

## Immunoadsorption in Vascular Dementia - a novel approach to Alzheimer's Disease?

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The pathomechanisms leading to Alzheimer's Disease (AD) are not well understood. Despite several robust hypotheses the nature of the disease seems to be more complex than initially thought. The role of vascular components of AD have been underestimated so far. In this novel treatment approach we perform immunoadsorption over 5 days to remove agonistic autoantibodies (AAB) against  $\alpha$ 1A-adrenoceptor from the plasma of AD patients. These AAB are thought to alter the functional properties of small blood vessels leading to malfunctions in the supply and clearance processes of the brain.

We will present the first 5 patients with AD who underwent immunoabsorption and who completed a 12-months follow up. Clinical, cognitive and MRI data as well as peripheral endothelial function data and data on AAB clearance will be presented.

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