

## “Less contented as a person”: an update from the LGI1-QoL study

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**Objective:** To establish a detailed phenotype of LGI1-antibody patients long-term through a cognitive, neuropsychiatric and quality of life (QoL) battery, and relate outcomes to biochemical, clinical and genetic factors.

**Methods:** 60 patients have now undergone detailed evaluation for the LGI1-QoL study, extending the previously-reported preliminary cohort. Selected assessments included domains clinically observed as impaired such as emotionality, fatigue and QoL.

**Results:** Patients (40 male) aged 44-92 were assessed at a median of three years post-onset (range 4 months-15 years). Compared to published thresholds in age-appropriate healthy controls, 32% were impaired on the Addenbrooke’s Cognitive Examination-Revised, 39% on the Frontal Assessment Battery, 39-52% on two different fatigue scales, 43-51% on the two different measures of the carer-reported Neuropsychiatric Inventory Questionnaire, and 40% on the Life Satisfaction Questionnaire (LSQ) – Life as a Whole. LGI1-antibody patients were significantly ( $p < 0.05$ ) more impaired on five LSQ sub-domains compared to an available dataset for healthy elders.

Analysis of retrospective pre- and post-illness analyses of LSQ, the EQ-5D-5L, another patient-related QoL measure, and the Modified Rankin Scale showed significant ( $p < 0.01$ ) decreases in most domains. Further clinical and paraclinical correlations will be presented.

**Conclusions:** Many LGI1-antibody patients demonstrate sustained deficits across cognitive, neuropsychiatric, carer-reported and QoL domains.