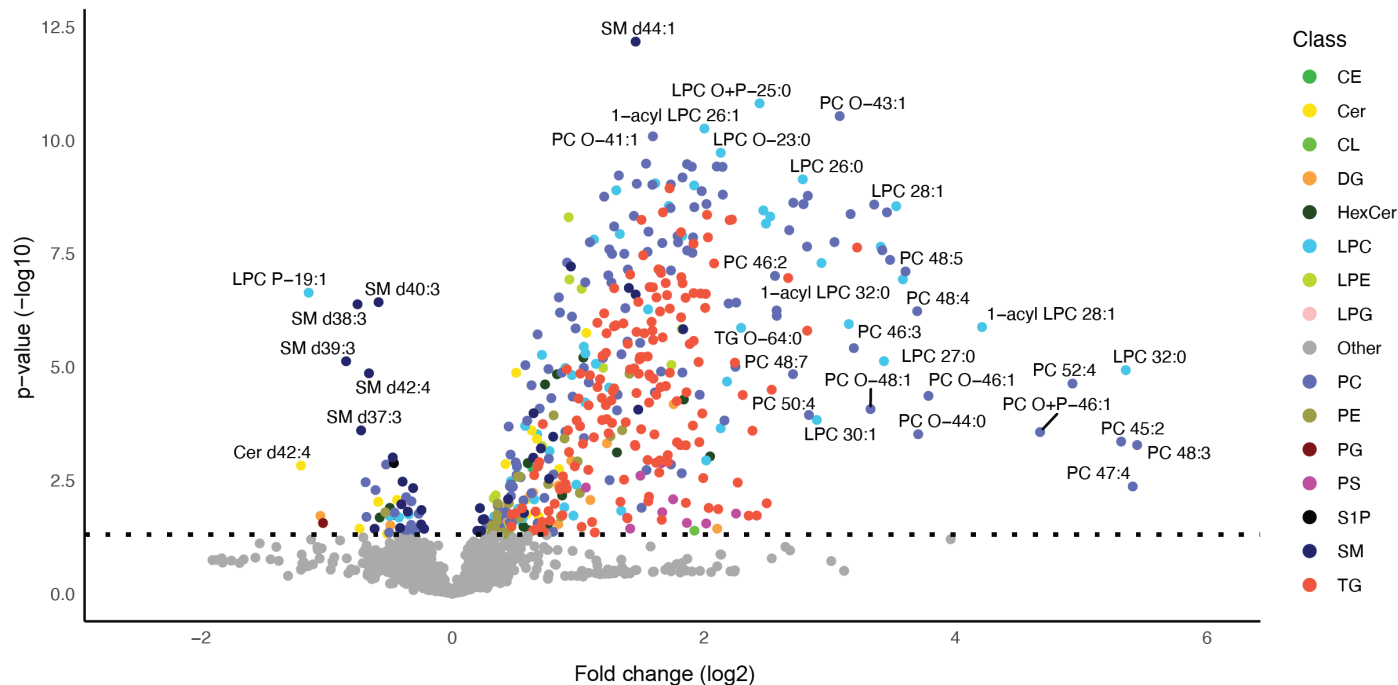
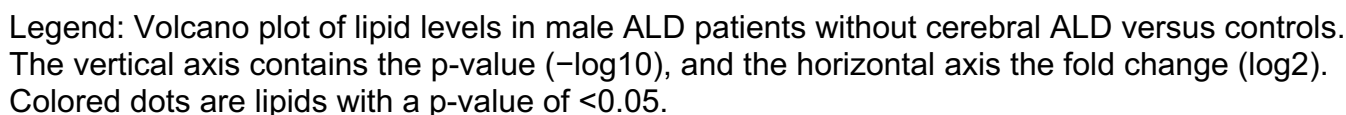
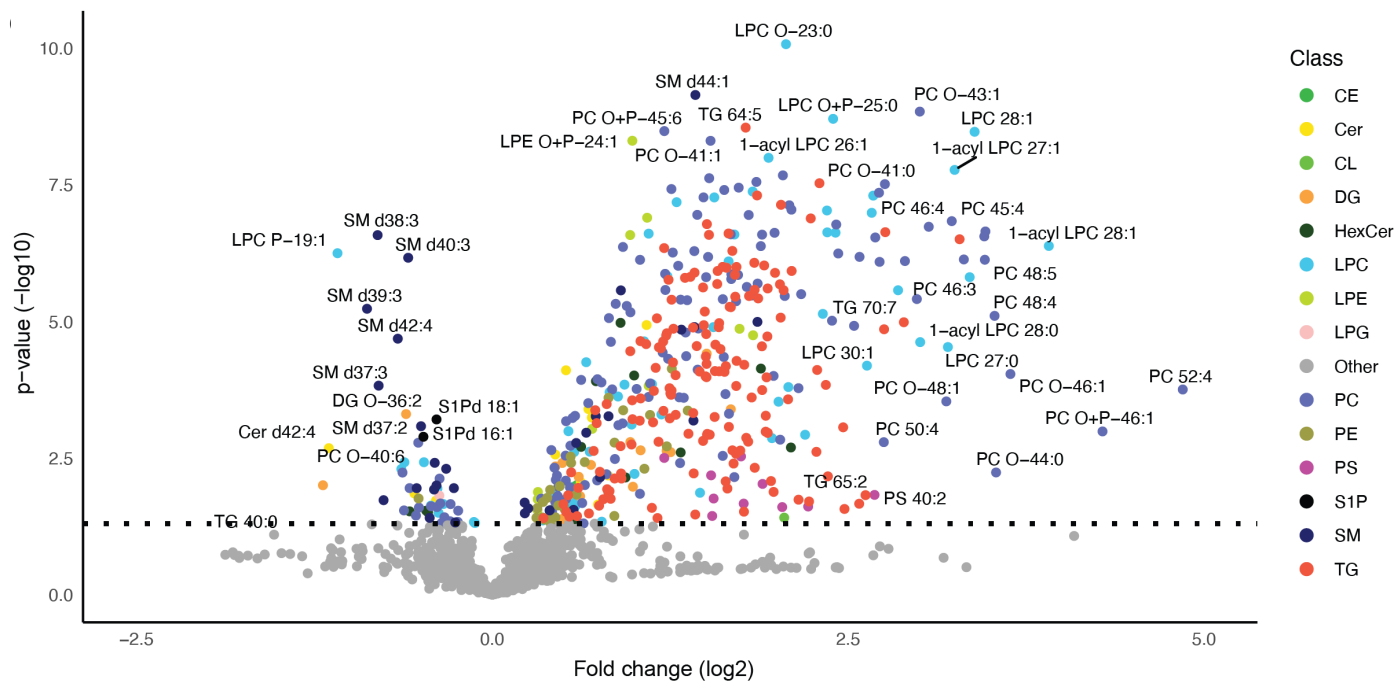


Figure 1A: Male ALD patients without cerebral ALD



Legend: Volcano plot of lipid levels in male ALD patients without adrenal insufficiency versus controls. The vertical axis contains the p-value ($-\log_{10}$), and the horizontal axis the fold change ($\log_2$). Colored dots are lipids with a p-value of <0.05 .

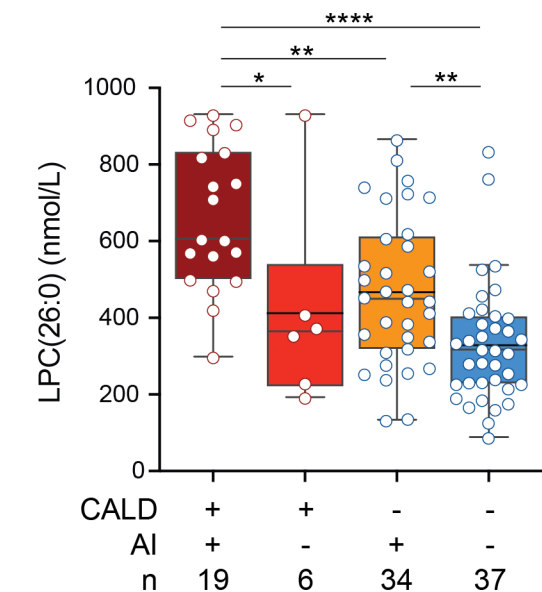
Figure 1C: Male ALD patients with mild spinal cord disease (EDSS≤6) and aged >55 years versus



Legend: Volcano plot of lipid levels in male ALD patients with mild spinal cord disease (EDSS≤6) and aged >55 years versus controls aged >55 years. The vertical axis contains the p-value ($-\log_{10}$), and the horizontal axis the fold change ($\log_2$). Colored dots are lipids with a p-value of <0.05.

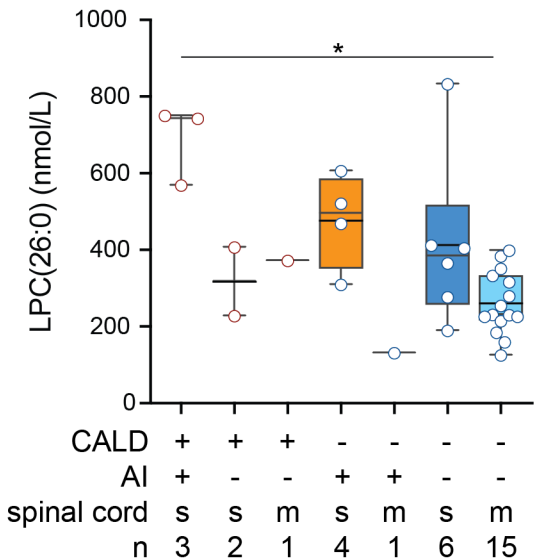
Supplemental Figure 2

Figure 2A: Subgroup analysis for male ALD patients based on the presence or absence of cerebral ALD and/or adrenal insufficiency (AI).



Legend: Targeted LPC(26:0) analysis in plasma of male ALD patients (n=96), CALD patients who underwent HCT were excluded from the analysis. Patients were grouped according to the presence or absence of cerebral ALD and/or adrenal insufficiency (AI) and number (n) of patients per group are indicated. The complete dataset is available in Supplementary Data 5. Kruskal-Wallis test was used to determine significant differences between groups, followed by Dunn's post-hoc test with FDR correction (*P≤0.05; **P≤0.01; ****P≤0.0001).

Figure 2B: Subgroup analysis for male ALD patients with mild or severe spinal cord disease grouped on the presence or absence of cerebral ALD and/or adrenal insufficiency (AI).



Legend: Targeted LPC(26:0) analysis in plasma of male ALD patients with mild or severe spinal cord disease (n=32). Patients were grouped according to the presence or absence of cerebral ALD, adrenal insufficiency (AI). Spinal cord involvement is mild (m, EDSS ≤6) or severe (s, EDSS >6). The number (n) of patients per group are indicated. The complete dataset is available in Supplementary Data 5. Kruskal-Wallis test was used to determine significant differences between groups, followed by Dunn's post-hoc test with FDR correction (*P≤0.05).