

New pain treatment tested in humans

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Nerve growth factor signals through receptors of the tropomyosin-related kinase (Trk) family, and research in animals has shown that inhibitors of Trks A, B, and C can reduce pain. Now a new study in the *British Journal of Clinical Pharmacology* provides the first demonstration of pain relief in humans using a Trk inhibitor.

The inhibitor was compared with pregabalin, ibuprofen, and placebo, in randomized, double blind, cross-over study with 20 participants.

"One striking aspect of this study is the use of a pain challenge model to assess this novel Trk mechanism. By determining the effect of a single dose of the drug in healthy subjects, we were able to provide an early demonstration of analgesia without the need to run a large patient study," said lead author Dr. Peter Loudon, of Pfizer WRD, in the UK.

"Furthermore, the use of a range of different pain challenge models has provided some information on the quality of effect, which may help predict the best patient population for future studies."

More information: Peter Loudon et al. Demonstration of an anti-hyperalgesic effect of a novel pan Trk inhibitor PF-06273340 in a battery of human evoked pain models., *British Journal of Clinical Pharmacology* (2017). [DOI: 10.1111/bcp.13448](https://doi.org/10.1111/bcp.13448)

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