Cover Page

Official Title of the Study:
Efficacy and Safety of Cognitive Behavioral Therapy, Tones Stimulator in Patients With Subjective Tinnitus: Prospective, Multi-center, Randomized, Single Blind (Subject), Parallel, Superiority, Confirmatory Trial

NCT Number: N/A

Date of the Document: July 20, 2023

Clinical trial subject information and consent form

Clinical trial to evaluate the efficacy and safety of a Class 2 cognitive therapy software, SoriClear, which combines cognitive behavioral therapy (CBT) and sound stimulation, in alleviating mental and physical dysfunctions caused by subjective tinnitus.

You are being asked to consider participating in a clinical trial conducted by NewLive Co., Ltd. The principal investigator of this trial will adhere to all relevant regulations and ethical principles based on the Declaration of Helsinki when obtaining your consent, conducting the trial procedures, and acquiring your information. Before deciding to participate, please carefully read this information and consent form. You are encouraged to ask any questions you may have and take your time to make an informed decision.

1. Purpose and background of the clinical trial

Tinnitus is the perception of sound without an external physical stimulus and is usually perceived subjectively. It affects a significant portion of the population and its prevalence increases with age. Tinnitus can be described as a creaking, hissing, buzzing, clicking, or ringing sound, experienced in one or both ears or in the head. Tinnitus can originate anywhere within the auditory system, engaging auditory processing pathways that involve extra-auditory brain regions responsible for emotions and reactions. Consequently, this engagement can lead to mental health challenges such as difficulty concentrating, sleep disturbances, depression, anxiety, and general irritability, becoming a significant nuisance and negatively impacting overall quality of life.

According to a recent World Health Organization (WHO) report, the population experiencing tinnitus is expected to increase significantly, driving demand for effective treatments. Currently, there is no established, universally effective treatment. While medication (antidepressants) and rehabilitation therapies (vestibular physical therapy) are used, many patients do not experience significant or sustained symptom improvement. Because tinnitus treatment focuses on changing the subjective experience rather than "curing" the sound itself, experts often recommend cognitive behavioral therapy (CBT) to address negative thought patterns, and sound therapy to modify the patient's reaction to tinnitus using background sounds. Therefore, a typical approach to tinnitus management includes tinnitus retraining therapy, sound therapy, and/or cognitive behavioral therapy.

CBT significantly improves quality of life by helping patients identify unhelpful beliefs and behaviors. It is recognized as an effective treatment, positively influencing the management and control of tinnitus both psychologically and physically.

Furthermore, because most tinnitus measurements rely on subjective reports, conscious recall of tinnitus perception and its effects is required during assessment, which depends on cognitive abilities. Therefore, tinnitus and cognition are viewed as inseparable in research and rehabilitation. CBT provides an integrated and practical approach to reduce symptoms, improve daily functioning, and ultimately promote recovery by modifying dysfunctional behaviors and beliefs. For decades,

CBT theories and therapies have been applied to tinnitus research, with results demonstrating reduced tinnitus severity/distress, fear, disability, and cognitive problems, alongside improvements in daily functioning.
This clinical trial aims to confirm the efficacy and safety of CBT, delivered via clinical trial cognitive therapy software, in alleviating the mental and physical dysfunctions caused by subjective tinnitus. It is expected to reduce tinnitus and improve your overall health and quality of life. Therefore, this trial seeks to validate the effectiveness and safety of the SoriClear cognitive therapy software for treating subjective tinnitus.

2. Clinical trial methods and expected efficacy

This clinical trial is conducted on patients with subjective tinnitus. If you meet the inclusion/exclusion criteria and consent to participate, you will undergo the necessary screenings and tests according to the clinical trial protocol. You will then use the clinical trial cognitive therapy software SoriClear for 6 weeks at your convenience. In addition, you will receive cognitive behavioral therapy 5 times a week through SoriClear.
The efficacy and adverse events of SoriClear will be observed together for 6 weeks of the clinical trial. By using SoriClear, you can expect to improve tinnitus discomfort and quality of life.

3. Information on the Clinical Trial Cognitive Therapy Software SoriClear Used in this Clinical Trial and the Probability of Being Randomly Assigned to the Test Group or Control Group

This clinical trial medical device is a Class 2 cognitive therapy software, and you will be provided with the SoriClear app installed on a tablet. In addition, subjects can receive a charger to charge the device. You will also be trained on how to use SoriClear and precautions. If you meet the inclusion/exclusion criteria and are found to be suitable for this clinical trial, the clinical trial will be conducted by dividing into a test group and a control group at a 1:1 ratio through stratified block randomization.

4. Tests and Procedures You Will Receive from Participation to Completion of This Clinical Trial

The procedures you will receive from participation to completion of this clinical trial are as follows: The investigator will determine your eligibility for clinical trial participation by reviewing the inclusion/exclusion criteria and items such as your medical history and medication history on your medical record. If you meet the inclusion/exclusion criteria, the investigator will explain the purpose of this clinical trial. If you decide to participate in the clinical trial, you will be asked to read and sign this consent form. If you decide to participate in this study, you will be provided with the prescribed clinical trial cognitive therapy software SoriClear according to the investigator's prescription, and you will use SoriClear at home for a total of 6 weeks, including visit 2, in the manner you have been trained, and visit the clinical trial institution 1 week, 2 weeks, 4 weeks, and 6 weeks later. And if you have any questions or strange things, you can call the phone number provided below or visit the hospital.

After registering for this study and signing the consent form, you will be asked questions about your smoking history, drinking history, etc., and undergo several tests. The types of tests you will receive after registering for this clinical trial are as follows. Also, please note that the tests you will receive in this clinical trial include invasive procedures in laboratory tests.

- Physical examination: Overall physical examination using inspection, auscultation, palpation, and percussion
- Vital signs: Blood pressure, pulse, body temperature
- Laboratory tests: Blood collection (approximately 5cc) from the patient's vein as an invasive procedure and urine test as a non-invasive procedure will be performed. Mild pain in the blood collection site is expected, but it is mostly not serious, temporary, and recovers on its own.
- Pure tone audiometry
- Tinnitus test
- Pregnancy test
- Adverse event confirmation
- Compliance
- Satisfaction survey
- THI (Tinnitus Handicap Inventory Questionnaire)
- TFI (Tinnitus Functional Index)
- Negative Emotion VAS Assessment
- Negative Thinking VAS Assessment
- Tinnitus Discomfort VAS Assessment
- BDI (Beck Depression Inventory)
- BAI (Beck Anxiety Inventory)

Among these, pregnancy tests and laboratory tests are performed only on visit 1.

If you do not visit on the scheduled visit date, you may be asked questions about whether to discontinue SoriClear use and overall adverse events through phone calls or letters. During the total clinical trial period, we will explain any clinical trial procedures that the subject or guardian is curious about, and we may check the presence or absence of adverse events experienced during the clinical trial period at each visit.
Visit 1 and visit 2 may be performed on the same day, and to summarize the procedures to be performed during the study period are as follows.
Subjects who have completed registration are divided into a test group and a control group through 1:1 stratified block randomization at visit 2. The test group and the control group will measure vital signs and perform a physical examination. After confirming concomitant medications, the clinical trial cognitive therapy software SoriClear installed on the tablet will be provided and instructions on how to use it and precautions will be provided. The SoriClear provided is self-administered, and

the subject starts using the software directly outside the hospital. After that, you will use SoriClear for a total of 6 weeks, including visit 2, and visit the clinical trial institution 1 week, 2 weeks, 4 weeks, and 6 weeks after receiving the software to confirm the efficacy and safety of tinnitus treatment through questionnaire evaluation.

5. Unverified Experimental Aspects of This Clinical Trial

This clinical trial is conducted as a confirmatory clinical trial to demonstrate the efficacy and stability of the clinical trial cognitive therapy software SoriClear. Therefore, the safety and efficacy of SoriClear are currently under evaluation.

6. Risks (Side Effects) or Inconveniences Expected Due to Participation

Side effects and inconveniences expected due to participation in this clinical trial include temporary pain in the ear due to strong sound pressure through use of the clinical trial cognitive therapy software SoriClear, and treatment delays due to incorrect setting of tinnitus frequency.
However, most cases do not experience adverse events or experience mild adverse events. Also, SoriClear prohibits use for purposes other than its intended use and recommends using it under the prescription and guidance of a doctor.

7. Benefits Expected by Participating in This Clinical Trial

You may not receive any direct benefits by participating in this clinical trial. However, your clinical trial participation will provide new information on the effectiveness and safety of tinnitus treatment, contributing to the establishment of medical data supporting the basis of treatment methods.

8. Expected Participation Period and Number of subhects

This clinical trial will be conducted for approximately 12 months from the date of approval by the Medical Research Ethics Committee (IRB), and your participation period will be approximately 6 weeks. If you decide to participate in this study, you will visit the hospital approximately 5 to 6 times to receive tests and observations. This clinical trial will be conducted at multiple institutions and will be conducted with a total of 106 people, including those who will drop out.

9. Compensation or Treatment Methods in Case of Damage Related to the Clinical Trial

Neurive Co., Ltd. will compensate for physical damage to the subject due to harmful reactions caused to the subject by clinical trial cognitive therapy software in clinical trials conducted in accordance with the clinical trial management standards for clinical trial cognitive therapy software, in the following cases according to the "Regulations on Compensation for Victims". Therefore, if an adverse event occurs, please tell the person in charge of the trial at any time and we will take appropriate action soon. The damage to the body is caused by this clinical trial cognitive therapy software. The investigator has complied with all the contents of the clinical trial plan approved by the Medical Research Ethics Committee. It is not due to the investigator's clear negligence or dereliction of duty. The subject has complied with all instructions from the principal investigator or

the person in charge of the trial.

10. Whether or Not There is Monetary Compensation for Participating in the Clinical Trial and the Degree of Adjustment According to the Degree of Participation or

There are no additional costs incurred due to participation in the clinical trial.
If you participate in this clinical trial, NewLive Co., Ltd. will fully support all medical expenses for all visits after registration (excluding the consent date) and all test costs incurred in this clinical trial. The subject will receive a participation fee of 50,000 KRW from Neurive Co., Ltd. per visit after screening exclusion registration, and this cost may vary depending on your degree of participation.

- In the following cases, your participation in this clinical trial may be restricted:
- If the subject or legal representative requests termination of clinical trial participation
- If surgery, medication, or other medical devices or medical device software that may affect safety and efficacy evaluation are used in combination
- If an adverse event (such as infection) that makes it difficult to continue the clinical trial occurs
- If another disease is accompanied during the clinical trial and treatment is unavoidable and its severity is determined to be serious
- If a serious violation of the selection/exclusion criteria is discovered during the clinical trial
- If the subject does not comply with the investigator's instructions or does not comply with the matters presented in the consent form, affecting the validity evaluation
- If follow-up observation is impossible during the clinical trial, making validity evaluation difficult
- If it is determined that continuation of the clinical trial is difficult according to the investigator's judgment

11. New Information That May Affect Your Willingness to Continue Participating in the Clinical Trial

By participating in this clinical trial, you have the right to ask any questions related to the clinical trial and receive sufficient explanations from the medical staff. Also, during the clinical trial, we will immediately notify you or your agent of any new information that may affect your willingness to continue participating in the clinical trial.

12. Voluntary Participation

Your participation in this clinical trial is up to your voluntary will. You may decide not to participate in the trial at any time, and you may also give up and stop participating at any time during the clinical trial. You will not receive any disadvantages even if you do not participate in this clinical trial or give up participating during the clinical trial, and your decision will not affect your future medical care.

13. Matters to be Observed by the Subject

Basic diagnosis is required to screen whether you are suitable for this clinical trial. At this time, you must inform the investigator about diseases you have had in the past and other diseases you are currently suffering from, pregnancy status, drugs you have used in the past, or drugs you are currently taking. This clinical trial cognitive therapy software is provided at the clinical trial institution on visit 2, and you can cooperate with the investigator's guidance and prescription according to the medical procedure at each visit by performing cognitive behavioral therapy 5 times a week.

Also, if you are a woman of childbearing age, you must select one of the standard contraception methods and practice contraception in the correct manner.

14. Privacy protection

If you participate in this clinical trial, your personal information (personal identification information such as initials, date of birth, age, and gender/sensitive information about height, weight, smoking history, drinking history, medical history, medication history, vital signs, and physical examination results) will be collected. The personal information collected in this way will be strictly managed in accordance with relevant laws and stored for 3 years from the end of the clinical trial, and only those in charge of the clinical trial will have access to the collected data. Among the collected personal information, personal identification information is not directly used for clinical trials or is necessary information, and is only used for the purpose of connecting clinical data acquired through clinical trials with you. Your personal information will be used until the purpose of the clinical trial is achieved, and the collected information will be thoroughly managed in accordance with the Personal Information Protection Act.

Records that can identify your identity will be kept confidential, and even if the results of the clinical trial are published, your identity will be kept confidential. However, the monitor, the person conducting the inspection, the Clinical Research Ethics Center, the Subject Protection Center, and the Commissioner of the Food and Drug Administration may, in accordance with related laws and regulations, inspect the subject's medical records (including the personal information and name information listed above) within the scope that protects the subject's personal information in order to verify the implementation procedure and data quality of the clinical trial, but even in this case, personal information will be kept confidential. Access to this data is permitted by a consent form signed by you (or your agent).

15. Matters Related to the Subject's Medical Care After the Clinical Trial

Subjects whose clinical trial has ended can discuss the test results with their doctor after using the clinical trial cognitive therapy software. Also, to prepare for unexpected delayed adverse events, you can receive medical treatment at any time according to the instructions of your doctor. If compensation is required for adverse events related to the clinical trial cognitive therapy software, the principal investigator will compensate according to the victim compensation regulations.

16. Adverse Events

Follow-up surveys are conducted only for subjects whose adverse events do not disappear even after the clinical trial has ended. In this case, all adverse events and changes in concomitant medications are recorded, and all related tests are performed if necessary. Subjects who have experienced adverse events are followed up until the symptoms disappear and there is a satisfactory explanation for the changes in the abnormally observed areas, or until further follow-up is no longer possible. In addition, the progress of adverse events is reported to NewLive Co., Ltd.

17. Contact Information

Please ask questions about any parts of the terms and contents described in this information document that are not well understood, and carefully review this clinical trial and consent form before deciding whether to participate in the clinical trial.

This clinical trial has been approved by the Medical Research Ethics Committee (IRB) responsible for protecting the rights, safety, and welfare of subjects at this hospital (this approval does not guarantee the safety of this clinical trial), and if you have any questions about your rights as a participant in this clinical trial, please contact the Medical Research Ethics Committee below. If you choose to participate in this trial, you will receive a copy of the signed consent form.

Medical Research Ethics Committee: 2023GR0400

Clinical Trial Subject Consent Form

version: NEU_SCL_01_ICF_v1.2 **Version date:** 2023.07.20

1. I have been fully informed about the contents of this consent form and have discussed the contents with the attending physician or research team.
2. I have read and understood the contents of the consent form and have had the opportunity to ask questions, and I have received satisfactory answers to all my questions.
3. I voluntarily agree to participate in this clinical trial and provide personal/sensitive information.
4. I understand that signing this consent form does not waive my rights.
5. I understand that I can freely withdraw my consent to this clinical trial at any time and that this will not affect my medical care or rights.
6. I understand that I will receive a copy of the signed and dated information document and consent form after consent.

Name: _____

Signature: _____ Date: _____

Subject Representative: _____ Relationship with the subjec: _____

Signature: _____ Cause: _____

Date: _____

Principal Investigator* Name: _____

Signature: _____ Date: _____