Candidate Biomarker Discovery

- 2D-GE
- Multi-dimensional LC

Candidate Biomarker Verification

- CSF samples (Non-trauma and trauma)

Detection of Candidate Markers by MRM-MS

- Q1
- Q2
- Q3

Fragmentation

Detection of Candidate Markers by Immunoassays (e.g. Sandwich ELISA)

- Detection Ab
- Candidate protein
- Capture Ab

Quantitation with SIS peptides

Standard Curve Quantitation

Verified Candidate Markers for Clinical Validation

Detection of Candidate Markers

Peptide Selection

Fragment Selection

Time

Light

Intensity

m/z

Concentration

Heavy

O.D.

CSF samples

(Candidate Protein Biomarkers)