



Universität
Basel

Research Project

A randomized add-on pilot trial of D-serine for depression

Project funded by own resources

Project title A randomized add-on pilot trial of D-serine for depression

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Organisation / Research unit

Bereich Psychiatrie (Klinik) / Erwachsenenpsychiatrie UPK

Project start 01.03.2021

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Status Active

The glutamate system is emerging as target for the development of novel antidepressant medication, in particular compounds modulating the NMDA receptor. While the NMDA receptor antagonist ketamine is an effective option for many treatment-resistant patients, it is also accompanied by dissociative and cognitive effects and also bears the risk to develop addiction, side effects that are significantly restricting its clinical utility. There is now compelling evidence of the antidepressant potential of D-serine, a NMDAR co-agonist. Compared to ketamine, D-serine goes along without any psychotomimetic effects or other side effects and thus might be a promising novel antidepressant.

This study represents the first randomized control trial to test the efficacy of D-serine as an adjuvant therapy in patients with depression and thereby adds to recent efforts to establish novel glutamatergic antidepressants.

Keywords D-serine, glutamate, NMDAR, depression, RCT

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