Neurocrine Biosciences, Inc.

THE NEUROENDOCRINE COMPANY
In addition to historical facts, this presentation contains forward-looking statements that involve a number of risks and uncertainties. These statements include, but are not limited to, statements related to our preliminary unaudited financial information, to the benefits to be derived from Neurocrine's products and product candidates, including INGREZZA; the value INGREZZA and our product candidates may bring to patients; the success of the continued launch of INGREZZA; the timing of completion of clinical and other development activities; and whether results from INGREZZA's clinical trials can be replicated or are indicative of real-world results. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are: risks and uncertainties associated with items that may be identified during its financial statement closing process that cause adjustments to the estimates included in this press release; Neurocrine's future financial and operating performance; risks and uncertainties associated with the commercialization of INGREZZA, including the likelihood of continued revenue growth of INGREZZA; risks or uncertainties related to the development of the Company's product candidates; risks and uncertainties relating to competitive products and technological changes that may limit demand for INGREZZA or a product candidate; risks associated with the Company's dependence on third parties for development and manufacturing activities related to INGREZZA and the Company's product candidates, and the ability of the Company to manage these third parties; risks that the FDA or other regulatory authorities may make adverse decisions regarding INGREZZA or the Company's product candidates; risks associated with the Company's dependence on AbbVie for the development and commercialization of elagolix; risks that clinical development activities may not be completed on time or at all; risks that clinical development activities may be delayed for regulatory or other reasons, may not be successful or replicate previous clinical trial results, may fail to demonstrate that our product candidates are safe and effective, or may not be predictive of real-world results or of results in subsequent clinical trials; risks that the benefits of the agreements with BIAL and Mitsubishi Tanabe may never be realized; risks associated with the Company's dependence on BIAL for development and manufacturing activities related to opicapone; risks associated with the Company's dependence on Mitsubishi Tanabe for the development and commercialization of valbenazine in Japan and other Asian countries; risks that INGREZZA and/or our product candidates may be precluded from commercialization by the proprietary or regulatory rights of third parties, or have unintended side effects, adverse reactions or incidents of misuse; and other risks described in the Company's periodic reports filed with the Securities and Exchange Commission, including without limitation the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017. Neurocrine disclaims any obligation to update the statements contained in this press release after the date hereof.
<table>
<thead>
<tr>
<th>Disease</th>
<th>Program</th>
<th>Stage of Development</th>
<th>Partner</th>
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<tbody>
<tr>
<td><strong>Neurology</strong></td>
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<tr>
<td>Tardive Dyskinesia</td>
<td>INGREZZA®</td>
<td>1 2 3 NDA Accepted</td>
<td>Asia</td>
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<tr>
<td>Tourette Syndrome</td>
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<td>Endometriosis</td>
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<td>1 2 3</td>
<td>AbbVie</td>
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<td>Uterine Fibroids</td>
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<td>Congenital Adrenal Hyperplasia</td>
<td>NBI-74788</td>
<td>1 2 3</td>
<td>NBI Rights: US &amp; Canada</td>
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</tbody>
</table>
Endometriosis
- PDUFA Date: Q2 2018
- Largest program completed to date
  - Greater than 40 clinical trials totaling more than 3,000 subjects

Uterine Fibroids
- Phase III Data: Q1 2018
- NDA Filing Date: 2019

AbbVie Receives U.S. FDA Priority Review for Investigational Oral Treatment Elagolix for the Management of Endometriosis with Associated Pain

- FDA grants priority review to medicines it determines have potential to provide significant improvements in the safety and effectiveness of the treatment of a serious disease
- Priority designation shortens the review period from the standard 10 months to six months from the acceptance of the NDA
- If approved, elagolix will be the first new oral medical management treatment option for endometriosis-associated pain in more than a decade
# AbbVie - Leadership Position in Women’s Health

## 2017 - Abstracts, Presentations, Publications

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<tr>
<td><strong>SEUD (2)</strong></td>
<td><strong>ACOG (1)</strong></td>
<td><strong>ASRM (9)</strong></td>
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<td><strong>WCE (6)</strong></td>
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<td><strong>ISPOR (1)</strong></td>
<td><strong>AMCP Nexus (3)</strong></td>
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<td><strong>UFS-QoL (HEOR)</strong></td>
<td><strong>ACOG (1)</strong></td>
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<td><strong>SRI (1)</strong></td>
<td><strong>EM Screening Tool (HEOR)</strong></td>
<td><strong>ASRM (9)</strong></td>
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<tr>
<td><strong>ASCPT (1)</strong></td>
<td><strong>ISPOR (1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of EM Surgeries (HEOR)</strong></td>
<td><strong>SOGC (1)</strong></td>
<td><strong>ACCP (1)</strong></td>
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<tr>
<td><strong>EM Burden on QoL (HEOR)</strong></td>
<td><strong>EM Screening Tool (HEOR)</strong></td>
<td><strong>EM Diagnosis Review</strong></td>
<td><strong>Systematic Review OCS and Pain</strong></td>
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<td><strong>Meeting Abstracts, Presentations (29)</strong></td>
<td><strong>Journal Manuscripts (11)</strong></td>
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**The NEW ENGLAND JOURNAL OF MEDICINE**

**ORIGINAL ARTICLE**

**Treatment of Endometriosis-Associated Pain with Elagolix, an Oral GnRH Antagonist**


**ABSTRACT**

**BACKGROUND**

Endometriosis is a chronic, estrogen-dependent condition that causes dysmenorrhea and pelvic pain. Elagolix, an oral, nonpeptide, gonadotropin-releasing hormone (GnRH) antagonist, produced partial to nearly full estrogen suppression in previous studies.

**METHODS**

We performed two similar, double-blind, randomized, 6-month phase 3 trials (Elaris Endometriosis I and II [EM-I and EM-II]) to evaluate the effects of two doses of elagolix — 150 mg once daily (lower-dose group) and 200 mg twice daily (higher-dose group) — as compared with placebo in women with surgically diagnosed endometriosis and moderate or severe endometriosis-associated pain. The two primary efficacy endpoints were the proportion of women who had a clinical response with respect to dysmenorrhea and the proportion who had a clinical response with respect to nonmenstrual pelvic pain at 3 months. Each of these endpoints was measured as a clinically meaningful reduction in the pain score and a decreased or stable use of rescue analgesic agents, as recorded in a daily electronic diary.
NEUROCRINE BIOSCIENCES, INC.

INGREZZA® (valbenazine) capsules
First FDA Approved Treatment for Adults with Tardive Dyskinesia

INDICATIONS AND USAGE

INGREZZA is a vesicular monoamine transporter 2 (VMAT2) inhibitor indicated for the treatment of adults with tardive dyskinesia

Initial dose is 40 mg once daily
After one week, increase the dose to the recommended dose of 80 mg once daily
INGREZZA® Launch Update
$116MM in Net Product Sales, First 8 Months

INGREZZA Net Product Sales and ~TRx

- **2017 Launch Highlights**
  - Salesforce Established for May 1, 2017 Launch
  - Market Awareness Created for TD
  - Broad Prescriber Base Realized

- **2018 Launch Priorities**
  - Continued Disease State Education
  - Brand Awareness

*Q4 2017 are preliminary, unaudited Net Product Sales*
Tardive Dyskinesia Overview

TD IS CAUSED BY EXPOSURE TO DOPAMINE RECEPTOR BLOCKING MEDICATIONS
- Antipsychotics for schizophrenia, bipolar disorder, depression
- Results in dysregulation of basal ganglia pathways responsible for movement control

TD AFFECTS APPROXIMATELY 500,000 PATIENTS IN THE US
- Newer atypical antipsychotics with diverse receptor specificity cause less extrapyramidal side-effects, but persistent TD risk
- Long-acting depot formulations of antipsychotics are also associated with risk of TD
- There has been more than a 400% increase in antipsychotic prescriptions from 1990-2015 (~65MM TRx in 2016)

NEUROCRINE FOCUSED ON DESIGNING A NOVEL MOLECULE FOR HYPERKINETIC MOVEMENT DISORDERS
- Selectivity for VMAT2 alone ensures no off-target pharmacology such as dopamine D2 antagonism, a known risk for TD
- Pharmacokinetic characteristics provide simple once daily dosing (without the need for titration)
- Drug properties allow for concomitant use of INGREZZA with existing psychiatric treatment regimens
Tardive Dyskinesia Overview: Symptoms

Oral and Facial Dyskinesia
- Abnormal tongue and lip movements
- Retractions of the corners of the mouth
- Abnormal eyelid closure or eyebrow movements
- Bulging of the cheeks
- Chewing movement

Limb Dyskinesia
- “Piano-playing” finger movements
- Tapping foot movements
- Dystonic extensor postures of the toes

Trunk Dyskinesia
- Shoulder shrugging

Axial Dystonia
- Twisting of the trunk
- Rocking and swaying movements
- Rotatory or thrusting hip movements
Patient Videos

In the audio webcast, which is synchronized with this slide deck, the speaker refers to slides which display videos of patients.

To preserve patient confidentiality these videos are not made public.
KINECT 3: INGREZZA® Reduction in Abnormal Involuntary Movement Scores at Each Study Visit Through Week Six

AIMS Change From Baseline by Study Visit (ITT Population)

<table>
<thead>
<tr>
<th>WEEK 0: Baseline</th>
<th>WEEK 2</th>
<th>WEEK 4</th>
<th>WEEK 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=76</td>
<td>n=76</td>
<td>n=73</td>
<td>n=69</td>
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<tr>
<td>n=70</td>
<td>n=70</td>
<td>n=64</td>
<td>n=63</td>
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<tr>
<td>n=79</td>
<td>n=77</td>
<td>n=73</td>
<td>n=70</td>
</tr>
</tbody>
</table>

LS Mean Change From Baseline (SEM)

-0.3
-1.4*
-1.9***
-0.1
-1.4*
-1.9**
-0.1

P values vs placebo: * <0.05 (nominal), ** <0.01 (nominal), † ≤0.001. AIMS change from baseline at weeks 2 and 4 not controlled for multiplicity. Data presented for ITT analysis set. Change in AIMS score analyzed by MMRM model. Treatment differences determined by comparison of LS means.


KINECT 3: AIMS Change From Baseline for INGREZZA® Groups

Long-Term Extension Period

AIMS Mean Change (SEM) From Baseline (ITT Population)

DB, double-blind. Data presented for ITT analysis set.
## INGREZZA® Safety Profile

### Adverse Reactions Reported at ≥2% and >Placebo

<table>
<thead>
<tr>
<th>Disorder</th>
<th>INGREZZA Once Daily n=262 (%)</th>
<th>Placebo n=183 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somnolence</td>
<td>10.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Nervous System Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anticholinergic effects</td>
<td>5.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Balance disorders/falls</td>
<td>4.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Headache</td>
<td>3.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Akathisia</td>
<td>2.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Gastrointestinal Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td>2.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Nausea</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Musculoskeletal Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arthralgia</td>
<td>2.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>

3 placebo-controlled studies at 6 week treatment duration (ITT).
Launch Commenced May 1st, 2017

- Specialty sales team of 142 NeuroPsych Account Specialists were trained and deployed
  - Began calling on approximately 10,000 HCP targets
    - 4:1 Psychiatrists to Neurologists
  - Additionally covering ~2,000 community mental health centers (CMHCs)

- Health Economics and Outcomes Research (HEOR)
  - Real-world Evidence Based Medicine: Re-Kinect Study Ongoing (35 sites)
    - Preliminary work published - 2 posters, 2 results abstracts (Psych Congress + Neuroscience Education Institute)
  - Systematic Literature Review: 1 manuscript JCER Oct 2017
  - Claims-based Healthcare Utilization: 2 abstracts (Psych Congress + Neuroscience Education Institute)

- Investigator Initiated Trials (IITs)
  - Multiple applications for valbenazine projects received – several funded
INGREZZA® and TD-Related Medical Communications In 2017

6 Manuscripts Published by Neurocrine

- **Pharmacology** (Grigoriadis et al. J Pharmacol Exp Ther. 2017)
- **Metabolites** (Skor et al. Drugs R D. 2017)
- **Cardiac Safety** (Thai-Cuarto et al. Drug Saf. 2017)

15 Manuscripts Published by Others

54 Accepted Publications at Conferences

![Bar chart showing the distribution of accepted publications across different conferences.](chart)
## 2018 Milestones

*Pipeline Expanding and Advancing*

<table>
<thead>
<tr>
<th>Program</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>elagolix</td>
<td>• Phase III data for Uterine Fibroids</td>
</tr>
<tr>
<td>opicapone</td>
<td>• FDA meeting and path forward to NDA submission</td>
</tr>
<tr>
<td>elagolix</td>
<td>• PDUFA date for Endometriosis</td>
</tr>
<tr>
<td>New</td>
<td>• IND Submission and Initiation of Phase I for internally discovered small molecule</td>
</tr>
<tr>
<td>NBI-74788</td>
<td>• Phase IIa data for CAH (Adults)</td>
</tr>
<tr>
<td></td>
<td>• Phase III initiation for CAH (Adults)</td>
</tr>
<tr>
<td></td>
<td>• Phase II initiation for CAH (Peds)</td>
</tr>
<tr>
<td>valbenazine</td>
<td>• Phase IIb data for Tourette Syndrome</td>
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</tbody>
</table>
Four Years = Four Products and Six Indications
Starting with INGREZZA® in Tardive Dyskinesia, Pipeline Will Deliver Long-term Growth

1. INGREZZA®
   - Tardive Dyskinesia
   - Tourette Syndrome

2. elagolix
   - Endometriosis
   - Uterine Fibroids

3. opicapone
   - Parkinson’s Disease

4. NBI-74788
   - Congenital Adrenal Hyperplasia