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**Keywords** specific class of amine oxidase (AO) inhibitors, traumatic neuropathy, neurogenic inflammation

Traumatic neuropathies are caused by mechanical nerve damage and mediated by the sensitization of the central and peripheral nervous system. These conditions are characterized by severe, debilitating pain. Neurogenic inflammation mediated by vasodilatation, plasma protein extravasation and immune cell activation as a result of pro-inflammatory neuropeptide release from activated sensory nerve terminals. It is an important mechanism of several inflammatory diseases and chronic pain states (rheumatoid arthritis, dermatitis, inflammatory bowel diseases).

As a result of intensive studies, the our research team have made the unexpected observation that SSAO inhibition effectively inhibits neuropathic mechanical hyperalgesia both in rat and mouse models of traumatic nerve injury, as well as neurogenic inflammatory hyperalgesia.

We showed for the first time that two SSAO/VAP-1 inhibitors, significantly decreased sciatic nerve ligation-induced neuropathic mechanical allodynia/hyperalgesia (decrease of the touch sensitivity threshold), as well neurogenic inflammatory hyperalgesia developing in response to central sensitization mechanisms, but not or only moderately thermal hyperalgesia (cold in neuropathy and heat in inflammation, respectively) mediated by peripheral sensitization processes.

According to this patent there is an ongoing project to finish a phase1 study.



We are seeking for: drug developers, license partners

IP status Patented in CH, ES, DE, FR, GB, HU, IE, IT and USA. The disclosed method and technology is owned by the University of Pécs.

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