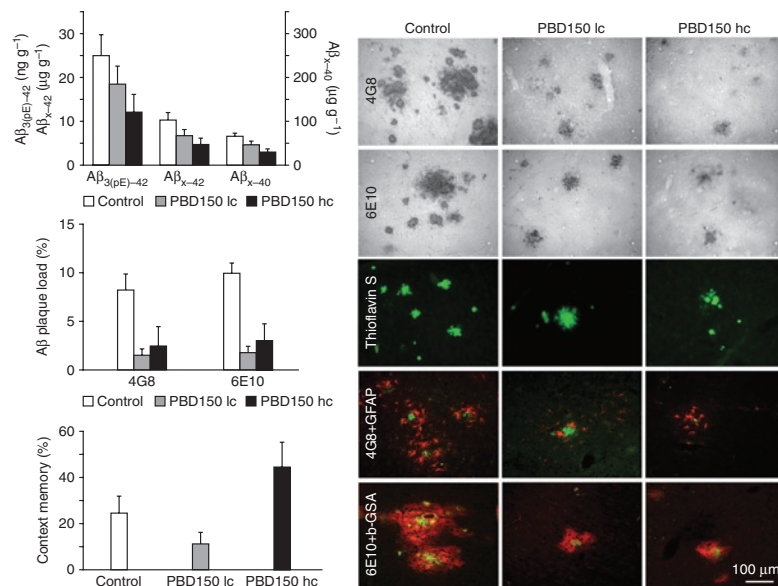


## HIGHLIGHTS



## Importance of N-terminally truncated peptides in Alzheimer's disease

The defining characteristics of N-terminally truncated and pyroglutamate-modified Aβ peptides—their abundance, resistance to proteolysis, rapid aggregation, and neurotoxicity—have raised interest in their potential involvement in the initiation of pathological cascades resulting in the development of Alzheimer's disease. The presence of neurofibrillary tangles and deposits of Aβ in neocortical brain structures define the brain of a person affected with Alzheimer's, and it is believed that reduction of Aβ<sub>3(pE)-42</sub> could promote Aβ proteolysis, leading to neuronal survival. Two transgenic mouse models of Alzheimer's disease and a new *Drosophila* model showed reduced Aβ<sub>3(pE)-42</sub> with oral application of a glutamyl cyclase inhibitor. Also noted were a reduction

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in Aβ<sub>x-40/42</sub>, reduced plaque formation and gliosis, and improved performance in context memory and on spatial learning tests. These findings have important implications for the treatment of Alzheimer's disease and potentially other amyloidoses, such as familial Danish dementia. (*Nat. Med.* 14, 1106–1111, 2008)

## Association of body mass index with prostate cancer death

Although excess body weight has been linked to an increased risk of prostate cancer progression, data explaining the link are unavailable. A new study examines how body mass index (BMI) affects prostate cancer-specific mortality after diagnosis. Study participants included 2,546 men diagnosed with cancer during the 24 years of follow-up in the Physicians' Health Study. Compared with men with BMIs of less than 25 kg/m<sup>2</sup>, overweight and obese men were found to be at increased risk for prostate cancer mortality.

The study also noted an association between insulin metabolic factors and prostate cancer prognosis, with men with higher C-peptide concentrations at greater risk of dying from prostate cancer. These findings imply that men in affluent societies face two epidemics—obesity and prostate cancer—and suggest that recent progress in prostate cancer control may be linked to an increase in the prevalence of obesity and hyperinsulinemia. (*Lancet Oncol.* 9, 1039–1047, 2008)

## Evaluating the long-term effectiveness of tiotropium therapy

Previous studies have shown tiotropium to be effective in slowing the rate of decline in forced expiratory volume in 1 second (FEV<sub>1</sub>) over a 1-year period, leading investigators to extend this time frame to 4 years to determine the long-term impact of tiotropium. The Understanding Potential Long-Term Impacts on Function with Tiotropium (UPLIFT) trial sought to determine the long-term effects on health-related quality of life, exacerbations, related hospitalizations, and mortality in people with chronic obstructive pulmonary disease treated with tiotropium. The patients

