

DEVELOPMENT OF TABLETS FOR TREATMENT OF MIND DISORDERS

Wako Samuel Jordan, Rybachuk V.D.

The National University of Pharmacy, Kharkiv, Ukraine

wakosamueljordan@yahoo.com

Over the past half century, biopharmaceutical research has helped transform mental illnesses from misunderstood causes of shame and fear into often highly treatable conditions. For example, medicines for treating depression are helping thousands of people live productive lives and breakthrough schizophrenia medicines have enabled patients to be treated in the community rather than being institutionalized.

One of the drugs that have led to a better way of life for mentally challenged people in recent years has been Piracetam. The drug influences neuronal and vascular functions and influences cognitive function without acting as a sedative or stimulant. Piracetam is a positive allosteric modulator of the AMPA receptor. In addition to Piracetam, vitamin B5 has been added to the drug, as a means of co-effectation, in the indicated medical conditions. Pantothenic acid (Vitamin B5) is involved in the oxidation of fatty acids and carbohydrates. If people have enough Vitamin B5 in your system, it can result in the impairment of a process needed to synthesize acetylcholine. Vitamin B₅ is necessary for the metabolism of choline in order to make the acetylcholine neurotransmitter. When taking any sort of Choline supplement, it is recommended to use a multivitamin with B₅ in it to ensure that one has this nutrient to reap full benefits from the nootropic stack. Without sufficient levels of Vitamin B₅, one may not notice any changes when using acetylcholine precursors like Alpha GPC, Citicoline, Centrophenoxine or Acetyl L-Carnitine. This is particularly true if one is stacking with a Racetam (like Piracetam) in addition to a source of choline. In fact, insufficient levels of Vitamin B₅ may exacerbate the “Piracetam headache” that can occur when you do not have enough acetylcholine to keep up with the demands of your neurons.

In the university of our study, we carried out experiment and laboratory works on development of composition and technology tablets containing Piracetam and Vitamin B₅. Nowadays we have chosen composition of tablets and studied all technological properties of taken components. As method of tablet manufacturing we have proposed direct compression.