Supplementary 3.

Average percent systematic difference using pairwise approach

The pairwise average percent systematic difference δ_{ij} was calculated for Bland-Altman analysis. The measure is based on the average difference in measurement between any pair of the i-th and j-th radiologists for the k-th cases as follows.

$$\delta_{ij} = \frac{2}{K} \sum_{k=1}^{K} \frac{M_{ik} - M_{jk}}{M_{ik} + M_{jk}}$$

Here, K is the number of cases (in our study K = 10), and M_{ik} is a measurement value of the i-th radiologist for the k-th case.

Bland-Altman outlier scores with standard and fixed-limit

The standard Bland-Altman outlier scores Υ_{2SD} is reliant on the percentage of pairwise measurement difference less than 2 standard deviations. Similarly, the Bland-Altman scores $\Upsilon_{20\%}$ with 20% fixed limit is reliant on the percentage of pairwise measurement difference less than 20% and calculated as follows:

$$\Upsilon_{2SD} = \frac{(N-2)!}{N!} \sum_{i=1}^{N} \sum_{j=1}^{N} 1 \left(\frac{\left| M_{ik} - M_{jk} \right|}{M_{ik} + M_{jk}} < 2SD \right)$$

$$\Upsilon_{20\%} = \frac{(N-2)!}{N!} \sum_{i=1}^{N} \sum_{j=1}^{N} 1 \left(\frac{\left| M_{ik} - M_{jk} \right|}{M_{ik} + M_{jk}} < 0.2 \right)$$

Here, 1(A) is an indicator function whose value is 1 if A is true and 0 otherwise. N represents the number of radiologists. The fixed-limit Bland-Altman outlier scores were based on the percentage of pairs where a pair of radiologists reviewed the same CT image set and resulted in measurements that differ by less than 20%.