Nerinetide

Also called: NA-1; NoNO

What it is

An investigational 20-amino-acid neuroprotective peptide for stroke; its phase 3 trials missed their primary endpoints.

Approval status

In Clinical Trials. Not approved anywhere. Phase 3 trials ESCAPE-NA1 (1,105 patients, 2020), ESCAPE-NEXT (850, 2025) and the paramedic-delivered FRONTIER trial (532, 2025) all missed their primary outcomes (PubMed abstracts, read October 3, 2026).

Dosing, as printed in the page's Recommended Dosing box

Used in human trials

No manufacturer dose exists for this use: these are amounts given in published trials, not recommendations.

Protocol and source	Dose	Frequency	Duration	Route
Trial: ESCAPE-NA1 **[Human study]** PMID 32087818	2.6 mg/kg (maximum 270 mg)	Single dose	Once, around thrombectomy	Intravenous
Trial: FRONTIER (paramedic-delivered) **[Human study]** PMID 39955120	2.6 mg/kg	Single dose	Within 3 hours of symptom onset	Intravenous

Educational information, not medical advice. Each dose above is tagged with its source: an approved label, a published human study, animal data, or amounts reported by users. None is a recommendation for you. An unapproved compound has no established safe or effective human dose, and products sold for "research use only" are not made or tested for people. Talk to a doctor before acting on anything on this site, including before you start, stop or change any medicine or dose.

Key human evidence

The first 3 of the 10 human studies carded on the page (15 study cards in all):

- **ESCAPE-NA1** (Human, 2020). In 1,105 thrombectomy patients, 61.4% on nerinetide and 59.2% on placebo had a good outcome (mRS 0-2) at 90 days (risk ratio 1.04, p = 0.35); alteplase appeared to inhibit the treatment effect, and serious adverse events were equal. **PMID 32087818**
- **ESCAPE-NEXT** (Human, 2025). In 850 thrombectomy patients without prior thrombolysis, 45% on nerinetide and 46% on placebo achieved mRS 0-2 at 90 days (odds ratio 0.97, p = 0.82); serious adverse events were similar. **PMID 39955119**
- **FRONTIER: given by paramedics** (Human, 2025). In 532 people treated in the field a median of 64 minutes after onset, favourable outcome was 57% against 58% (adjusted odds ratio 1.05); in the 302 with ischaemic stroke, results leaned towards nerinetide without reaching significance. **PMID 39955120**

Interactions

Human interaction studies found on PubMed (search of October 3, 2026):

- With alteplase: nerinetide is cleaved by plasmin when given after alteplase, which nullifies its benefit; in rats, giving nerinetide before alteplase preserved its effect (PMID 33827973)

Side effects and cautions

Reported side effects	Contraindications and cautions
• Serious adverse events similar to placebo in all three phase 3 trials	• Not approved for any use

Five questions to ask

1. Nerinetide is listed here as "In Clinical Trials". What does the evidence on this sheet mean for someone in my situation, and is there an approved treatment I should consider instead?
2. Here are the medicines and supplements I take. Do any of them interact with Nerinetide? This sheet lists the interactions on record.
3. Which side effects should make me stop and call you, for example serious adverse events similar to placebo in all three phase 3 trials?
4. Do any of the cautions on this sheet apply to me, such as: Not approved for any use?
5. What should we check before I start and while I am on it (blood tests, blood pressure, weight), and how often?

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