Study of depression and efficacy of treatment published with promising results and in line with the National Board of Health and Welfare guidelines

The study has focused on both being able to detect depression in patients but also to look at the effect of treatment in the form of medication with Citalopram. The study shows that SensoDetect BERA can discern with a high statistical significance of patients with depression and already after about 1 week discern the effect of treatment which is unique and completely in line with the National Board of Health and Welfare stated improvement goals.

The study is an important part of the development that SensoDetect works with for both tests for initial assessment of mental ill-health and for the choice of medication and control of its effect.

"*Depression and anxiety disorders belong to the major public diseases and affect people of all ages. The risk of developing depression is approximately 36% for women and 23% for men [7]. Approximately 25% of the population is estimated to suffer from an anxiety disorder, and in adults it is two to three times as common in women compared to men. Among children before puberty, anxiety disorders occur in about 10% and are as common in boys as in girls. Many of those affected by depression or anxiety are of working age. Diagnoses in the Depression and anxiety area (including adaptation disorder and response to severe stress) are responsible for approximately 90% of all sick leave due to mental illness in Sweden [8]. In both depression and anxiety disorders, there are varying severities, but even in the case of less seriousness, the condition often means that the person has a loss of quality of life and difficulties in coping with everyday life and work. The lives of relatives can also be influenced to a large extent. It is therefore important to have adequate and early treatment to prevent, as far as possible, disabilities, risk of long-term disease and återinsjuknande.*", the Swedish Social Welfare Board's guidelines for Depression and anxiety, 20171204

This is also a stated goal for the Swedish National Board of Health and Welfare in Sweden when there is a clear problem with, among other things, increased drug prescription. The importance of being able to follow up and respond to the desired effect is difficult within a very large group of patients especially in psychiatry and therefore it is important to be able to follow up quickly so that the impact on both the patient, the environment and society's costs are minimized.

The National Board of Health and Welfare evaluation also identified a number of areas for improvement,

"• *Develop procedures for early detection and treatment of bodily diseases in people with mental illness*

• *Develop routines for Suicide risk assessment*

• *Increase access to evidence-based psychological treatment*

• *Develop routines for early detection and diagnostics of mental ill-health*

• *Increase follow-up of treatment*", from the Swedish Social Welfare Board's guidelines for Depression and anxiety, 20171204

In the study made they identified that markers have been found to clearly identify depression in line with "early detection and support for the diagnosis of mental ill-health". It is also noted that it is very quickly possible to see the effect of the treatment which also coincides very well with the National Board of Health and Welfare list, "increasing the follow-up of treatment".

"*An electro-physiological marker for depression has been identified by this study. It separates depressive individuals from healthy with high statistical significance. By combining ABR results from several complex stimuli, a second marker was constructed that enabled detection of effects of treatment with Citalopram after only one week. The study is a starting point for further development that is commented on in the discussion. The ultimate goal is to achieve a method of diagnosis and treatment control. An objective contribution for these purposes in psychiatry would be of great benefit.*", quote from ACTA PSYCHOPATHOLOGICA ISSN 2469-6676, Depressive State and Auditory Brainstem Response a Tentative Future Method for Diagnosis and Pharmacological Control of Depression by Jens Holmberg, Johan source Strand and Sören Nielzén, 20180705.

Link to the article

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http://psychopathology.imedpub.com/depressive-state-and-auditory-brainstem-response-a-tentative-future-method-for-diagnosis-and-pharmacological-control-of-depression.pdf

"If one can avoid" trial-and-error "methods of medication of patients, it saves not only money, the environment and suffering also is likely to save life. Unfortunately it is not obvious which medication or treatment is always best, but it becomes a bit of an experience guess and to try out for both doctors and patients. We can read almost daily that after years of treatment it has been discovered that a patient has been taking wrong medication and been suffering both from medications as well as from not getting treated. This not least in psychiatry with ADHD and Depression at the top of that list. That is why I see this as very interesting possibility and we will continue the development towards creating conditions not only for tests that help in the assessment of an individual disease but also on the effects. It is important for all parties and since it is very difficult in any other way to test this, I see it as obvious that we should now help with this as soon as we can. It will as always with medical technology take a while before we can launch it since all medical technology needs to have more studies and we will also need to get help from doctors and patients to test and evaluate it. But it will absolutely be part of our future activities as I see it. "says CEO Johan Olson, SensoDetect AB (publ.)

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SensoDetect highlights through patented equipment brain stem responses to audio stimuli in order to provide health care clear anomalies and patterns for use primarily within psychiatry. The goal is to increase efficiency in Psychiatry and thus the benefits for health care, society, patients and relatives.

Our Mission
Improve the lives of people with mental illness
Our Vision
Making ABR profiling tests with SensoDetect technology an integral part of setting diagnosis for mental illness
Our Value Proposition:
SensoDetect provides a complete audiogram for the brainstem, helping health care professional to set psychiatric diagnoses objectively and cost effectively. This unique offering improves patients' quality of life and reduces the economic impact on the health care system and society