

S9 Table. E/I MLA determination on manual and automatic segmentation maps (B30f scans).

| | | Baseline | 3 months | 12 months | 24 months | Overall |
|---------|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| RUL | manually corrected (mean±sd) | 0.64±0.09 | 0.68±0.11 | 0.67±0.09 | 0.7±0.09 | 0.68±0.1 |
| | automatic (mean±sd) | 0.65±0.09 | 0.68±0.11 | 0.68±0.09 | 0.71±0.09 | 0.68±0.09 |
| | Δ (mean±sd) | -0.01±0.01 | 0±0.02 | -0.01±0.01 | -0.01±0.01 | 0±0.01 |
| | LoA (2.5% limit, 97.5% limit) | (-0.03, 0.02) | (-0.03, 0.03) | (-0.04, 0.02) | (-0.03, 0.02) | (-0.03, 0.02) |
| | Regr. (Intercept / Slope) | 0.03 / 0.96 | 0.02 / 0.98 | -0.01 / 1.04 | 0.07 / 0.9 | 0.02 / 0.97 |
| | Regr (Pearson's r) | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| RML | manually corrected (mean±sd) | 0.73±0.09 | 0.74±0.09 | 0.74±0.08 | 0.75±0.09 | 0.74±0.09 |
| | automatic (mean±sd) | 0.73±0.1 | 0.73±0.09 | 0.76±0.07 | 0.75±0.08 | 0.74±0.08 |
| | Δ (mean±sd) | 0±0.02 | 0.01±0.03 | -0.02±0.06 | 0±0.02 | 0±0.04 |
| | LoA (2.5% limit, 97.5% limit) | (-0.05, 0.04) | (-0.05, 0.07) | (-0.13, 0.09) | (-0.04, 0.04) | (-0.07, 0.07) |
| | Regr. (Intercept / Slope) | 0 / 1.01 | -0.07 / 1.09 | 0.04 / 0.94 | 0.07 / 0.92 | 0.01 / 0.99 |
| | Regr (Pearson's r) | 0.97 | 0.95 | 0.75 | 0.98 | 0.91 |
| RLL | manually corrected (mean±sd) | 0.61±0.11 | 0.61±0.11 | 0.63±0.09 | 0.64±0.09 | 0.62±0.1 |
| | automatic (mean±sd) | 0.65±0.1 | 0.63±0.09 | 0.65±0.08 | 0.65±0.08 | 0.64±0.08 |
| | Δ (mean±sd) | -0.04±0.03 | -0.02±0.02 | -0.02±0.02 | -0.01±0.02 | -0.02±0.03 |
| | LoA (2.5% limit, 97.5% limit) | (-0.1, 0.02) | (-0.06, 0.02) | (-0.07, 0.03) | (-0.05, 0.03) | (-0.07, 0.03) |
| | Regr. (Intercept / Slope) | 0.12 / 0.85 | 0.1 / 0.88 | 0.13 / 0.82 | 0.09 / 0.88 | 0.11 / 0.85 |
| | Regr (Pearson's r) | 0.98 | 0.98 | 0.97 | 0.98 | 0.97 |
| LUL | manually corrected (mean±sd) | 0.59±0.1 | 0.61±0.11 | 0.63±0.1 | 0.65±0.1 | 0.62±0.11 |
| | automatic (mean±sd) | 0.62±0.09 | 0.62±0.09 | 0.64±0.1 | 0.66±0.09 | 0.64±0.09 |
| | Δ (mean±sd) | -0.04±0.04 | -0.01±0.02 | -0.01±0.02 | -0.01±0.02 | -0.02±0.03 |
| | LoA (2.5% limit, 97.5% limit) | (-0.12, 0.04) | (-0.06, 0.04) | (-0.04, 0.02) | (-0.05, 0.03) | (-0.07, 0.04) |
| | Regr. (Intercept / Slope) | 0.1 / 0.88 | 0.09 / 0.87 | 0.06 / 0.92 | 0.08 / 0.89 | 0.09 / 0.88 |
| | Regr (Pearson's r) | 0.92 | 0.98 | 0.99 | 0.99 | 0.97 |
| LLi | manually corrected (mean±sd) | 0.66±0.11 | 0.67±0.11 | 0.7±0.11 | 0.71±0.08 | 0.68±0.1 |
| | automatic (mean±sd) | 0.67±0.14 | 0.68±0.12 | 0.7±0.11 | 0.71±0.08 | 0.69±0.11 |
| | Δ (mean±sd) | -0.01±0.11 | -0.02±0.07 | 0±0.04 | -0.01±0.02 | -0.01±0.07 |
| | LoA (2.5% limit, 97.5% limit) | (-0.24, 0.21) | (-0.16, 0.12) | (-0.08, 0.08) | (-0.05, 0.03) | (-0.14, 0.13) |
| | Regr. (Intercept / Slope) | -0.09 / 1.12 | -0.01 / 1.01 | -0.02 / 1.03 | 0.04 / 0.96 | -0.03 / 1.04 |
| | Regr (Pearson's r) | 0.62 | 0.81 | 0.93 | 0.97 | 0.8 |
| LLL | manually corrected (mean±sd) | 0.58±0.13 | 0.58±0.11 | 0.6±0.11 | 0.61±0.1 | 0.59±0.11 |
| | automatic (mean±sd) | 0.63±0.11 | 0.62±0.1 | 0.62±0.09 | 0.63±0.08 | 0.62±0.09 |
| | Δ (mean±sd) | -0.05±0.03 | -0.04±0.03 | -0.03±0.02 | -0.02±0.03 | -0.03±0.03 |
| | LoA (2.5% limit, 97.5% limit) | (-0.11, 0.01) | (-0.09, 0.01) | (-0.08, 0.02) | (-0.08, 0.04) | (-0.09, 0.02) |
| | Regr. (Intercept / Slope) | 0.16 / 0.81 | 0.13 / 0.84 | 0.13 / 0.84 | 0.09 / 0.88 | 0.13 / 0.83 |
| | Regr (Pearson's r) | 0.98 | 0.98 | 0.98 | 0.95 | 0.97 |
| LUL+LLi | manually corrected (mean±sd) | 0.61±0.1 | 0.63±0.11 | 0.65±0.1 | 0.67±0.09 | 0.64±0.1 |
| | automatic (mean±sd) | 0.62±0.09 | 0.64±0.1 | 0.66±0.1 | 0.68±0.09 | 0.65±0.09 |
| | Δ (mean±sd) | -0.01±0.02 | -0.01±0.02 | -0.01±0.01 | -0.01±0.01 | -0.01±0.02 |
| | LoA (2.5% limit, 97.5% limit) | (-0.06, 0.04) | (-0.04, 0.02) | (-0.03, 0.02) | (-0.03, 0.02) | (-0.04, 0.02) |
| | Regr. (Intercept / Slope) | 0.08 / 0.89 | 0.05 / 0.92 | 0.01 / 1 | 0.04 / 0.95 | 0.05 / 0.94 |
| | Regr (Pearson's r) | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 |

Air trapping (E/I MLA) calculated for fully automatic and manually corrected segmentation on B30f scans at baseline, 3, 12 and 24 months. The last column summarizes all time points. All values are separately calculated for the right upper (RUL), middle (RML) and lower lobe (RLL), the left upper lobe (LUL), the lingula (LLi), the left lower lobe (LLL), and also combining left upper lobe and lingula into one lobe (LUL+LLi). Both methods are

compared in accordance with the approach of Bland-Altman giving mean differences (Δ), limits of agreement (LoA) and two regression coefficients (Intercept / Slope and Pearson's correlation coefficient).