OROBOROS INSTRUMENTS

http://wiki.oroboros.at/index.php/O2k-Publications: Lymphocyte High-resolution respirometry: Lymphocytes, Alzheimer's

## Peripheral Mitochondrial Dysfunction in Alzheimer's Disease: Focus on Lymphocytes

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## Mitochondrial respiration in lymphocytes from Alzheimer disease (AD) patients and controls

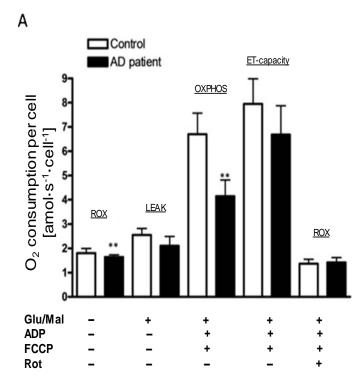


Figure 1.  $O_2$  flux and  $O_2$  consumption were measured after addition of different agents: glutamate/malate (glu/mal), ADP, FCCP and rotenone (Rot). Two-way ANOVA revealed a significant decrease of the total cellular respiration in AD cells compared with that of control cells.

The mitochondrial dysfunction found in lymphocytes of patients with Alzheimer's disease and mild cognitive impairment points to the relevance of this as an early peripheral marker for detection.

Reference: Leuner K, Schulz K, Schütt T, Pantel J, Prvulovic D, Rhein V, Savaskan E, Czech C, Eckert A, Müller WE (2012) Peripheral mitochondrial dysfunction in Alzheimer's disease: focus on lymphocytes. Mol Neurobiol 46:194-204.

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