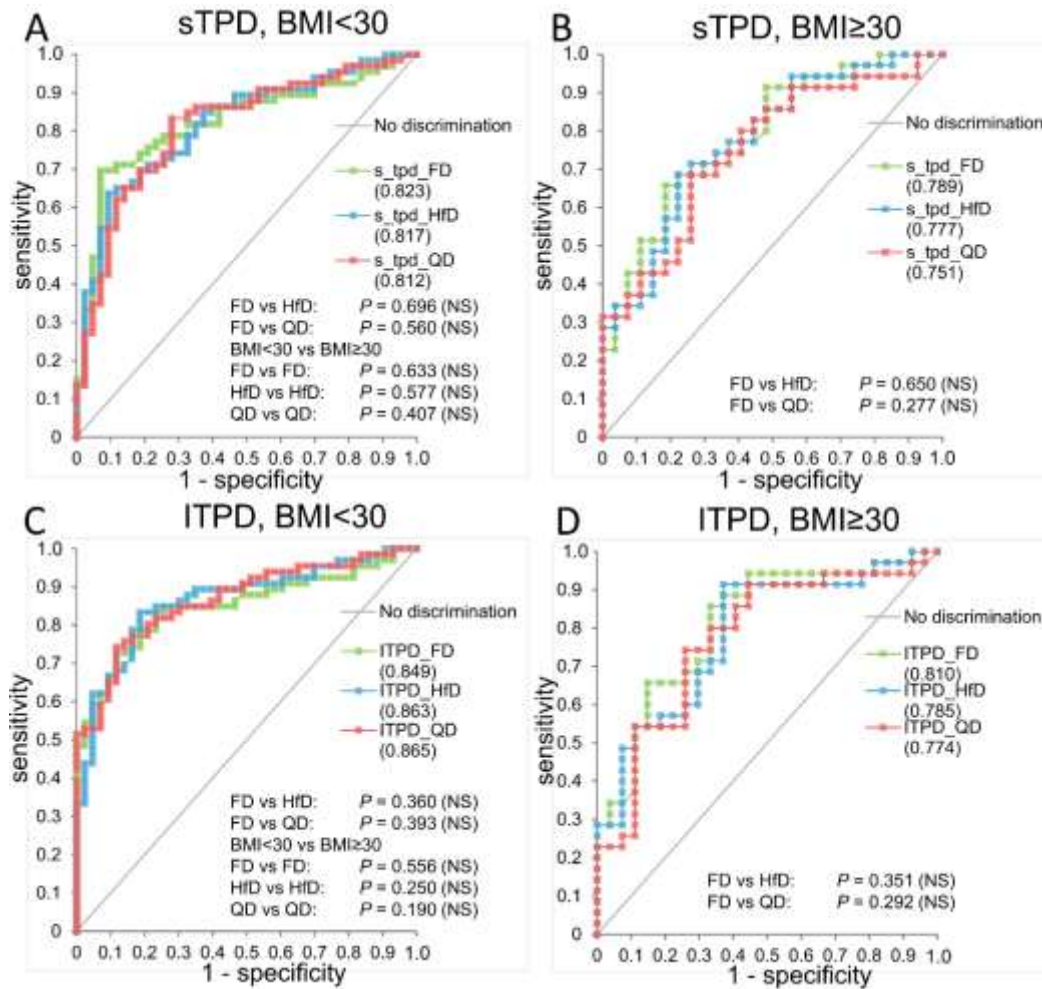


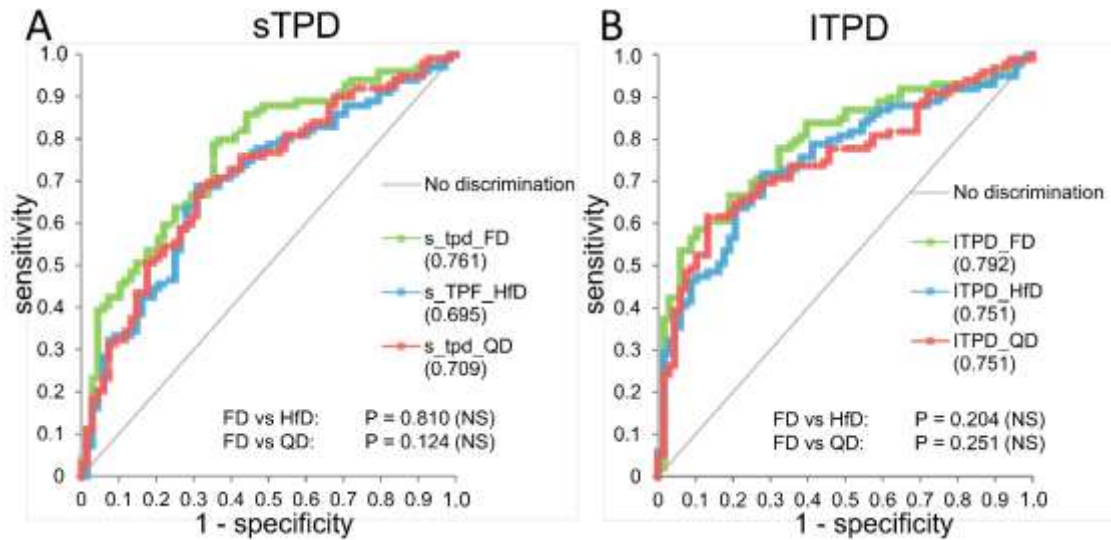
Supplemental Fig. 1 Diagnostic performance of quantitative perfusion assessment for patients with BMI<30 and BMI≥30. ROC curves for sTPD (A,B) and ITPD (C,D) obtained for the FD, HfD, and QD reconstruction protocols. The left column shows the patients with BMI<30 (N=109), while the right shows patients with BMI≥30 (N=62). No significant differences were observed between the FD, HfD and QD assessments for the grouped analyses, similarly no differences in the quantitative assessments were observed between the two groups.



FD = Full dose, HfD = Half-dose, QD = Quarter-dose, ROC = receiver operating characteristic, AUC = Area under ROC curve, sTPD = stress total perfusion deficit, ITPD = ischemic total perfusion deficit, NS= non-significant.

Supplemental Fig. 2 Diagnostic performance of quantitative perfusion assessment.

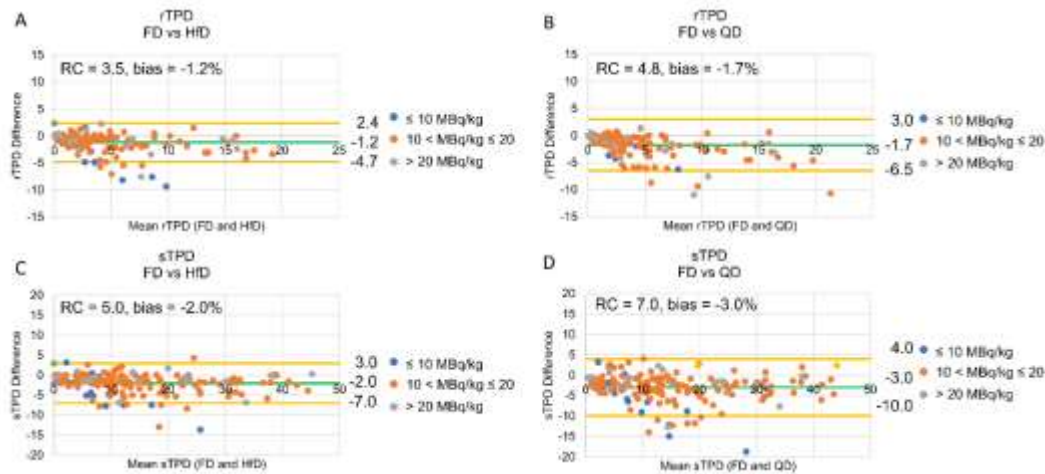
ROC curves for sTPD (A) and ITPD (B) obtained for the FD, HfD, and QD reconstruction protocols. For sTPD, similar AUC was observed for FD and HfD, while QD was significantly reduced (A). Data was reconstructed an OSEM-algorithm using 3 iterations 24 subsets followed by a 8mm Gaussian filtration of the data.



FD = Full dose, HfD = Half-dose, QD = Quarter-dose, ROC = receiver operating characteristic, AUC = Area under ROC curve, sTPD = stress total perfusion deficit, ITPD = ischemic total perfusion deficit, NS= non-significant.

Supplemental Fig 3. Dose-weight corrected Bland-Altman plots of rTPD and sTPD.

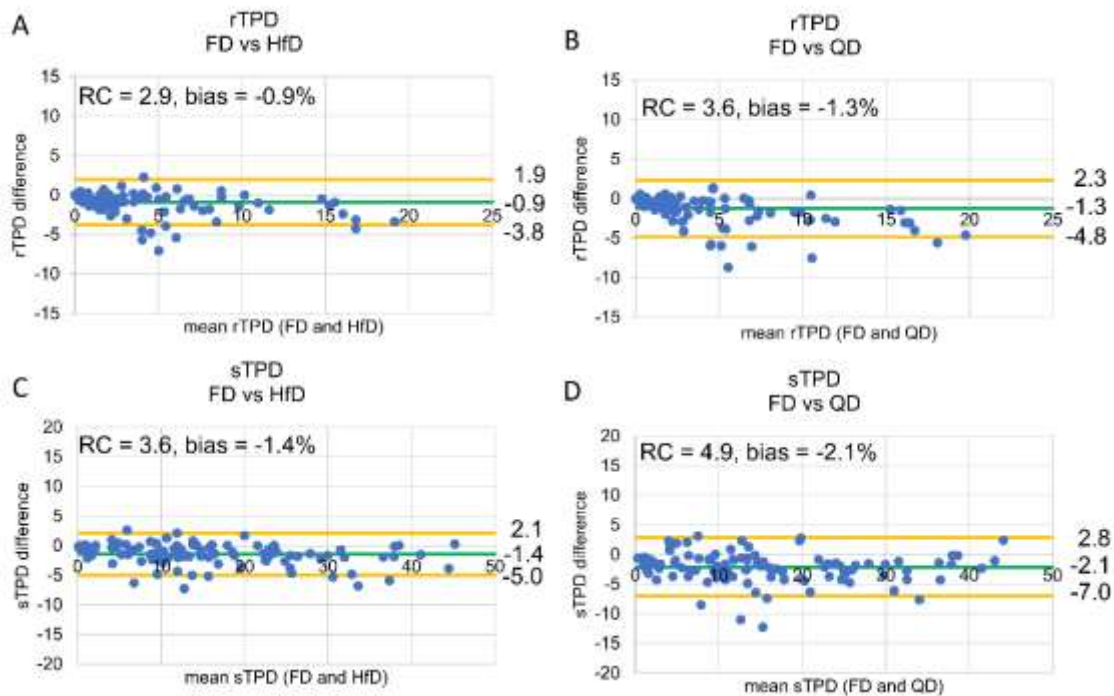
The Bland-Altman plots were created using the paired data, thus providing bias and confidence intervals for all 171 patients. Increased variability in the rTPD and sTPD are observed for FD/QD as compared to FD/HfD scans. No significant bias was observed for FD/HfD scans (A, C), however, increased bias and a trend to increased variability is observed for FD/QD (B, D). Importantly, no correlation between the dose-weight corrected injection profiles and the bias was observed. The green line indicates the bias, while the yellow lines mark the 95% confidence limits.



rTPD = rest total perfusion defect, sTPD = stress total perfusion defect, FD = full dose, HfD = half dose and QD = quarter dose. RC = repeatability coefficient

Supplemental Fig. 4 Bland-Altman plots of rTPD and sTPD for patients with BMI<30.

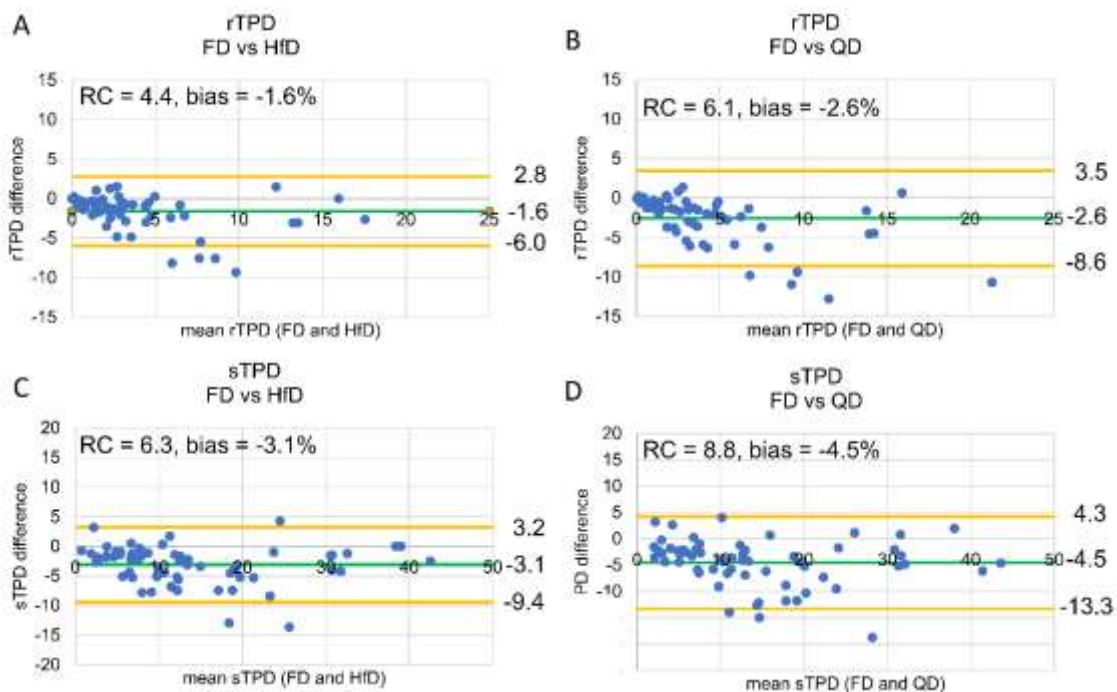
The Bland-Altman plots were created using data from the normal-to-overweight patients, thus providing bias and confidence intervals for 109 patients. Increased variability in the rTPD and sTPD are observed for FD/QD as compared to FD/HfD scans. No significant bias was observed for FD and HfD scans (A, C), however, increased bias and a trend to increased variability is observed for FD/QD (B, D). Importantly, no correlation between the dose-weight corrected injection profiles, and the bias was observed. Green line indicates the bias, while the yellow lines mark the 95% confidence limits.



rTPD = rest total perfusion defect, sTPD = stress total perfusion defect, FD = full dose, HfD = half dose and QD = quarter dose. RC = repeatability coefficient

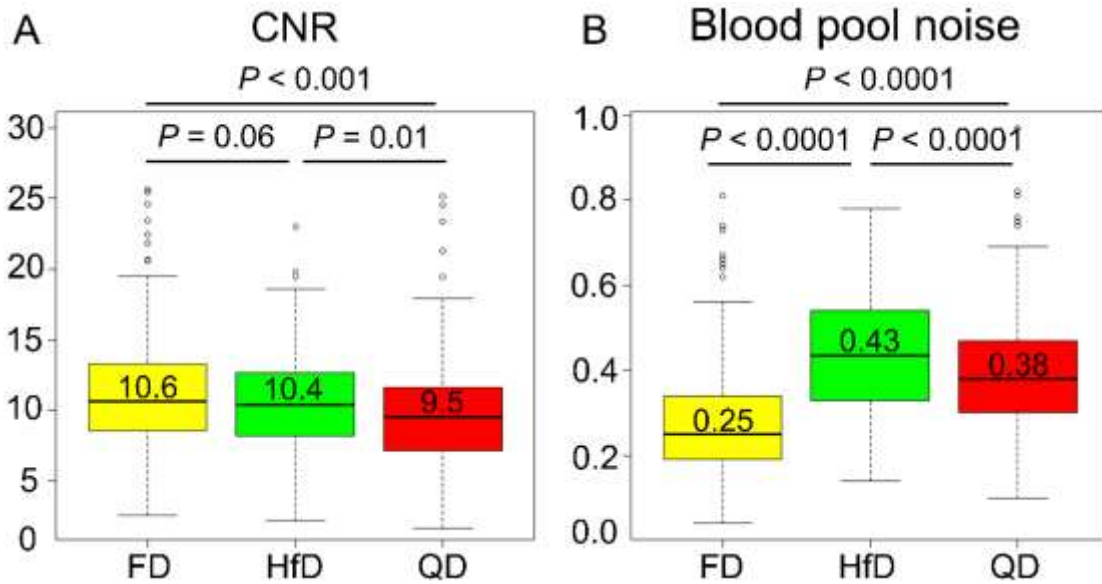
Supplemental Fig. 5 Bland-Altman plots of rTPD and sTPD for patients with BMI \geq 30.

The Bland-Altman plots were created using data from the obese patients, thus providing bias and confidence intervals for 62 patients. Increased variability in the rTPD and sTPD are observed for FD/QD as compared to FD/HfD scans. No significant bias was observed for FD and HfD scans (A, C), however, increased bias and a trend to increased variability is observed for FD/QD (B, D). Importantly, no correlation between the dose-weight corrected injection profiles, and the bias was observed. Green line indicates the bias, while the yellow lines mark the 95% confidence limits.



rTPD = rest total perfusion defect, sTPD = stress total perfusion defect, FD = full dose, HfD = half dose and QD = quarter dose. RC = repeatability coefficient

Supplemental Fig 6. Contrast to noise ratio and noise in the blood pool calculated as the coefficient of variation. Similar contrast to noise ratios was observed for the FD and HfD reconstruction protocols, while reduced CNR was observed for the QD reconstructions (Kruskal-Willis test). Evaluation of the noise in the blood pool, however, showed significantly increased noise for the reconstruction protocols when using HfD and QD data. Of note, the figures show the pooled results from the rest and stress scans. Median values are presented above the median line in the box-plots.



CNR = contrast to noise ratio, FD = Full dose, HfD= half-dose, QD = quarter dose