



Tibial Nerve Stimulation (TNS) Alternatives

Vivally™ – Big news: In 2024, the FDA cleared its first surface-electrode TNS device. Its Velcro ankle cuff places surface electrodes similar to PTNS and TTNS. According to the manufacturer, integrated electronics verify stimulation during treatment. It is expensive (Cost: \$ Thousands).

Revi™, an implantable neuromodulation system, is an FDA-cleared therapy. It wirelessly stimulates the Tibial nerve. (Think of the way an electric toothbrush recharges through its base - Cost: \$ Tens of Thousands).

PTNS (Percutaneous TNS) A clinician places a very thin acupuncture needle in the correct anatomical region and then confirms that electrical stimulation is likely to be successful by observing your response. Annual costs may exceed \$1,500, with patient copays often exceeding \$500/A. Access and scheduling are issues, but it is the most widely used, FDA-cleared, TNS approach in the U.S. (Cost: < \$1000/A up to a \$ few thousand per annum without insurance.)

TTNS (Transcutaneous TNS), has been extensively studied and is commonly used in many countries outside the U.S. It uses surface electrodes. Published studies support its efficacy. Costs: device, ~\$50; at-home treatment <\$1, Total <\$100/A. **A few Americans have used this therapy, but it is not FDA-cleared.**



TNS Comparisons

NB: This information is subject to change. Patients should obtain current information before committing to any TNS therapy.

Criteria	PTNS	TTNS	Vivally	Revi
Stimulation Delivery	Needle and Surface- Pad Electrode	Two Surface-Pad Electrodes	Two surface-pad electrodes with manufacturer-described electronic verification of stimulation.	Wireless Implant (Think how your toothbrush battery gets its charge.)
Cost	Typically \$1500/A and up; copays, \$500/A and higher.	TENS devices cost ~\$50+ plus reusable pads @ ~\$1/treatment	\$4,995 plus prescription (Avation website, April 2026)	Likely in the area of \$Tens of thousands.
Convenience	Clinic-administered; monthly after 12 startup weeks.	Self-administered at home; monthly after 12 startup weeks.	Self-administered at home; twice monthly.	Self-administered at home; 2–3 times per week.
Regulatory Status	FDA cleared; most commonly used U.S. TNS therapy	TENS devices are not FDA cleared for OAB therapy.	FDA cleared in 2024.	FDA cleared.
Physician Oversight	Yes	No	Yes	Yes