

Valby, October 22, 2018

U.S. Food and Drug Administration approves expansion of Trintellix® (vortioxetine) label

Label now includes data showing improvement of treatment emergent sexual dysfunction when switching to Trintellix® from certain SSRI treatments.

H. Lundbeck A/S (Lundbeck) and its partner Takeda Pharmaceuticals USA, Inc. (Takeda) can once again expand the Clinical Trials section of the U.S. label of their antidepressant Trintellix® (vortioxetine) as the U.S. Food and Drug Administration (FDA) has approved a supplemental new drug application for the medicine. Trintellix is a prescription medicine approved for the treatment of adults with Major Depressive Disorder (MDD), also known as depression.

A common issue when treating MDD is that some medications can have a negative effect on sexual function, called treatment emergent sexual dysfunction (TESD). TESD can affect any aspect of the sexual response cycle including desire, arousal and orgasm.ⁱ

The U.S. labeling of Trintellix now includes data from a head-to-head clinical study that demonstrates Trintellix is superior to the commonly-used selective serotonin reuptake inhibitor (SSRI) Lexapro® (escitalopram) in improving SSRI-induced sexual dysfunction in adults with MDD. In this study, patients with well-treated depression who were experiencing SSRI-induced sexual dysfunction while taking paroxetine, sertraline or citalopram were switched to Trintellix or escitalopram. Switching to Trintellix led to improvement of TESD.ⁱⁱ

“Sexual dysfunction can be an issue for patients with MDD. We are hopeful that expanding Trintellix’s label to include TESD data can help address an important unmet need,” says Anders Gersel Pedersen, Executive Vice President, Research and Development, Lundbeck.

“Sexual dysfunction is one of the most common and bothersome side effects patients with depression struggle with when prescribed an SSRI,” said lead study investigator, Dr. Anita Clayton, Chair, Department of Psychiatry & Neurobehavioral Sciences, University of Virginia School of Medicine. “We designed the study to specifically look at these troublesome side effects. Changing to a medication with potentially fewer sexual side effects, while not losing progress in treating depression, provides an important option for patients with depression.”

In the five years since FDA approval on September 30, 2013, more than 845,000 patients have been prescribed Trintellix. Vortioxetine is approved in 82 countries. This is the second time this year FDA has approved a supplemental new drug application for Trintellix to add new data to the Trintellix U.S. labeling.

About Trintellix (vortioxetine)

The mechanism of the antidepressant effect of Trintellix is not fully understood. It is an inhibitor of serotonin (5-HT) reuptake and that is thought to be a mechanism of its action. It is also an agonist at 5-HT_{1A} receptors, a partial agonist at 5-HT_{1B} receptors and an antagonist at 5-HT₃, 5-HT_{1D} and 5-HT₇ receptors. The contribution of each of these activities to Trintellix's antidepressant effect has not been established. It is considered to be the first and only compound with this combination of pharmacodynamic activity. The clinical relevance of this is unknown. Trintellix was discovered by Lundbeck researchers in Copenhagen, Denmark. The clinical trial program in the U.S. was conducted jointly by Lundbeck and Takeda, and Takeda holds the new drug application for the U.S. market. Trintellix is a trademark of H. Lundbeck A/S and is used under license by Takeda Pharmaceuticals U.S.A., Inc.

Voluntary reports of sexual dysfunction with TRINTELLIX in 6-8 week controlled trials were $\leq 5\%$. Because voluntary reports of sexual dysfunction are known to be underreported, a separate, self-rated questionnaire was provided to patients prospectively in TRINTELLIX clinical studies. When assessed proactively in patients without sexual dysfunction at baseline, reports of treatment emergent sexual dysfunction across doses 5 mg, 10 mg, 20 mg were 16%, 20%, 29% in males (N=212) respectively and females 22%, 23% and 34% (N=226) respectively, compared to 14% (N=162) and 20% (N=135), respectively, in placebo.

About the study

The FDA approval of adding the study on TESD in the Trintellix label in the U.S. is based on a study with patients in which treatment with Trintellix led to superior improvements compared to escitalopram in SSRI-induced sexual dysfunction.ⁱⁱ

In an 8-week head-to-head, randomized, double-blind study, well-treated adult MDD patients with TESD (N=447) were switched to Trintellix (N=225) or escitalopram (N=222), from citalopram, paroxetine, or sertraline, due to SSRI-induced sexual dysfunction as measured by the Changes in Sexual Functioning Questionnaire (CSFQ-14). Improvement in SSRI-induced sexual dysfunction in subjects switched to Trintellix was superior to the improvement observed in those subjects that switched to escitalopram. For both TRINTELLIX and escitalopram, patients were started on 10 mg, increased to 20 mg at week one, followed by flexible dosing (10 mg or 20 mg). Trintellix demonstrated statistically significant improvement vs escitalopram from baseline to Week 8 (Trintellix (8.8 ± 0.64), escitalopram (6.6 ± 0.64 , $P=0.013$) as measured by CSFQ-14 total score, which assesses the three phases of sexual response cycle. Both drugs maintained prior improvement in depression based on overall score on standardized depression rating scale. The data builds upon the voluntary and prospective reports of sexual dysfunction with Trintellix in clinical trials.

Contacts

Mads Kronborg
Senior Director, Corporate Communication



Phone: +45 36 43 40 00
E-mail: mavk@lundbeck.com

About Lundbeck

H. Lundbeck A/S (LUN.CO, LUN DC, HLUY) 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 depression, schizophrenia, Parkinson's disease and Alzheimer's disease.

An estimated 700 million people worldwide are living with psychiatric and neurological disorders 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 psychiatric and neurological disorders – 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 programmes and our products are available in more than 100 countries. Our research centre is based in Denmark and our production facilities are located 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.

ⁱ Sexual Problems and Depression. (2016, October 15). Retrieved August 14, 2018, from <https://www.webmd.com/depression/guide/sexual-problems-and-depression>.

ⁱⁱ Jacobsen, Paula L., et al. Effect of Vortioxetine vs. Escitalopram on Sexual Functioning in Adults with Well-Treated Major Depressive Disorder Experiencing SSRI-Induced Sexual Dysfunction. *The Journal of Sexual Medicine*. 2015;12: 2036-2048.