Intellia THERAPEUTICS

Q3 2017 Earnings Presentation

October 31, 2017

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Today's Presenters

Nessan Bermingham, Ph.D
CEO, President and Founder

John Leonard, M.D.
EVP, Research & Development

Graeme Bell
EVP & Chief Financial Officer

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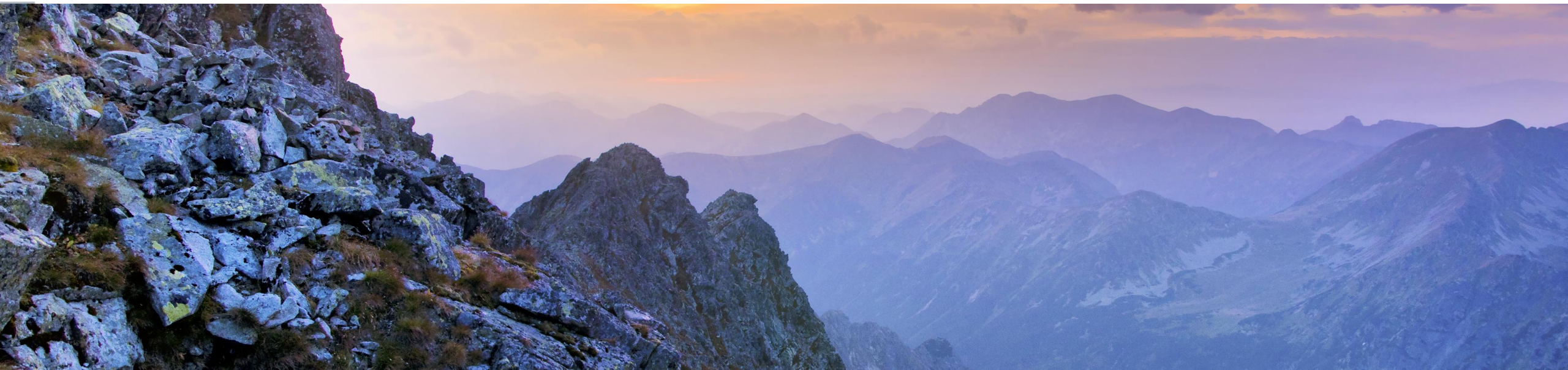
Agenda

- Welcome and overview
- R&D update
- Financial results
- Upcoming milestones
- Q&A



Business and R&D Update

Business Update

- Collaboration revenue of $7.3M
- R&D investment of $17.5M
- 135 focused R&D personnel
- 34 general & administrative support staff
- 70:30 ratio of R&D : G&A capital deployment
- Cash balance of $222M
- Loss per share of $0.44

R&D Update

- Early results in non-human primates showed, for the first time with CRISPR/Cas9, liver genome editing of over 20 percent in certain animals
  - Dose-dependent levels of liver genome editing in non-human primates, with ability to redose
  - Well-tolerated safety profile
  - Confirmed rapid clearance of all components of the LNP system, as seen in rodent studies
- Demonstrated *in vivo* maintenance of liver genome editing in mice through 12 months
- Made progress in evaluating *in vivo* delivery by LNPs to a second organ, with successful genome editing by CRISPR/Cas9 in the central nervous system (cerebellum and striatum) in mice

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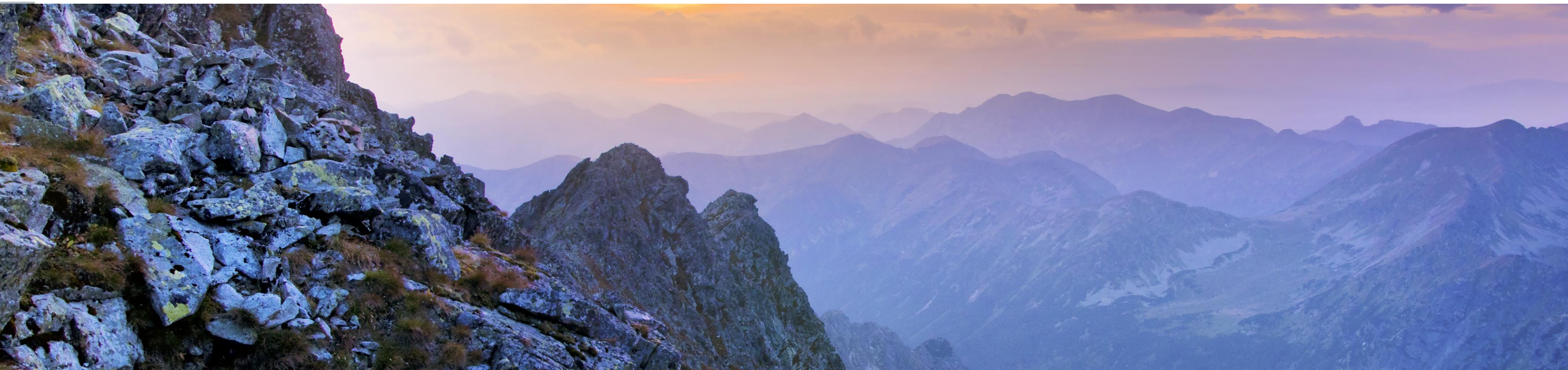
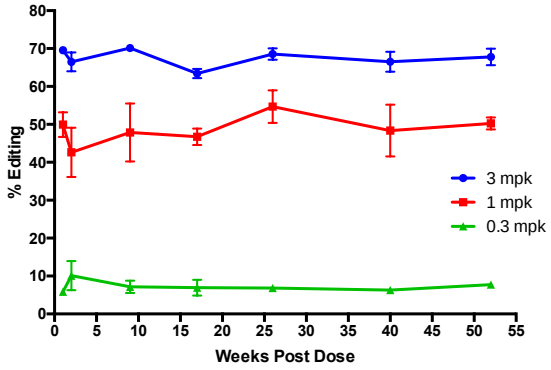


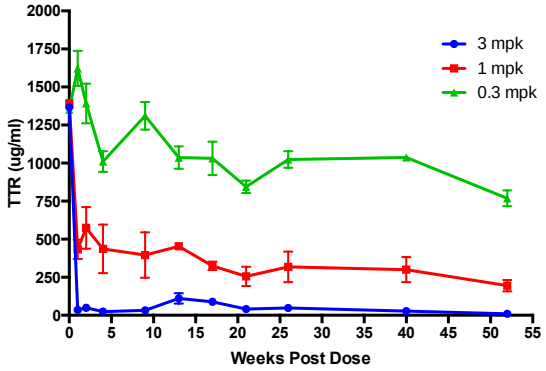
Editing Effect Durability Mouse Study

High Editing Effect Durability *in vivo* After Single Dose; Persistent Effect for Full 12 Months

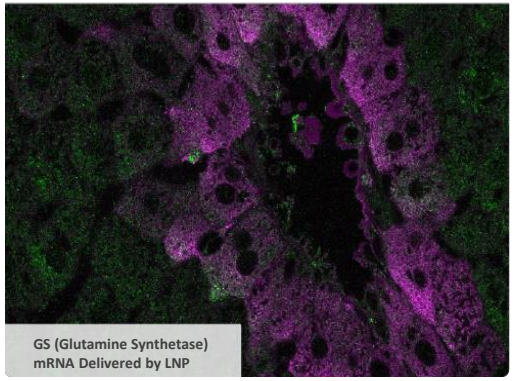
Liver Editing Durable at 12 months



Low Serum TTR Levels Persist



Edited Liver Cell Population Linked To Durability



Cas9 expression is transient, with durable editing effect

- Durable and stable liver editing for duration of 12 month study
- ~97% reduction in serum TTR levels, ~70% liver editing
- Stem cell editing likely drives durability

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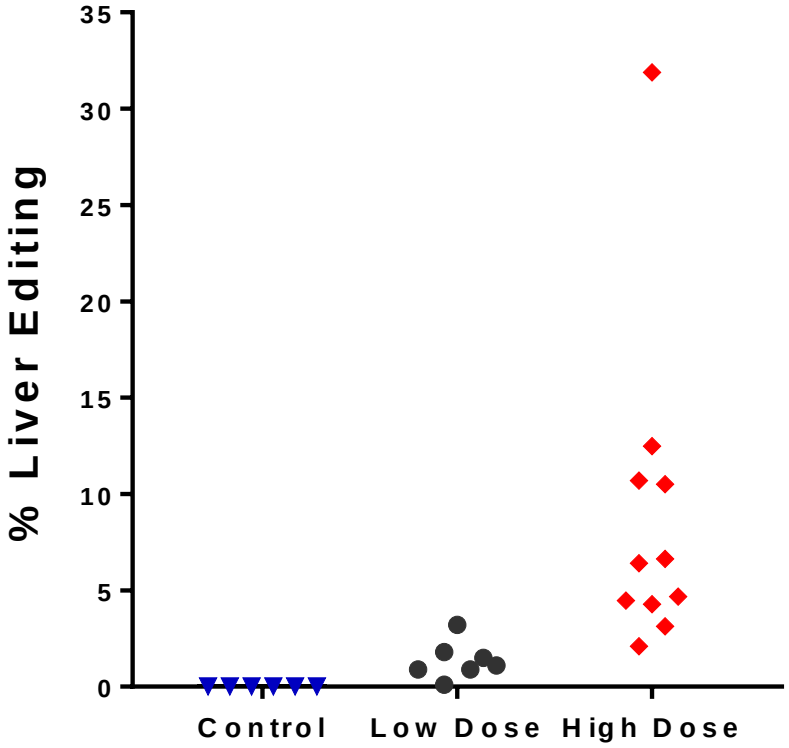
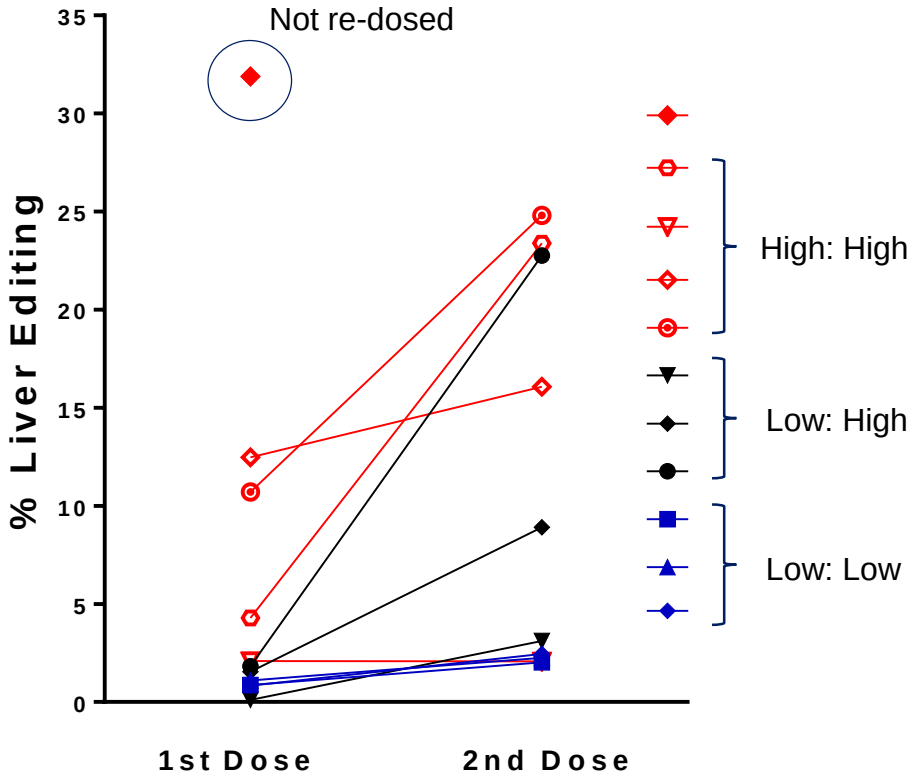
Editing Achieved with Single and Repeat Dose of LNP in NHPs

Single Dose



Repeat Dose



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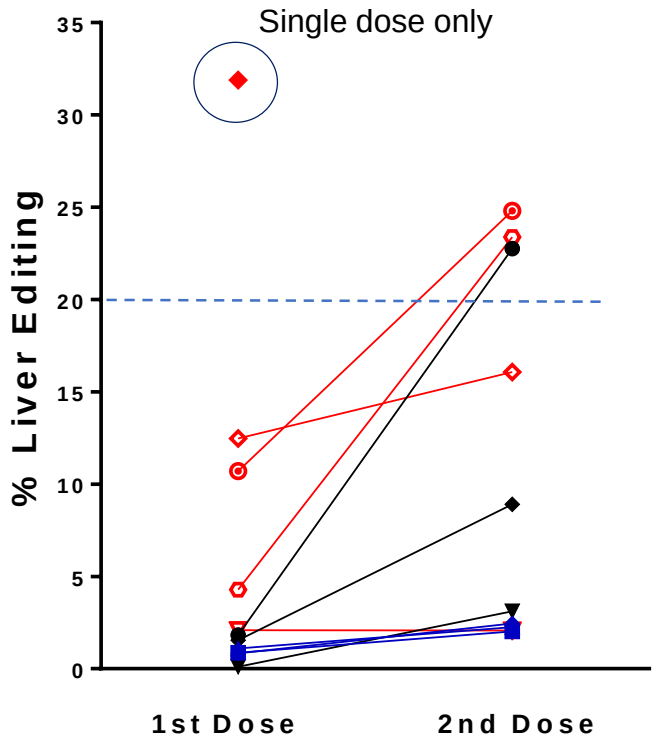
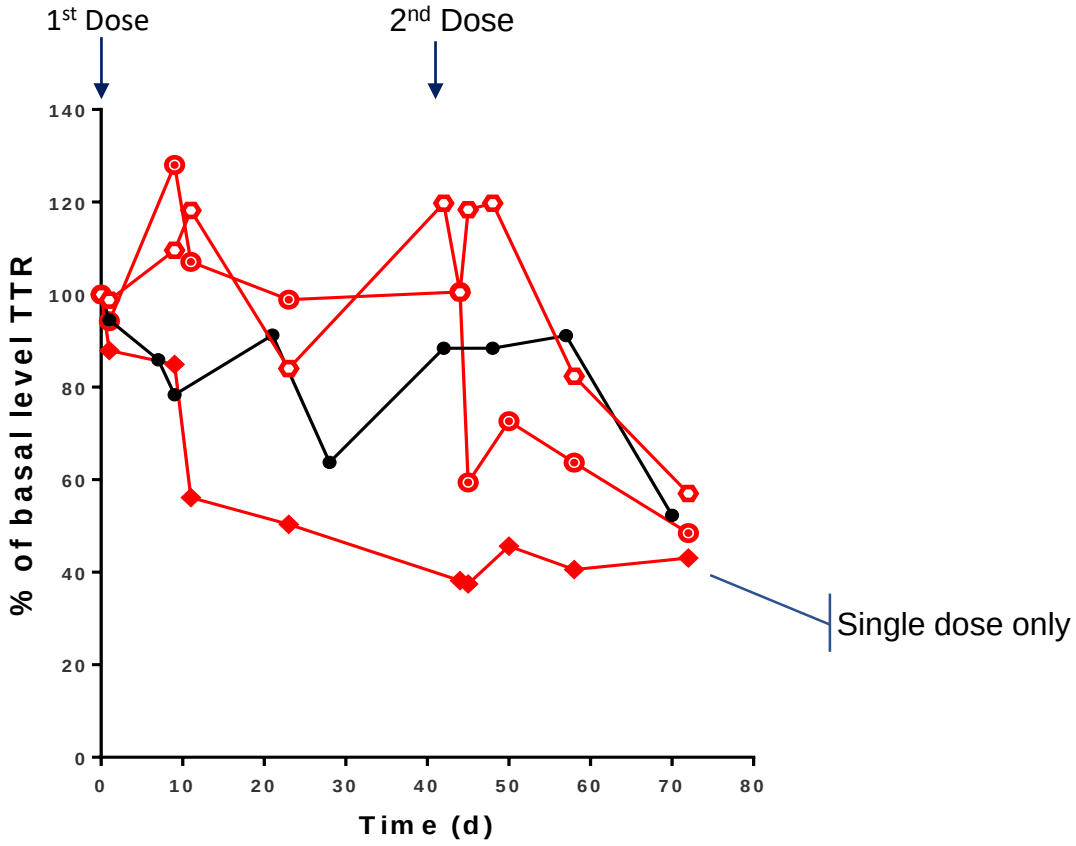
NHP Study - Higher Editing Resulted in Higher Reduction of TTR serum

Liver Editing



%TTR Knock Down

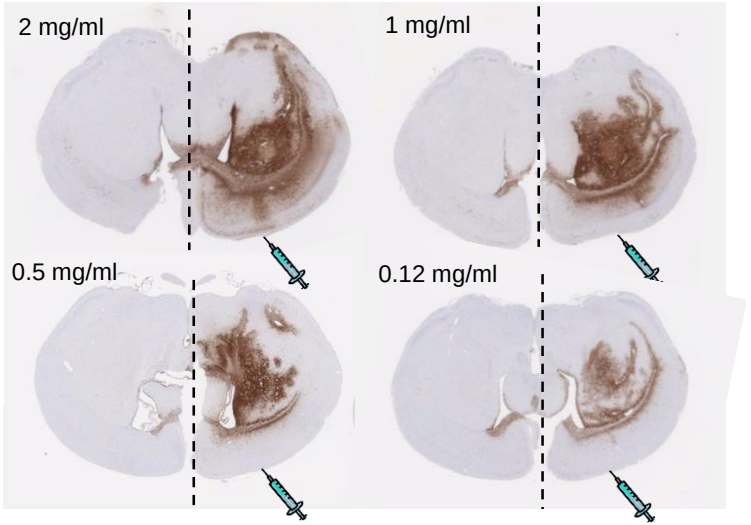


Sample set from multivariate analysis

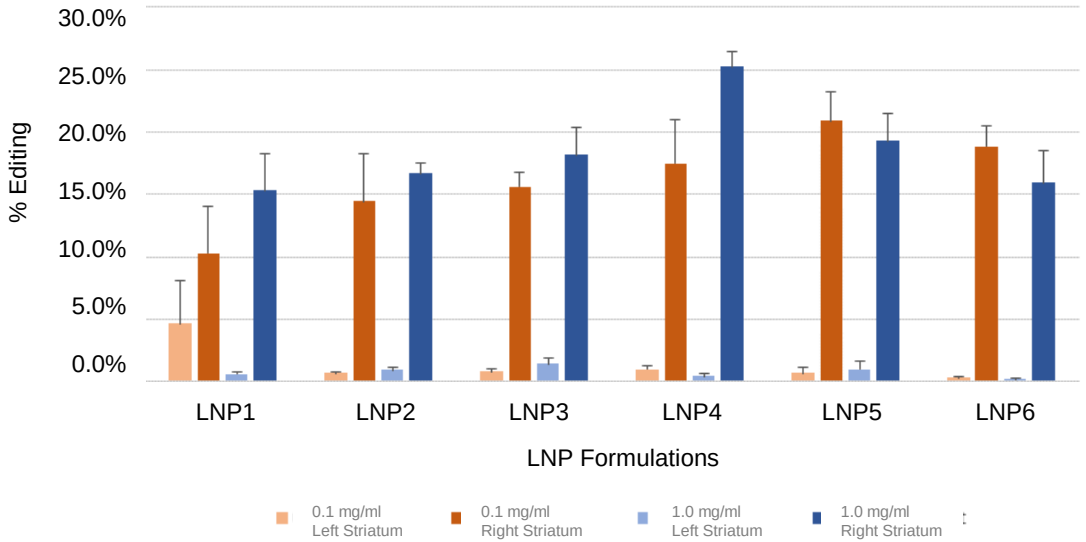
in vivo Potential in CNS

LNP-mediated CNS Delivery and Editing Observed in Mice in Collaboration with Dr. Beverly Davidson

LNP Dose Response Observed in CNS



1-28% Editing in Striatal and Cerebellar Tissue



LNP-mediated CNS delivery led to protein expression and editing in mouse

- Single, local administration was well-tolerated with no behavioral changes
- Uptake is seen in the cerebellum and striatum, and results in genome editing
- Significant opportunities for CNS-specific improvements of LNP formulation and guide selection

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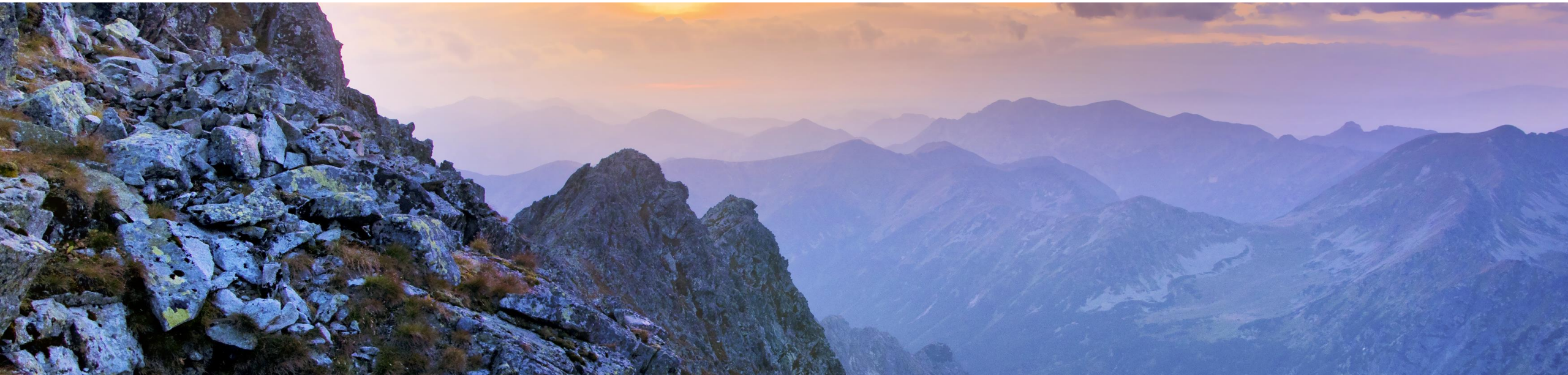

Statement of Operations

	Three Months Ended September 30		Nine Months Ended September 30	
	2017 $M	**2016 $M**	**2017 $M**	**2016 $M**
Collaboration Revenue	**7.317**	**4.869**	**19.449**	**10.852**
Operating Expenses				
- Research and development	17.481	7.861	46.477	20.509
- General and administrative	5.711	4.705	17.812	11.680
Total operating expenses	23.192	12.566	64.289	32.189
Operating loss	(15.875)	(7.697)	(44.840)	(21.337)
Interest income	0.519	0.215	1.260	0.266
Net loss	**(15.356)**	**(7.482)**	**(43.580)**	**(21.071)**
Loss per share	(0.44)	(0.22)	(1.25)	(1.16)
Shares outstanding	35,189	34,316	34,945	18,098

$'M, except net loss per share
Weighted average shares outstanding, basic and diluted in '000

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Balance Sheet

	September 30 2017 $M	December 31 2016 $M
Cash and cash equivalents	222.264	273.064
Total assets	249.170	298.969
Total liabilities	73.323	89.132
Total stockholders equity	175.847	209.837

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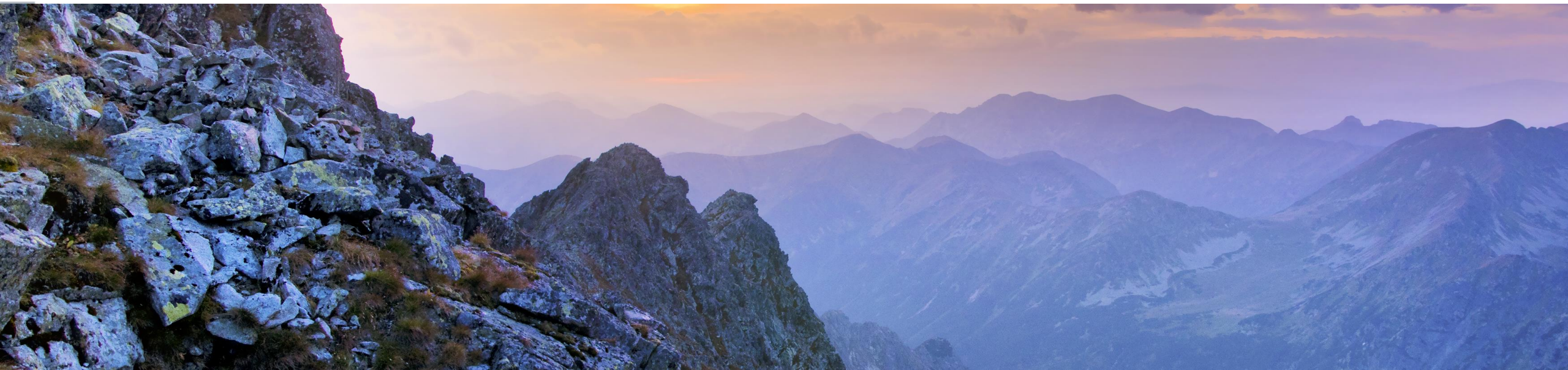
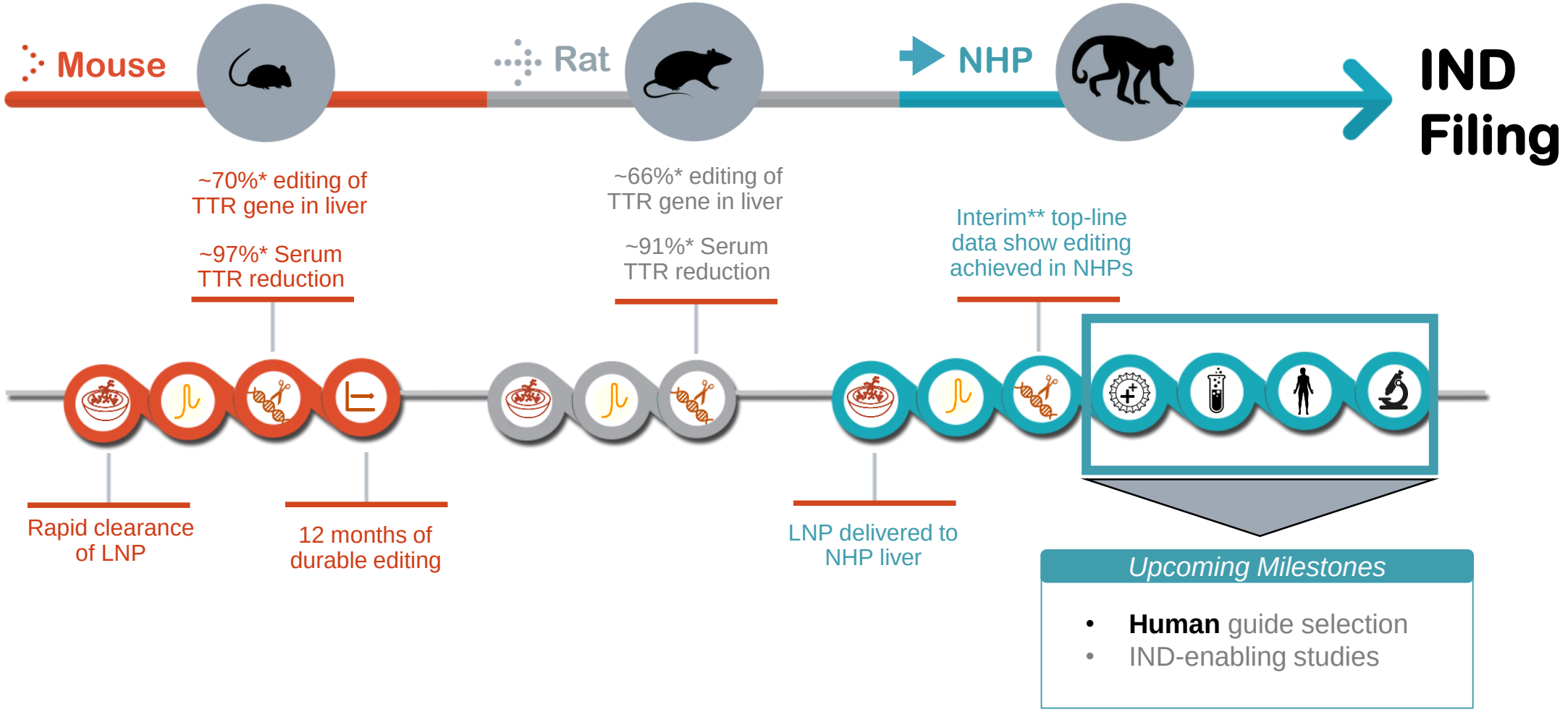


Roadmap to IND Filing



LNP Delivery to Liver
Edit in Liver
Durability
Guide Selection
Optimize Guide
Optimize Formulation
Human Guide Selection
IND Enabling Studies

*Optimized
**Prior to optimization

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Key Accomplishments & Activities

Key Accomplishments

- Successfully delivered CRISPR/Cas9 to non-human primate livers via proprietary LNP delivery system
- Achieved CRISPR/Cas9 editing at the target genome site in the liver of NHPs following a single dose
- Demonstrated that CRISPR/Cas9 editing level translated into TTR serum reduction
- Showed that redosing increased genome editing levels in the liver
- Observed a safe and well-tolerated profile following single and repeat dosing

Upcoming Activities

- Nominate first Intellia development candidate
- Initiate IND-enabling activities
- Demonstrate *in vivo* insertion/repair edit in non-human primates
- Generate preclinical data on T cell candidate for immuno-oncology indication

Industry Leading Investment Thesis

Scalable Application

Committed Partnerships

Proprietary Delivery System

Robust, Global IP Portfolio

Diversified Pipeline

Strong Balance Sheet

Accelerating the development of life-transforming therapies

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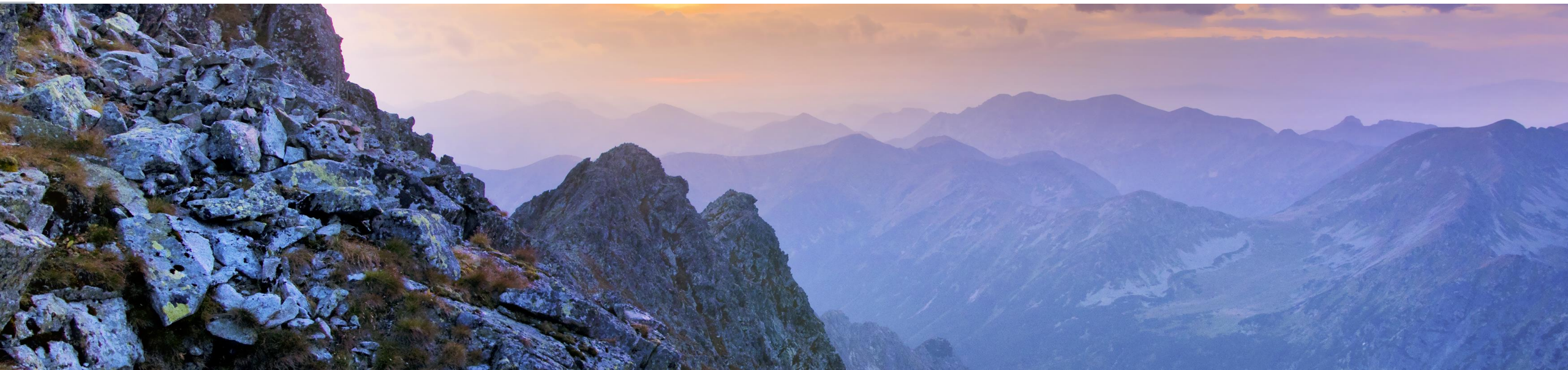

Question & Answer

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NASDAQ: NTLA
www.intelliatx.com