# **Supplementary Material**

# Tittle: Different pattern of CSF glial markers between dementia with Lewy bodies and Alzheimer's disease

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|                                  | DLB with AD<br>copathology | DLB without AD copathology |         |
|----------------------------------|----------------------------|----------------------------|---------|
|                                  | (n = 20)                   | (n = 17)                   | p-value |
| Age, y ± SD                      | 77.1 ± 1.1                 | 75.7 ± 1.2                 | 0.420   |
| Sex, Females % (n)               | 55% (11)                   | 52.9% (9)                  | 1       |
| MMSE, mean ± SD                  | 21.9 ± 1.2                 | $24.2 \pm 0.8$             | 0.165   |
| Mean follow-up time (y) $\pm$ SD | $2.2 \pm 0.5$              | $2.6 \pm 0.6$              | 0.568   |
| <i>ΑΡΟΕ</i> ε4, %* (n)           | 30% (6)                    | 17.6% (3)                  | 0.462   |

Suppl. table S1. Demographic and basic clinical data from DLB patients

Supplementary figure S1. Relationship between glial biomarkers by diagnosis



CN: cognitively normal controls, DLB: Dementia with Lewy Bodies, prodDLB: prodromal DLB, AD: Alzheimer's disease, prodAD: prodromal AD.



Supplementary figure S2. Relationship between glial and core AD biomarkers

CN: cognitively normal controls, DLB: Dementia with Lewy Bodies, prodDLB: prodromal DLB,

## Supplementary methods

Supplementary table S2. Intra and inter-assay CV% per measured protein.

| Assay  | intra-assay CV%* | inter-assay CV%** |
|--------|------------------|-------------------|
| Αβ1-42 | 2.01%            | 11.07%            |
| t-tau  | 2.01%            | 10.89%            |
| p-tau  | 1.77%            | 17.24%            |
| sTREM2 | 3.9%             | 13.02%            |
| YKL-40 | 4.03%            | 6.3%              |
| PGRN   | 4.47%            | 10.7%             |

\* Intra-assay CV% was calculated as the mean of all CV% from the samples included per assay \*\* We included the following internal controls per assay to calculate the inter-assay CV%. Internal controls are samples with an already known concentration that we included in all the assays. In Braquets there is the mean from all assays and the interplate CV % of each internal control. Aβ1-42: L10-001 (mean: 392.5 pg/mL, CV%: 10.85%), Aβ384 (mean: 359 pg/mL, CV%: 12.48%), Aβ500 (mean: 472,73 pg/mL, CV%: 9.87%). t-tau: tau300 (mean: 297.78 pg/mL, CV%: 10.89%). p-tau: pTau125 (mean: 132.98 pg/mL, CV%: 17.24%). sTREM2: Interplate D (mean: 3.08 ng/mL, CV%: 11.54%) and Interplate E (mean: 4.44 ng/mL, CV%: 14.51%). YKL-40: YKL40H (mean: 142.84 ng/mL, CV%: 6.3%). PGRN: L10-84 (mean: 3.67 ng/mL, CV%: 15.45%) and L15-033 (mean: 5.12 ng/mL, CV%: 5.12%)

### Standard curve calculation per assay

- Standard curves for Innotest assays (A $\beta_{1-42}$ , t-tau and p-tau) were calculated with a 4parameter logistic regression (provided by the manufacturer).

- Standard curves for sTREM2 assays were calculated by with a 4-parameter logistic regression in the MSD software.

- Standard curves for YKL-40 assays were calculated by a polinomic regression in Excel as recommended by the manufacturer.

- Standard curves for PGRN assays were calculated by a polinomic regression in Excel as recommended by the manufacturer.

All the assays had standard curves with a R squared over 0.95