

## What is Neuropathic pain? What are the causes?

Neuropathic pain is observed in a large variety of disorders that vary from metabolic and infectious disorders, which affect the small, afferent sensory nerve fibers such as sarcoidosis to diseases of the central nervous system like multiple sclerosis.

### Symptoms of neuropathic pain:

- Allodynia (Increased sensitivity to non-noxious stimuli)
- Tingling and Numbness
- Spontaneous pain or pain that occurs without a trigger
- Difficulty Sleeping or Resting
- Emotional Problems associated with chronic pain (eg. anxiety, depression, social isolation)

### Common Disease which can cause neuropathic pain:

- Diabetes
- Stroke
- Multiple Sclerosis
- Multiple Myeloma

## What is ARA-290? Could it be the solution?

ARA 290 is an 11-amino acid linear peptide and an innate repair receptor (IRR) agonist. The IRR is a heteromer of the erythropoietin receptor and the beta-common (CD131) receptor, which simultaneously activates anti-inflammatory and tissue repair pathways.

Experimental data suggest that after peripheral nerve injury, the IRR is unregulated in the spinal cord and modulates the neurogenic inflammatory response.

### Targeting the innate repaired receptor to treat neuropathy:

In this study, ARA290 displayed efficacy in preclinical models of disease, including neuropathy, without associated adverse effects. In the models from this study, this peptide has been shown to reprogram a proinflammatory, tissue-damaging milieu into one of healing and repair.

### Indications:

- Reduces pain

