

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 to acquire Abide Therapeutics, adding a unique discovery platform and a lead compound in an exploratory phase IIa program for Tourette's

- *Abide's world-class discovery platform is focused on harnessing the therapeutic potential of one of the largest and most diverse enzyme classes – the serine hydrolases (SHs) – with the potential to deliver unprecedented compounds across a broad range of central nervous system (CNS) indications*
- *Abide's lead product ABX 1431 is a first-in-class inhibitor of monoacylglycerol lipase (MGLL), modulating the endocannabinoid system. ABX-1431 is in clinical development for Tourette's (exploratory phase IIa) and neuropathic pain (phase I)*
- *Lundbeck to acquire Abide for USD 250 million in upfront payment and with additional development and sales milestones*

Valby, Denmark, San Diego, USA, 6 May 2019 - H. Lundbeck A/S (Lundbeck) and Abide Therapeutics, Inc. (Abide) today announced signing of a definitive agreement in which Lundbeck LLC has agreed to acquire Abide. Under the terms of the agreement, Lundbeck may pay USD 250 million (approximately DKK 1.65 billion) upfront with a commitment to pay future development and sales milestones to the group of current owners of up to USD 150 million (approximately DKK 1 billion). This acquisition provides Lundbeck a novel discovery platform and a U.S.-based research hub.

Dr. Deborah Dunsire, President and CEO of Lundbeck commented *"The acquisition of Abide provides us with a differentiated chemo-proteomic platform to discover new classes of drugs for a broad spectrum of brain diseases starting with those that harness the therapeutic potential of the endocannabinoid system. Abide's innovative R&D platform provides us with a unique opportunity to strengthen our pipeline now and well into the future, putting Lundbeck in position to deliver multiple new and transformative treatments for brain diseases."*

"Developing first-in-class CNS mechanisms requires in depth expertise across the spectrum of drug discovery and development. Lundbeck's commitment to brain health convinced us that together this was the best way to attain Abide's goal to develop novel therapeutics that make a fundamental difference in the lives of patients with a range of neurological and mood disorders. This together with the support for



the La Jolla discovery site means that we can continue to leverage the insights of Ben Cravatt's laboratory at Scripps Research and maintain our outstanding discovery team," said **Alan Ezekowitz, CEO of Abide.**

Abide has developed a world class platform to discover potent and selective serine hydrolase inhibitors. Serine hydrolases are one of the largest and most diverse classes of enzymes found in nature, which include lipases, esterases, thioesterases, amidases, peptidases and proteases¹. In mammals, serine hydrolases represent roughly 1% of all proteins and have vital roles in many pathophysiological processes, including blood clotting, digestion, nervous system signaling, inflammation and cancer.

The lead molecule ABX-1431 is a potent selective inhibitor of the serine hydrolase monoacylglycerol lipase (MGLL) that potentiates endocannabinoid signaling to restore homeostatic balance in the central nervous system. It has the potential to address multiple indications in psychiatry and neurology and is initially being explored in clinical trials as a first-of-its-kind compound for the treatment of Tourette syndrome (exploratory phase IIa) and for neuropathic pain (phase I).

In addition to the clinical and pre-clinical programs targeting MGLL, Abide has a rich pipeline of inhibitors targeting other serine hydrolases that may be pursued as future novel treatments to improve the quality of life for patients living with neurological and/or psychiatric disorders. The chemo-proteomic platform may also be further expanded to characterize other enzyme systems within the serine hydrolase family, leading to the development of additional active agents that modify enzyme function.

After closing, Abide's laboratory in La Jolla, California will become a U.S. drug discovery hub for Lundbeck.

Deal terms

Lundbeck may pay USD 250 million upfront to the current investors of Abide Therapeutics, Inc. Furthermore, Lundbeck is required to pay up to USD 150 million in future development and sales milestones.

The transaction is expected to be financed by Lundbeck's existing cash reserves.

Credit Suisse and BofA Merrill Lynch acted as financial advisors and Goodwin Procter LLP served as legal counsel to Abide. Baker McKenzie served as legal counsel to Lundbeck.

The board of directors of Abide has unanimously approved the transaction. The transaction is expected to close during the second quarter of 2019, subject to the receipt of customary regulatory approvals, including expiration or termination of the waiting period under the Hart-Scott-Rodino Act in the U.S.

Financial guidance

The transaction will not have any impact on Lundbeck's 2019 financial guidance range provided in February 2019. The expected operational costs related to Abide will be covered within the current guidance range for 2019.



About Abide Therapeutics, Inc.

Abide Therapeutics is a clinical-stage biopharmaceutical company focused on developing first-in-class drugs for serious diseases with significant unmet medical need. An innovative discovery platform and an extensive library of proprietary small molecules allows Abide to address biological pathways with potential therapeutics that enhance the body's normal physiological response to disease. The platform enables Abide to efficiently identify, develop, and validate small-molecule inhibitors that target serine hydrolases, a highly relevant but under-explored class of enzymes. Abide's lead program focuses on addressing neurological diseases with limited treatment options through the inhibition of the serine hydrolase monoacylglycerol lipase (MGLL).

Based outside of San Diego in La Jolla, Abide was founded in 2011 and currently employs around 40 employees. Co-founder Benjamin F. Cravatt of Scripps Research in La Jolla is a world leading scientist who has advanced activity-based protein profiling (ABPP)ⁱⁱ to harness the therapeutic potential of the serine hydrolase enzyme super-family. Cardinal Partners' is the Founding initial and sole institutional investor in Abide. Managing General Partner John Clarke served as the Chairman of the Board of Directors.

About ABX-1431

ABX-1431 is a first-in-class, investigational oral therapy designed to inhibit monoacylglycerol lipase (MGLL), an enzyme that regulates a key system that serves as a natural brake on excessive brain signaling. Inhibition of MGLL by ABX-1431 may potentiate putting the brakes on overactive neural circuits, which may serve to correct abnormal neurotransmission that is often dysregulated in neurological diseases. ABX-1431 has shown clinically promising data in a phase Ib placebo-controlled trial in patients with Tourette's and Abide is currently testing ABX-1431 in clinical trials for the treatment of both Tourette's and neuropathic pain. The class of compounds also has potential applicability in a range of other neurologic and psychiatric diseases.

Lundbeck contacts

Investors:

Palle Holm Olesen

Vice President, Investor Relations

palo@lundbeck.com

+45 30 83 24 26

Media:

Mads Kronborg

Senior Director, Corporate Communication

mavk@lundbeck.com

+45 36 43 40 00

Abide contacts:

Investors and Media:

Kevin Finney

President, Abide Therapeutics

Tel: +1 858.449.8202

kevin@abidetx.com

About H. Lundbeck A/S

H. Lundbeck A/S (LUN.CO, LUN DC, HLUYY) is a global pharmaceutical company specialized in brain diseases. For more than 70 years, we have been at the forefront of neuroscience research. We are tirelessly dedicated to restoring brain health, so every person can be their best.



An estimated 700 million people worldwide are living with brain diseases and far too many suffer due to inadequate treatment, discrimination, a reduced number of working days, early retirement and other unnecessary consequences. Every day, we strive for improved treatment and a better life for people living with brain diseases – we call this Progress in Mind.

Read more at www.lundbeck.com/global/about-us/progress-in-mind.

Our approximately 5,000 employees in more than 50 countries are engaged in the entire value chain throughout research, development, production, marketing and sales. Our pipeline consists of several late-stage development programs and our products are available in more than 100 countries. Our research center is based in Denmark and our production facilities are located in Denmark, France and Italy. Lundbeck generated revenue of DKK 18,1 billion in 2018 (EUR 2,4 billion; USD 2,8 billion).

For additional information, we encourage you to visit our corporate site www.lundbeck.com and connect with us on Twitter at [@Lundbeck](https://twitter.com/Lundbeck) and via [LinkedIn](https://www.linkedin.com/company/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 considering 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.

ⁱ *"The pharmacological landscape and therapeutic potential of serine hydrolase"*; Daniel A. Bachovchin and Benjamin F. Cravatt, *Nature Reviews Drug Discovery*, January 2012 (11): 52-68

ⁱⁱ *"Activity-based Proteomics of Enzyme Superfamilies: Serine Hydrolases as a Case Study"*; Gabriel M. Simon and Benjamin F. Cravatt, *J. Biol. Chem.* 2010 Apr. 9; 285(15): 11051-11055.