Intellia Therapeutics Announces Third Quarter 2018 Financial Results and Corporate Developments

October 31, 2018

- *Enhanced* in vivo *CRISPR/Cas9 cargo components have led to substantially increased liver editing and protein reduction in non-human primates that could materially improve its transthyretin amyloidosis and other* in vivo *product profiles*
- *Integration of enhanced components into its lead transthyretin amyloidosis development candidate will move expected IND submission into 2020*
- *First to demonstrate robust CRISPR-mediated, site-specific insertion of transgenes in the liver of mice via proprietary LNP-AAV hybrid delivery approach*
- *Progressed transgenic TCR technology by showing that its engineered T cells efficiently recognize and kill myeloid leukemic blasts expressing WT1 antigen*
- *Broadened medical and regulatory science expertise by electing Dr. Jesse Goodman, former Chief Scientist, Deputy Commissioner for Science and Public Health and Director of the Center for Biologics Evaluation and Research of the U.S. FDA, to its Board of Directors*
- *Reported $293 million in cash and cash equivalents as of September 30, 2018*

CAMBRIDGE, Mass., Oct. 31, 2018 (GLOBE NEWSWIRE) -- Intellia Therapeutics, Inc. (NASDAQ:NTLA), a leading genome editing company focused on developing curative therapeutics using CRISPR/Cas9 technology both *in vivo* and *ex vivo*, announced financial results and operational developments for the third quarter of 2018.

"We made excellent progress across our *in vivo* and *ex vivo* programs in the third quarter. In our ATTR program, Intellia previously reported that our proprietary LNP delivery technology could edit genes in the liver of non-human primates sufficiently to reduce TTR protein levels to a potential therapeutic range. Our continued *in vivo* delivery enhancement efforts have now produced striking improvements over these liver editing and protein knockdown levels. Data from the initial application of these enhancements in our ATTR program suggest that we may be able to double our previously reported liver editing results and more significantly reduce circulating protein beyond recognized therapeutic levels, at a lower, well-tolerated dose. We are applying these enhancements to develop a superior ATTR development candidate and we believe we can leverage these enhancements to significantly improve the performance of our development candidates for follow-on *in vivo* programs," said Intellia President and Chief Executive Officer John Leonard, M.D.

"Furthermore, in our insertion programs, we successfully introduced functioning genes in mice using our modular LNP delivery system of CRISPR/Cas9 in combination with our proprietary AAV insertion templates developed in collaboration with Regeneron. In our presentation at ESGCT, Intellia was the first company to demonstrate technology that can insert genes in mice to produce, and fine tune, protein levels up to and greater than those required for normal human physiology.

"In parallel to these *in vivo* achievements, we are rapidly advancing our *ex vivo* immuno-oncology efforts, beginning with the development of best-in-class CRISPR-edited T cells for WT1," added Dr. Leonard.

Third Quarter 2018 Operational Highlights and Recent Corporate Developments Include:

Transthyretin Amyloidosis Program Enhancements

Intellia announced today results from its transthyretin amyloidosis (ATTR) non-human primate (NHP) studies, conducted in collaboration with Regeneron Pharmaceuticals, Inc., related to its enhancements of the cargo components of its lipid nanoparticle (LNP)-based delivery system. These novel component enhancements, which are part of the ongoing development of its proprietary and modular *in vivo* delivery platform, have produced unprecedented results, achieving up to 78 percent (mean of 59 percent) liver editing in our most recent NHP study. The corresponding transthyretin (TTR) protein reduction at 21 days showed a decrease from baseline of up to 96 percent (mean reduction of 78 percent) after a single dose. This substantially improved level of liver editing, achieved with a lower dose and well-tolerated safety profile, compares with mean editing levels of 34 percent in Intellia's previously reported NHP studies.

Based on these new data, the Company is pursuing confirmatory studies with the goal of integrating enhanced cargo components in its Investigational New Drug (IND)-enabling studies and submission of an IND (previously planned for the end of 2019, but now targeted for 2020) for ATTR. In addition, the Company intends to apply these technology improvements to the rest of its *in vivo* product pipeline.

"We are elated to have achieved such impressive and compelling editing and protein knockdown results in our NHP studies. We believe that this approach, while introducing a relatively short delay to our previous IND timeline, will ultimately yield the best possible treatment option for patients – one that we hope will clearly advance the standard of care well beyond approved and potential therapies for the treatment of ATTR," added Dr. Leonard.

Advancing Complex Genome Editing Capabilities
Intellia advanced its complex genome editing capabilities with the first robust demonstration of CRISPR-mediated, targeted insertion of transgenes in the liver of mice. The Company used its modular LNP delivery system of CRISPR/Cas9 in combination with Intellia's proprietary modular adeno-associated virus (AAV) to insert donor template DNA into the albumin locus of mice. In collaboration with Regeneron, the Company used *F9* as a model gene, which encodes Factor IX (FIX) protein, which is the clotting factor deficient in patients with hemophilia B. Using a proprietary bi-directional template platform technology, researchers showed that they can detect hybrid *mAlb-hF9* transcripts in over 50 percent of hepatocytes following a single dose and measured circulating human FIX protein levels of more than 30,000 ng/mL. These levels are higher than those required in a clinical

setting and correspond to levels predicted to be up to 40 to 300 times higher than those capable of preventing spontaneous bleeding episodes in hemophilia B patients, relative to wildtype or a hyperfunctional version of *F9,* respectively (sources: George, et al, NEJM, 2017; Simioni et al, NEJM, 2009). Furthermore, the Company observed that varying either the LNP or AAV dose modulated FIX levels. Protein levels remained stable after dosing throughout the 12-week observation period.

Intellia also applied the hybrid LNP-AAV delivery approach to its wholly owned *in vivo* preclinical program in alpha-1 antitrypsin deficiency (AATD). Alpha-1 antitrypsin (AAT), a protein that protects the lungs and is mutated or absent in patients with AATD, is produced by the *SERPINA1* gene. To produce AAT protein, Intellia combined CRISPR/Cas9 delivery by LNP with the *SERPINA1* DNA template delivered by AAV into the albumin locus. The targeted insertion generated gene expression levels in mice that correspond to levels that protect against the loss of pulmonary capacity in humans. This milestone underscores the utility of Intellia's modular LNP-based delivery system and shows significant progress in developing an *in vivo* genome editing solution for AATD.

Progressing Transgenic T Cell Receptor Technology

Intellia and its research collaborator, Ospedale San Raffaele (OSR), presented data at the 26th Annual Congress of the European Society of Gene and Cell Therapy (ESGCT) showing progression in the Company's lead *ex vivo* program for the treatment of acute myeloid leukemia (AML), utilizing transgenic T cell receptor (TCR) technology. *In vitro* data demonstrated that CRISPR/Cas9 editing resulted in over 90 percent knockout of endogenous TCRs and insertion of Wilms' Tumor 1 (WT1) epitope-specific TCRs. The resulting engineered T cells were fully functional and killed a significant percentage of leukemic blasts. The Company continues to advance its first *ex vivo* development candidate, which is undergoing *in vitro* and *in vivo* functional testing.

Expanded Board of Directors and Management Team

Intellia announced today the appointment of Jesse Goodman, M.D., to its board of directors. Dr. Goodman brings more than three decades of expertise in medical research and public health as a professor, practicing clinician and former director of the U.S. Food and Drug Administration's (FDA) Center for Biologics Evaluation and Research (CBER).

"We are thrilled to have someone with the broad scientific, public health, regulatory and clinical credentials of Jesse join Intellia's board of directors," said Intellia Chairman Perry Karsen. "During his time at the FDA, Jesse demonstrated exceptional leadership in ensuring that the agency and companies could work together to advance scientific innovation and responsibly enhance patient access to safe and effective therapies. We expect his contributions will be invaluable as Intellia begins transitioning to a biotech company approaching clinical trials with patients."

Dr. Goodman is currently a professor of medicine at Georgetown University, where he directs the Center on Medical Product Access, Safety and Stewardship (COMPASS). As an attending physician in infectious diseases, he also is an active clinician and educator. Additionally, he serves as an independent non-executive director for GlaxoSmithKline plc.; as president and trustee of the U.S. Pharmacopeial Convention; and on the Regulatory Working Group of the Coalition on Epidemic Preparedness Innovation (CEPI). Dr. Goodman was chief scientist at the FDA from 2009 through 2014, during which time he led preparations for and responses to major public health threats, including emerging infectious diseases, disasters and terrorism. He previously also served as the FDA's deputy commissioner for science and public health and as director of CBER. Dr. Goodman has a bachelor of arts in biology from Harvard University; earned a master's in public health from the University of Minnesota; and received his doctor of medicine from the Albert Einstein College of Medicine. He completed his residency and fellowship training at the Hospital of the University of Pennsylvania and at the University of California at Los Angeles. Dr. Goodman is board-certified in internal medicine, infectious diseases and oncology, and has been elected to the American Society for Clinical Investigation and to the U.S. National Academy of Medicine.

Earlier this week, Intellia announced that Glenn Goddard had been named its executive vice president and chief financial officer. Mr. Goddard joins as a member of Intellia's executive management team, and will oversee all financial functions and investor relations, as well as information technologies and facilities.

Strengthened Intellectual Property Position

Yesterday, the U.S. Patent and Trademark Office (USPTO) granted U.S. Patent No. 10,113,167 to The Regents of the University of California, the University of Vienna and Emmanuelle Charpentier, Ph.D., co-owners of foundational intellectual property relating to CRISPR/Cas9 genome editing technology. The patent covers optimized guide RNA formats (including single-guide and dual-guide formats) that may be used in any environment, including eukaryotic cells (such as human, animal and plant cells). The optimized formats modify the part of a guide RNA that interacts with the CRISPR/Cas9 nuclease. The previously awarded U.S. Patent No. 10,000,772 covers methods of using optimized guide RNAs to edit genes in certain environments, including in eukaryotic cells. Intellia sublicenses this intellectual property from The Regents of the University of California and the University of Vienna under a license agreement with Caribou Biosciences Inc.

Third Quarter 2018 Financial Results

Collaboration Revenue

Collaboration revenue was $7.4 million for the third quarter of 2018, compared to $7.3 million during the third quarter of 2017. The increase in collaboration revenue in 2018 was primarily driven by amounts recognized under Intellia's collaboration agreement with Regeneron.

Since inception through September 30, 2018, the Company has received $122.7 million in funding from the collaborations with Novartis Institutes for Biomedical Research, Inc. (Novartis) and Regeneron, excluding amounts received for equity investments, and had an accounts receivable balance of $2.8 million as of September 30, 2018.

Operating Expenses

Research and development expenses increased by $5.8 million to $23.2 million during the third quarter of 2018, compared to $17.5 million during the third quarter of 2017. This increase was driven primarily by the advancement of Intellia's research programs, research personnel growth to support these programs, as well as the expansion of the development organization, and includes laboratory supplies and research materials such as reagents.

General and administrative expenses increased by $2.6 million to $8.3 million during the third quarter of 2018, compared to $5.7 million during the third quarter of 2017. This increase was driven primarily by increased salary and related headcount-based expenses to support Intellia's larger research and development organization and administrative obligations.

The Company's net loss was $22.7 million for the third quarter of 2018, compared to $15.4 million during the third quarter of 2017.

Balance Sheet

Cash and cash equivalents were $293.2 million as of September 30, 2018, compared to $340.7 million as of December 31, 2017.

Financial Guidance

The Company's primary uses of capital will continue to be for research and development programs, laboratory and related supplies, compensation costs for current and future employees, consulting, intellectual property related costs and general operating costs.

As of September 30, 2018, the Company had an accumulated deficit of $182.0 million. The Company expects losses to increase as it continues to incur significant research and development expenses related to the advancement of Intellia's therapeutic programs and ongoing operations. Based on Intellia's research and development plans and expectations related to the progress of the Company's programs, the Company expects that the cash and cash equivalents as of September 30, 2018, as well as technology access and research funding from Novartis and Regeneron, will enable Intellia to fund operating expenses and capital expenditures through mid-2020, excluding any potential milestone payments or extension fees that could be earned and distributed under the collaboration agreements with Novartis and Regeneron or any strategic use of capital not currently in the base-case planning assumptions.

Conference Call to Discuss Third Quarter 2018 Earnings and Corporate Developments

The Company will present third quarter 2018 results and corporate developments in a conference call on Oct. 31, 2018 at 8 a.m. ET. The investor presentation may be downloaded starting at 7:30 a.m. ET from the Events and Presentations page of the Investor Relations section of Intellia's website at intelliatx.com

To join the call:

- U.S. callers should dial 866-548-4713 and use conference ID# 5893807, approximately five minutes before the call.
- International callers should click here to access dial-in information and use conference ID# 5893807, approximately five minutes before the call.

A replay of the call will be available on Intellia's website, beginning on Oct. 31, 2018 at 12 p.m. ET.

About Intellia Therapeutics

Intellia Therapeutics is a leading genome editing company focused on developing proprietary, curative therapeutics using the CRISPR/Cas9 system. Intellia believes the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course, and through improved cell therapies that can treat cancer and immunological diseases, or can replace patients' diseased cells. The combination of deep scientific, technical and clinical development experience, along with its leading intellectual property portfolio, puts Intellia in a unique position to unlock broad therapeutic applications of the CRISPR/Cas9 technology and create a new class of therapeutic products. Learn more about Intellia Therapeutics and CRISPR/Cas9 at intelliatx.com and follow us on Twitter @intelliatweets.

Forward-Looking Statements

This press release 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 into human therapeutic products, as well as our CRISPR/Cas9 intellectual property portfolio; our ability to achieve stable or effective genome editing; our ability to administer 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 programs (such as alpha-1 antitrypsin deficiency (AATD)), and clinical trials; the timing and potential achievement of milestones to advance our pipeline including filing INDs; our ability to replicate results achieved in our preclinical studies, including those in our ATTR, AATD and Wilms' Tumor 1 (WT1) programs, in any future studies, including human clinical trials; the potential development of our proprietary lipid nanoparticle (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 Investigational New Drug ("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 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 and autoimmune/inflammation indications during 2018 or thereafter; our ability to advance a development candidate for an *in vivo* second indication by late 2018 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 development programs; the potential timing of regulatory filings regarding our development programs; the potential commercialization opportunities, including value and market, for product candidates; our expectations regarding our uses of capital, expenses, future accumulated deficit and other 2018 financial results; and our ability to fund operations through mid-2020.

Any forward-looking statements in this press release 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 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; 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. 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 press release is as of the date of the release, and Intellia Therapeutics undertakes no duty to update this information unless required by law.

INTELLIA THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
(Amounts in thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017

Collaboration revenue	$ 7,408	$ 7,317	$ 22,554	$ 19,449
Operating expenses:				
Research and development	23,237	17,481	69,197	46,477
General and administrative	8,270	5,711	23,481	17,812
Total operating expenses	31,507	23,192	92,678	64,289
Operating loss	(24,099)	(15,875)	(70,124)	(44,840)
Interest income	1,397	519	3,847	1,260
Net loss	$ (22,702)	$ (15,356)	$ (66,277)	$ (43,580)
Net loss per share, basic and diluted	$ (0.53)	$ (0.44)	$ (1.55)	$ (1.25)
Weighted average shares outstanding, basic and diluted	43,161	35,189	42,684	34,945

INTELLIA THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEET DATA (UNAUDITED)
(Amounts in thousands)

	September 30, 2018	December 31, 2017
Cash and cash equivalents	$ 293,248	$ 340,678
Total assets	321,233	376,235
Total liabilities	57,963	75,638
Total stockholders' equity	263,270	300,597

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