CIS 519

Final Project Alzheimer’s Disease Machine Learning

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1. 2012 tamatine criterion review
2. Neuropathology not always gold standard for diagnosis
3. Plaques and tangles, also vasculature problems can lead to AD
   1. Louis bodies also apparent in 50% of AD patients – also no imaging techniques
   2. GTP43 pathology – for ALS – no good imaging approach, ELISAs haven’t been turned into informative diagnostics yet
4. ADNI is most standardized/organized
5. Need hypothesis driven studies – go after a specific biomarker
   1. Like Tau in CSF, present in tangles
   2. aBeta + Tau
6. Free surfer – check QC for each data point
7. Take accelerated or non-acc (either or)
8. Don’t mix field strengths for MRI
9. Tau and aBeta measured in concentration (pictograms)
10. Ask Juan for data – might be unlabeled
11. david soloway and Rachel doody – article about solinuzimab clinical trial
    1. unsuccessful trial, mild patients did show attenuation in slope of decline
    2. talks about all the metrics they used