

## Thursday

### **Characterization of CDR plus NACC FTLD at Phenoconversion from Asymptomatic to Mild Behavioral and/or Cognitive Impairment in familial FTLD: Data from the ALLFTD Consortium**

Toji Miyagawa, Danielle Brushaber, Jeremy Syrjanen, Walter Kremers, Fields Julie, Leah Forsberg, Hilary Heuer, Edward Huey, David Knopman, John Kornak, Adam Boxer, Howard Rosen, Bradley Boeve, on behalf of the ALLFTD Consortium

**State of the art:** The ALLFTD Consortium targets to characterize familial Frontotemporal Lobar Degeneration (f-FTLD) including its preclinical/prodromal stage to prepare for clinical trials in FTLD. We sought to identify and describe the early clinical picture of f-FTLD for the three most common pathogenic genes (*MAPT*, *GRN*, and *C9orf72*) using the CDR® plus NACC FTLD.

**Methodology:** We longitudinally evaluated the CDR® plus NACC FTLD among 312 asymptomatic participants of the ALLFTD Consortium who are family members of f-FTLD with *MAPT* (n=103), *GRN* (n=72), or *C9orf72* (n=137) mutations, and described the CDR® plus NACC FTLD in the participants who developed Mild Behavioral and/or Cognitive Impairment (MBCI).

**Result:** Thirty-six participants (15 *MAPT*, 9 *GRN*, 12 *C9orf72*) developed MBCI during follow-up visits. Age at the diagnosis of MBCI was 53.6±13.0 years (*MAPT* 44.3±8.3, *GRN* 63.1±11.3, *C9orf72* 56.4±10.8). Frequencies of abnormal rating on the eight CDR® plus NACC FTLD domains at the time of MBCI diagnosis were: “Memory” 36% (*MAPT* 33%, *GRN* 33%, *C9orf72* 44%); “Orientation” 8% (*MAPT* 7%, *GRN* 8%, *C9orf72* 11%); “Judgment/Problem Solving” 44% (*MAPT* 47%, *GRN* 50%, *C9orf72* 33%); “Community Affairs” 22% (*MAPT* 27%, *GRN* 17%, *C9orf72* 22%); “Home/Hobbies” 25% (*MAPT* 40%, *GRN* 8%, *C9orf72* 22%); “Personal Care” 0%; “Behavior/Compartment/Personality” 44% (*MAPT* 60%, *GRN* 42%, *C9orf72* 22%); “Language” 31% (*MAPT* 13%, *GRN* 50%, *C9orf72* 33%).

**Conclusion:**

We described the early clinical picture of f-FTLD in the pathogenic mutation carriers, which could be beneficial in recognizing its prodromal symptoms for early disease modifying intervention.

### **Conflicts of interest**

The authors have no financial conflicts of interest to disclose concerning the presentation.