H. Lundbeck A/S

Ottiliavej 9
DK-2500 Valby, Copenhagen
CVR number: 56759913
LEI code: 5493006R4KC2OI5D3470

Tel +45 36 30 13 11

E-mail investor@lundbeck.com
www.lundbeck.com

Corporate Release

Lundbeck updates on clinical phase III study for Lu AF35700 in Treatment-Resistant Schizophrenia

- *Lu AF35700 did not show statistical superiority versus conventional therapy on the primary endpoint (change in Total PANSS) in patients with treatment-resistant schizophrenia (TRS)*
- *Lu AF35700 showed good anti-psychotic effects, was well-tolerated and safe at 10 mg and 20 mg dosages in the study*
- *Further analysis of the data is ongoing*

Valby, Denmark, 25 October 2018 - H. Lundbeck A/S (Lundbeck) today announced that *DAYBREAK*[i], the first phase III study for Lu AF35700, an investigational, novel, once-daily, oral antipsychotic drug candidate for the potential treatment of treatment-resistant schizophrenia (TRS), did not meet the primary endpoint of statistical superiority vs conventional therapy.

Lu AF35700 was safe and generally well-tolerated in the study with no unexpected adverse events reported.

"*TRS constitutes the highest burden of disease within schizophrenia for patients, their families and society and we had with Lu AF35700 hoped to show superiority against conventional therapy",* says Anders Gersel Pedersen, Executive Vice President, Research and Development at Lundbeck; "*this is a setback for patients with schizophrenia, but we will continue to advance our pipeline of innovative therapies to meet the needs of patients suffering from psychiatric and neurological diseases*."

DAYBREAK was a multinational, double-blind, randomized, active-controlled phase III study that evaluated the antipsychotic efficacy, safety and tolerability of Lu AF35700 compared to an active-controlled arm over ten weeks in 964 patients with TRS.

About *DAYBREAK I*

The safety and efficacy of Lu AF35700 in patients with TRS was assessed in a 10-week, double-blind, randomised, active-controlled trial. The target TRS population for randomization was patients who met the DSM-5 criteria for schizophrenia who experienced ongoing psychotic symptomatology and demonstrated a lack of satisfactory clinical improvement to at least two different antipsychotics given at an adequate dose and duration.

The study included a single-blinded prospective treatment period of patients with persistent psychotic symptomatology who had at least one adequate and well-documented antipsychotic treatment trial without a satisfactory clinical improvement were treated for 6 weeks with either risperidone (4mg to 6mg/day) or olanzapine (15mg to 20mg/day) to confirm their resistance to antipsychotic treatment.

Patients who did not fulfil the pre-specified response criteria in the prospective treatment period were considered treatment-resistant and were eligible to enter the double-blind treatment period were patients were randomly assigned to 10 weeks of daily treatment with either Lu AF35700 10mg (n=235), Lu AF35700 20 mg (n=232) or to continued treatment with risperidone or olanzapine (n=230).

The primary efficacy endpoint was change from randomisation to Week 10 of the double-blind treatment period in PANSS total score.

About Lu AF35700

Lu AF35700 is an antagonist at dopaminergic, serotonergic, and α adrenergic receptors. Unlike all currently available antipsychotics, Lu AF35700 has higher affinity for the human dopamine D_1 receptor than it has for the human dopamine D_2 receptor. In TRS, the higher ratio of dopamine D_1 vs. D_2 receptor activity is hypothesized to result in a beneficial efficacy profile and a tolerability profile without the troublesome side effects associated with extensive dopamine D_2 receptor blockade, such as extrapyramidal symptoms.

In November 2015, FDA granted *Fast Track* designation for Lu AF35700 — a first important step to ensure a potential expedited approval of the compound.

About treatment-resistant schizophrenia (TRS)

Treatment-resistant schizophrenia (TRS) is broadly defined in clinical guidelines as no or minimal clinical improvement in target schizophrenia symptoms following treatment with ≥2 anti-psychotic treatments of adequate dose and duration[ii, iii, iv, v, vi]. About one-third of patients with schizophrenia have TRS with persistent core positive symptoms of at least moderate severity despite treatment with antipsychotics[vii, viii, ix]. TRS is among the most highly disabling psychiatric disorders for both patients and caregivers, and imposes the greatest impairment in the patients' community functioning and psychosocial adjustment[x, xi]. TRS is associated with poor prognosis and functional outcomes, and individuals with TRS are at increased risk of hospitalization, unemployment, homelessness, aggression, imprisonment, substance abuse, violent victimization, and suicide[xii, xiii, xiv].

Lundbeck contacts

Investors:
Palle Holm Olesen
Vice President, Investor Relations
PALO@lundbeck.com
+45 30 83 24 26

Media:
Mads Kronborg
Senior Director, Corp. Communication
MAVK@lundbeck.com
+45 36 43 40 00

About H. Lundbeck A/S

H. Lundbeck A/S (LUN.CO, LUN DC, HLUYY) is a global pharmaceutical company specialized in psychiatric and neurological disorders. For more than 70 years, we have been at the forefront of research within neuroscience. Our key areas of focus are Alzheimer's disease, depression, Parkinson's disease and schizophrenia.

Our approximately 5,000 employees in 55 countries are engaged in the entire value chain throughout research, development, manufacturing, marketing and sales. Our pipeline consists of several late-stage development programmes and our products are available in more than 100 countries. We have production facilities in Denmark, France and Italy. Lundbeck generated revenue of DKK 17.2 billion in 2017 (EUR 2.3 billion; USD 2.6 billion).

For additional information, we encourage you to visit our corporate site www.lundbeck.com and connect with us on Twitter at @Lundbeck.

Safe Harbor/Forward-Looking Statements

The above information contains forward-looking statements that provide our expectations or forecasts of future events such as new product introductions, product approvals and financial performance.

Such forward-looking statements are subject to risks, uncertainties and inaccurate assumptions. This may cause actual results to differ materially from expectations and it may cause any or all of our forward-looking statements here or in other publications to be wrong. Factors that may affect future results include interest rate and currency exchange rate fluctuations, delay or failure of development projects, production problems, unexpected contract breaches or terminations, government-mandated or market-driven price decreases for Lundbeck's products, introduction of competing products, Lundbeck's ability to successfully market both new and existing products, exposure to product liability and other lawsuits, changes in reimbursement rules and governmental laws and related interpretation thereof, and unexpected growth in costs and expenses.

Certain assumptions made by Lundbeck are required by Danish Securities Law for full disclosure of material corporate information. Some assumptions, including assumptions relating to sales associated with product that is prescribed for unapproved uses, are made taking into account past performances of other similar drugs for similar disease states or past performance of the same drug in other regions where the product is currently marketed. It is important to note that although physicians may, as part of their freedom to practice medicine in the US, prescribe approved drugs for any use they deem appropriate, including unapproved uses, at Lundbeck, promotion of unapproved uses is strictly prohibited.

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[i] NCT02717195: Effect of Lu AF35700 in Patients With Treatment-resistant Schizophrenia (DayBreak)

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