



CLINICAL EVIDENCE REVIEW

Alothia Recovery Research Brief

Published evidence, transparent limitations, and a framework for
prospective clinical validation

Evidence boundary

Independent research supports individual techniques and mechanisms incorporated into Alothia. It does not independently clinically validate the complete Alothia protocol.

Prepared for physicians, healthcare practices, and research partners
September 2026



1 | EVIDENCE FRAMEWORK

The Research Behind Alothia

This brief separates three evidence streams: research supporting individual techniques used within Alothia; research that is promising but preliminary, mixed, or null; and Alothia's own exploratory physiological observations.

Purpose of this brief

The purpose is to present a clinically useful evidence map without treating every intervention, population, or outcome as interchangeable. The strongest support is concentrated in pain, anxiety, and selected autonomic or sleep measures. Wound-healing evidence is encouraging but less replicated. Immune and inflammatory findings are generally small, heterogeneous, or marker-specific.

How to read the evidence

Tier 1 - Strong evidence: replicated clinical outcomes or meta-analytic support.

Tier 2 - Moderate / preliminary: encouraging human evidence with smaller or less replicated samples.

Tier 3 - Mixed / small effects: outcomes vary by marker, intervention, and study quality.

Tier 4 - Negative / null: trials that did not show meaningful benefit on primary outcomes.

Why the null studies stay in

A credible research brief should not imply that every mind-body intervention works in every setting. Including null trials makes the boundary of the evidence visible and helps distinguish a research program from marketing copy.

Important

Independent studies support individual techniques and mechanisms. They do not, by themselves, clinically validate the complete Alothia protocol. Alothia measures its own protocol separately.

Evidence tier	Primary interpretation
Tier 1	Best-supported adjunctive outcomes: pain, anxiety, sleep, HR/HRV, and blood pressure.
Tier 2	Promising surgical recovery and wound-healing markers; replication remains limited.
Tier 3	Immune and inflammatory effects are plausible, but typically modest and variable.
Tier 4	Negative trials define where benefit has not been demonstrated.

Cross-outcome caution: evidence for one biomarker in one population does not establish consistency across wound types or patient populations. The wound-healing section shows conflicting findings within one outcome category.

**2 | TIER 1 - STRONG EVIDENCE**

Pain & Anxiety

Perioperative music and audio interventions show the clearest independent support for reducing subjective pain and anxiety. Evidence for opioid reduction and other hard clinical outcomes is less consistent.

Li, G., et al. (2024; published online 2023). Effects of Perioperative Music Therapy on Patients with Postoperative Pain and Anxiety: A Systematic Review and Meta-Analysis.

19 randomized controlled trials; n=1,803. The source review reports significant pooled reductions in postoperative pain and anxiety (pain SMD about -0.90; anxiety SMD about -0.75).

[View study / DOI](#)

Patiyal, N., et al. (2021). Effect of Music Therapy on Pain, Anxiety, and Use of Opioids Among Patients Undergoing Orthopedic Surgery: A Systematic Review and Meta-Analysis.

13 studies; n=778. Pain SMD -0.27 (p=0.002) and anxiety SMD -0.40 (p=0.0009). Opioid use was not significantly different.

[View study / DOI](#)

Lin, C.-L., et al. (2020). Effect of Music Therapy on Pain After Orthopedic Surgery - A Systematic Review and Meta-Analysis.

9 RCTs. Overall findings favored music for postoperative pain. The paper reports an internal inconsistency in one music-therapy subgroup: SMD -0.31 with a 95% CI crossing zero while listing p=0.02. Transparency note: do not rely on that isolated subgroup estimate without checking the original analysis.

[View study / DOI](#)

Clinical takeaway

For perioperative pain and anxiety, the evidence is strongest when framed as an adjunctive intervention. Music/audio-based interventions can reduce subjective pain and anxiety, but effects on opioid consumption and other hard clinical outcomes are less consistent.

**3 | TIER 1 - STRONG EVIDENCE**

Sleep, HR/HRV & Blood Pressure

Controlled breathing, mindfulness-based sleep interventions, and therapeutic audio have been studied across acute autonomic regulation, blood pressure, subjective sleep quality, pain, and anxiety.

Shao, R., Man, I.S.C., & Lee, T.M.C. (2024). The Effect of Slow-Paced Breathing on Cardiovascular and Emotion Functions: A Meta-Analysis and Systematic Review.

31 studies; n=1,133. Strongest evidence was for acute cardiovascular changes, including heart rate, HRV, and systolic blood pressure. Long-term effects were less certain.

[View study / DOI](#)

Chaddha, A., et al. (2019). Device and Non-Device-Guided Slow Breathing to Reduce Blood Pressure: A Systematic Review and Meta-Analysis.

17 RCTs. Pooled blood-pressure change: systolic -5.62 mmHg and diastolic -2.97 mmHg. Authors noted high heterogeneity.

[View study / DOI](#)

Wang, Y.-Y., et al. (2020). Mindfulness-Based Interventions for Insomnia: A Meta-Analysis of Randomized Controlled Trials.

5 RCTs; n=520. Strong improvement in subjective sleep quality (PSQI; SMD about -1.01), while objective sleep-efficiency findings were not significant.

[View study / DOI](#)

Loong, L.J., et al. (2022). The Effect of Binaural Beat Audio on Operative Pain and Anxiety in Cataract Surgery under Topical Anaesthesia: A Randomized Controlled Trial.

n=61. Positive findings across operative pain, anxiety, and physiological measures. Limitation: no music-only control, so the specific contribution of binaural beats cannot be isolated from the overall audio intervention.

[View study / DOI](#)

Interpretation

The strongest signal is for acute cardiovascular regulation and subjective sleep improvement. Long-term effects, objective sleep measures, and the specific contribution of binaural beats remain less certain.

**4 | TIER 2 - MODERATE /
PRELIMINARY**

Wound Healing & Recovery

These studies provide direct human evidence that relaxation and guided-imagery interventions may influence objective recovery markers. The evidence is encouraging, but smaller and less replicated than the evidence for pain and anxiety.

Broadbent, E., et al. (2012). A Brief Relaxation Intervention Reduces Stress and Improves Surgical Wound Healing Response: A Randomised Trial.

n=60 completed. Surgical patients receiving relaxation and guided imagery showed greater hydroxyproline deposition, an objective marker of collagen deposition and wound healing (difference in means 0.35; $p=0.03$). See the re-epithelialization subsection for conflicting diabetic foot ulcer findings within this outcome category.

[View study / DOI](#)

Holden-Lund, C. (1988). Effects of Relaxation with Guided Imagery on Surgical Stress and Wound Healing.

n=24. The guided-imagery group showed lower anxiety, lower urinary cortisol one day after surgery, and less wound erythema. The accessible abstract does not provide a clean extractable effect magnitude for the wound outcome.

[View study / DOI](#)

Lu, Y.-J., et al. (2022). Effect of Guided Imagery Meditation During Laparoscopic Cholecystectomy on Reducing Anxiety: A Randomized Controlled Trial.

n=68. The study reported lower postoperative pain (2.11 vs 4.00), improved sleep, and reduced anxiety in the guided imagery group. Single, relatively small RCT; replication is important before treating the effect size as generalizable.

[View study / DOI](#)

Robinson, H., Norton, S., Jarrett, P., & Broadbent, E. (2017). The Effects of Psychological Interventions on Wound Healing: A Systematic Review of Randomized Trials.

19 studies. Reported standardized effects ranged widely (about 0.13 to 3.21 depending on study/outcome). The authors noted publication bias and substantial variation in methods.

[View study / DOI](#)

Re-epithelialization and Barrier Recovery

Objective metrics for skin repair include re-epithelialization and barrier recovery, though findings vary considerably by study.



Diabetic Foot Ulcers - Conflicting Evidence

Findings on diabetic foot ulcer healing are inconsistent across the available literature. An older, smaller trial reported that biofeedback-assisted relaxation training resulted in 87.5% of foot ulcers healing compared with 43.8% in controls (Rice et al., 2001). However, two more recent and more rigorous sources found no such effect: a 2025 systematic review of three RCTs found no convincing evidence that relaxation was superior to standard care or neutral imagery, and a 2023 pilot RCT found no between-group healing superiority (see Tier 4).

We present this disagreement without resolving it. The Rice et al. finding is dramatic, but it is decades old, from a single small trial, and has not been replicated by later, better-designed research. Readers should weight the more recent and methodologically stronger null findings more heavily than the older positive result.

Rice, B., Kalker, A.J., Schindler, J.V., & Dixon, R.M. (2001). Effect of Biofeedback-Assisted Relaxation Training on Foot Ulcer Healing. *Journal of the American Podiatric Medical Association*, 91(3), 132-141.

Prospective randomized study; n=32. Fourteen of 16 ulcers (87.5%) healed in the biofeedback-assisted relaxation group compared with 7 of 16 (43.8%) in the control group. The finding is dramatic but comes from one small, older trial and has not been replicated by the more recent studies summarized in Tier 4.

[View study / DOI](#)

Other Barrier Recovery Findings

Robinson, H., Jarrett, P., & Broadbent, E. (2015). The Effects of Relaxation Before or After Skin Damage on Skin Barrier Recovery: A Preliminary Study. *Psychosomatic Medicine*, 77(8), 844-852.

n=121 healthy adults. Twenty minutes of guided relaxation, delivered before or after tape stripping, improved skin barrier recovery measured by transepidermal water loss compared with quiet reading ($F(2,92)=3.58$; $p=0.032$). The authors described the study as preliminary and called for replication in clinical wounds.

[View study / DOI](#)

Shetty, S.P., et al. (2024). The Impact of Bhramari Pranayama and Om Chanting on Post-operative Wound Healing: A Focus on the Nitric Oxide Pathway. *Cureus*, 16(11), e73511.

The trial reported improved wound-healing grades and higher endothelial nitric oxide synthase (eNOS) levels in intervention groups ($p<0.001$). It was published in *Cureus*, a journal with lower editorial selectivity than most sources cited in this brief; treat the finding as preliminary pending independent replication.

[View study / DOI](#)

Interpretation

Objective surgical and barrier-recovery markers make this evidence relevant to recovery research. At the same time, wound type, sample size, publication quality, methodological variation, and limited replication prevent broad claims. The evidence suggests possible support for wound healing in some contexts, but findings are inconsistent across wound types and patient populations.



Immune & Inflammatory Outcomes

Mind-body interventions can produce measurable changes in selected immune, inflammatory, and physiological stress markers. Across the literature, effects vary substantially by biomarker, comparator, intervention, and study quality.

Oyler, D.L., Hulett, J.M., Pratscher, S.D., et al. (2023). The Influence of Meditative Interventions on Immune Functioning: A Meta-Analysis.

105 studies. Overall immune-function effect was small but statistically significant (reported g about 0.18). Effects varied substantially by intervention and biomarker.

[View study / DOI](#)

Black, D.S., & Slavich, G.M. (2016). Mindfulness Meditation and the Immune System: A Systematic Review of Randomized Controlled Trials.

The review found possible effects on selected inflammatory, cell-mediated immunity, and biological-aging markers, but characterized the findings as tentative and heterogeneous.

[View study / DOI](#)

Morgan, N., Irwin, M.R., Chung, M., & Wang, C. (2014). The Effects of Mind-Body Therapies on the Immune System: Meta-Analysis.

34 RCTs; $n=2,219$. Evidence favored reductions in some inflammatory markers, including CRP (reported effect size about 0.58 in the source review), while IL-6 and TNF-alpha were not consistently significant.

[View study / DOI](#)

Rådmark, L., Sidorchuk, A., Osika, W., & Niemi, M. (2019). A Systematic Review and Meta-Analysis of the Impact of Mindfulness Based Interventions on Heart Rate Variability and Inflammatory Markers.

10 studies; $n=607$. Results were mixed and inconclusive. The IL-6 pooled estimate was essentially null in the review summary (Hedges' g about 0.02).

[View study / DOI](#)

Pascoe, M.C., Thompson, D.R., Jenkins, Z.M., & Ski, C.F. (2017). Mindfulness Mediates the Physiological Markers of Stress: Systematic Review and Meta-Analysis.

45 studies were reviewed. Compared with active controls, meditation was associated with reductions in selected physiological stress markers, including cortisol, systolic blood pressure, and heart rate.

[View study / DOI](#)



Schakel, L., Veldhuijzen, D.S., Cromptoets, P.I., et al. (2019). Effectiveness of Stress-Reducing Interventions on the Response to Challenges to the Immune System: A Meta-Analytic Review.

Meta-analytic review of stress-reduction interventions and experimentally challenged immune responses. Useful as mechanistic/context evidence rather than proof of a specific clinical recovery outcome.

[View study / DOI](#)

Bhasin, M.K., Dusek, J.A., Chang, B.H., et al. (2013). Relaxation Response Induces Temporal Transcriptome Changes in Energy Metabolism, Insulin Secretion and Inflammatory Pathways. PLOS ONE, 8(5), e62817.

Peripheral-blood transcriptome measurements before, immediately after, and 15 minutes after relaxation-response practice showed temporal gene-expression changes involving energy metabolism, insulin secretion, and inflammatory or stress-related pathways. This is mechanistic evidence from healthy practitioners and novices, not proof of a clinical recovery outcome.

[View study / DOI](#)

Interpretation

Statistical significance in a pooled biomarker does not automatically establish clinically important recovery benefit. These findings are best treated as mechanistic context and as support for carefully defined prospective measurement.

6 | TIER 4 - NEGATIVE / NULL FINDINGS

Where Benefit Was Not Demonstrated

These studies are included deliberately. They show that intervention type, timing, population, comparator, dose, and outcome selection matter - and that 'mind-body' is not one uniform treatment.

Fu, V.X., et al. (2024). Intraoperative Music to Promote Patient Outcome (IMPROMPTU): A Double-Blind Randomized Controlled Trial.

n=70; esophagogastrectomy surgery. The primary postoperative pain outcome was not significantly different (reported MD -0.28; p=0.236), and there were no meaningful differences in opioids, complications, or length of stay.

[View study / DOI](#)

**Haase, O., et al. (2005). Guided Imagery and Relaxation in Conventional Colorectal Resections: A Randomized, Controlled, Partially Blinded Trial.**

n=60. Guided imagery / progressive muscle relaxation did not produce significant differences in analgesic use, pain, complications, or length of stay.

[View study / DOI](#)

Chester, S.J., Tyack, Z., De Young, A., et al. (2018). Efficacy of Hypnosis on Pain, Wound-Healing, Anxiety, and Stress in Children with Acute Burn Injuries.

n=62. Primary pain outcome was not significant ($p=0.12$) and wound healing was not significant ($p=0.81$). Some benefit was observed for anxiety and heart rate.

[View study / DOI](#)

Farrukh, D.N., et al. (2025). Effectiveness of Relaxation Therapy for Wound Healing in Patients with Diabetic Foot Ulcers: A Systematic Review of Randomized Control Trials.

Preprint systematic review; 3 RCTs, n=75. Within-group improvements were reported, but there was no convincing evidence that relaxation was superior to standard care or neutral imagery. Preprint: not yet peer-reviewed at the time of this evidence brief.

[View study / DOI](#)

Ferreira, G., et al. (2023). Relaxation Intervention to Improve Diabetic Foot Ulcer Healing: Results from a Pilot Randomized Controlled Study.

Pilot trial registered as NCT04652999. The study was primarily designed for feasibility and acceptability; between-group healing superiority was not established. Improvements over time occurred in both relaxation and active-control imagery groups.

[View study / DOI](#)

Why this matters

Negative results do not invalidate positive trials. They define the limits of current evidence and reinforce the need for protocol-specific studies with prospectively defined outcomes.

**7 | EVIDENCE
INTERPRETATION**

Transparency, Context & Supporting Evidence

The evidence base is clinically relevant only when its boundaries remain visible. This section identifies supporting studies and the rules used to interpret the research throughout this brief.

Additional relevant studies



Kaushik, D., et al. (2022). Effects of Yoga in Men with Prostate Cancer on Quality of Life and Immune Response: A Pilot Randomized Controlled Trial.

Pilot RCT examining quality-of-life and immune-response outcomes in men with prostate cancer. Relevant to immune modulation, but it should be treated as supportive/adjacent evidence rather than direct evidence for postoperative Alothia protocols.

[View study / DOI](#)

Stoerkel, E., et al. (2018). Effectiveness of a Self-Care Toolkit for Surgical Breast Cancer Patients in a Military Treatment Facility.

n=100. The toolkit combined breathing, progressive muscle relaxation, meditation, guided imagery, self-hypnosis, and acupuncture. It is useful as evidence for multimodal perioperative self-care, but it cannot isolate the effect of any single component.

[View study / DOI](#)

Publication and interpretation rules

- Every study links directly to the DOI or primary journal record.
- Statistical significance is not presented as clinical importance without context.
- A component study is not treated as proof that the complete Alothia protocol has the same effect size.
- Null findings remain visible as part of the evidence map.
- Small samples, heterogeneous interventions, active controls, publication bias, and inability to isolate mechanisms are flagged where applicable.
- Source quality variance: citations span high-impact journals, preprints, and lower-selectivity publications. Source quality is flagged explicitly where relevant rather than presented uniformly.
- Unmeasured contextual variables: clinician belief, patient expectancy, and therapeutic environment are rarely reported or controlled in the underlying studies.
- The Lin et al. subgroup inconsistency remains visible as an example of critical evidence review.

Plain-language summary

The strongest independent clinical evidence supports reductions in pain and anxiety and improvements in some cardiovascular and sleep-related measures. Evidence suggests that some interventions may support wound healing in some contexts, though findings are inconsistent across wound types and patient populations. Immune effects are plausible and measurable in some studies, but overall effects are mixed and generally modest.



Context, Belief & the Limits of What a Study Can Isolate

A note on variables that are clinically meaningful but commonly unmeasured in mind-body research.

Every study in this brief reports an outcome measured under specific conditions: a specific clinician, a specific setting, a specific patient population, and a specific moment in that patient's illness or recovery. What these studies generally do not - and often cannot - report is the quality of the therapeutic relationship, the patient's belief in the intervention, the clinician's own confidence in what was being delivered, or the broader emotional context of the room.

This is not a minor caveat. Research on expectancy and placebo response shows that belief and context can measurably affect physiological outcomes. In a 2007 study, hotel room attendants who were told that their daily work qualified as exercise showed measurable improvements in blood pressure, weight, body-fat percentage, waist-to-hip ratio, and BMI within four weeks, without a reported change in actual behavior (Crum & Langer, 2007). Earlier work found that nursing-home residents given greater choice and personal responsibility over daily events showed sustained benefits in health-related ratings and mortality indicators at 18-month follow-up (Rodin & Langer, 1977). These interventions centered on information, autonomy, and context rather than a pharmacological treatment.

Crum, A.J., & Langer, E.J. (2007). Mind-Set Matters: Exercise and the Placebo Effect. *Psychological Science*, 18(2), 165-171.

Hotel room attendants told that their daily work qualified as exercise showed changes in weight, blood pressure, body fat, waist-to-hip ratio, and BMI after four weeks, without a reported change in actual behavior.

[View study / DOI](#)

Rodin, J., & Langer, E.J. (1977). Long-Term Effects of a Control-Relevant Intervention with the Institutionalized Aged. *Journal of Personality and Social Psychology*, 35(12), 897-902.

At 18-month follow-up, nursing-home residents who received an intervention designed to increase choice and personal responsibility showed sustained beneficial effects in nurses' ratings and health and mortality indicators.

[View study / DOI](#)

This matters directly for how the findings in this brief should be read. A positive trial of guided imagery or relaxation may capture effects of the technique alongside attention, hope, expectancy, or the clinical environment - and many published trials are not designed to separate these factors cleanly. Conversely, a null trial may reflect an ineffective technique, or it may occur in a setting where expectancy, delivery, or the surrounding environment does not support the state the intervention is intended to produce.



Interpretive boundary

This context is not offered to excuse null findings or inflate positive ones. The studies discussed here generally do not fully isolate technique from belief, context, and relationship. Readers - particularly clinicians considering how an intervention is introduced to patients - should weigh this alongside the reported effect sizes.

9 | INTERNAL RESEARCH

Internal Research: Methods and Early Observations

Alothia is built on techniques - including meditation, guided imagery, controlled breathing, and therapeutic audio - that have been studied independently across pain, anxiety, sleep, stress regulation, and recovery.

Scientific foundation, not clinical validation

Published research has reported meaningful benefits in several of these areas, while other well-designed trials have produced mixed or null findings. For this reason, Alothia views the existing literature as a scientific foundation for further study - not clinical validation of the complete Alothia protocol.

What We Have Observed

Alothia's early internal research has explored whether responses to its meditation protocols can be measured physiologically and whether those responses change with repeated use.

EEG

Using the NeuroCrown, participants' brainwave activity was monitored while they completed Alothia meditation sessions. Early sessions frequently showed EEG activity moving in the same direction and temporal sequence as the experienced meditator whose brainwave progression informed the protocol.

87%	92%	100%
measurable EEG response during first session	by the second session	by the third session

With repeated use over multiple weeks, participants also demonstrated progressive convergence toward the reference EEG pattern. All participants observed through repeated use eventually demonstrated EEG-frequency patterns approaching the reference meditator's measured pattern within an approximately 30% margin.

The approximately 30% margin compares each participant's repeated-use EEG-frequency trajectory with the reference meditator's trajectory; it is not a clinical norm or control-group comparison. The exploratory calculation was not prospectively defined and should not be interpreted as a validated effect size.



Research question

Can repeated exposure to a standardized meditation protocol help users progressively and reproducibly approach EEG states observed in highly experienced meditators?

9 | INTERNAL RESEARCH

Measuring Autonomic Response

Alothia subsequently expanded its testing using the Polar H10 ECG chest sensor to examine beat-to-beat cardiac activity, heart rate, and HRV.

Measurement validity

The Polar H10 records electrical cardiac signals and RR intervals. Independent research has found substantial agreement between Polar H10-derived HRV measurements and clinical Holter ECG, including testing in patients undergoing major abdominal surgery.

Yang, J., & Ben-Menachem, E. (2024; published online 2023). Accuracy and Clinical Utility of Heart Rate Variability Derived from a Wearable Heart Rate Monitor in Patients Undergoing Major Abdominal Surgery. *Journal of Clinical Monitoring and Computing*, 38(2), 433-443.

In 23 patients, simultaneous five-minute recordings showed substantial agreement between Polar H10 and clinical Holter ECG for average R-R interval, total power, and other HRV indices.

[View study / DOI](#)

Exploratory internal observations

In an exploratory subset of approximately 22 participants, changes in cardiovascular and autonomic activity were observed around the transition into controlled breathing and sustained attention to the Alothia soundscape. In some participants, physiological stabilization appeared within approximately 10 minutes.

Some participants underwent repeated baseline measurements before their first session, with additional measurements during and after use extending approximately 12, 16, 24 and, when feasible, 36 hours afterward.

Internal observations suggested changes from each participant's own baseline that extended beyond the meditation session. Across certain monitored cardiovascular and autonomic measures, initial-session differences were approximately 13-20%. Some participants using Alothia repeatedly over two to four weeks showed changes greater than those observed after initial exposure.

The 13-20% figures describe within-participant change relative to each participant's own baseline, not comparison with a clinical norm or control group. They are reported for transparency and should not be interpreted as validated effect sizes.



Descriptive, not established clinical effects

These percentages remain descriptive internal observations rather than statistically established clinical effects.

Open question for future study

These early observations raise a specific question: whether physiological regulation can begin before a person consciously perceives a change, and whether repeated exposure changes the consistency or durability of that response. The current dataset is not designed or powered to answer this. It is the basis for the prospective study design outlined below.

9 | INTERNAL RESEARCH

Where the Research Goes Next

Future clinical pilots are intended to move Alothia from exploratory internal observation toward prospectively defined and independently evaluated research.

A broader measurement framework

Measurement may expand beyond EEG and HRV to include respiration, electrodermal activity, blood pressure, sleep/activity, and additional autonomic signals, alongside validated patient-reported measures of pain, anxiety, stress, sleep, and recovery.

The goal is not simply to collect more biometric data. It is to determine:

- Does a measurable response occur?
- How quickly does it begin, and how long does it persist?
- Does repeated use change the response?
- Do physiological changes correspond with meaningful improvements in the patient's recovery experience?

Where findings warrant further investigation, Alothia intends to pursue appropriate controls, independent analysis, research partnerships, and formal clinical study.

A Note on Evidence

Alothia's internal findings are exploratory and hypothesis-generating. They have not yet been independently replicated or established as proof of clinical efficacy. Independent research cited throughout this report supports individual techniques and mechanisms incorporated into Alothia; it does not independently validate the complete Alothia protocol.



Proposed outcome domains

Patient-reported	Physiological	Study design
Pain, anxiety, stress, sleep quality, recovery experience, adherence	EEG, HR/HRV, respiration, electrodermal activity, blood pressure, sleep/activity	Prospective endpoints, appropriate controls, independent analysis, research partnerships

10 | SOURCES

References & Primary Sources

The links below are live in the PDF and connect to DOI or primary-source records. Study descriptions preserve the evidence boundaries stated throughout the brief.

- Li, G., et al. (2024; published online 2023). Effects of Perioperative Music Therapy on Patients with Postoperative Pain and Anxiety: A Systematic Review and Meta-Analysis.
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Research-use disclaimer

This brief is prepared for informational and protocol-development purposes. It is not a claim that Alothia has completed independent clinical validation, and it does not guarantee any outcome for an individual patient.