

| Diagnosis | Physiological CSF profile (n=139) | Non-inflammatory CSF profile (n=146) | Inflammatory CSF profile (n=172) |
|--|-----------------------------------|--------------------------------------|----------------------------------|
| Autoimmune mediated or infectious processes in CNS, n (%) | 0 | 0 | 154 (90%) |
| Serum KFLC concentration of "autoimmune mediated or infectious processes in CNS" (mg/l), mean (min-max) | 0 | 0 | 11.7 (2-43.2) |
| CSF KFLC concentration of "autoimmune mediated or infectious processes in CNS" (mg/l), mean (min-max) | 0 | 0 | 5 (0.1-35.2) |
| Headache, diffuse paresthesia or psychiatric diagnosis, n (%) | 39 (28%) | 27 (19%) | 3 (2%) |
| Serum KFLC concentration of "headache, diffuse paresthesia or psychiatric diagnosis" (mg/l), mean (min-max) | 12.4 (7.8-34.8) | 14.6 (7.3-53.2) | 8.9 (6.4-11.8) |
| CSF KFLC concentration of "headache, diffuse paresthesia or psychiatric diagnosis" (mg/l), mean (min-max) | 0.12 (0.04-0.4) | 0.22 (0.05-0.6) | 0.1 (0.1) |
| Peripheral nerve pathologies, n (%) | 39 (28%) | 41 (28%) | 7 (4%) |
| Serum KFLC concentration of "peripheral nerve pathologies" (mg/l), mean (min-max) | 13.5 (5.6-29) | 19.3 (8.1-95.2) | 13.3 (9.4-19.7) |
| CSF KFLC concentration of "peripheral nerve pathologies" (mg/l), mean (min-max) | 0.14 (0.07-0.4) | 0.31 (0.08-1.4) | 0.64 (0.1-1.9) |
| Epilepsy, n (%) | 22 (16%) | 27 (19%) | 2 (1%) |
| Serum KFLC concentration of "epilepsy" (mg/l), mean (min-max) | 20 (6.4-90.5) | 17 (7-50.3) | 5.4 (4-6.7) |
| CSF KFLC concentration of "epilepsy" (mg/l), mean (min-max) | 0.2 (0.03-0.7) | 0.27 (0.1-1.2) | 0.1 (0.1) |
| Vascular diseases of the CNS, n (%) | 17 (12%) | 18 (12%) | 6 (3%) |
| Serum KFLC concentration of "vascular diseases of the CNS" (mg/l), mean (min-max) | 15.6 (8.2-65.4) | 16.3 (7.6-45.4) | 19.2 (8.5-42.4) |
| CSF KFLC concentration of "vascular diseases of the CNS" (mg/l), mean (min-max) | 0.17 (0.1-0.4) | 0.27 (0.1-0.7) | 1.07 (0.11-3.88) |
| Neuro-degenerative diseases, n (%) | 16 (12%) | 12 (8%) | 0 |
| Serum KFLC concentrations of "neuro-degenerative diseases" (mg/l), mean (min-max) | 17.5 (8-31.5) | 22.7 (7.7-39) | 0 |
| CSF KFLC concentrations of "neuro-degenerative diseases" (mg/l), mean (min-max) | 0.18 (0.08-0.45) | 0.32 (0.06-0.69) | 0 |
| Idiopathic intracranial hypertension (IIH) or normal pressure hydrocephalus (NPH), n (%) | 6 (4%) | 3 (2%) | 0 |
| Serum KFLC concentration of "idiopathic intracranial hypertension (IIH) or normal pressure hydrocephalus (NPH)" (mg/l), mean (min-max) | 18.1 (9.5-26.9) | 15.5 (11.7-18.8) | 0 |
| CSF KFLC concentration of "idiopathic intracranial hypertension (IIH) or normal pressure hydrocephalus (NPH)" (mg/l), mean (min-max) | 0.12 (0.09-0.14) | 0.18 (0.09-0.31) | 0 |
| Encephalopathy, n (%) | 0 | 15 (10%) | 0 |
| Serum KFLC concentration of "encephalopathy" (mg/l), mean (minx-max) | 0 | 14.6 (7.1-32.5) | 0 |
| CSF KFLC concentration of "encephalopathy" (mg/l), mean (minx-max) | 0 | 0.24 (0.03-0.55) | 0 |
| Malignant diseases of the CNS, n (%) | 0 | 3 (2%) | 0 |
| Serum KFLC concentration of "malignant diseases of the CNS" (mg/l), mean (min-max) | 0 | 54.1 (12.4-130) | 0 |
| CSF KFLC concentration of "malignant diseases of the CNS" (mg/l), mean (min-max) | 0 | 0.9 (0.4-1.9) | 0 |

Supplemental table 1