



# Q2 2020 Financial Results

**August 5, 2020**



# On Today's Earnings Call

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**Brett Monia, Ph.D.**  
*Chief Executive Officer*



**Beth Hougen**  
*Chief Financial Officer*



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*Executive Vice President, Development*



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*Executive Vice President, Research*



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*Chief Corp. Development & Commercial Officer*



# Forward Looking Language Statement

This presentation includes forward-looking statements regarding our business, financial guidance and the therapeutic and commercial potential of SPINRAZA® (nusinersen), TEGSEDI® (inotersen), WAYLIVRA® (volanesorsen) and Ionis' technologies and products in development, including the business of Akcea Therapeutics, Inc., Ionis' majority owned affiliate. 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, including those related to the impact COVID-19 could have on our business, and including but not limited to those related to our commercial products and the medicines in our pipeline, and particularly those inherent in the process of discovering, developing and commercializing medicines that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such medicines. 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, 2019 and our most recent Form 10-Q quarterly filing, which are on file with the SEC. Copies of this and other documents are available at [www.ionispharma.com](http://www.ionispharma.com).

In this presentation, unless the context requires otherwise, “Ionis,” “Company,” “we,” “our,” and “us” refers to Ionis Pharmaceuticals and its subsidiaries.

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# Introduction



Brett Monia, Ph.D.  
Chief Executive Officer

## 1H 2020:

**On track to achieve 2020 objectives & guidance**

Enabled by dedicated and committed team

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**Advancing and expanding pipeline**

>40 potentially transformational medicines in development

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**Investing in our strategic priorities**

Ionis-owned pipeline, commercial capabilities & technology

**2H 2020:  
Positioned  
for Continued  
Success**

# Q2 2020 Financial Performance



Beth Hougen  
Chief Financial Officer

# Substantial Financial Strength

Continuing to invest in strategic priorities

**Solid financial results, including net income\*,  
increasing from Q1 2020**

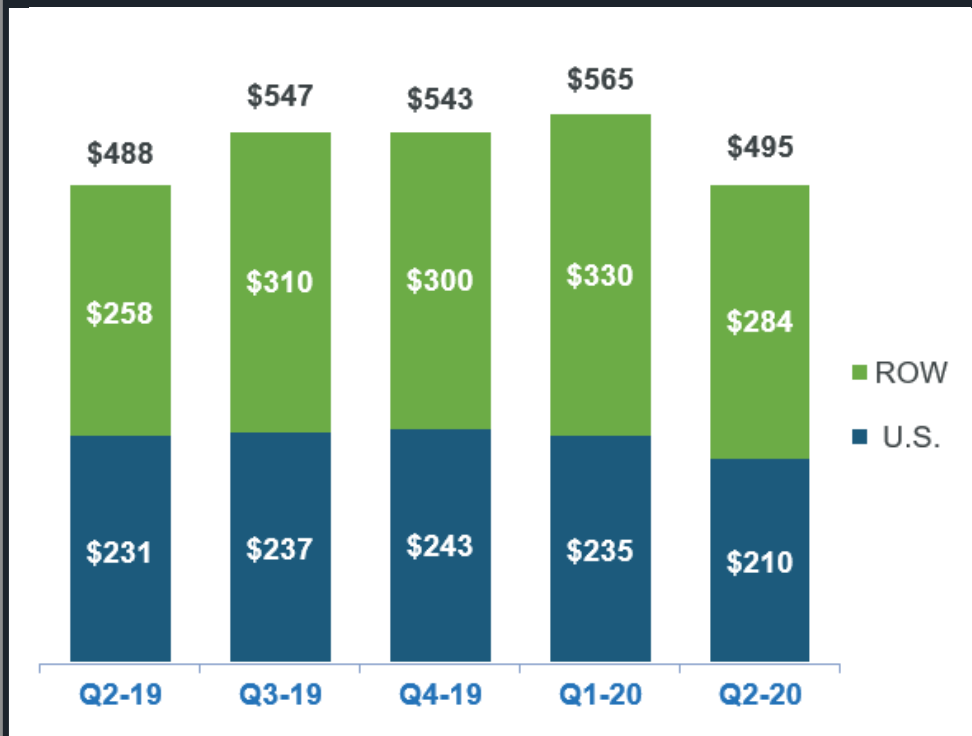
**Strong, sustainable balance sheet**

**Well capitalized, with cash balance of >\$2.3 billion**

**Reaffirming our 2020 financial guidance**

# Continued Blockbuster Performance with >\$1B in YTD 2020 Sales

## \$72M in Royalties to Ionis<sup>1</sup>



- >11,000 patients on SPINRAZA worldwide<sup>2,3</sup>
  - 30% increase from prior year
- >60,000 SMA patients in markets with Biogen commercial presence<sup>4</sup>
  - >33% increase from prior estimate of 45,000
- Approved in over 50 countries and formal reimbursement in over 40 countries
- Continued opportunities for growth

Source: Biogen Q2 2020 Financial Results and Business Update; 1. SPINRAZA royalty tier resets at the beginning of each year; 2. Includes patients from commercial, clinical and EAP settings; 3. As of June 30, 2020; 4. Biogen estimate, data on file



# Growing Evidence Supporting Long-term SPINRAZA Benefit in SMA Patients of all Ages



*Logan, living with SMA*

## **NURTURE study in presymptomatic infants<sup>1</sup>**

- Unprecedented survival benefit with ~5 years on treatment
- NURTURE data added to U.S. label

## **SHINE study in later-onset SMA<sup>2</sup>**

- Motor function stabilization/improvement up to >6 years
- Data in SMA patients ranging from toddlers to adults
- SHINE data support broader adult reimbursement in some EU markets

## **RESPOND study in infants and children<sup>3</sup>**

- Strong rationale to evaluate SPINRAZA benefit in patients previously treated with gene therapy

## **DEVOTE study of higher dose SPINRAZA<sup>4</sup>**

- Potential for even greater efficacy in SMA patients of all ages

# TEGSEDI and WAYLIVRA

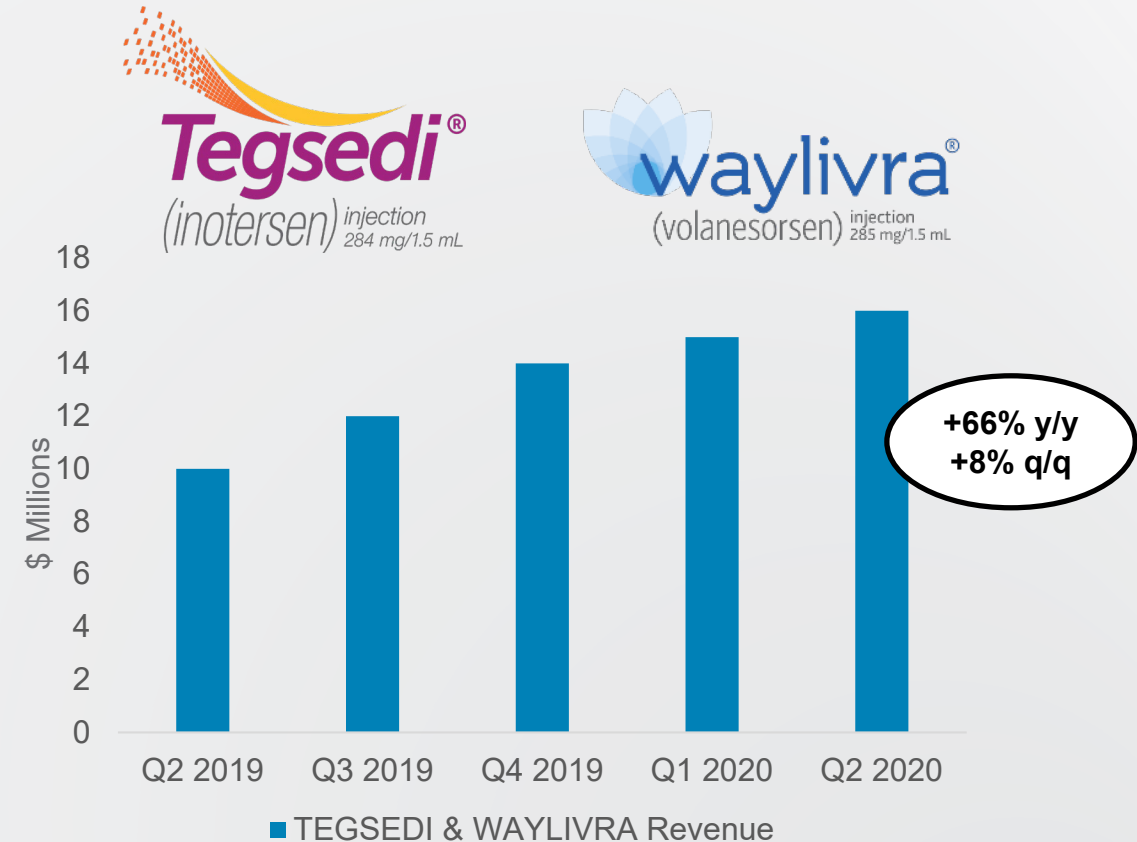
Continued sequential growth

## TEGSEDI<sup>1</sup>

- Commercially available in 15 countries
- Achieved reimbursement in Portugal, Italy, Spain and Austria
- Expanding commercial availability in new EU countries and in Latin America this year<sup>2</sup>

## WAYLIVRA<sup>1</sup>

- Launched in Austria, Germany, Greece and France<sup>3</sup>
- Launching in new EU countries this year
- Filed for approval in Brazil<sup>2</sup>; refiling for approval in the U.S.



# Q2 2020 Financial Performance

On track to achieve 2020 financial guidance

**\$146 million in revenue**

Driven by commercial revenue growth

**\$8 million of net income\***

An increase compared to Q1



**\$72 million\*\***

Continued blockbuster performance

**>\$2.3 billion of cash**

Substantial financial resources  
to execute on ambitious agenda

# Maintaining our 2020 Financial Guidance

**Revenue**

>\$700 million

**Operating Expenses**

~\$650-\$690 million\*

Meaningfully profitable\*

# Pipeline Performance



Richard Geary, Ph.D.  
Executive Vice President, Development



# Key Pipeline Highlights and 2H 2020 Catalysts

## Neurological

- Tominersen Phase 3 study in Huntington's disease on track for data and regulatory filing in 2022<sup>1</sup>
- Tofersen Phase 3 VALOR data expected in 2021<sup>2</sup>; Phase 1/2 results published in *NEJM*
- IONIS-C9<sub>Rx</sub> (C9 ALS) and IONIS-MAPT<sub>Rx</sub> (AD) Phase 1/2 studies on track for data in 2021<sup>2</sup>
- Initiate a registration study of ION363 in patients with FUS-ALS **Ionis-owned**
- Initiate a Phase 1/2 study of ION464 in patients with multiple system atrophy<sup>2</sup>
- Initiate Phase 1/2 studies in patients with Alexander, Lafora & Prion diseases in late 2020 and 2021 **Ionis-owned**

## Cardio-renal and Metabolic

- AKCEA-APO(a)-L<sub>Rx</sub> granted Fast Track Designation; Phase 3 data currently expected 2024<sup>3</sup>
- AKCEA-TTR-L<sub>Rx</sub> Phase 3 cardiomyopathy and polyneuropathy studies on track for data in 2023 **Ionis-owned**
- Present positive Phase 2 results for vupanorsen<sup>4</sup>
- Present positive results Phase 2 for AKCEA-APOCIII-L<sub>Rx</sub>; initiate Phase 3 study in patients with FCS **Ionis-owned**
- Initiate a Phase 2 study of IONIS-FXI-L<sub>Rx</sub> in patients with clotting disorders<sup>5</sup>
- Provide update for IONIS-AZ4-2.5-L<sub>Rx</sub>, which includes subcutaneous and oral formulations<sup>6</sup>
- Report Phase 2 data for IONIS-AGT-L<sub>Rx</sub> in hypertension and IONIS-GHR-L<sub>Rx</sub> in acromegaly **Ionis-owned**

# Key Pipeline Highlights and 2H 2020 Catalysts

Oncology	<ul style="list-style-type: none"> <li>ION736, targeting FOXP3, licensed by Astra Zeneca for the treatment of cancer</li> <li>Initiate a Phase 1/2 study of ION251 targeting IRF4 in patients with multiple myeloma <b>Ionis-owned</b></li> </ul>
Pulmonary and Allergy	<ul style="list-style-type: none"> <li>Report Phase 2 data for IONIS-PKK-L<sub>Rx</sub> in patients with hereditary angioedema <b>Ionis-owned</b></li> <li>Report POC data for pulmonary delivery of antisense in healthy volunteers <b>Ionis-owned</b></li> <li>IONIS-ENaC-2.5<sub>Rx</sub> Phase 1/2 cystic fibrosis patient cohort fully enrolled; data early next year <b>Ionis-owned</b></li> <li>Initiate a Phase 2 study of IONIS-ENaC-2.5<sub>Rx</sub> in patients with COPD <b>Ionis-owned</b></li> <li>Added ION663, expanding Ionis-owned pulmonary franchise <b>Ionis-owned</b></li> </ul>
Infectious Disease, Other	<ul style="list-style-type: none"> <li>ION253 Phase 1 study initiated for the treatment of immune-mediated GI disease<sup>1</sup></li> <li>Initiate a Phase 2 study of IONIS-HBV<sub>Rx</sub> in patients with hepatitis B virus infection<sup>2</sup></li> </ul>

# Conclusion: 2020 and Beyond

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Brett Monia, Ph.D.  
Chief Executive Officer

# Today we are Stronger than Ever

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- On track to achieve 2020 guidance and well-capitalized
- Executing on our ambitious agenda
- Building our commercial capabilities
- Dedicated employees committed to serving patients in need

**Positioned for >10 NDAs through 2025;  
potential for many new commercial medicines**

# Q&A



Brett Monia, Ph.D.  
Chief Executive Officer





**IONIS™**

**IONIS: A FORCE FOR LIFE**