



Alzheimer's Disease

Monitoring physiologic endpoints with proven preclinical research tools

Alzheimer's disease is the most common cause of dementia, affecting an estimated 35 million people worldwide. Despite the wide impact of this disease, little is known. Annually, millions of funding dollars are allocated for preclinical research to further understand Alzheimer's disease.

Physiologic data of interest for Alzheimer's research

Frequency Analysis: EEG monitoring is commonly performed to assess Alzheimer's by evaluating a shift in power spectrum, decrease in coherence, and changes in EEG complexity.

Sleep: Alzheimer's typically has a dramatic impact on a patient's sleep patterns. Sleep research often includes EEG and EMG monitoring to identify distinct sleep architecture including reduced slow wave sleep, reduced REM sleep, and broken sleep periods.

DSI tools» implantable telemetry, hardwired recording, and NeuroScore software

Circadian Rhythms: When studying Alzheimer's disease, scientists may also need to analyze circadian rhythms and look for alterations in core body temperature, and a change in eating habits.

DSI tools» implantable telemetry and Anipill implants

Respiration: Some study designs require researchers to assess the risks of respiratory disruptions such as shortness of breath or pneumonia that are often found in Alzheimer's Disease populations.

DSI tools» Buxco whole body plethysmography, and Buxco anesthetized resistance and compliance

Glucose: Measuring glucose allows scientists to explore the relationship between elevated blood sugar levels and its possible correlation with Alzheimer's disease.

DSI tools» implantable telemetry and the Nova Statstrip glucometer.

