

may still have been new to them, seeing with their own eyes the numbers in their journal decrease gave them the impression that their hearing was improving. Many participants realized mid-journal that the volume they couldn't hear yesterday was now audible today, thanks to ongoing sound therapy. They often shared that, without needing any explanation from others, they came to understand on their own: "This sound therapy is doing something good for my ears, for my body—it's actually working." For many participants, the listening journal helped alleviate a great deal of doubt "Will this really work?" especially given that they were seeing a diagram of the cochlea for the first time, and had never received this type of treatment at any ENT clinic or medical facility before. Even though the term "descending threshold" was entirely new to them, the feeling that "this treatment is actually working", along with a growing sense of self-confidence, seemed to produce significant psychological effects as well. As participants recorded their descending threshold values daily, they began to notice that on days when their physical condition was poor, the thresholds were higher. Through this, they began to understand on their own that their physical condition directly influenced their tinnitus. For instance, when they saw a sudden spike in their descending threshold after drinking alcohol, they didn't need an explanation—they could see the impact clearly in their own journal, and this often prompted them to adjust their behavior. I observed many participants who, after making such behavioral changes, reported a reduction in the intensity and frequency of their tinnitus, and even experienced the added bonus of improved hearing. For those with tinnitus, finding the correct threshold is more difficult than one might expect. In the presence of constant tinnitus noise, it was not easy to distinguish between the treatment sound and the tinnitus itself, and accurately identifying the descending threshold often took considerable time. Participants with severe and complex tinnitus especially struggled to identify the moment when the "chiki-chiki" cue sound used for tracking thresholds began to overlap with the sound of their tinnitus. It often required a period of learning and adaptation. But once participants learned to distinguish the treatment sound from their tinnitus and accurately identify the descending threshold, dramatic changes began to appear in their hearing graphs. In the end, I believe true treatment begins at the point when the participant can clearly differentiate tinnitus from the treatment sound and swiftly, accurately locate the descending threshold. Sometimes I wonder—if the participants had fully understood all of this before beginning the trial, could the treatment outcomes have been even better during the limited clinical period?

Tinnitus Disappeared in 4 Weeks – Participants JYL and HSL

JYL (Male, 58 years old):

Tinnitus questionnaire score changed from 11 to 13

First visit: October 5

Second visit: October 22

Third visit: November 9

JYL was not a participant with severe tinnitus, but he did experience noticeable discomfort from it and had not found relief despite visiting other medical institutions. When he joined the MTM clinical trial, he expressed a strong desire to understand the principles behind the sound-based treatment. Since the approach was entirely unfamiliar to him and he was told it could treat tinnitus where conventional methods had failed, he was eager to understand how this treatment works. We explained the frequency specificity of the ear, and based on his hearing graph, described the regions of hearing loss and fluctuating response, and how these were targeted. After the second hearing test, we produced a personalized sound file and instructed him to listen for two weeks. Targeting was conducted in the left ear at Index 96, 120, and 128, and in the right ear at Index 130. When we compared the second and third hearing graphs to assess treatment effects, hearing changes were observed in the targeted frequency zones by the third test. The tinnitus questionnaire scores were 11 at the first visit and 13 at the third—this minor increase reflected the participant's honest reporting, but was not indicative of worsening symptoms. On the third visit, the participant brought back his thoroughly kept listening journal, reporting that he had not heard his tinnitus even once during the two weeks of sound therapy. He explained that he listened to the treatment sound at his descending threshold for 30 minutes in a quiet environment, doing absolutely nothing else during the session. While we had advised participants to conduct home therapy in as quiet an environment as possible—especially when determining the threshold—we had also told them they were free to go about their daily activities once the threshold was established. We even said watching TV or having a conversation was fine. However, this participant chose to stay still and focus solely on the sound during each session. Although the treatment involves listening, at the descending threshold level, the sound is technically inaudible, meaning the participant was actually resting in silence during therapy. We've repeatedly emphasized that difficulty in identifying the threshold at the beginning of treatment is a major factor that determines the effectiveness and duration of the therapy. In this case, the listening journal from the two-week period showed that the participant had identified the descending threshold with great accuracy. It seems likely that a quiet, focused listening environment helped him achieve this precision. The fact that a clear treatment effect appeared after just two weeks may be attributed to this.

When the participant accurately identified the descending threshold at home, he experienced clearer changes in both volume perception and tinnitus, which aligns with our broader understanding of the mechanism. Regardless of severity, the presence of tinnitus causes distress. Yet this case shows that for an early-stage tinnitus patient with a proactive attitude toward treatment, just two weeks of consistent sound therapy was enough to completely resolve the condition.

HSL (Female, 37 years old):

Tinnitus questionnaire score changed from 8 to 13

First visit: October 5

Second visit: October 19

Third visit: November 2

At the first and third visits, HSL's tinnitus questionnaire scores were 8 and 13, respectively. Although her hearing was in a good range—under 30 dBHL—there were still signs of relative hearing loss and fluctuation. As her initial score suggests, she experienced mild tinnitus, and after two weeks of listening to the treatment sound, she reported that she no longer heard the tinnitus, and thus treatment was concluded. This case demonstrates that mild tinnitus may be sufficiently treated within just two weeks. HSL had bilateral simple tinnitus, and during the targeting process, she mentioned that the targeted frequencies matched the sound of her tinnitus. When the treatment sound and the tinnitus sound were similar, accurately identifying the threshold led to a high treatment success rate. Therefore, the targeting and descending threshold detection were performed with care, and after two weeks of home-based therapy, the tinnitus was no longer perceived. In cases of mild tinnitus, it is easier to determine the descending threshold because there are fewer confusing or overlapping sounds. Though latent tinnitus may resurface after a resting period, we discussed the situation with the participant and mutually agreed to conclude both the clinical trial and the treatment.

Participants Who Recovered from Tinnitus After Continued Treatment Beyond 4 Weeks YBK, MJC, BWM, YML, MRS, KHJ

These participants did not experience dramatic improvement during the 4-week clinical period, but they began to notice changes in their hearing, the "tone" or character of the tinnitus, and the intensity of the sound. They expressed a desire to continue the sound therapy, and as a result, their treatment was extended. After completing a full 3-month program (including the initial 4 weeks of the clinical trial), their tinnitus symptoms disappeared completely.

YBK (Female, 60s): Over 10 Years of Left-Sided Tinnitus / Tinnitus score changed from 8 to 10 after 4 weeks / Continued treatment beyond clinical period, completed in December
First visit: October 5
Second visit: October 19
Third visit: November 7



This participant's audiogram revealed a clear asymmetry between the left and right ears, with significantly worse hearing in the high frequencies (8,000–12,000 Hz) on the left side. When patients with this kind of hearing pattern report high-pitched tinnitus, it typically means that frequencies in the 8,000–12,000 Hz range are part of their tinnitus frequency spectrum. This pattern was also observed in the audiograms of JYL and HSL, where hearing loss and fluctuation in this high-frequency range aligned with their tinnitus profiles. In such cases, high-frequency targeting is essential, and when applied, participants often report notable changes in their tinnitus. After conducting home-based sound therapy, YBK's tinnitus score at the third visit was 10, and she reported very noticeable changes in her tinnitus perception. Although her tinnitus was not present 24/7, she had given up on treatment after trying various therapies over the past 10 years with no success. However, as she began listening to the therapy sound, she gradually started to experience changes in the tinnitus sound. The complex, noise-mixed tinnitus began to simplify, and its intensity and frequency decreased. When asked to describe her tinnitus, she used the metaphor of entangled wires: originally like 8 twisted strands of wire, but after starting the therapy, it reduced to 5 strands, the noise component disappeared, and she felt much more comfortable—she even said it was fascinating. She also reported a significant reduction in the frequency of tinnitus occurrence. By the end of the 4-week clinical period (including 2 weeks of home sound therapy), she described her tinnitus as having been reduced from 8 strands to 5. To address the remaining tinnitus, she continued treatment, and as therapy progressed, she said it decreased to 3 strands, then 2, then 1, and by December 12, she completed the treatment. While not particularly novel, it is worth noting that although she received sound therapy only for her left ear, not only did her left ear's hearing improve, but her right ear also showed improvement. She was able to physically perceive the improvement, and this was also reflected objectively in her audiogram.



YML (female, 57):
15 years right-sided tinnitus
Tinnitus score 4

When comparing the audiograms of both ears, the right ear shows a sudden drop in hearing at specific frequencies, and the participant presents with complex tinnitus that includes high-pitched components. Targeting was performed at frequencies where hearing fluctuated and sharply declined in the high-frequency range. Initially, targeting was performed at two locations on the right ear only. By the third visit (after two weeks), no significant change was observed in the tinnitus. The 4-week clinical trial ended with no change in the questionnaire score (still 4). However, the participant wished to continue treatment, and from the fourth visit onward, the number of targeted frequencies was increased using proximity targeting. This case is comparable to that of YBK, as both are female participants of a similar age, with unilateral complex tinnitus including high-frequency components. While the overall conditions can't be perfectly matched, the difference in treatment speed appears to stem from the number of targeted frequencies and the use of proximity targeting. During the clinical period (up to the third visit), YML only had two target frequencies, which yielded no noticeable improvement. Audiogram results also showed little change. However, after increasing the number of target points from 4 to up to 6, the participant began experiencing changes in tinnitus. She reported that the complex tinnitus spectrum began to simplify, consolidating into a single dominant sound. Thus, the number of target frequencies and proximity targeting likely influence the duration and effectiveness of treatment. By December, YML had shown significant improvement, and most of the sounds in her complex tinnitus profile had been resolved.



MRS (Female, 38): Tinnitus Score Increased from 8 to 9
Left-sided tinnitus for 10 years
Hearing loss and tinnitus began after Meniere's disease diagnosis 10 years ago

The participant had unilateral tinnitus in the left ear, and the degree of hearing loss in that ear was significant enough that the presence of tinnitus could be predicted from the audiogram alone. The hearing pattern showed a sharp decline in the 8,000–12,000 Hz high-frequency range, and the tinnitus frequency spectrum included high-pitched components.

During the clinical period, isolated targeting was applied at four sharply dropped hearing points. After the 4-week clinical period, the tinnitus score increased slightly from 8 to 9, but the participant reported a reduction in tinnitus volume compared to before treatment. MRS wished to continue therapy beyond the clinical trial. As she began proximity targeting around 8,000 Hz in addition to isolated targeting, she began to experience more noticeable relief. The treatment was concluded at the end of December.



MJC (Male, 40): Bilateral Tinnitus,
Tinnitus Score Increased from 4 to 10

This participant experienced a remarkably dramatic therapeutic effect during the clinical trial. In MJC's case, the left-side tinnitus was better described as a sensation of "fullness or pressure" rather than a typical ringing or buzzing. He reported a persistent feeling of ear fullness in the left ear, similar to what one might feel when ascending to high altitudes or during airplane travel, which had remained unresolved despite seeking treatment at various medical institutions. After the second clinical visit, he began sound-based therapy, and after just three days of home sound therapy, he reported that the fullness in his left ear had disappeared. He expressed amazement that the discomfort he had endured for several years had vanished after only three days of treatment. Initially, he approached the therapy with low expectations—simply hoping for a last resort—but was stunned that sound frequency therapy alone could yield such results, and he repeatedly expressed his astonishment. Following the disappearance of the discomfort in his left ear, the participant became highly motivated and diligent about the home-based sound therapy. This case reinforced the notion that treatment is ultimately carried out by the participant themselves—not the doctor. In other words, the patient must believe in the treatment's effectiveness and also engage actively and sincerely in the self-healing process. Encouraged by the success on the left side, the participant continued to apply himself to the home therapy. He continued treatment for his right-ear tinnitus for about six more weeks after the clinical period, and this too improved significantly. The treatment was eventually concluded as his right-side tinnitus had subsided to the point where it was barely noticeable, occurring only once every few days and no longer interfering with daily life.