Neurocrine Biosciences Presents INGREZZA® (valbenazine) Capsules Data on Long-Term Improvements and Psychiatric Stability in Patients With Tardive Dyskinesia and Schizophrenia or Schizoaffective Disorder at the Schizophrenia International Research Society

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SAN DIEGO, May 15, 2023 /PRNewswire/ -- Neurocrine Biosciences, Inc. (Nasdaq: NBIX) today announced findings from a post hoc analysis of two long-term studies (KINECT™ 3 and KINECT™ 4) of INGREZZA® (valbenazine) capsules evaluating global tardive dyskinesia (TD) improvement and stability of psychiatric symptoms in adults with TD and schizophrenia or schizoaffective disorder. The data (Poster #SA135) was presented at the Schizophrenia International Research Society (SIRS) 2023 Annual Congress in Toronto, Canada.

The post hoc analysis found that patients with TD and schizophrenia or schizoaffective disorder who received long-term (48-week) treatment with once-daily INGREZZA (40 mg and 80 mg) while receiving concomitant, stable-dose medications for maintenance of their psychiatric condition experienced long-term global improvements in TD, with more than 90 percent of patients having a rating of "minimally improved" or better, and more than 75 percent of patients having a rating of "much improved" or better using the Clinical Global Impression of Change-Tardive Dyskinesia (CGI-TD) and Patient Global Impression of Change (PGIC), respectively. Importantly, patients maintained psychiatric stability throughout treatment with INGREZZA, as indicated by Positive and Negative Syndrome Scale (PANSS) and Calgary Depression Scale for Schizophrenia (CDSS) scores.

"It is important to consider all aspects of patient health when managing TD symptoms, especially underlying and often complex psychiatric conditions that may require multiple treatments," said Eiry W. Roberts, M.D., Chief Medical Officer at Neurocrine Biosciences. "These data demonstrate that psychiatric stability can be maintained in patients living with schizophrenia or schizoaffective disorder while actively improving and managing TD symptoms with INGREZZA."

Key results from the analysis demonstrated the following:

- More than 90 percent of patients treated with INGREZZA had a clinician-reported (CGI-TD = 94.3 percent, n=116/123) or patient-reported (PGIC = 91.9 percent, n=113/123) rating of "minimally improved" or better at week 48
    - More than 75 percent of INGREZZA-treated patients had robust global improvements, as indicated by CGI-TD (79.7 percent, n=98/123) or PGIC (78.0 percent, n=96/123) ratings of "much improved" or better
- In all patients, a -0.5 mean change from baseline to week 48 was seen in CDSS total score (n=122)
- In all patients, a -3.2 mean change from baseline to week 48 in PANSS total score was seen (n=122), with stability also seen across subscales (positive symptoms [-0.7], negative symptoms [-0.6], general psychopathology [-1.9])

The full abstract presented by Neurocrine Biosciences at the SIRS 2023 Annual Congress is available on the meeting website and can be accessed by registering.

About the KINECT™ 3 Phase 3 Study
KINECT 3 is a Phase 3, randomized, double-blind, placebo-controlled, parallel-group, fixed-dose study, in which 234 participants with moderate to severe TD and underlying schizophrenia, schizoaffective disorder or mood disorder (including bipolar disorder or major depressive disorder) received six weeks of once-daily INGREZZA (40 mg or 80 mg capsules) or placebo (participants randomized to 80 mg started on 40 mg for 1 week). Subsequent to the completion of the six-week placebo-controlled dosing, participants receiving INGREZZA continued on their current dose and placebo participants were randomized to receive either once-daily 40 mg or once-daily 80 mg of INGREZZA, through week 48 (42-week blinded treatment extension period; placebo participants randomized to 80 mg started on 40 mg for 1 week), followed by a four-week drug-free washout. Dose reduction to 40 mg was allowed for participants who were unable to tolerate the 80 mg dose. Patients were discontinued if the new dose was not tolerated.

The study met its primary endpoint of change-from-baseline in AIMS at week six in the 80 mg once-daily dosing group compared

to placebo as assessed by expert central blinded video raters. The mean change from baseline to week six in the AIMS rating was -3.2 for the 80 mg once-daily group as compared to -0.1 in the placebo group (*P*>0.0001). Sustained TD improvements were seen with INGREZZA 40 mg and 80 mg through week 48.

INGREZZA was generally well tolerated throughout 48 weeks of treatment. The most common adverse reactions (≥ five percent and twice the rate of placebo) during the six-week double-blind, placebo-controlled phase was somnolence with the frequency of adverse events being similar among all treatment groups. Treatment-emergent adverse events (TEAEs) were consistent with those of prior studies. There were no drug-drug interactions identified in participants who were utilizing a wide range of psychotropic and other concomitant medications, and participants generally remained psychiatrically stable throughout the study.

About the KINECT™ 4 Phase 3 Study
KINECT 4 is a Phase 3, open-label study, in which 163 participants with moderate-to-severe TD and underlying schizophrenia, schizoaffective disorder or mood disorder (including bipolar disorder or major depressive disorder) received 48 weeks of open-label treatment with once-daily INGREZZA (40 mg or 80 mg capsules) followed by a four-week washout. Dosing was initiated at 40 mg/day in all participants, with escalation to 80 mg/day at week 4 based on effectiveness and tolerability. Dose reduction to 40 mg was allowed in participants who could not tolerate the 80 mg dose. Patients were discontinued if the new dose was not tolerated.

Participants experienced TD improvements during long-term treatment, as demonstrated by mean change from baseline to week 48 in AIMS total score (sum of items 1-7, evaluated by site raters) with INGREZZA 40 mg/day (-10.2) or 80 mg/day (-11.0). Consistent with previous studies, INGREZZA was generally well tolerated. After week four, TEAEs that occurred in ≥5 percent of all participants (combined dose groups) were urinary tract infection (8.5 percent) and headache (5.2 percent). Changes from baseline in psychiatric stability, vital signs, electrocardiogram parameters and laboratory test values were generally small and not clinically significant.

About Tardive Dyskinesia (TD)
Tardive dyskinesia (TD) is a movement disorder that is characterized by uncontrollable, abnormal, and repetitive movements of the face, torso and/or other body parts, which may be disruptive and negatively impact patients. The condition is associated with taking certain kinds of mental health medicines (like antipsychotics) that help control dopamine receptors in the brain. Taking antipsychotics commonly prescribed to treat mental illnesses such as major depressive disorder, bipolar disorder, schizophrenia and schizoaffective disorder, and other prescription medicines (metoclopramide and prochlorperazine) used to treat gastrointestinal disorders are associated with TD. In patients with TD, these treatments are thought to result in irregular dopamine signaling in a region of the brain that controls movement. The symptoms of TD can be severe and are often persistent and irreversible. TD is estimated to affect approximately 600,000 people in the U.S.

About INGREZZA® (valbenazine) Capsules
INGREZZA, a selective vesicular monoamine transporter 2 (VMAT2) inhibitor, is an FDA-approved product indicated for the treatment of adults with tardive dyskinesia, a condition associated with uncontrollable, abnormal, and repetitive movements of the face, torso, and/or other body parts.

INGREZZA is thought to work by reducing the amount of dopamine released in a region of the brain that controls movement and motor function, helping to regulate nerve signaling in adults with tardive dyskinesia. VMAT2 is a protein in the brain that packages neurotransmitters, such as dopamine, for transport and release in presynaptic neurons. INGREZZA, developed by Neurocrine Biosciences, is novel in that it selectively inhibits VMAT2 with no appreciable binding affinity for VMAT1, dopaminergic (including D2), serotonergic, adrenergic, histaminergic, or muscarinic receptors. Additionally, INGREZZA can be taken for the treatment of tardive dyskinesia as one capsule once-daily, together with most psychiatric medications such as antipsychotics or antidepressants. INGREZZA dosages approved for use are 40 mg, 60 mg, and 80 mg capsules. INGREZZA is not approved in any other dosage form.

Important Information

Approved Use

INGREZZA® (valbenazine) capsules is a prescription medicine used to treat adults with movements in the face, tongue, or other body parts that cannot be controlled (tardive dyskinesia).

It is not known if INGREZZA is safe and effective in children.

IMPORTANT SAFETY INFORMATION

Do not take INGREZZA if you:

- are allergic to valbenazine, or any of the ingredients in INGREZZA.

INGREZZA may cause serious side effects, including:

- **Sleepiness (somnolence).** Do not drive, operate heavy machinery, or do other dangerous activities until you know how INGREZZA affects you.

- **Heart rhythm problems (QT prolongation).** INGREZZA may cause a heart problem known as QT prolongation. **Symptoms of QT prolongation may include:**

    - fast, slow, or irregular heartbeat
    - shortness of breath
    - dizziness or fainting

    Tell your healthcare provider right away if you have a change in your heartbeat (a fast or irregular heartbeat), or if you faint.

- **Abnormal movements (Parkinson-like).** Symptoms include: shaking, body stiffness, trouble moving or walking, or keeping your balance.

Before taking INGREZZA, tell your healthcare provider about all of your medical conditions including if you: have liver or heart problems, are pregnant or plan to become pregnant, or are breastfeeding or plan to breastfeed.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

The most common side effect of INGREZZA is sleepiness (somnolence). Other side effects include changes in balance (balance problems, dizziness) or an increased risk of falls, headache, feelings of restlessness, dry mouth, constipation, and blurred vision.

These are not all of the possible side effects of INGREZZA. Call your doctor for medical advice about side effects. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit MedWatch at www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see accompanying INGREZZA full Product Information.

About Neurocrine Biosciences
Neurocrine Biosciences is a leading neuroscience-focused, biopharmaceutical company with a simple purpose: to relieve suffering for people with great needs, but few options. We are dedicated to discovering and developing life-changing treatments for patients with under-addressed neurological, neuroendocrine, and neuropsychiatric disorders. The company's diverse portfolio includes FDA-approved treatments for tardive dyskinesia, Parkinson's disease, endometriosis* and uterine fibroids*, as well as a robust pipeline including multiple compounds in mid- to late-phase clinical development across our core therapeutic areas. For three decades, we have applied our unique insight into neuroscience and the interconnections between brain and body systems to treat complex conditions. We relentlessly pursue medicines to ease the burden of debilitating diseases and disorders, because you deserve brave science. For more information, visit neurocrine.com, and follow the company on LinkedIn, Twitter and Facebook. (*_in collaboration with AbbVie_)

Forward-Looking Statements

In addition to historical facts, this press release contains forward-looking statements that involve a number of risks and uncertainties. These statements include, but are not limited to, statements regarding the potential benefits to be derived from INGREZZA and the value INGREZZA may bring to patients. 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 the commercialization of INGREZZA; risks that clinical trial activities may not be predictive of real-world results or of results in subsequent clinical trials; risks that INGREZZA may be precluded from commercialization by the proprietary rights of third parties, or have unintended side effects or adverse reactions; risks and uncertainties relating to competitive products and technological changes that may limit demand for INGREZZA; risks associated with our dependence on third parties for development and manufacturing activities related to INGREZZA and our product candidates, and our ability to manage these third parties; risks that the FDA or other regulatory authorities may make adverse decisions regarding our products or product candidates; risks that our products, 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; risks associated with potential generic entrants for our products; 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 March 31, 2023. Neurocrine Biosciences disclaims any obligation to update the statements contained in this press release after the date hereof.

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