

**Supplemental Table S1.** Mean signal intensity of the joint fluid with different inversion time

| Inversion time | Signal intensity of the joint fluid |
|----------------|-------------------------------------|
| 2000 ms        | 31.8 ± 11.6                         |
| 2100 ms        | 17.8 ± 9.2                          |
| 2200 ms        | 34.5 ± 11.0                         |

Data are presented as mean ± standard deviation. To determine the optimal inversion time for FLAIR-FS, which effectively nulls joint fluid signals, several test scans were performed using inversion times between 2000 and 2200 ms. Consequently, an inversion time of 2100 ms was selected.