Neurocrine Biosciences Presents New Data Analyses Demonstrating Efficacy of FDA-Approved Once-Daily ONGENTYS® (opicapone) in Patients with Parkinson's Disease at the MDS Virtual Congress 2020

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- Data Demonstrated that Newly Approved ONGENTYS Significantly Reduced "Off" Time as an Add-On Therapy in Patients with Parkinson's Disease Taking Levodopa/Carbidopa only in a Pooled Post-Hoc, Sub-Group Analysis of Phase III Studies

- ONGENTYS Significantly Increased "On" Time When Used as the First COMT-Inhibitor Add-On Therapy Compared with Entacapone in Recently Diagnosed Patients with Motor Fluctuations in Post-Hoc Analysis from a Phase III Study

- Real-World Data Highlight the Impact of Motor Fluctuations Experienced by Patients with Parkinson's Disease Have on the U.S. Healthcare System

SAN DIEGO, Sept. 11, 2020 /PRNewswire/ -- Neurocrine Biosciences, Inc. (Nasdaq: NBIX) today announced new data from two post-hoc analyses of Phase III data, demonstrating that once-daily ONGENTYS® (opicapone) capsules decreased "off" time and increased "on" time without troublesome dyskinesia as an add-on therapy to levodopa/carbidopa in patients with Parkinson's disease who experience motor fluctuations. Neurocrine Biosciences also presented real-world data showing the increased burden motor fluctuations have over time on Parkinson's disease patients and the healthcare system through significantly more hospitalizations and emergency room visits. These data are among several studies and analyses of ONGENTYS being presented in collaboration with BIAL at the MDS Virtual Congress 2020 on September 12–16 (www.mdscongress.org/Congress/Registration.htm).

ONGENTYS, approved by the U.S. Food and Drug Administration in April 2020, is the first and only once-daily catechol-O-methyltransferase (COMT) inhibitor approved as an add-on to levodopa/carbidopa in patients with Parkinson's disease experiencing "off" episodes and will be available to wholesalers in September.

"As Parkinson's disease progresses and treatment with levodopa/carbidopa begins to wear off between treatment doses, many patients begin to experience increased motor fluctuations," said Robert A. Hauser, M.D., Professor of Neurology and Director, University of South Florida Parkinson's Disease and Movement Disorders Center. "The Phase III post-hoc data analyses demonstrated the benefit of adding once-daily ONGENTYS to levodopa/carbidopa in patients with Parkinson's disease who have motor fluctuations. Patients with Parkinson's disease now have a new treatment option to help provide more control of motor symptoms."

Data from a pooled post-hoc, sub-group analysis of Phase III studies demonstrated that ONGENTYS 50 mg significantly reduced "off" time by more than an hour compared to placebo when used as an add-on treatment in patients with Parkinson's disease treated with levodopa/carbidopa plus placebo at baseline (109.2 minutes for ONGENTYS 50 mg [n=67] vs. 40.3 minutes for placebo [n=59]; p=0.0161).

In a separate post-hoc analysis, ONGENTYS significantly increased absolute "on" time by approximately one additional hour compared with entacapone (124 minutes [n=50] vs. 60 minutes [n=47]; p=0.0344) when used as the first COMT inhibitor add-on therapy to levodopa/carbidopa in patients with Parkinson's disease recently diagnosed with motor fluctuations.

"These data analyses demonstrated the benefit of adding once-daily ONGENTYS to levodopa/carbidopa earlier in the treatment regimen of patients with Parkinson's disease. In addition to decreasing 'off' time the data also show that ONGENTYS significantly increased 'on' time compared to an older COMT inhibitor to help control motor fluctuations in patients with Parkinson's disease," said Eiry W. Roberts, MD, Chief Medical Officer, Neurocrine Biosciences. "We are looking forward to bringing ONGENTYS to patients as a new add-on treatment option as data from our real-world study show that the debilitating symptoms of Parkinson's disease result in more hospitalizations and emergency room visits, impacting the healthcare system in the U.S."

Neurocrine Biosciences also presented real-world data from a retrospective medical chart review of adult patients with Parkinson's disease who began experiencing motor fluctuations while taking levodopa. Of the 310 patients included in the review, 117 (38%) had a history of motor fluctuations of ≥ 2 years. Data show that emergency department visits were significantly more frequent in patients with Parkinson's disease with a longer history of motor fluctuations (≥2 years) compared to patients with a shorter history (13% [n=15] vs. 3% [n=5]; P<0.001). Similarly, hospitalizations were significantly more frequent in patients with a longer history of motor fluctuations (15% [n=18] vs 6% [n=12], P<0.01). Among patients who were hospitalized, the mean length of stay was shorter in patients with motor fluctuations ≥2 years versus patients with motor fluctuations <2 years, but the difference was not statistically significant (0.5 vs 1.1 days; P>0.05).

About the BIPARK-1 Study
BIPARK-1 was a Phase III, randomized, double-blind placebo- and active-controlled study of ONGENTYS as an adjunct to levodopa therapy in which approximately 600 patients with Parkinson's disease and motor fluctuations received once-daily doses of opicapone (5 mg, 25 mg, or 50 mg), placebo, or 200 mg doses of the COMT inhibitor entacapone for 14 to 15 weeks. The primary endpoint was the change from baseline in absolute time in the "off" state, as assessed by patient diaries. The initial study period was followed by a one-year open-label phase during which all patients received treatment with opicapone.

About the BIPARK-2 Study
BIPARK-2 was a Phase III, randomized, double-blind placebo-controlled study of opicapone as an adjunct to levodopa therapy in which approximately 400 patients with Parkinson's disease and motor fluctuations received once-daily doses of opicapone (25 mg or 50 mg) or placebo for 14 to 15 weeks. The primary endpoint was the change from baseline in absolute time in the "off" state, as assessed by patient diaries. The initial study period was followed by a one-year open-label phase during which all patients received treatment with opicapone.

BIPARK-1 and BIPARK-2 were conducted by BIAL – Portela & CA, S.A. (BIAL). Neurocrine Biosciences in-licensed opicapone from BIAL in 2017 and has exclusive development and commercialization rights in the U.S. and Canada. BIAL received approval from the European Commission for ONGENTYS as an adjunct therapy to preparations of levodopa/DOPA decarboxylase inhibitors in adult patients with Parkinson's disease and end-of-dose motor fluctuations who cannot be stabilized on those combinations. BIAL currently markets ONGENTYS in Germany, United Kingdom, Spain, Portugal and Italy.

About Parkinson's Disease
Parkinson's disease is a chronic, progressive and debilitating neurodegenerative disorder that affects approximately one million people in the United States and six million people worldwide. Parkinson's disease is associated with low dopamine levels produced in the brain. Dopamine helps transmit signals between the areas of the brain that control all purposeful movements, including talking, walking and writing. As Parkinson's disease progresses, dopamine production steadily decreases, resulting in increased problems with motor symptoms including slowed movement (bradykinesia), tremor, rigidity, impaired posture and balance, and difficulty with speech and writing.

There is presently no cure for Parkinson's disease and management of the disease consists of the use of treatments that attempt to control motor symptoms primarily through dopaminergic mechanisms. The current gold standard for treatment of motor symptoms is levodopa/carbidopa. While levodopa/carbidopa improves patients' motor symptoms, as the disease progresses, the beneficial effects of levodopa begin to wear off more quickly. Patients then experience motor fluctuations throughout the day between "on" time, periods when the medication is working and Parkinson's disease symptoms are controlled, and "off" time, when the medication is not working, and motor symptoms return.

About ONGENTYS® (opicapone) Capsules
ONGENTYS is a unique, once-daily, oral, peripheral, selective and reversible catechol-O-methyltransferase (COMT) inhibitor approved by the U.S. Food and Drug Administration (FDA) as an add-on treatment to levodopa/carbidopa in patients with Parkinson's disease experiencing "off" episodes. ONGENTYS inhibits the COMT enzyme, which breaks down levodopa, making more levodopa available to reach the brain.

Important Information

Approved Use
ONGENTYS® (opicapone) capsules is a prescription medicine used with levodopa and carbidopa in people with Parkinson's disease (PD) who are having "OFF" episodes.
It is not known if ONGENTYS is safe and effective in children.

Important Safety Information
Do not take ONGENTYS if you:

- take a type of medicine called a non-selective monoamine-oxidase (MAO) inhibitor.
- have a tumor that secretes hormones known as catecholamines.

Before taking ONGENTYS, tell your healthcare provider about all of your medical conditions, including if you:

- have daytime sleepiness from a sleep disorder, have unexpected periods of sleep or sleepiness, or take a medicine to help you sleep or that makes you feel sleepy.
- have had intense urges or unusual behaviors, including gambling, increased sex drive, binge eating, or compulsive shopping.
- have a history of uncontrolled sudden movements (dyskinesia).
- have had hallucinations or psychosis.
- have liver or kidney 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. Especially tell your healthcare provider if you take nonselective MAO inhibitors (such as phenelzine, tranylcypromine, and isocarboxazid) or catecholamine medicines (such as isoproterenol, epinephrine, norepinephrine, dopamine, and dobutamine), regardless of how you take the medicine (by mouth, inhaled, or by injection).

ONGENTYS and other medicines may affect each other causing side effects. ONGENTYS may affect the way other medicines work, and other medicines may affect how ONGENTYS works.

What should I avoid while taking ONGENTYS?

- Do not drive, operate machinery, or do other dangerous activities until you know how ONGENTYS affects you.

What are the possible side effects of ONGENTYS?
ONGENTYS may cause serious side effects, including:

- **Falling asleep during normal activities** such as driving a car, talking or eating while taking ONGENTYS or other medicines used to treat Parkinson's disease, without being drowsy or without warning. This may result in having accidents. Your chances of falling asleep while taking ONGENTYS are higher if you take other medicines that cause drowsiness.
- **Low blood pressure or dizziness**, light headedness, or fainting.
- **Uncontrolled sudden movements (dyskinesia).** ONGENTYS may cause uncontrolled sudden movements or make such movements worse or happen more often.
- **Seeing, hearing, or feeling things that are not real (hallucinations), believing things that are not real (delusions)**, or aggressive behavior.
- **Unusual urges (impulse control and compulsive disorders)** such as urges to gamble, increased sexual urges, strong urges to spend money, binge eating, and the inability to control these urges.

Tell your healthcare provider if you experience any of these side effects or notice changes in your behavior.

The most common side effects of ONGENTYS include uncontrolled sudden movements (dyskinesia), constipation, increase in an enzyme called blood creatine kinase, low blood pressure, and weight loss.
These are not all of the possible side effects of ONGENTYS. Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

Please see ONGENTYS full Product Information.

About Neurocrine Biosciences
Neurocrine Biosciences is a neuroscience-focused, biopharmaceutical company with 28 years of experience discovering and developing life-changing treatments for people with serious, challenging and under-addressed neurological, endocrine and psychiatric disorders. The company's diverse portfolio includes FDA-approved treatments for tardive dyskinesia, Parkinson's disease, endometriosis* and uterine fibroids*, with three pivotal and five mid-stage clinical programs in multiple therapeutic areas. Headquartered in San Diego, Neurocrine Biosciences specializes in targeting and interrupting disease-causing mechanisms involving the interconnected pathways of the nervous and endocrine systems. For more information, visit **neurocrine.com**, and follow the company on LinkedIn. *(*in collaboration with AbbVie)*

Forward Looking Statement
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 related to the benefits to be derived from ONGENTYS; the size of the potential market for ONGENTYS; the value ONGENTYS brings to patients; the timing of ONGENTYS's availability; the ability of Neurocrine Biosciences to ensure patients have access to ONGENTYS; our expectations regarding business and financial impacts of the COVID-19 pandemic, including with respect to ONGENTYS availability and the ONGENTYS commercial supply chain and other business operations; and whether results from ONGENTYS's clinical trial results 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 the scale and duration of the COVID-19 pandemic and resulting global, national, and local economic and financial disruptions; risk and uncertainties related to any COVID-19 quarantines, shelter-in-place and similar government orders that are currently in place or that may be put in place in the future, including the impact of such orders on our business operations and the business operations of the third parties on which we rely; risks and uncertainties associated with Neurocrine Biosciences' business and finances in general, as well as risks and uncertainties associated with the commercialization of ONGENTYS; whether ONGENTYS receives adequate reimbursement from third-party payors; the degree and pace of market uptake of ONGENTYS; risks and uncertainties relating to competitive products and technological changes that may limit demand for ONGENTYS; risks that additional regulatory submissions, for ONGENTYS or other product candidates, may not occur or be submitted in a timely manner; risks that the FDA or other regulatory authorities may make adverse decisions regarding ONGENTYS; risks that post-approval ONGENTYS commitments or requirements may be delayed; risks that ONGENTYS may be precluded from commercialization by the proprietary rights of third parties, or have unintended side effects, adverse reactions or incidents of misuse; risks and uncertainties relating to competitive products and technological changes that may limit demand for ONGENTYS; risks associated with the Company's dependence on BIAL for the commercial supply of, and manufacturing activities related to, ONGENTYS, and the ability of the Company to manage BIAL; 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 June 30, 2020. Neurocrine disclaims any obligation to update the statements contained in this press release after the date hereof.

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