



## VINPOCETINE

ReQollect is a branded high purity Vinpocetine extract manufactured from the finest plant material by Alchem International LLC. Vinpocetine is an exciting compound often called the “Smart Nutrient” that helps improve cognitive function and memory by increasing blood circulation through the brain. Vinpocetine is commonly used for enhancing memory and alertness. It is also used in conditions that harm learning, memory, and information processing skills as people age. Additionally, Vinpocetine may be able to protect the brain from damage caused by strokes and help reduce the risk of ischemia. ReQollect is appropriate for use in supplements and beverages for pre-workout formulations to enhance memory and alertness, as well as to improve focus and coordination.

### Scientific Data

#### What is Vinpocetine?

Vinpocetine is a component extracted from vincamine, found in Periwinkle and Voacanga africana plants of the Apocynacea family. It has been used to support the brain and its blood vessels by European and Japanese medical practitioners from more than two decades. Vinpocetine is approved by European and British Pharmacopeias.

#### ReQollect’s Main Functions & Usages:

- Increases focus and alertness
- Enhances cerebral metabolism & vasodilation
- Improves cognitive and memory functions
- Provides neuroprotective support

#### Other Functions of Vinpocetine:

- Believed to act as a vasodilator
- May help improve vision and hearing
- Used traditionally for tiredness
- Antioxidant properties, similar to vitamin E
- Believed to have astringent properties and is used for abnormal menstrual bleeding, mouth sores and bleeding gums

# Vinpocetine Research

**Vinpocetine has been used in many published clinical studies on over 30,000 individuals.**

Poor blood circulation in the brain is one of the most significant mechanisms responsible for the cognitive decline that accompanies aging. Vinpocetine helps to improve mental function and memory by improving blood circulation through the brain. It also enhances the brain's use of oxygen by increasing the amount of ATP (adenosine triphosphate, the body's cellular fuel), thereby improving mental functioning. Vinpocetine may help improve the use of oxygen and glucose by the brain and help reduce the risk of ischemia.

## 1. VINPOCETINE ENHANCES CEREBRAL METABOLISM & VASODILATION BY:

### ▪ Improving Cerebral Blood Flow

Vinpocetine has been used in studies with stroke patients using Positron Emission Tomography (PET). Vinpocetine improved metabolism and increased glucose uptake within the brain's cortical and subcortical regions, especially in the area where the strokes occurred. Another study of 13 chronic ischemic stroke victims determined that Vinpocetine improved cerebral blood flow up to 37% in the contralateral side and up to 33% in the affected side.

#### Effect of Vinpocetine on the redistribution of cerebral blood flow and glucose metabolism in chronic ischemic stroke patients: a PET study

# OF PATIENTS: 13 chronic ischemic stroke  
DOSAGE: 6.68 +/- 7.2 mg/day  
TIME PERIOD: 2 weeks  
AGE: 59.7 +/- 13.2 years

#### RESULTS: % Improvement in Cerebral Blood Flow

	CONTRALATERAL SIDE	AFFECTED SIDE
Whole Hemisphere	26.11%	19.92%
Thalamus	36.39%	21.75%
Mesencephalon	33.08%	24.32%
Cerebellum	28.26%	25.94%
Stroke Region	—	33.89%
Caudate Nucleus	37.29%	—
Putamen	25.95%	—
ACA Region	16.97%	—
Pons	18.59%	8.63%

Journal of Neurological Sciences 2005;229-230:275-284

## ▪ Enhancing Cerebral Metabolism

A comparative study of ethyl apovincamate and xantinol nicotinate on 143 cerebrovascular patients showed a 60.6% improvement in paresis and enhancement of the glycolic and oxidative glucose breakdown in CNS.

**Comparative study of the effect of ethyl apovincamate and xantinol nicotinate in cerebrovascular diseases. Immediate drug effects on the concentration of carbohydrate metabolite and electrolytes in the blood and CSF**

# OF PATIENTS: 143

### RESULTS:

- Improvement in paresis in 60.6% of patients
- Enhancement of the glycolytic and oxidative glucose breakdown in CNS
- Restoration of age-related impairment of the brain's energy metabolism

Arzneimittelforschung 1976;26(10a):1980-1984

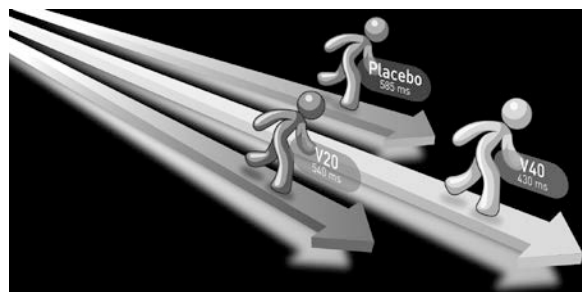
## ▪ Reducing Cerebral Vascular Resistance

The effect of ethyl apovincamate (RGH-4405, Cavinton) on cerebral and systemic circulations has been studied in detail in ten cases of cerebrovascular disease. The results show a reduction in cerebral vascular resistance and an increase in cerebral blood flow. The study also showed an increase of cerebral fraction of cardiac output with no marked effect on systematic circulation.

## 2. VINPOCETINE SUPPORTS MEMORY & COGNITIVE FUNCTION:

### Cerebral Memory Enhancer Studies:

- A double-blind, crossover trial with 12 healthy females showed a 30% faster reaction time with 40 mg Vincpocetine as compared to placebo (Eur J Clin Pharmacol 1985;28;567-571).
- One meta-analysis was performed on 6 double-blind, placebo-controlled, randomized, clinical trials in Italy and Germany with 731 patients who had chronic cerebrovascular disease. The review showed that Vinpocetine significantly improved senile cerebral dysfunction (Praxis 1998;7;63-68).
- In 3 multi-centric, double-blind, placebo-controlled randomized trials involving 583 patients aged 58 years and older who were administered 15-60 mg, Clinical Global Impression Scale (CGI) and Syndrome Kurtz Test (SKT) scores significantly improved over placebo for cognitive impairment and dementia.



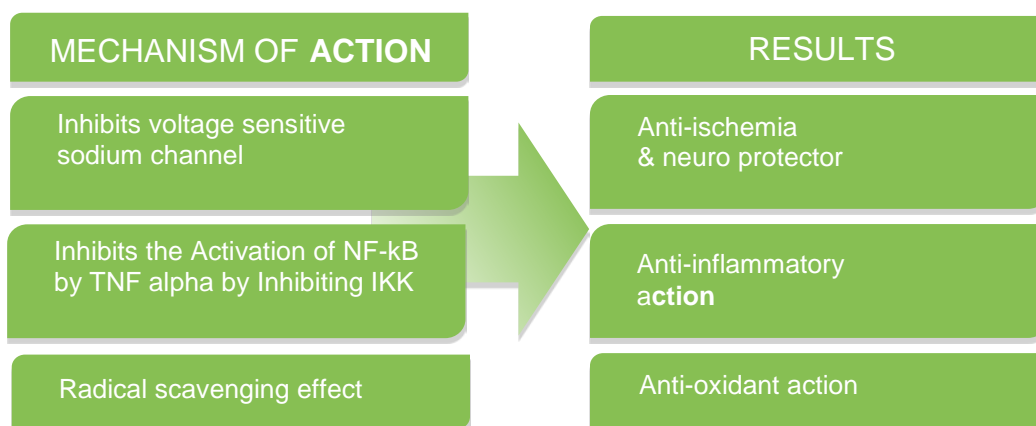
## Psychopharmacological effects of Vinpocetine in normal healthy volunteers

3 Multicentric, Double-Blind, Placebo-Controlled Randomized Trials			
# OF PATIENTS:	583		
DOSAGES:	15-60 mg/day		
TIME PERIOD:	12-16 weeks		
AGE:	>58 years		
SKT Score	Weighted Mean Difference	95% CI	P Value
	-1.19	-1.73 to -0.66	0.00001
CGI Clinical Improvement	OR	95% CI	P Value
	3.27	2.18 to 4.91	<0.00001

Cochrane Database Syst Rev. 2003;(1):CD003119

### 3. VINPOCETINE PROVIDES NEUROPROTECTIVE SUPPORT:

Research shows that Vinpocetine may help protect neurons. In individuals with cerebrovascular disease, Vinpocetine has been shown to lower blood viscosity, thinning out the blood by reducing platelet aggregation. It also helps promote blood flow through the brain.



PNAS 2010 ; 107(22) :9921-9922  
 Biochem Pharmacol 1984 ;33(3) :453-457  
 Brain Research Bull 2000 ; 53(3) :245-254

#### 4. VINPOCETINE MAY SUPPORT TINNITUS / MENIERE'S DISEASE / VISUAL IMPAIRMENT:

There is research showing that a form of Vinpocetine helped hearing loss and tinnitus, as well as Meniere's disease and visual impairment.

### ReQollect Recommended Dosage

Research shows that 5 to 10 mg per day of ReQollect, three times per day is an effective daily dosage. After Vinpocetine has been provided with or without food, oral doses have been shown to take around 1 hour to appear in the blood (Journal of the American Geriatric Society 1989;37:515-520).

### Popular Delivery Forms

ReQollect is appropriate for use in:

- Capsules
- Tablets
- Softgels
- Dry powder drinks
- Ready-to-drink beverages

### Suggested Labeling Claims for USA

- **Supports blood circulation to the brain**, which is important because oxygen and nutrients are delivered through the blood.\*
- **Promotes feelings of focus and alertness after exercise.**
- **Supports memory and mental function.\***
- **Has been used in Europe for decades supporting cerebral circulation.\***
- **Supports cognitive performance with the aging process.\***
- **Provides neuroprotective support.\***
- **Helps promote the vasodilation of blood vessels.\***
- **Has antioxidant properties.\***
- **Aids the brain, blood vessels and central nervous system.\***
- **May support hearing and eye sight.\***
- **Aids the brain blood flow using the available oxygen.\***

*\*These claims have not been reviewed by an FDA/FTC Attorney.*

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