Pentigetide (IgE Pentapeptide)

Also called: Pentigetide; IgE pentapeptide; Human IgE pentapeptide; HEPP; Pentyde; Asp-Ser-Asp-Pro-Arg; DSDPR; Hamburger pentapeptide

What it is

Pentigetide (the human IgE pentapeptide / HEPP, brand Pentyde) is the synthetic pentapeptide Asp-Ser-Asp-Pro-Arg, drawn from a reported IgE epsilon-chain sequence and developed as an anti-allergy agent. Topical pentigetide reduced allergic-rhinitis and conjunctivitis symptoms versus placebo in human trials (PMIDs 1952297, 1903616), but a four-laboratory study found it does NOT compete with IgE for mast-cell/basophil receptors (PMID 67091), its mechanism was never confirmed, and it was never approved.

Approval status

Research Chemical. Not approved: Drugs@FDA and the openFDA label endpoint hold no approved application or label for pentigetide / Pentyde (searched November 7, 2026). It reached multicentre human trials for allergic rhinitis and conjunctivitis in the late 1980s-early 1990s (developer Immunetech Pharmaceuticals) but was never approved in any country, and development was discontinued — in part because the proposed IgE-blocking mechanism could not be independently confirmed.

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

No established human dose

Pentigetide was given to people only inside clinical trials of an investigational, never-approved drug, as topical formulations (a nasal solution and eye drops) applied under study supervision; the exact trial regimens, with their sources, are in the studies below. Those are regimens for an abandoned agent, not guidance: there is no approved product, no established current dose, and no amount is printed here for use.

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 first 3 of the 4 human studies carded on the page (6 study cards in all):

• **Pentigetide nasal solution reduces seasonal-allergic-rhinitis symptoms (RCT)** (Human, 1991). A randomised, multicentre, double-blind, placebo-controlled trial in 431 patients with seasonal allergic rhinitis gave pentigetide (Pentyde) nasal solution four times daily for two weeks. Pentigetide produced a statistically significant greater reduction in the frequency (p=.004) and severity (p=.05) of total nasal symptoms (sneezing, congestion, rhinorrhoea) than placebo, with consistently lower daily diary scores and an adverse-event profile like placebo (no sedation). A positive human interventional result. **PMID 1952297**

• **Pentigetide eye drops vs cromolyn for allergic conjunctivitis (RCT)** (Human, 1991). A randomised, double-blind, parallel-group trial (50 patients) compared pentigetideophthalmic solution with cromolyn sodium over two weeks in allergic conjunctivitis. Both physicians and patients rated the pentigetide group significantly more improved overall, with greater improvement in hyperaemia, oedema, lacrimation and itching; mean symptom severity fell 64% with pentigetide vs 46% with cromolyn, and adverse events were minor in both arms. An active-controlled human result. **PMID 1903616**

• **Intranasal IgE pentapeptide beats placebo in allergic rhinitis** (Human, 1987). A double-blind, placebo-controlled trial in 30 patients with IgE-mediated allergic rhinitis found statistically and clinically significant improvement with intranasal IgE pentapeptide (HEPP) solution versus placebo, and reported the peptide to be safe — an earlier controlled human signal of symptom benefit. **PMID 3578925**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 7, 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
• In the 431-patient rhinitis RCT, adverse events were similar to placebo, with no sedation or fatigue (PMID 1952297) • In the conjunctivitis trial, adverse events were minor and comparable to cromolyn, with no abnormal changes in visual acuity or intraocular pressure (PMID 1903616) • Human data are limited to short, topical use in trials of a drug that was never approved and whose mechanism was not confirmed • No safety data support any non-topical or self-directed use; material sold under its names is an unregulated research chemical of unverified content	• Not an approved medicine: no FDA application or label, approved in no country, development discontinued • No established current dose; studied only as short-term topical nasal/ophthalmic solutions in trials • Its proposed IgE-blocking mechanism was not confirmed by independent laboratories (PMID 67091) • Pregnancy, long-term and drug-interaction safety were never characterised

Five questions to ask

1. Pentigetide (IgE Pentapeptide) is listed here as "Research Chemical". 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 Pentigetide (IgE Pentapeptide)? This sheet records none published, which does not mean none exist.
3. Which side effects should make me stop and call you, for example in the 431-patient rhinitis rct?
4. Do any of the cautions on this sheet apply to me, such as: Not an approved medicine: no FDA application or label, approved in no country, development discontinued?
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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