

Generating a mechanism-based taxonomy of Alzheimer's and Parkinson's disease and validating in the course of a prospective clinical trial

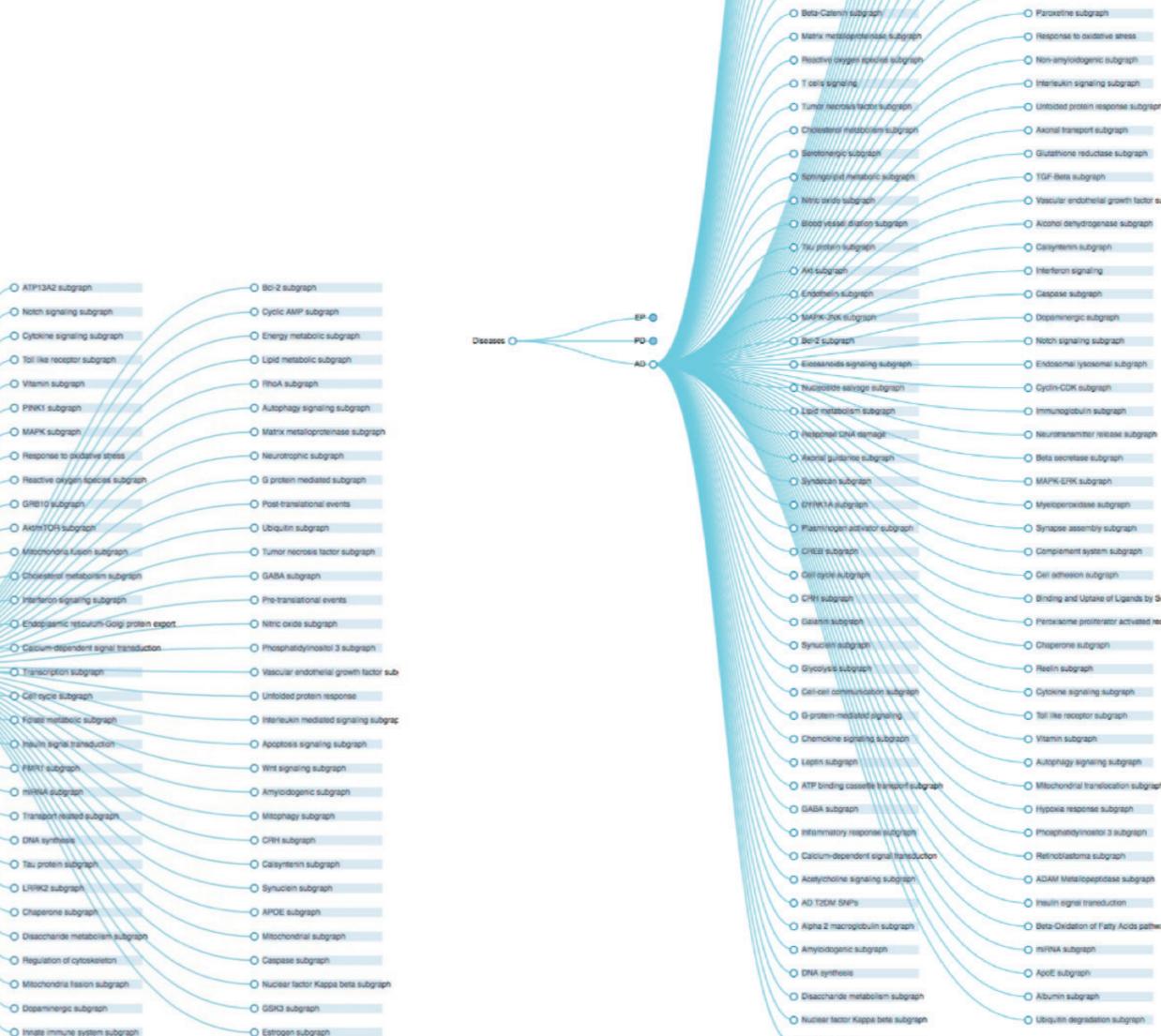
TRANSFER TO HEALTH CARE

An inventory of mechanistic hypotheses for Alzheimer's and Parkinson's disease

Hypotheses for Alzheimer's and Parkinson's Disease by Knowledge and Data Mining

 126 candidate mechanisms for Alzheimer's and

 76 candidate mechanisms for Parkinson's disease have been identified.



○ GSK3 subgraph

AD group

RhoA subgraph

Clinical Study

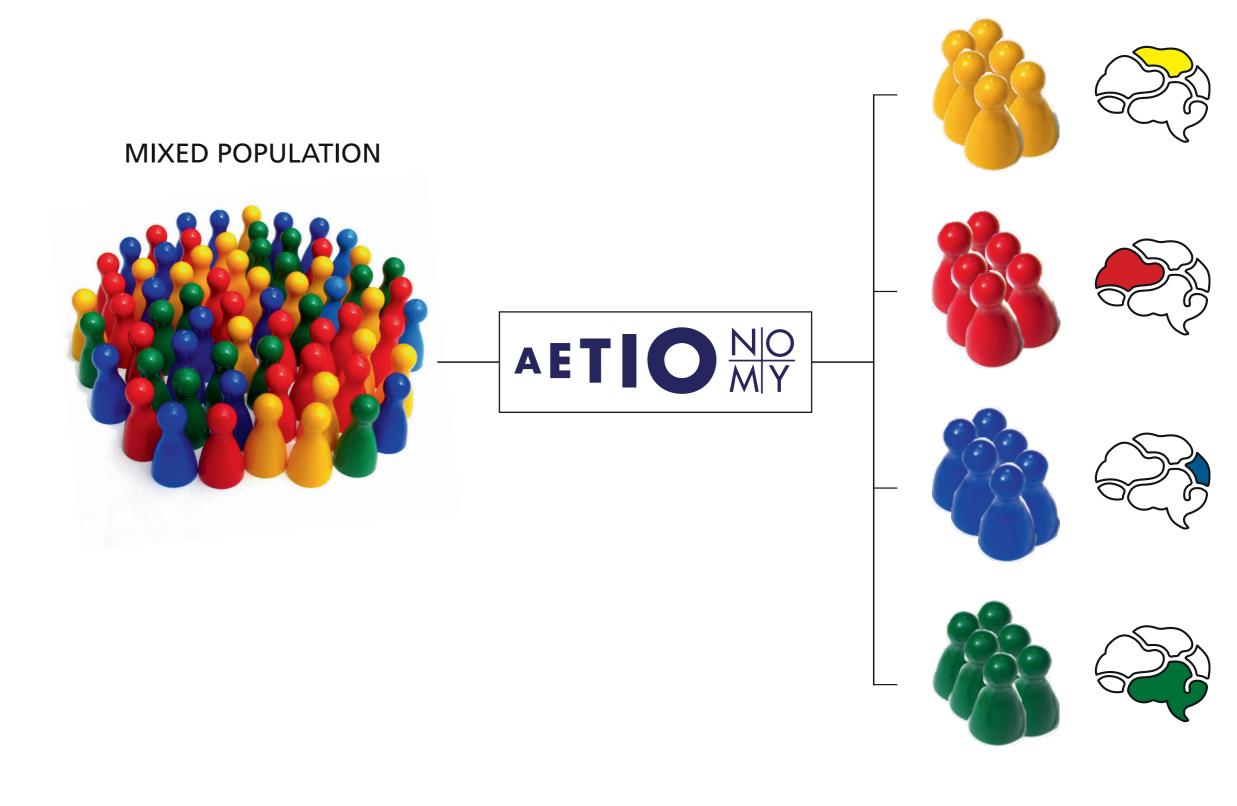
 420 patients for Alzheimer's and Parkinson's disease have been recruited and sample analyses are done for the

validation of disease hypotheses.

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		iPD patients	Familial form of PD (FPD)	At risk PD subjects (AR-PD)	PD controls (HC-PD)	At risk AD subjects (AR-AD)	Prodromal AD subjects (PAD)	Healthy AD controls (HC-AD)	Subjects
All centers		284	55	70	112	40	60	60	681
	Actual number of subjects	255	25	39	92	5	2	2	420

Patient stratification

- Patient subgroups have been identified based on computable mechanism graphs.
- This is the first step towards a mechanism-based taxonomy of neurodegenerative diseases.



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