



Supporting Figure S1. Inter-subject reproducibility of the placement of MRSI PRESS volume/OVS bands and spectra. (a) and (b) The PRESS volume and OVS bands transformed to the spaces of subject 1 and 2 (who had a similar head size, hence a similar size of PRESS volume), respectively, in their baseline scans. Similar to Figure 2, the 3 orthogonal background image slices were chosen such that they all transverse the center of the PRESS volume box in (a) and (b). (c) and (d) Spectra of subject 1 and 2 in the green grid on the axial slices in (a) and (b), respectively. Good inter-subject reproducibility was achieved for the two subjects, which is evident by the visual inspection of the similarity between: 1) the anatomy covered by the OVS bands, PRESS volume, and voxels in the grid; 2) the spatial variation of spectra, e.g., the decrease of absolute metabolite intensity from the right to the left columns; higher Cre and lower Cho levels in cortical gray matter (voxels in the right column) vs. lower Cre and higher Cho levels in cortical white matter (voxels in the middle column), which is in line with the observation from a previous study¹.

Reference:

1. Schuff N, Ezekiel F, Gamst AC, et al. Region and tissue differences of metabolites in normally aged brain using multislice 1H magnetic resonance spectroscopic imaging. *Magn Reson Med.* 2001; 45: 899-907.