

ARA 290 – cibentide

This peptide is in clinical trials where it is being evaluated for a variety of nerve related conditions.

Benefits of the ARA 290 peptide based on the latest information:

- Relief from neuropathic pain by reducing inflammation and promoting nerve repair, effective in conditions like diabetic neuropathy and sarcoidosis.
- Potent anti-inflammatory effects through activation of innate repair receptor pathways, reducing systemic inflammation in various inflammatory and autoimmune diseases.
- Improvement in metabolic control in type 2 diabetes, including reductions in HbA1c and lipid profile enhancements.
- Modulation of immune responses by altering T cell function to suppress inflammation, which may help in autoimmune disorders like multiple sclerosis.
- May promote cognitive function and reduce brain inflammation in neurological conditions like Alzheimer's and traumatic brain injury based on animal studies.
- Safety observed in clinical trials with no serious adverse hematopoietic effects typical of erythropoietin.
- Improves symptoms related to small fiber neuropathy affecting the eyes, especially in patients with sarcoidosis.
- Enhances corneal nerve fiber area significantly after treatment, indicating true regeneration rather than just symptom relief.
- Potentially improves ocular surface health by reducing inflammation and promoting tissue repair.
- No significant adverse effects on retinal thickness or visual acuity observed in clinical studies.
- May contribute to improved autonomic symptoms affecting eye function through nerve repair.
- These effects suggest ARA 290 as a promising treatment for eye conditions involving nerve damage and inflammation, with a focus on corneal nerve health.

ARA 290 peptide could potentially help a person who has experienced nerve damage from ciprofloxacin-induced neuropathy.

ARA 290 works by activating the innate repair receptor, which triggers anti-inflammatory and tissue repair pathways, promoting nerve regeneration and reducing neuropathic pain. It has shown efficacy in multiple types of neuropathies, including small fiber neuropathy and nerve injury models, by promoting nerve fiber regrowth, attenuating inflammation, and improving neuropathic symptoms. Although direct clinical studies on ciprofloxacin nerve damage are not available, the mechanism of action and benefits seen in other neuropathies suggest it could be beneficial for drug-induced nerve damage such as that caused by ciprofloxacin.

Key points:

- Activates innate repair receptor to promote nerve repair and reduce inflammation.
- Proven efficacy in small fiber neuropathy and nerve injury models.
- Demonstrated nerve fiber regeneration, symptom relief, and functional improvement.
- May help restore nerve function impaired by ciprofloxacin toxicity.

ARA 290 peptide has demonstrated significant benefits for corneal nerve fiber regeneration, particularly in patients with small fiber neuropathy associated with sarcoidosis and diabetes.

Key findings:

- In a 28-day, double-blind, placebo-controlled clinical trial, daily subcutaneous administration of 4 mg ARA 290 significantly increased corneal nerve fiber area by 14.5% compared to baseline, indicating true nerve fiber regeneration.
- Doses tested in clinical trials included 1 mg, 4 mg, and 8 mg daily, with 4 mg showing the best balance of efficacy and safety for nerve fiber regrowth.
- Corneal nerve fibers were more responsive to regeneration than peripheral skin fibers, making the cornea an ideal location to assess treatment efficacy noninvasively using corneal confocal microscopy.
- Patients also experienced decreased neuropathic symptoms, improved thermal sensitivity, and better functional capacity, such as longer distance in the 6-minute walk test.

- Similar nerve regeneration and symptom improvements were observed in diabetic patients with small fiber neuropathy using the same dosing regimen.

The effective dose of ARA 290 peptide, based on clinical trials and research, is generally in the range of 2 to 4 mg per administration.

Intravenous doses are typically 2 mg while subcutaneous doses are 4mg. It is commonly administered once daily or every other day by subcutaneous injection. Specific dosing examples from trials include:

- 4 mg once daily subcutaneous injection for diabetic neuropathy and sarcoidosis-related neuropathy, showing symptom improvement and nerve repair.
- Dosage variations include 2–4 mg daily or every other day depending on the condition severity and trial protocols.
- Some studies used doses up to 8 mg daily but 4 mg is typical and well tolerated.
- Cycle durations in research are often around 4 weeks of daily dosing.
- Intravenous dosing in some volunteer studies used 2 mg as a single dose safely.

These dosing regimens demonstrated safety and efficacy in trials addressing neuropathic symptoms, nerve fiber regeneration, and inflammation reduction.

ARA 290 typically provides noticeable benefits within about 28 days of treatment.

Clinical trials have shown that after 28 days of daily subcutaneous administration (usually 4 mg), patients experience significant improvements in neuropathic symptoms, quality of life, and functional capacity. Importantly, corneal nerve fiber regeneration begins to be observed within this 28-day period, with a significant increase in corneal nerve fiber density indicating tissue healing. The peptide initiates rapid regrowth of small nerve fibers and drives anti-inflammatory and tissue repair mechanisms, with sustained effects potentially lasting weeks beyond treatment cessation.