

# Bioactive marine peptides

## Consumer Information and Guidelines

### What is PreCardix?

PreCardix® is a natural solution for elevated blood pressure. PreCardix® contains unique bioactive marine peptides (small fragments of protein) that are derived from cold-water shrimp (*Pandalus borealis*). These peptides have been found in peer-reviewed clinical trials to have a significant blood pressure-lowering effect on elevated blood pressure.

PreCardix® is approved by Health Canada to help maintain healthy blood pressure levels and to support cardiovascular health. PreCardix® has also been approved by the Food and Drug Administration (USA), and the European Food Safety Authority.

Certified



Corporation



## Clinically proven to lower blood pressure naturally

PreCardix® has been studied in people who have mild to moderate elevated blood pressure. When taken daily and over time, PreCardix® is proven to have a statistically significant blood pressure-lowering effect on elevated systolic and diastolic blood pressure.

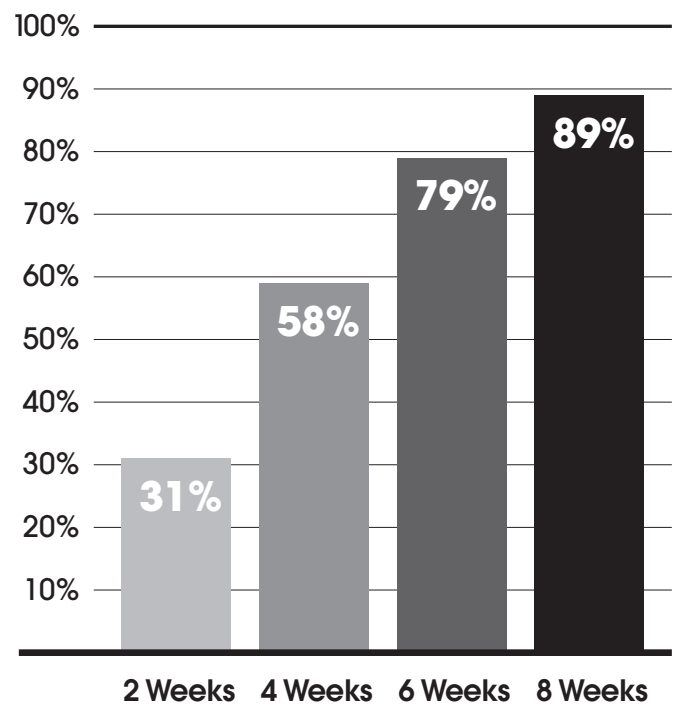
In the gold standard clinical trial, published by the International Journal of Hypertension, 89% of participants experienced a significant blood pressure-lowering effect in 8 weeks.

When blood pressure is taken two values are recorded; systolic blood pressure (SBP) and diastolic blood pressure (DBP). For example: 120/80 mmHg. The first number is systolic blood pressure, the maximum force blood exerts against blood vessels. This number tells you the pressure in blood vessels when the heart is contracting (or beating). The second number is diastolic blood pressure, the lowest force blood exerts against blood vessels. This number tells you the pressure in the arteries when the heart is relaxing (between heart beats).

The blood pressure-lowering effect observed in study participants ranged from 0 to 38 mmHg for systolic blood pressure (the upper reading) and 0 to 28.7 mmHg for diastolic blood pressure (the lower reading) compared to baseline. In the clinical trial, the average decrease compared to baseline was 9.5 mmHg in systolic blood pressure and 4.2 mmHg in diastolic blood pressure.

Some individuals experience a blood pressure-lowering effect after taking PreCardix® for 1-2 weeks, but it can take up to 8 weeks to experience a measurable impact. PreCardix® should be continued for a minimum of 8 weeks to determine if it's right for you.

**89% experienced a significant blood pressure-lowering effect in 8 weeks.**



\*Marealis 13TBHM. Full scale, randomized, double blind, placebo-controlled multi-centred study.

PreCardix® can be taken to prevent elevated blood pressure. Maintaining healthy blood pressure is especially important if there is a family history of stroke, heart attack or high blood pressure.

Clinical research shows that PreCardix® does not cause hypotension.

## Clinical study

The gold standard scientific study, reporting PreCardix®'s blood pressure-lowering effect, has been reviewed by both Health Canada and Hypertension Canada and is published in the International Journal of Hypertension.

You can access the study through the following web address:

<https://www.hindawi.com/journals/ijhy/2019/2345042/>

## Recommended Dose and Usage

Adults: Take 2 tablets, 1 time per day. Take a few hours before or after taking other medications or natural health products. Take between meals before noon.

It may take up to 8 weeks to achieve optimal results. Continue taking PreCardix® to maintain results.

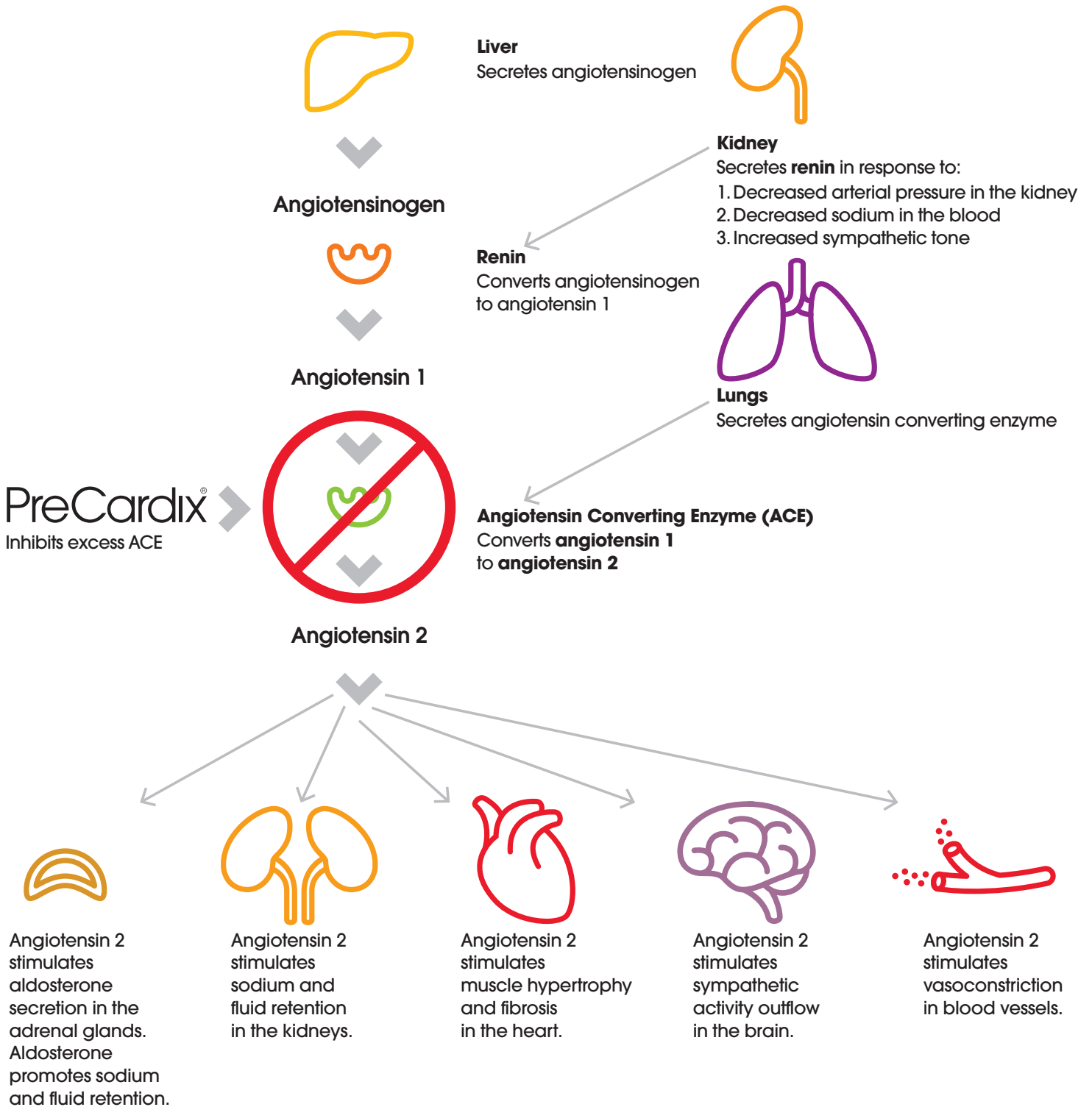
Consult your healthcare practitioner before making any changes to your hypertension treatment plan.

## How does PreCardix work?

PreCardix® is a clinically proven natural ACE inhibitor. ACE inhibitors help lower blood pressure by preventing ACE (angiotensin-converting enzyme) from converting angiotensin 1 to angiotensin 2. Angiotensin 2 increases blood pressure in several ways including stimulating the retention of sodium and fluid and constricting blood vessels. By inhibiting excess levels of ACE, the conversion of angiotensin 1 to angiotensin 2 is reduced and PreCardix® can, therefore, lower elevated blood pressure levels. This mechanism of action has been proven for PreCardix® in a clinical trial. See the following page for more detail on how PreCardix® lowers blood pressure through its ACE inhibitor mechanism of action.

# How does PreCardix® Lower Blood Pressure?

## ACE Inhibitor Mechanism



## **Safety and Cautions**

PreCardix® clinical trials were conducted on a healthy population without pre-existing medical conditions. Cautions are inferred based on the most common contra-indications for ACE inhibiting medications. Individuals with pre-existing medical conditions should be closely monitored by their healthcare practitioner when initiating PreCardix®.

Individuals who have an allergy to shellfish should not take PreCardix®.

PreCardix® has not been studied in individuals with a history of angioedema related to the previous use of ACE inhibitors and should be avoided in this population.

PreCardix® has not been studied in individuals who have renal artery stenosis and should be avoided in this population based on the known contraindication with pharmaceutical ACE inhibitor medication.

PreCardix® has not been studied in pregnancy and should be avoided throughout the entire gestational period due to the potential teratogen effects of ACE inhibitors. Women who are breastfeeding should not take PreCardix®.

Children under the age of 18 should not take PreCardix®.

## **Are there any side effects?**

PreCardix® does not have any known serious side effects. It has not been found to cause side effects sometimes associated with common ACE inhibitor medications such as dry cough, itching, edema, high potassium levels, or hypotension.

PreCardix® may cause moderate nausea in some individuals. Side effects found to be possibly related to PreCardix® from the clinical trial included 1 case each of euphoric mood, fatigue, upper abdominal pain, and headache. All of these side effects were rated as mild in intensity.

## **Can PreCardix® be taken with other medications or supplements?**

Speak to your healthcare practitioner before taking PreCardix® with any medications or supplements. Never stop or reduce your blood pressure medication without speaking with your healthcare practitioner first.

PreCardix® has not been directly studied in combination with other medications or supplements. The interactions below are inferred based on the most common drug interactions with ACE inhibitor medications. Additional interactions may occur.

The blood pressure-lowering effect of PreCardix® may be augmented by other blood pressure-lowering medications or natural health products. Individuals who are combining PreCardix® with products that also lower blood pressure should be monitored for hypotension. Individuals who combine alpha-blocking medications with ACE inhibitor pharmaceuticals have experienced increased hypotension after the first dose of alpha-blockers. Individuals who are taking PreCardix® and are adding in alpha-blockers should be monitored closely for this potential effect.

PreCardix® has not been found to increase potassium levels. In the clinical trial, serum potassium levels were measured at baseline and at 8 weeks in all study participants. There was no clinically significant difference between potassium levels at both baseline and at 8 weeks between the placebo and treatment group. However, considering its ACE inhibitor action, caution should be taken when using PreCardix® with agents that increase serum potassium such as potassium-sparing diuretics, potassium supplements, and potassium-containing salts. Individuals using any of these combinations should have serum potassium levels monitored frequently.

A possible causal relationship may exist between ACE inhibitor treatment and allopurinol, predisposing individuals to hypersensitivity reactions. PreCardix® should be used cautiously with allopurinol until further research establishes the safety of this combination.

The use of NSAIDs may antagonize the blood pressure-lowering effect of ACE inhibitor medications. Individuals who are using NSAIDs regularly along with PreCardix® should be monitored frequently.

Intravenous infusion of iron should be administered cautiously in individuals using PreCardix®. ACE inhibitors have been found to augment the systemic effects of I.V iron. Oral iron supplementation is not a concern.

Individuals who are taking PreCardix® with lithium should have lithium levels monitored frequently. ACE inhibitor medication may decrease renal elimination of lithium leading to lithium toxicity (CNS symptoms, ECG changes, renal failure). PreCardix® has not been studied alongside lithium medication however considering its ACE inhibitor mechanism caution should be taken.

### **Are there interactions with food?**

There are no known interactions with food.

### **Contact**

If you have any questions or comments about PreCardix®, or if you experience any side effects, please contact us at [support@precardix.ca](mailto:support@precardix.ca).