

Evidence Discussion (PND 10)

- Though PET has well established roles in disorders other than peripheral neuropathies, the resolution of PET is on the order of millimeters, which limits its usefulness in evaluation of peripheral nerve disorders.³ As a result, PET may be most useful for nerve injury in combination with higher resolution structural imaging such as MRI.⁴
- Fusion PET/MRIs role in peripheral nerve injuries is less defined and still largely limited to animal studies as an alternative non-invasive diagnostic modality.⁴
- At this time, the use of PET/MRI for Peripheral Nerve Disease is considered not medically necessary.

1. [What is Nuclear Medicine and Molecular Imaging.pdf](#). Society of Nuclear Medicine & Molecular Imaging. Accessed 2/23/2024.
2. Choi JS, Seo HG, Oh BM, Choi H, Cheon GJ, Lee SU, Lee SH. ¹⁸ F-FDG uptake in denervated muscles of patients with peripheral nerve injury. *Ann Clin Transl Neurol*. 2019 Nov;6(11):2175-2185. doi: 10.1002/acn3.50899. Epub 2019 Oct 6. PMID: 31588693; PMCID: PMC6856607.
3. Luzhansky ID, Sudlow LC, Brogan DM, Wood MD, Berezin MY. Imaging in the repair of peripheral nerve injury. *Nanomedicine (Lond)*. 2019 Oct;14(20):2659-2677. doi: 10.2217/nnm-2019-0115. Epub 2019 Oct 15. PMID: 31612779; PMCID: PMC6886568.
4. Tan RES, Jeyaratnam S, Lim AYT. Updates in peripheral nerve surgery of the upper extremity: diagnosis and treatment options. *Ann Transl Med*. 2023 Oct 25;11(11):391. doi: 10.21037/atm-23-1500. Epub 2023 Sep 18. PMID: 37970602; PMCID: PMC10632574.