

Table S1 Objective image quality comparison in the preliminary study

Parameter	DLIR-H (n=15)	ASIR-V50% (n=15)	P value
Coronary CTA			
Attenuation, HU	459.56±75.43*	453.78±76.64	<0.001
SD _{vessel} , HU	27.25±2.89*	33.36±3.14	<0.001
SNR	17.40±4.23*	13.96±3.39	<0.001
CNR	30.99±5.75*	13.15±3.79	<0.001
Noise, HU	19.02±1.37*	25.28±2.62	<0.001
Carotid-cerebrovascular CTA			
Attenuation, HU	401.04±82.18*	392.49±85.64	<0.001
SD _{vessel} , HU	22.36±1.92*	27.63±1.68	<0.001
SNR	18.28±3.79*	14.33±3.10	<0.001
CNR	17.35±4.24*	14.68±3.87	<0.001
Noise, HU	19.27±1.31*	22.38±1.24	<0.001

Preliminary experiment to evaluate the objective image quality of DLIR-H and ASIR-V50% under the same scanning condition. 15 patients were included, and the scanning parameters were referred to those of the experimental group in the formal study. Both DLIR-H and ASIR-V50% were applied to reconstruct image. After objective image quality assessment, paired-t-test was employed to compare these variables between these two groups with the same scanning parameter setting and different algorithms. Data were presented as mean ± standard deviation. *, significant difference from ASIR-V50% group. DLIR-H, deep learning image reconstruction-high; ASIR-V50%, 50% adaptive statistical iterative reconstruction-V; SNR, signal-to-noise ratio; CNR, contrast-to-noise ratio.