

AETIONOMY

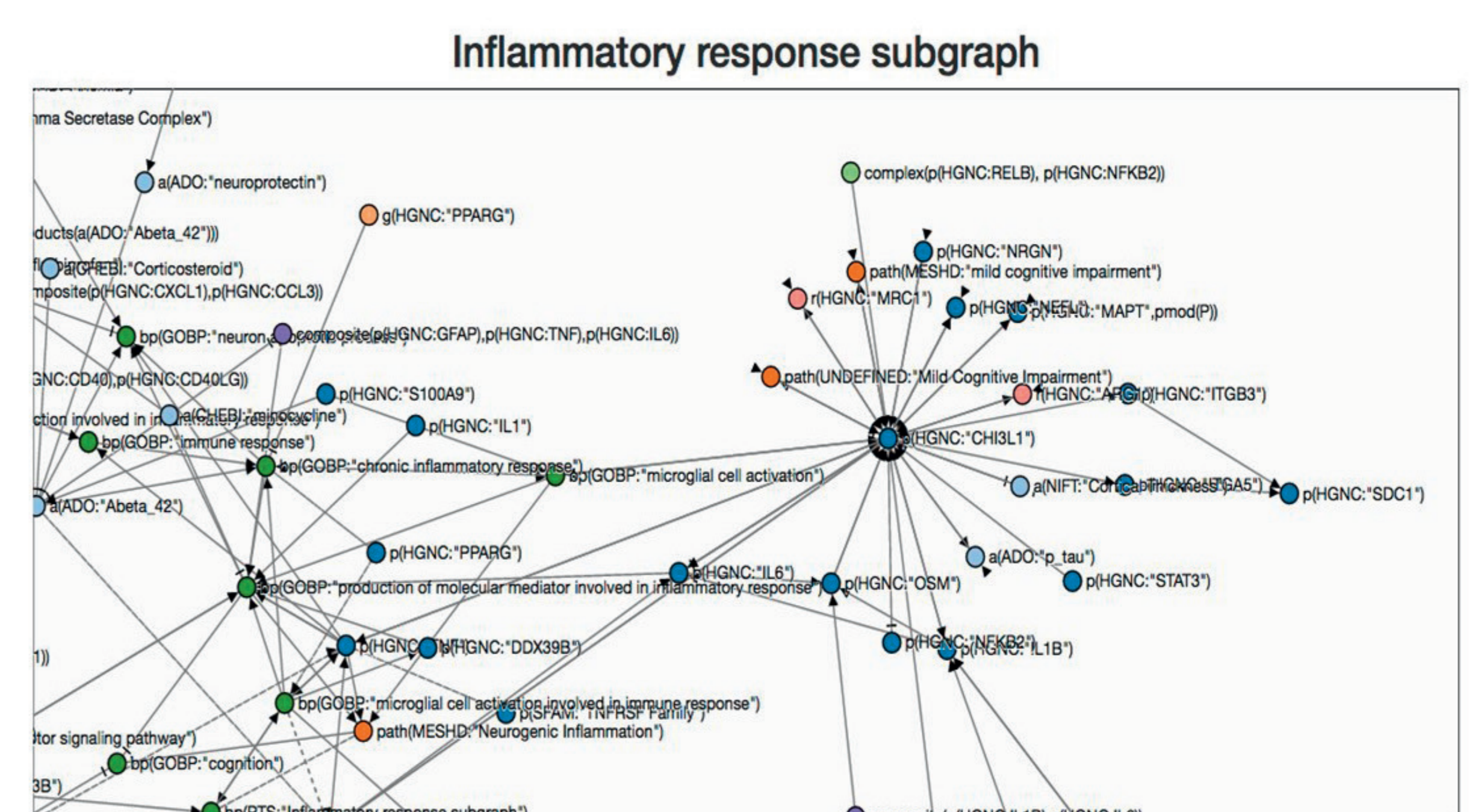
Generating a mechanism-based taxonomy of Alzheimer's and Parkinson's disease and validating in the course of a prospective clinical trial

TRANSFER TO PHARMA INDUSTRY

New applications for knowledge mining, data analysis, disease modelling and virtualization

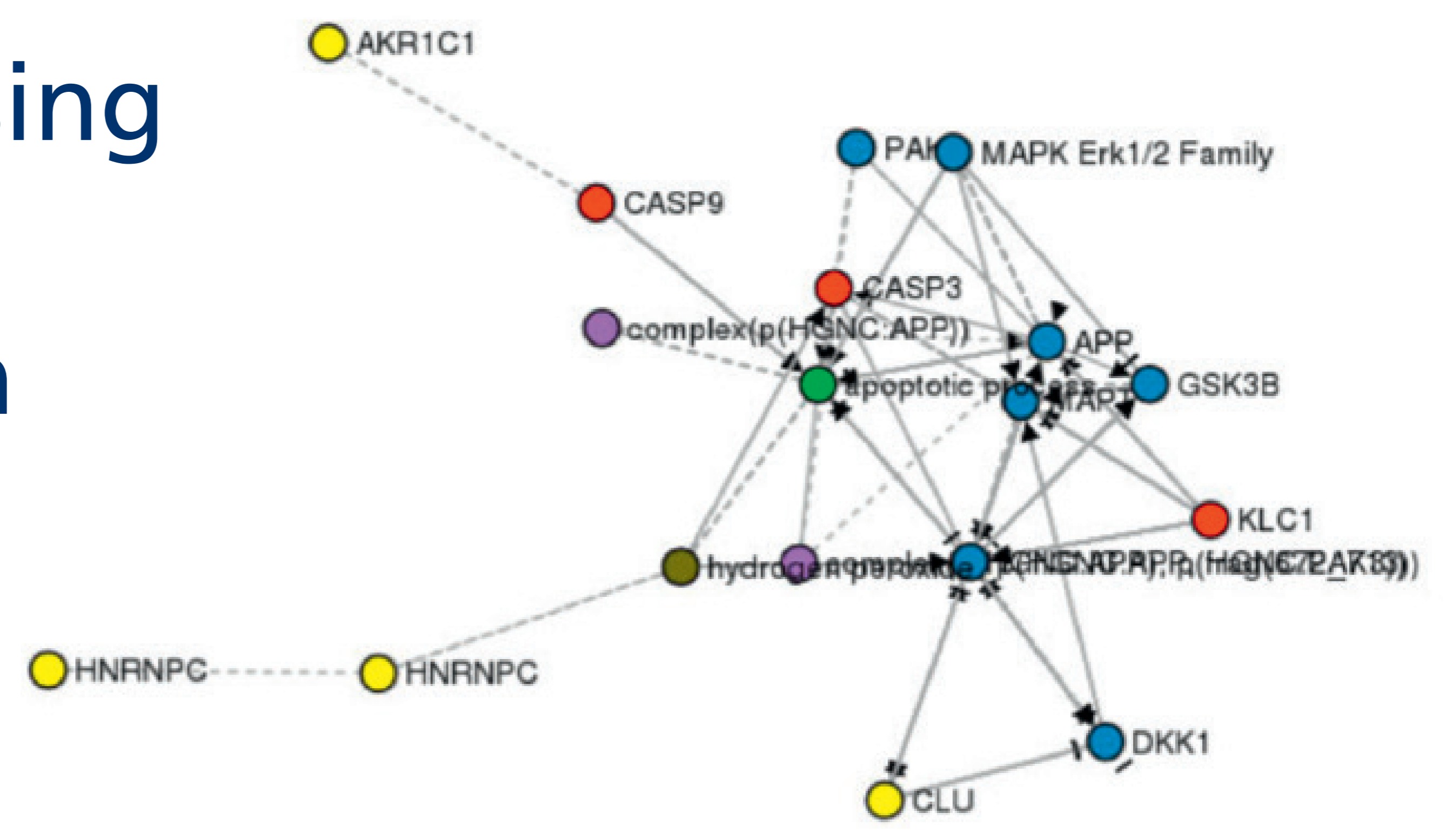
Multimodal Mechanistic Signatures Database for Neurodegenerative Diseases

- NeuroMMSig: a collection of candidate mechanisms represented as computable networks



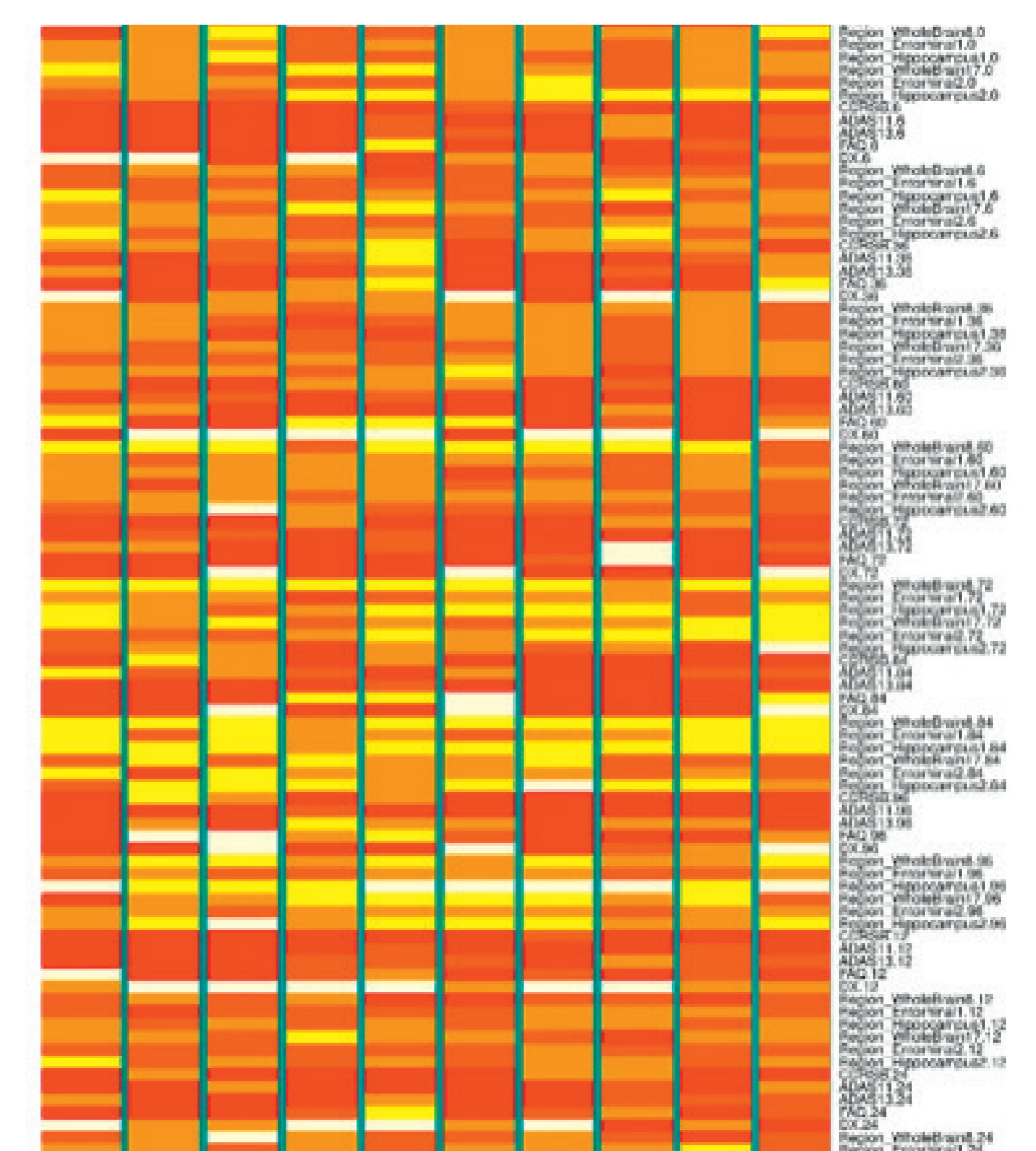
Machine Learning – Predictive Modeling and Bayesian Networks

- Predictive disease risk models using multi-scale clinical data and longitudinal disease progression
- Bayesian representations of clinical studies representing feature dependencies



Simulation of Patients – Virtual Patient Cohorts

- Generating huge virtual patient cohorts for research overcoming legal/ethical barriers
- Building a platform for in silico testing and validation of candidate mechanisms
- Virtualizing incomplete patient data and generating missing data



www.aetionomy.eu



The research leading to these results has received support from the Innovative Medicines Initiative Joint Undertaking under AETIONOMY grant agreement n°115568, resources of which are composed of financial contribution from the European Union's Seventh Framework Programme (FP7/2007-2013) and EFPIA companies' in kind contribution.

www.imi.europa.eu