



Preclinical Phase II Testing of Psilocybin in Alcohol Addiction and Epigenetic and Neuroimaging Studies on the Mode of Action (Psi-Alc)

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Worldwide more than 2 billion people consume alcohol. Nearly 60 million EU citizens engage in harmful drinking and 23 million Europeans are suffering from alcohol addiction. Approved pharmacological treatments for alcoholism are limited in their effectiveness, and new drugs that can be translated into the clinic are warranted. In the last decade there was considerable enthusiasm that advances in the neuroscience of alcohol addiction would soon translate into mechanistically novel alcoholism therapies. However, several novel mechanisms that appeared to hold great promise based on preclinical data failed to be translated to the human condition.

In our Psi-Alc proposal we will attempt to improve the reliability of preclinical academic research as well as enhance the chance of clinical translatability of our findings. Our consortium is interested in the neurobiological underpinnings of alcohol addiction and the development of new treatment possibilities. By using a unique DSM-5 based rat model for alcohol addiction and implementing the novel concept of randomized multi-centre preclinical phase II testing in laboratory animals we will be able to produce meaningful and translatable results for subsequent cost-intensive Phase II/III testing in alcohol addicted patients. With this approach and integrating experimental human studies we will test the efficacy of psilocybin for treating alcohol addiction and will translationally study the underlying neurobiological mechanism.