Alzheimer's Disease Prediction Challenge

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https://www.kaggle.com/static/images/medals/discussion/bronzel@1x.png

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UCL's POND (Progression of Neurodegenerative Disease) group aims to develop computational models that learn patterns of progression in diseases such as Alzheimer's Disease, Parkinson's Disease and Multiple Sclerosis.

Our group has recently launched an Alzheimer's Disease (AD) prediction challenge named TADPOLE (The Alzheimer's Disease Prediction of Longitudinal Evolution challenge).

The website for the challenge is here: [http://tadpole.grand-challenge.org](http://tadpole.grand-challenge.org/). Briefly, the goal of the TADPOLE challenge is to predict the progression of AD in at-risk individuals. In particular, you will be provided with historical data for a set of individuals and will be asked to predict their future clinical status, cognitive score (ADAS-Cog) and relevant anatomical volume (normalized ventricle volume).

Unfortunately, because we are using data from the Alzheimer's Disease Neuroimaging Initiative (ADNI, [http://adni-info.org](http://adni-info.org/)) we cannot publicly share this data and as a result cannot explicitly create a Kaggle competition. Individuals must register with ADNI to download information. We welcome the data scientists from the Kaggle community to register with ADNI, receive our preprocessed data and give this competition a try.

There will be cash prizes, sponsored by the Alzheimer's Association, the Alzheimer's Society and Alzheimer's Research UK, and perhaps others.

If you would like more information, visit the website and have a look at our first webinar, which took place on July 12th: <https://youtu.be/mZj-sYm7pXg>

There is a timeline of upcoming events, including several follow-up webinars, on the site. There will be an open consultation phase for the challenge until 15th August after which the website and challenge rules will freeze.

Many thanks,  
The UCL POND team  
<http://cmic.cs.ucl.ac.uk/pond/>

<https://www.kaggle.com/akshita72/alzheimers-prediction>

<https://www.kaggle.com/obrienmitch94/alzheimer-s-analysis>

<https://www.kaggle.com/hyunseokc/detecting-early-alzheimer-s>

[http://www.oasis-brains.org/pdf/**oasis-longitudinal.csv**](http://www.oasis-brains.org/pdf/oasis-longitudinal.csv)

<https://www.researchgate.net/publication/308818564_A_Comparison_of_Strategies_for_Incorporating_Nuisance_Variables_into_Predictive_Neuroimaging_Models>

<http://www.oasis-brains.org/files/oasis_cross-sectional.csv>

<http://www.oasis-brains.org/files/OASIS-3_Imaging_Data_Dictionary_v1.5.pdf>

<https://www.researchgate.net/publication/273873940_Accurate_multimodal_probabilistic_prediction_of_conversion_to_Alzheimer's_disease_in_patients_with_mild_cognitive_impairment>