Urotensin II-related peptide

Also called: URP; UTS2B; urotensin-related peptide; urotensin II related peptide; Urotensin-2B

What it is

Urotensin II-related peptide was isolated from rat brain in 2003, sequenced as ACFWKYCV and shown to activate the urotensin II receptor and lower blood pressure in anaesthetised rats (PMID 14550283). In people it has only been measured: plasma levels ran about four times higher in patients admitted with acute heart failure than in matched controls (PMID 23270674), and it is more abundant in unstable carotid plaque and stenosed aortic valves (PMIDs 27375483, 31679703). There is no approved product and no human dose.

Approval status

Research Chemical. Not a medicine anywhere in the sources read: Drugs@FDA (openFDA) and the EMA medicines list return no record for urotensin II-related peptide (November 3, 2026). In people it has only been measured, in plasma and in removed tissue (PMIDs 23270674, 27375483).

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

No established human dose

No study read here gave URP to a person, so there is no human dose to state, not even a research one. The human evidence is measurement: levels in plasma compared between patients and controls, staining of surgically removed plaque and valve tissue, and experiments on human cells in culture.

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 5 human studies carded on the page (21 study cards in all):

• **In the lung lesions of a rare disease** (Human, 2010). Lungs from patients with lymphangioleiomyomatosis, in which abnormal muscle-like cells destroy lung tissue, were stained for URP, urotensin II and the receptor. All three were plentiful in the nodular lesions and overlapped with a marker used to diagnose the disease, and receptor protein was higher than in normal lung. The authors suggest a part in the overgrowth without testing whether blocking it changes anything. **PMID 20433884**

• **Separating two peptides that look alike to an antibody** (Human, 2013). URP and urotensin II share the same ring, so an antibody raised against one can read the other, and the authors built an extraction step that pulls the two apart before each is measured. Applied to 20 people admitted with sudden heart failure and 20 matched controls, it put median plasma URP at roughly 8 pmol/L in the patients against about 2 pmol/L in the controls. Urotensin II was also higher in the patients, by much less. **PMID 23270674**

• **Present in unstable neck-artery plaque** (Human, 2016). Eighty-eight plaques removed in carotid surgery were stained for urotensin II, URP and their shared receptor. All three showed up more strongly in plaques judged unstable than in stable ones, and the amount of staining tracked with calcification, inflammation and how narrow the artery was. The dish experiments in the same paper used urotensin II rather than URP, so they are not evidence about URP itself. **PMID 27375483**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 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
• Every human study on this page measures the peptide in plasma or in removed tissue, or treats human cells in culture (PMIDs 23270674, 27375483, 31679703) • The blood-pressure fall reported for the peptide was in anaesthetised rats (PMID 14550283) • Effects on heart, kidney, brain cells and spine come from rats, isolated organs, cell culture and zebrafish (PMIDs 17900760, 18955095, 20192922, 36453722)	• Not a medicine: there is no approved product, no treatment trial and no human dose • A raised level in disease is an association measured at one moment, not a reason to take or block the peptide • Anything sold under this name has unknown identity, purity and sterility • Tested athletes: see the Sport (WADA) row in the table below

Five questions to ask

1. Urotensin II-related peptide 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 Urotensin II-related peptide? This sheet records none published, which does not mean none exist.
3. Which side effects should make me stop and call you, for example every human study on this page measures the peptide in plasma or in removed tissue?
4. Do any of the cautions on this sheet apply to me, such as: Not a medicine: there is no approved product, no treatment trial and no human dose?
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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