase 3 MAGNITUDE trial for NTLA-2001 for ATTR-CM in Q1 2024, preparing for a Phase 3 study for the treatment of ATTR amyloidosis with polyneuropathy, presenting updated data from the ongoing Phase 1 study of NTLA-2001 in 2024, initiating the Phase 3 clinical trial for NTLA-2002 for HAE in 2024, presenting additional data from the Phase 1/2 study of NTLA-2002 in 2024, and dosing the first patient in the Phase 1 study of NTLA-3001 in 2024; the execution of its strategic priorities for 2024-2026, including the completion of patient enrollment for pivotal studies of NTLA-2001 and NTLA-2002, the planned BLA submission for NTLA-2002 for HAE in 2026, demonstrating human proof-of-concept for targeted in vivo gene insertion, initiating clinical development for its allogeneic *ex vivo* program, demonstrating preclinical proof-of-concept of editing in tissues outside the liver, and advancing DNA writing technology; its ability to expand its platform to create new medicines, including the aspects of its platform related to *in vivo* gene insertion, *ex vivo* allogeneic cell therapies, *in vivo* delivery outside the liver, and DNA writing; potential commercial opportunities, including value and market, for our product candidates, including the potential for NTLA-2001 to be the best-in-class TTR reduction agent and the only single-dose treatment and the potential for NTLA-2002 to be the best-in-class HAE prophylaxis agent and the only single-dose treatment; and statements regarding its cash balance funding its operating plans into mid-2026.

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: risks related to our ability to protect and maintain our intellectual property position; risks related to our relationship with third parties, including our licensors and licensees; risks related to the ability of our licensors to protect and maintain their intellectual property position; uncertainties related to regulatory agencies' evaluation of regulatory filings and other information related to our product candidates; uncertainties related to the authorization, initiation and conduct of studies and other development requirements for our product candidates; risks related to the development and/or commercialization of any of Intellia's or its collaborators' product candidates, including that they may not be successfully developed and commercialized; risks related to the results of preclinical studies or clinical studies, including that they may not be positive or predictive of future results in connection with future studies; risks related to the successful initiation and enrollment of patients in the Phase 3 studies for NTLA-2001 for the treatment of ATTR-CM and NTLA-2002 for the treatment of HAE; and the risk we will not be able to demonstrate our platform's modularity and replicate or apply results achieved in preclinical studies to develop additional product candidates, including to apply our proprietary CRISPR/Cas9 technology platform successfully to additional product candidates. 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 report on Form 10-Q 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 this presentation, and Intellia undertakes no duty to update this information unless required by law.

Intellia THERAPEUTICS

Intellia is Leading a New Era of Medicine

Turning Nobel-Prize-Winning Science into Medicine

- Poised to bring first-ever *in vivo* CRISPR therapy to market
- Initiated first-ever, pivotal Phase 3 program for an *in vivo* CRISPR therapy
- On track for second *in vivo* Phase 3 program in 2024

100+ patients
dosed with Intellia's investigational *in vivo* CRISPR-based therapies

Robust pipeline of *in vivo* and *ex vivo* programs

Comprehensive gene editing toolbox

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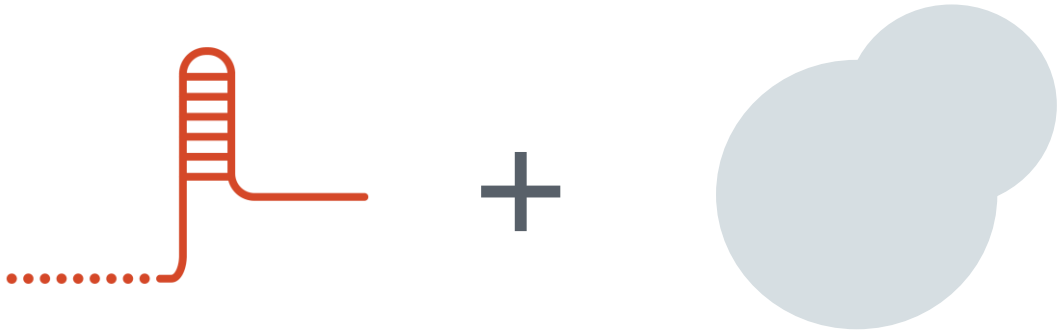
Gene Editing Starts with CRISPR/Cas9, a Two-Part, Programmable System

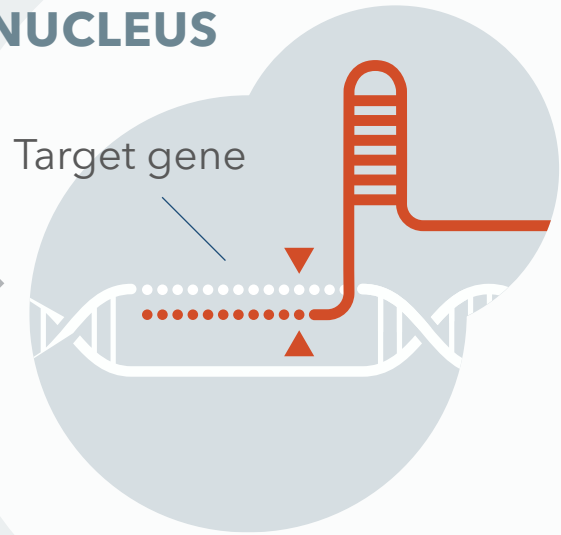
FOUNDATIONAL CRISPR MACHINERY



1 **Guide RNA (gRNA)**
Identifies genetic target

2 **Cas Protein**
Responsible for the targeted DNA editing and provides platform for other enzymatic activities

INSIDE CELL NUCLEUS



KEY FEATURES OF CRISPR/CAS9 SYSTEM

✓ Selectivity ✓ High potency ✓ Address any site ✓ Target multiple DNA sites

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CRISPR/Cas9 and Derivative Gene Editing Technologies Can Be Used to Make Any Type of Edit

INTELLIA'S EDITING TOOLS

CRISPR/ Cas9

DERIVATIVE TECHNOLOGIES

+ Base Editor

+ DNA Writer

+ Other Technologies

KNOCKOUT

Inactivation/deletion of disease-causing DNA sequence

INSERT

Insert new DNA sequence to manufacture therapeutic protein

REPAIR

Correction of "misspelled" disease-driving DNA sequence

INTELLIA SELECTS THE BEST TOOL FOR EACH THERAPEUTIC APPLICATION

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A Tailored Approach to Maximize the Reach of Gene Editing Across Multiple Tissues

INTELLIA'S DELIVERY TOOLS

LNP: Liver-targeted

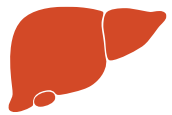
LNP: Bone marrow-targeted

AAV

Other technologies

TARGET TISSUES*

LNPs are well-suited for delivery to the liver and blood cells



Liver

Bone Marrow

AAV and other technologies are well-suited for delivery to other tissues

CNS/PNS

Eye

Muscle

AAV: adeno-associated virus; **CNS**: central nervous system; **LNP**: lipid nanoparticle; **PNS**: peripheral nervous system
* This is a representative list of target tissues and does not include all future opportunities.

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2023 Key Accomplishments

NTLA-2001 ATTR & NTLA-2002 HAE	✓ FDA clearance of INDs for NTLA-2002 Phase 2 and NTLA-2001 Phase 3 studies
	✓ Initiated the pivotal Phase 3 MAGNITUDE trial of NTLA-2001 for ATTR-CM
	✓ Initiated and completed enrollment of the NTLA-2002 Phase 2 study
	✓ Positive interim data updates from Phase 1 studies of NTLA-2001 and NTLA-2002
NTLA-3001 AATD	✓ Submitted CTA for NTLA-3001 Phase 1 study for AATD-associated lung disease
Platform	✓ Achieved key enabling research milestone for DNA writing technology

Ended 2023 with ~$1B in cash – expect to fund operations into mid-2026

AATD: alpha-1 antitrypsin deficiency; **ATTR-CM**: transthyretin amyloidosis with cardiomyopathy; **CTA**: clinical trial application; **HAE**: hereditary angioedema; **IND**: investigational new drug application

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Intellia's Strategic Priorities for 2024 – 2026

1 Execute pivotal trials for first two *in vivo* CRISPR-based therapies

- Complete patient enrollment for pivotal studies of NTLA-2001 and NTLA-2002
- Planned BLA submission for NTLA-2002 for HAE in 2026

2 Launch next wave of *in vivo* and *ex vivo* clinical programs

- Demonstrate human proof-of-concept for targeted *in vivo* gene insertion
- Initiate clinical development for first allogeneic *ex vivo* program

3 Deploy new gene editing and delivery modalities

- Demonstrate preclinical proof-of-concept of editing in tissues outside the liver
- Advance DNA writing technology

BLA: biologics license application

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Upcoming 2024 Key Clinical Program Milestones

NTLA-2001 **ATTR**	○ Dose first patient in pivotal Phase 3 MAGNITUDE trial for ATTR-CM in Q1 2024
	○ Continue to open new sites and enroll patients
	○ Prepare for the Phase 3 study for the treatment of ATTRv-PN
	○ Present updated data from the ongoing Phase 1 study in 2024
NTLA-2002 **HAE**	○ Initiate the Phase 3 study in 2H 2024, subject to regulatory feedback
	○ Present updated data from Phase 1 and new data from Phase 2 portion in 2024
NTLA-3001 **AATD**	○ Dose first patient in Phase 1 study of NTLA-3001 in 2024

ATTRv-PN: hereditary transthyretin amyloidosis with polyneuropathy

CLINICAL PIPELINE UPDATE

- NTLA-2002
- NTLA-2001

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Both NTLA-2001 and NTLA-2002 Have Been Generally Well Tolerated

- Data from 75 patients dosed in the Phase 1 of NTLA-2001 and NTLA-2002 showed a favorable safety profile
  - Safety data up to two years for NTLA-2001 and one year for NTLA-2002

- Majority of adverse events (AEs) were mild in severity

- Most common AEs were infusion-related reactions, headache, diarrhea, back pain and fatigue and all resolved without sequelae

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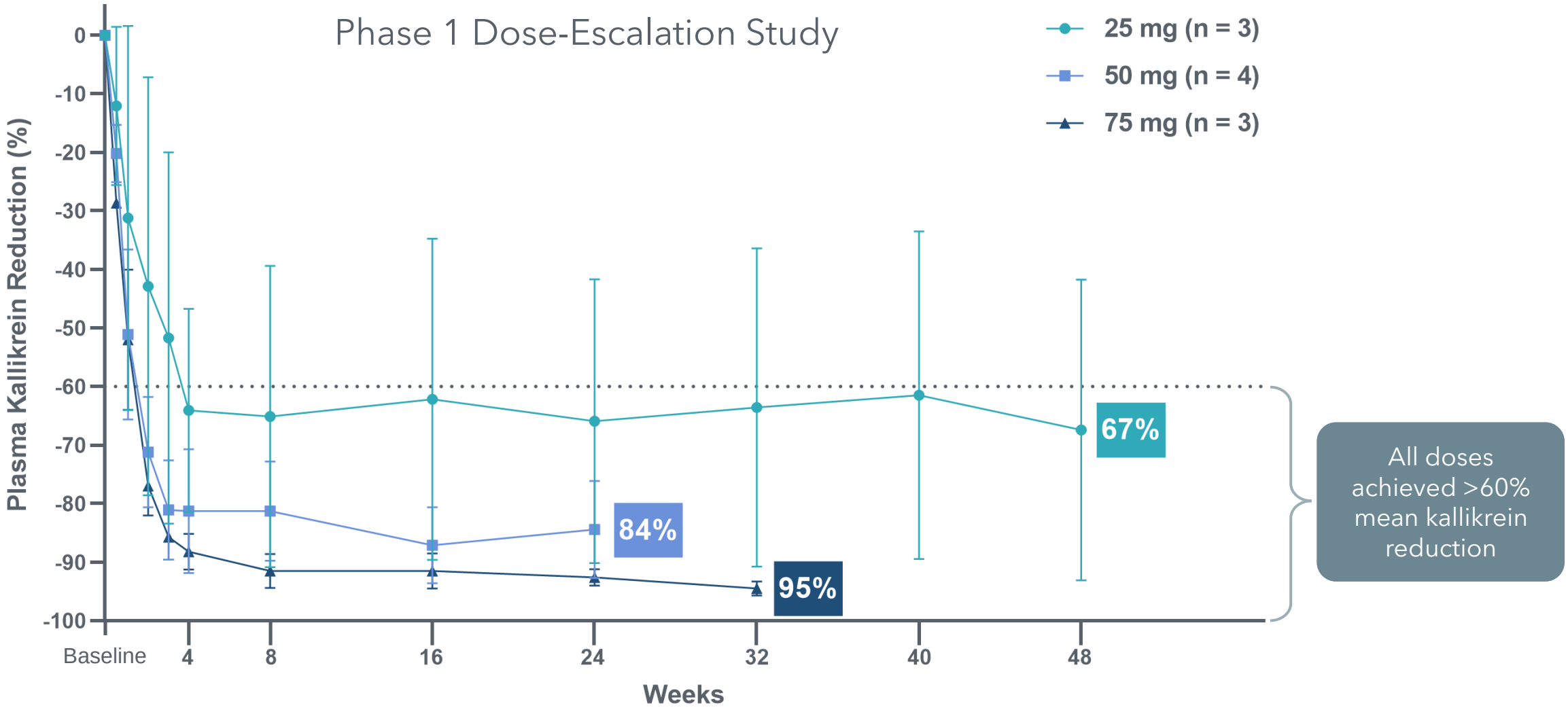
A Single Dose of NTLA-2002 Resulted in Dose-Dependent and Durable Reductions in Plasma Kallikrein Protein



Data cutoff February 17, 2023.
Data are mean values with standard deviation.
Mean percentage reduction callout on graph refers to last measurement as of the data cutoff date.

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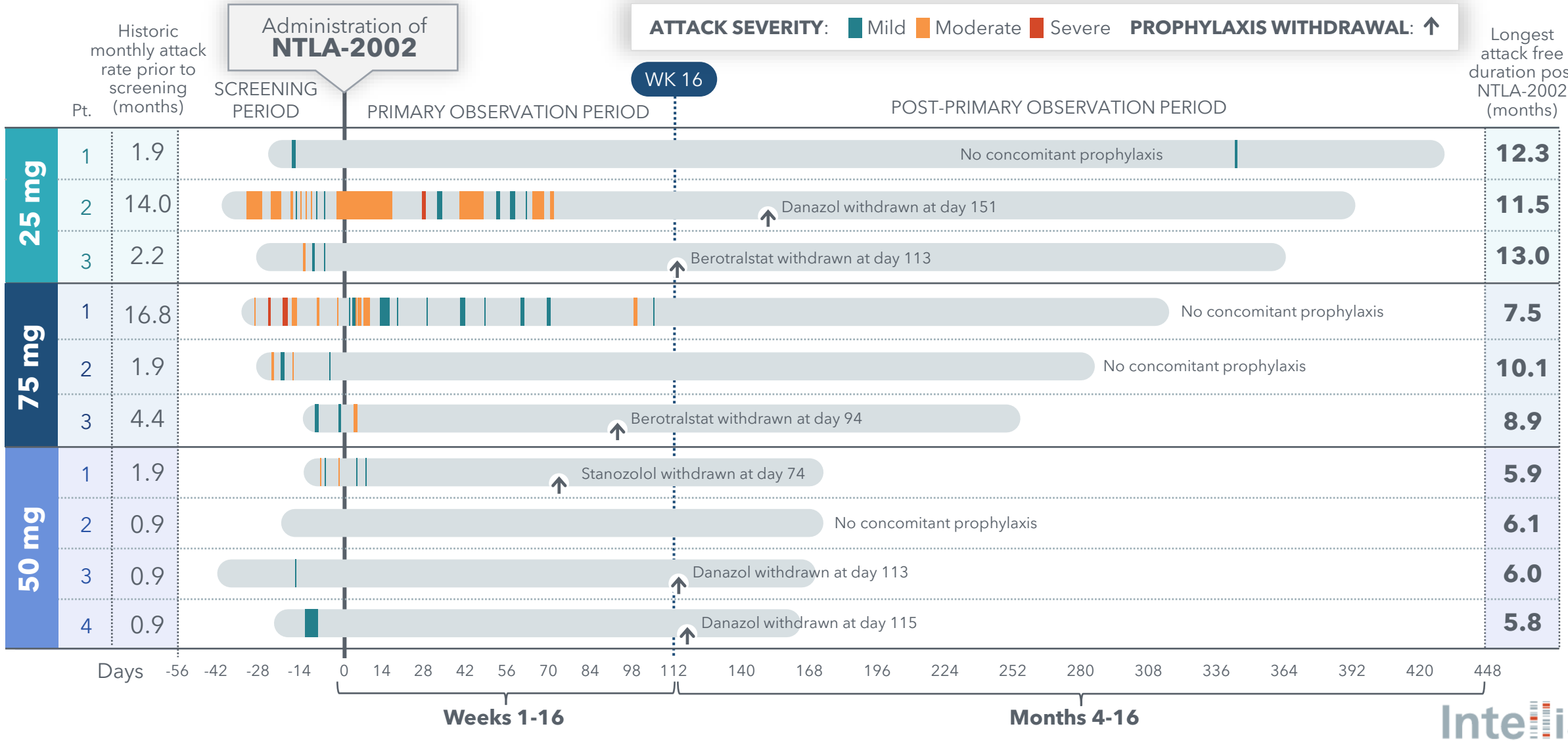
A Single Dose of NTLA-2002 Led to a 95% Mean Reduction in Monthly HAE Attack Rate Through the Latest Follow-up



Data cutoff February 17, 2023.

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Next Steps for NTLA-2002

- Select the Phase 3 dose based on Phase 2 study evaluating 25 mg and 50 mg
- On track to initiate the Phase 3 study in 2H 2024, subject to regulatory feedback
- Plan to present longer-term follow-up from the Phase 1 in 2024
- Plan to present results from the Phase 2 in 2024

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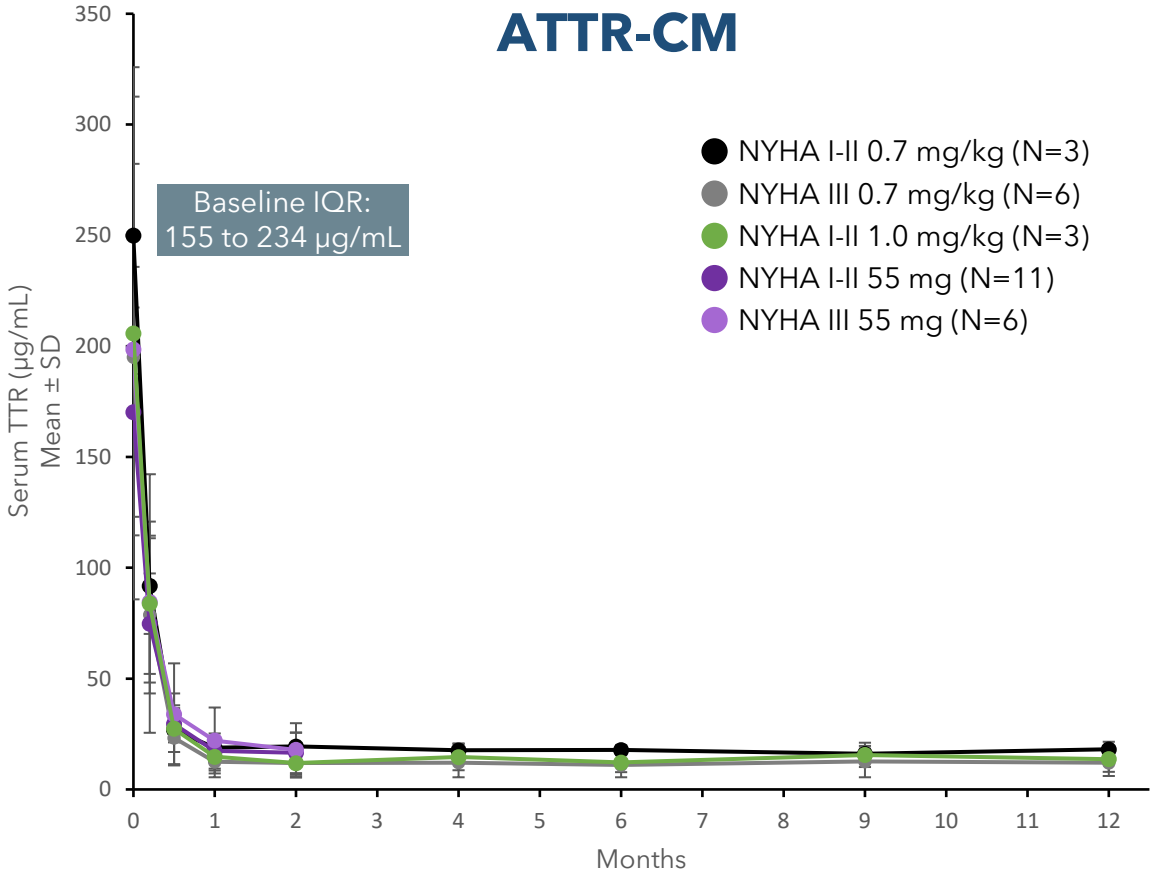
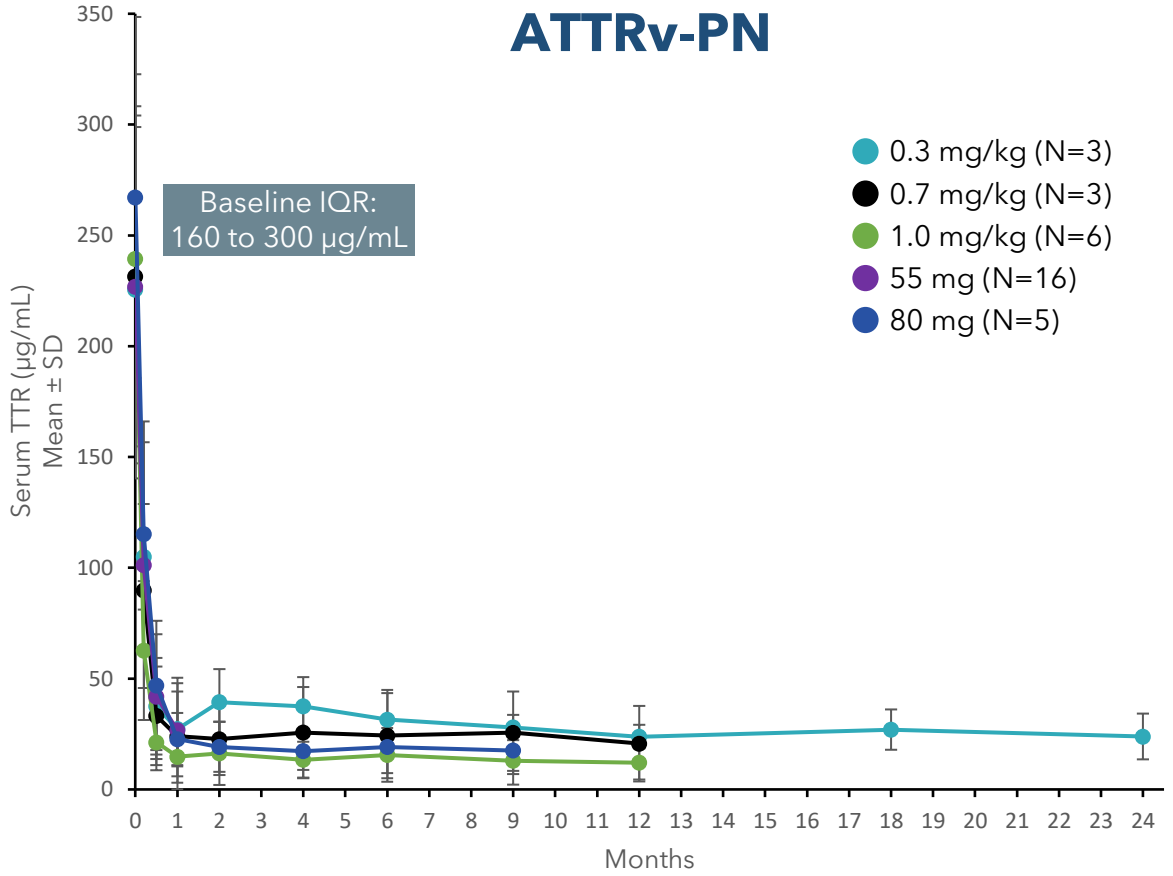
Regardless of Baseline TTR Levels, a Single Dose of NTLA-2001 Led to Consistently Low and Sustained Absolute Serum TTR in All Patients





Median (IQR) Serum TTR at Day 28 (n=62)	Residual absolute TTR concentration at day 28	17 µg/mL (11 to 24 µg/mL)
	% Change from baseline in serum TTR at day 28	-91% (-88 to -94%)

Data cutoff May 11, 2023.

Figure notes: Results for each dose level are shown out to the last time point with complete follow-up for the entire cohort. Interim data presented excludes the 0.1 mg/kg cohort from the dose-escalation of the polyneuropathy arm. The three patients in the 0.1 mg/kg cohort have been re-dosed at 55 mg and results will be shared in a future presentation. The 55 mg and 80 mg doses are the fixed doses corresponding to 0.7 mg/kg and 1.0 mg/kg, respectively.

IQR: interquartile range; **NYHA**: New York Heart Association; **SD**: standard deviation; **TTR**: transthyretin

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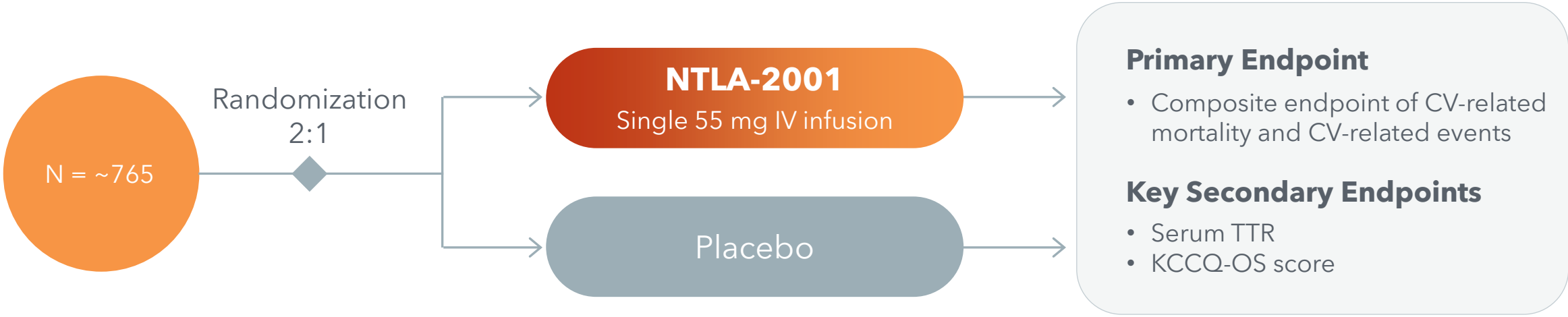
MAGNITUDE
ATTR-CM

A Phase 3, Randomized, Double-blind, Placebo-controlled Study to Evaluate NTLA-2001 in Patients with ATTR Amyloidosis with Cardiomyopathy (ATTR-CM)



Key Eligibility Criteria:

- Adult patients with diagnosis of either hereditary or wild-type ATTR-CM
- NYHA Class I – III
- NT-proBNP baseline ≥ 1000 pg/mL

Stratification:

- NAC stage
- TTR genotype: wild-type vs. mutant
- Concomitant tafamidis use vs. no tafamidis

Study Duration:

- Dependent on occurrence of pre-specified number of CV events and a minimum of 18 months follow-up
- Majority of patients are expected to have ≥ 30 months of follow-up for the primary analysis

Clinicaltrials.gov ID: NCT06128629
CV: cardiovascular; **KCCQ-OS**: Kansas City Cardiomyopathy Questionnaire-Overall Summary; **NAC**: National Amyloidosis Centre; **NYHA**: New York Heart Association; **NT-proBNP**: N-terminal-pro-B-type natriuretic peptide

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Next Steps for NTLA-2001

- Expect to dose first patient in the MAGNITUDE study for ATTR-CM in Q1 2024
- Continue to open new sites and enroll patients
- Prepare for the Phase 3 study for ATTRv-PN
- Plan to present additional data from the Phase 1 study in 2024

Significant Market Potential for NTLA-2001 and NTLA-2002

	NTLA-2001 for ATTR Amyloidosis Potential to be the best-in-class TTR reduction agent and only single-dose treatment	NTLA-2002 for Hereditary Angioedema Potential to be the best-in-class HAE prophylaxis agent and only single-dose treatment
Global market size expected by 2029[1]	**$11B+**	**$6B+**
Patients worldwide[2,3]	**500K+**	**~20K**
Current approved therapies	• Continued disease progression • Require chronic administration	• Breakthrough attacks still occur • Require chronic administration
Average annual cost of treatment in the U.S.[4]	**$450K+**	**$500K+**

[1] GlobalData
[2] Compiled from various sources
[3] Zuraw 2008 NEJM
[4] Redbook

Intellia THERAPEUTICS

Expanding Intellia's Platform to Create New Medicines

FIRST WAVE

In Vivo Gene Insertion

- Durably restore a functional protein after a single dose

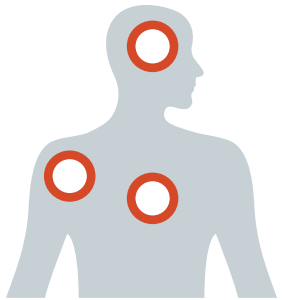
Ex Vivo: Allogeneic Cell Therapies

- Rewiring immune cells for oncology and autoimmunity

NEXT WAVE

DNA Writing

- Targeted correction of a mutant gene



In Vivo Delivery Outside the Liver

- Unlock treatment of diseases across multiple tissue types

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Broad Development Pipeline Fueled by Robust Research Engine

PROGRAM	APPROACH	Research and Preclinical	Early-Stage Clinical	Late-Stage Clinical	PARTNERS
***In Vivo*: CRISPR is the therapy**					
NTLA-2001: Transthyretin Amyloidosis	Knockout				LEAD Intellia THERAPEUTICS REGENERON
NTLA-2002: Hereditary Angioedema	Knockout				Intellia THERAPEUTICS
NTLA-3001: AATD-Lung Disease	Insertion				Intellia THERAPEUTICS
Hemophilia A / B	Insertion				Intellia THERAPEUTICS REGENERON LEAD
Research Programs	Knockout, insertion or repair				Intellia THERAPEUTICS
Research Programs	Tissues outside the liver				Intellia* THERAPEUTICS REGENERON SPARINGVISION
***Ex Vivo*: CRISPR creates the therapy**					
Research Programs	Allogeneic and other				Intellia* THERAPEUTICS AVENCELL kyverna ONK THERAPEUTICS

Lead refers to lead development and commercial party
* Intellia is advancing both wholly owned and partnered programs.

Intellia THERAPEUTICS

Realizing the Promise of Gene Editing

At Intellia, we innovate every day to make CRISPR-based medicines a reality for patients.

This is just the beginning of the gene editing revolution.

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