## Supplementary file 1

## Observer agreement

## Methods

The strengths of the relation between the two sets of measurements were assessed with intraclass-correlation coefficients (ICC). Observer agreement for the assessment of tumor-pleura relationship, pleural indention, density type, lobulation, spiculation, air bronchogram and vascular convergence sign was calculated and evaluated using  $\kappa$ -statistics.

## Results

The relation between the two sets of measurements was strong for maximum standardized uptake value [ICC: 0.987, 95% confidence interval (CI)  $0.970 \sim 0.994$ , P < 0.001], tumor size (ICC: 0.970, 95% CI  $0.958 \sim 0.978$ , P < 0.001), solid component size (ICC: 0.963, 95% CI  $0.949 \sim 0.973$ ), minimum distance between lesion and pleura (ICC: 0.962, 95% CI  $0.948 \sim 0.973$ ), pleural contact length (ICC: 0.996, 95% CI  $0.997 \sim 0.998$ ). Observer agreement for assessment of tumor-pleura relationship, pleural indention, density type, lobulation, spiculation, air bronchogram and vascular convergence sign was excellent, with kappa values were 0.971, 0.879, 0.940, 0.877, 0.925, 0.955, 0.921, respectively.