Neurocrine Biosciences Announces Six Abstracts on Indiplon to Be Presented at the Associated Professional Sleep Societies (APSS) Meeting, June 3-8

June 5, 2003

Results Demonstrate Indiplon Significantly Improves Sleep Initiation and Sleep Maintenance In the Elderly

SAN DIEGO, Calif., June 5 /PRNewswire-FirstCall/ -- Neurocrine Biosciences, Inc. (Nasdaq: NBIX) announced today that Neurocrine and Clinical Investigators from the Company's indiplon clinical development program will present six abstracts including two oral presentations with data from three Phase II clinical trials and three Phase I pharmacokinetic (PK) clinical trials, at the Associated Professional Sleep Societies (APSS) Meeting, June 3-8, 2003 in Chicago, Illinois.

The first abstract for oral presentation on Sunday, June 8th at 11:00 a.m. reports on the efficacy, safety and tolerability of the modified release formulation of indiplon in elderly patients with Sleep Maintenance Insomnia. This study was a randomized, multi-center, double-blind, placebo-controlled, five-period crossover, dose-response study, in which four dose levels (10 mg, 20 mg, 30 mg, and 35 mg) of the modified release formulation of indiplon were tested in elderly patients aged 65 to 75 years. Results demonstrated that indiplon modified release doses of 20 mg, 30 mg and 35 mg significantly improved sleep maintenance as measured objectively by polysomnography (PSG) in patients with Chronic Primary Insomnia. Results of the primary endpoint of mean Sleep Efficiency (SE), defined as Total Sleep Time divided by Total Bed Time as measured objectively by PSG, was statistically significant at 20 mg, 30 mg, and 35 mg dose as compared to placebo. Total Sleep Time (TST) and Wake Time After Sleep Onset (WASO) were also statistically significant relative to placebo in the three higher doses. In addition, objective Latency to Persistent Sleep (LPS) and the number of PSG awakenings during the night as well as subjective Total Sleep Time (sTST), the subjective Number of Awakenings After Sleep Onset (sNAASO) and Latency to Sleep Onset (LSO) were also all statistically significant relative to placebo. Visual Analogue Scale of sleepiness (VAS), and Symbol Copy Test (SCT) showed no difference compared to placebo. There was a modest effect on Digital Symbol Substitution Test (DSST) at the highest doses. Adverse events between indiplon treatment and placebo were similar. The results of this study demonstrate that the 20 mg modified release dose is effective in sleep maintenance and sleep initiation, and was well tolerated with no next day residual sedation in elderly patients with Sleep Maintenance Insomnia.

Another abstract for poster presentation on June 6th at 1:30 p.m. illustrates the efficacy and safety of three doses of the immediate release formulation of indiplon in elderly patients with Chronic Primary Insomnia. This was a randomized, multi-center, double-blind, placebo-controlled, four- way crossover dose-response study in 42 patients over 65 years of age (mean 70 years, range from 65 to 85 years) with Chronic Primary Insomnia. The primary endpoint was Latency to Persistent Sleep (LPS) compared to placebo as measured objectively by polysomnography (PSG). Latency to Sleep Onset (LSO) as reported subjectively by the patient was also collected during the study. Indiplon demonstrated a statistically significant effect on LPS relative to placebo at all dose levels (5 mg, 10 mg, 20 mg) with up to a 61% improvement in the primary endpoint of LPS. In addition, up to 86% of the treated patients responded by going to sleep within 30 minutes as compared to only 40% of patients on placebo. Subjective LSO was also improved significantly over placebo in a dose-response manner from 30% to 50%. There were no next day residual effects observed at any dose level relative to placebo using the accepted standardized sedation tests of Digital Symbol Substitution Test (DSST), Symbol Copy Test (SCT) and Visual Analogue Scale of sleepiness (VAS). Overall, the immediate release formulation of indiplon was found to be safe, well tolerated in elderly patients with no serious adverse events and without next day residual sedation for all dose groups.

Neurocrine will also present one additional oral presentation and three poster presentations at APSS June 3-8 to include:

- The Co-Administration of Indiplon and Alcohol Lacks Pharmacokinetic and Pharmacodynamic Interactions (Oral presentation on Sunday, June 8th at 11:45 a.m.)
- The Activity of Modified Release Indiplon in a Transient Nighttime Venipuncture Model (Poster viewing on Friday, June 6th at 2:15 p.m.)
- Efficacy and Tolerability of Indiplon Solution in Healthy Adults in a Model of Transient Insomnia (Poster viewing on Friday, June 6th at 2:15 p.m.)
- Lack of Pharmacological and Pharmacokinetic Tolerance Following Repeat Dosing of Indiplon (Poster viewing on Friday, June 6th at 2:15 p.m.)

For more information or copies of these abstracts please contact Neurocrine's Investor Relations Department.

According to the National Sleep Foundation's (NSF) Sleep in America Poll 2003, 37 million older Americans suffer from frequent sleep problems that if ignored, can complicate the treatment of a host of common, serious age-related medical conditions, from arthritis to diabetes, heart and lung disease and depression. The NSF reports that insomnia is the most common sleep complaint of older adults, with about one-half reporting they frequently suffer from insomnia. Despite this widespread prevalence, insomnia remains a disorder with high unmet medical needs, including the ability to initiate and maintain sleep throughout the night without next-day residual effects.

Neurocrine is conducting one of the most comprehensive clinical programs in insomnia to address the multiple needs of younger and older adult patients with insomnia such as sleep initiation, sleep maintenance, and long-term administration. Neurocrine has initiated and is completing all of its multiple Phase III safety and efficacy trials to support a New Drug Application (NDA) submission expected in early 2004 for indiplon for multiple indications associated with insomnia.

Indiplon is a unique non-benzodiazepine sedative hypnotic that acts on a specific site of the GABA-A receptor. It is through this mechanism that the currently marketed non-benzodiazepine therapeutics also produce their sleep- promoting effects. However, indiplon has been shown to be more potent than the currently marketed non-benzodiazepines at the specific subtype of receptors within the brain believed to be responsible for promoting sleep.

Neurocrine Biosciences, Inc. is a product-based biopharmaceutical company focused on neurological and endocrine diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world including insomnia, anxiety, depression, diabetes, multiple sclerosis, irritable bowel syndrome, eating disorders, pain, autoimmunity and certain female and male health disorders. Neurocrine Biosciences, Inc. news releases are available through the Company's website via the Internet at http://www.neurocrine.com .

In addition to historical facts, this press release contains forward- looking statements that involve a number of risks and uncertainties. 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 Neurocrine's indiplon development program and business and finances including, but not limited to, risk that indiplon will not successfully proceed through Phase III clinical trials or that Phase III clinical trials will not show that it is safe and effective in treating humans; determinations by regulatory and governmental authorities; our reliance on corporate collaborators for commercial manufacturing and marketing and sales activities; uncertainties relating to patent protection and intellectual property rights of third parties; impact of competitive products and technological changes; availability of capital and cost of capital; and other material risks. A more complete description of these risks can be found in the Company's Form 10K for December 31, 2002 and the Company's most recent report on Form 10Q. Neurocrine undertakes no obligation to update the statements contained in this press release after the date hereof.

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