## Ionis to Present Inotersen NEURO-TTR Phase 3 Study Results at 1st European ATTR Amyloidosis Meeting

November 1, 2017

## Company to host webcast conference call on Thursday, November 2 at 7:00 a.m. Eastern Time

CARLSBAD, Calif., Nov. 1, 2017 /PRNewswire/ — Ionis Pharmaceuticals, Inc. (NASDAQ: IONS) announced today that it will host a live webcast on Thursday, November 2 at 7:00 a.m. Eastern Time to review data from the Phase 3 NEURO-TTR study presented at the European ATTR Amyloidosis Meeting in Paris, France.



Interested parties may listen to the call by dialing 877-443-5662 or access the webcast at <a href="https://www.ionispharma.com">www.ionispharma.com</a>. A webcast replay will be available for a limited time at the same address.

## ABOUT IONIS PHARMACEUTICALS, INC.

lonis is the leading company in RNA-targeted drug discovery and development focused on developing drugs for patients who have the highest unmet medical needs, such as those patients with severe and rare diseases. Using its proprietary antisense technology, lonis has created a large pipeline of first-in-class or best-in-class drugs, with over three dozen drugs in development. SPINRAZA® (nusinersen) has been approved in global markets for the treatment of spinal muscular atrophy (SMA). Biogen is responsible for commercializing SPINRAZA. Drugs that have successfully completed Phase 3 studies include inotersen, an antisense drug lonis is developing to treat patients with hereditary TTR amyloidosis (hATTR), and volanesorsen, an antisense drug discovered by Ionis and co-developed by Ionis and Akcea Therapeutics to treat patients with either familial chylomicronemia syndrome or familial partial lipodystrophy. Akcea, an affiliate of Ionis, is a biopharmaceutical company focused on developing and commercializing drugs to treat patients with serious cardiometabolic diseases caused by lipid disorders. If approved, volanesorsen will be commercialized through Ionis' affiliate, Akcea. Volanesorsen filings for marketing approval have been submitted in the U.S., EU and Canada. Inotersen is progressing toward regulatory filings for marketing authorization. Ionis' patents provide strong and extensive protection for its drugs and technology. Additional information about Ionis is available at <a href="https://www.ionispharma.com">www.ionispharma.com</a>.

## **IONIS' FORWARD-LOOKING STATEMENT**

This press release includes forward-looking statements regarding the therapeutic and commercial potential of inotersen and other products in development. Any statement describing lonis' goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such drugs. Ionis' forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause its results to differ materially from those expressed or implied by such forward-looking statements. Although lonis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Ionis. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Ionis' programs are described in additional detail in Ionis' annual report on Form 10-K for the year ended December 31, 2016, and its most recent quarterly report on Form 10-Q, which are on file with the SEC. Copies of these and other documents are available from the Company.

In this press release, unless the context requires otherwise, "Ionis," "Company," "we," "our," and "us" refers to Ionis Pharmaceuticals and its subsidiaries.

Ionis Pharmaceuticals™ is a trademark of Diogen. Inc. Akcea Therapeutics™ is a trademark of Diogen.

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SOURCE Ionis Pharmaceuticals, Inc.

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