Danegaptide

Also called: ZP1609; ZP-1609; GAP-134

What it is

An investigational connexin-43 gap junction modifier dipeptide (ZP1609); phase 2 in STEMI negative; phase 1b in diabetic retinopathy safe in 24 patients.

Approval status

In Clinical Trials. Not approved. openFDA's Drugs@FDA index returns no record (searched October 3, 2026). Phase 2 in STEMI (NCT01977755, 591 registered) did not improve myocardial salvage (PubMed 29602883); a 2026 phase 1b in diabetic retinopathy enrolled 24 patients (PubMed 42777083).

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

No established human dose

Danegaptide has been given to people in two trials, but neither abstract read for this page states an amount: two dose levels alongside primary PCI for heart attack, which did not improve myocardial salvage, and an oral form in diabetic retinopathy, which caused no serious adverse events attributed to it.

Educational information, not medical advice. 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 2 human studies carded on the page (13 study cards in all):

• **Phase 2 in STEMI** (Human, 2018). Of 585 patients randomised to two dose levels of danegaptide or placebo alongside primary PCI for STEMI, 243 met the imaging criteria for per-protocol analysis; at three months cardiac MRI showed no difference in myocardial salvage index (63.9, 65.6 and 66.7 for high dose, low dose and placebo), final infarct size or ejection fraction, and clinical outcomes did not differ. Zealand Pharma staff were among the authors. **PMID 29602883**

• **Diabetic retinopathy: preclinical and phase 1b** (Human, 2026). In human retinal microvascular cells and animal models, danegaptide improved inner blood-retina barrier function through connexin-43 and by acting as a functional antagonist of VEGF; in a phase 1b trial in 24 patients with non-proliferative diabetic retinopathy and mild centre-involved macular oedema, oral danegaptide caused no serious adverse events attributed to it. Authors from Breye Therapeutics, which is developing it, took part. **PMID 42777083**

Interactions

A PubMed search for interaction studies of this compound with any drug (October 3, 2026, 0 records) found none in people. That is not evidence that it is safe to combine with anything.

Side effects and cautions

Reported side effects	Contraindications and cautions
• No difference in clinical outcomes from placebo in the 585-patient STEMI trial • No serious drug-related adverse events in the 24-patient retinopathy phase 1b	• Not approved for any use

Five questions to ask

1. Danegaptide 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 Danegaptide? This sheet records none published, which does not mean none exist.
3. Which side effects should make me stop and call you, for example no difference in clinical outcomes from placebo in the 585-patient stemi trial?
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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