

COMPOSITIONS FOR PREVENTION AND/OR TREATMENT OF ALCOHOL USE DISORDERS

Description

Researchers from Universidad Complutense, Madrid, in collaboration with FIMABIS in Málaga, have developed a new medicament or nutraceutical composition for prevention and/or treatment of the alcohol use disorders, in general, and for the alcohol intoxication or drunkenness, and alcohol dependence syndrome and withdrawal, in particular.

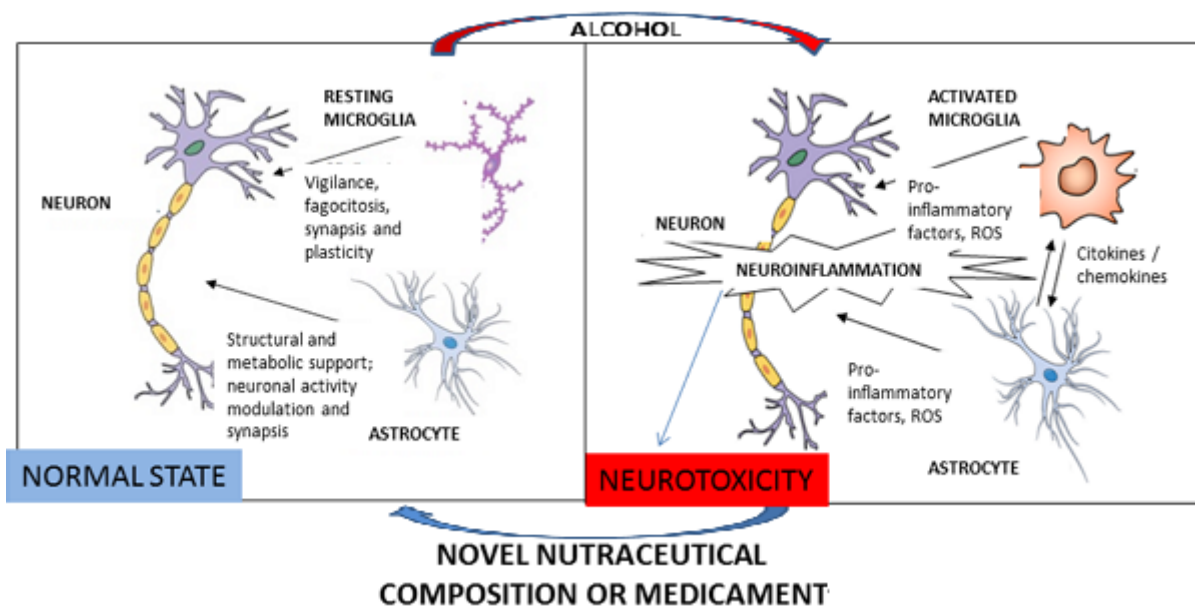
The composition and its application to the alcohol use disorders are **protected by [national](#) and [supranational](#) patents**.

How does it work

Alcohol abuse is a pattern of alcohol consumption that affects physical or psychologically, with no need of fulfillment the dependence criteria. Epidemiological studies in occidental countries have shown that alcohol abuse is a serious problem that affects young people between 15 and 30 years old. Additionally, alcohol dependence affects 9-10% of men and 3-5% of women along life, and these risks are the double for alcohol abuse.

Alcohol intoxication is a common pattern of alcohol consumption among alcoholics and alcohol dependent subjects. It has been proposed that alcohol-induced brain damage and neurodegeneration are direct consequences of alcohol intoxication episodes, and evidence indicate that the neuroinflammation induced by alcohol intoxication may contribute to the neurotoxic effects of the drug. Additionally, alcoholic patients suffer from other psychiatric syndromes such as anxiety and depression, which are induced or aggravated by alcohol consumption.

The novel medication or nutraceutical composition is based on the anti-inflammatory, antioxidant and neuroprotectant properties of a family of endogenous biolipids, which **treat or prevent alcohol-induced neuroinflammation, neurotoxicity, neural death, hepatic damage, hangover, anhedonia, compulsion, tolerance and inability to control alcohol drinking, withdrawal symptoms such as anxiety and depression, or any of these combination**.



Alcohol abuse alters the brain homeostasis inducing neuroinflammation, which involves the activation of microglia and release of pro-inflammatory and oxidant components (ROS), which can affect the neurons. When neuroinflammation become chronic it may induce neurotoxicity and brain damage. The novel nutraceutical composition or medication prevents the alcohol-induced neuroinflammation and brain damage, as well as certain alcohol abuse-associated behaviors such as anhedonia, anxiety and depression-like behavior.



Advantages

Some of the medications that are currently used to treat alcohol use disorders induce adverse secondary effects and it is needed the co-administration of several drugs to treat the symptoms and the alcohol addiction-associated pathologies. It is of great interest to develop therapeutic treatments with less secondary adverse effects and with the potential to block the majority of the dangerous effects of alcohol, as well as to develop preventive treatments to alcohol-induced organ damage.

The novel nutraceutical composition now proposed is a therapeutic alternative more secure than existing medications, with **less secondary adverse effects**, and it is also a **preventive medication for alcohol-induced brain damage**.

Where has it been developed

The study has been developed in the **Laboratory of Psychobiology**, School of Psychology, at the Complutense University of Madrid, together with the FIMABIS foundation in Málaga, Spain. The multidisciplinary team is composed of pharmacologists, psychologists, biologists/biochemistries who develop studies to test novel pharmacological tools for alcohol use disorders and other addictions.

The composition and its application to the alcohol use disorders are **protected by national and supranational patents**. Recently, **the exploitation licence of the patent has been acquired by a company placed in Florida (USA)**.

And also

The Complutense team develops preclinical studies using behavioral tests to determine the influence of drugs in operant alcohol behavior, motivation, depressive-like behavior, anxiety, anhedonia, etc.

In addition, the team studies the neurobiological mechanisms involved in the neuroprotective actions of the mentioned medications, and the effects of psychoactive drugs in the brain.

Responsible Researcher

Laura Orío Ortiz: lorio@psi.ucm.es

Department: Psychobiology

Faculty: Psychology

