

Ionis Pharmaceuticals Provides Corporate Update at 2017 Annual Meeting of Stockholders

Carlsbad, Calif., May 11, 2017 – Ionis Pharmaceuticals, Inc. (NASDAQ: IONS) today announced that management will present a general corporate update in conjunction with its 2017 Annual Meeting of Stockholders and Open House on Wednesday, May 24 at 2:10 p.m. Pacific Time (5:10 p.m. Eastern Time) in Carlsbad, CA.

The agenda for the meeting is as follows:

- 2:00 p.m. 2:10 p.m. PT Annual Meeting of Stockholders (for stockholders of record as of March 31, 2017)
- 2:10 p.m. 3:00 p.m. PT Corporate Presentation Stanley T. Crooke, Ionis' Chairman and Chief Executive Officer
- 3:00 p.m. 5:00 p.m. PT Meet and Mingle Session and Open House

A live audio webcast of the presentation will be available on the "Investors & Media" section of the Company's website, <u>www.ionispharma.com</u>. A replay of the presentation will be available on the website within 48 hours and will be archived for a limited time.

If you plan to attend the meeting, please RSVP by visiting the "Investors & Media" page at www.ionispharma.com.

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) is a drug that has been approved in the U.S. for the treatment of spinal muscular atrophy (SMA) in pediatric and adult patients. Biogen is responsible for commercialization of SPINRAZA. Drugs currently in Phase 3 development include volanesorsen, a drug lonis is developing and plans to commercialize through its wholly owned subsidiary, Akcea Therapeutics, to treat patients with either familial chylomicronemia syndrome or familial partial lipodystrophy; and IONIS-TTR_{Rx}, a drug lonis is developing with GSK to treat patients with TTR amyloidosis. lonis' patents provide strong and extensive protection for its drugs and technology. Additional information about lonis is available at <u>www.ionispharma.com</u>.

IONIS' FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding Ionis Pharmaceuticals' financial position and outlook, Ionis' business, the business of Akcea Therapeutics, Inc., a wholly owned subsidiary of Ionis, and the therapeutics and commercial potential of Ionis' technologies and products in development, including SPINRAZA, IONIS-TTR_{Rx}, and volanesorsen. Any statement describing Ionis' 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 Ionis' 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 Ionis Pharmaceuticals, Inc. Akcea Therapeutics[™] is a trademark of Ionis Pharmaceuticals, Inc. SPINRAZA[™] is a trademark of Biogen.

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