Online Table i: Table of quality assessment of included studies using modified CASP tool

Studies	Clear Question?	Sampling Adequate?	Compare Ref. Stand?	All pats. Index + Ref. Stand?	Blinding Ref. Stand Result?	Pats Status Clear?	Methods detailed?	Confound. Factors + Consi?	Result Clear?	Result Validity?	Result Believability?	Result Applicability?	Index test Applicability?	All outcomes important?	Fit available evidence?	Impact using index test?	Total	Overall Rating
Bisdas et al	Y	Y	Y	Y	Y	Y	Y	C/C	D	D	Y	Y	Y	Y	Y	D	15/17	Good
Hom et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Yassi et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Shinoyama et al.	Y	Y	Y	Y	C	Y	Y	Y/N	D	D	Y	Y	Y	Y	Y	D	15/17	Good
Bennink et al.	Y	Y	Y	Y	Y	Y	Y	C/C	D	D	Y	Y	Y	C	Y	D	13/17	Poor
Aviv et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Lin et al	Y	Y	Y	Y	N	Y	Y	Y/N	D	D	Y	Y	Y	Y	Y	D	16/17	Good
Jain et al	Y	Y	Y	Y	C	Y	Y	Y/C	D	D	Y	Y	Y	Y	Y	D	15/17	Good
Ozkul-Wermester et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Souza et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Ke Lin et al	Y	Y	Y	Y	N	Y	Y	Y/Y	D	D	Y	Y	Y	Y	Y	D	17/17	Excellent
Yen et al	Y	Y	Y	Y	C	Y	Y	N/N	D	D	C	Y	Y	C	C	D	11/17	Poor

Key: Y = yes C= Can't tell N= No (in Q5 N = Good/+ & Y = bad/-) D= either stated explicitly or deducible

Online Table ii: CTP acquisition parameters

Study	Type of Scanner	CTP; z-coverage	CTP Technique	Slice thickness	CTP Scan time/ phases.	Frame rate or temporal resolution	CTP colour maps	Review Method	Software principle
Bisdas	GE Lightspeed QX/I helical (?width/rotation)	20mm	NS	10mm	50s	N/S	CBV, CBF, MTT, PS, E, V(EES)	Visual	Custom-written, distributed parameter Tracer Kinetic
Hom	Philips 64slice	80mm	Cine-mode @ 2 positions	5mm	240s	Variable; 1/s, 0.5/s + delayed acquisitions	CBV, MTT, PS (BBBP)	Visual + threshold	Deconvolution
Yassi	Toshiba Aquilion one 320-slice & Philips Brilliance 64-slice	160mm & 80mm	Whole brain & Jog-mode	5mm & 10mm	60s	1/1.33s	rCBV, rCBF, rTmax.	Visual + threshold	Deconvolution
Shinoyama	Siemens SOMATOM 128-slice	96mm	Constant bi-directional	5mm	30s	1/1.5s	CBF, CBV, MTT, TTP	Visual + Threshold	Deconvolution
Bennink	Variable, all Multidetector 40 - 256 slice	40 – 65mm	Cine-basal ganglia to Lat. Ventr.	5mm	210s	1/2s & 1/30s delayed acquisitions	NLR (rPS, rKtrans, rCBV, rCBF, rMTT)	Visual + threshold	Deconvolution
Aviv	GE 64-slice	40mm	Cine (2-phases, same position)	5mm	135s	1/0.5s + 1/15s delayed acq.	PS, CBV, CBF, MTT	Visual + threshold	Deconvolution
Lin	Siemens 16-slice	24mm	Cine (2-sections)	(2x12mm)	60s	1/0.5s	CBF, CBV, MTT, PS	Visual + threshold	Max. Slope + Deconvolution
Jain	Philips Brilliance 64-slice	40mm	Successive gantry rotation?	5mm	60s (2x30)	1/2s	rCBV	Visual + whole value	Deconvolution

Ozkul-Wermester	GE Lightspeed 64-slice	40mm	Cine (2-phases, same position)	5mm	150s	1/1s + 1/30s delayed acq.	CBV, CBF, MTT, PS	Visual + threshold	Deconvolution
Souza	GE Lightspeed 64-slice	80mm	Shuttle mode	5mm	91s	N/S	rCBF, rCBV, rMTT, rPS	Visual + threshold	Deconvolution
Lin Ke	GE Lightspeed 16-slice	20mm	Cine mode	5mm	60s	N/S	CBV , ASPECTS	Visual + threshold	Deconvolution
Yen	Siemens Sensation 128-slice	96mm	Shuttle mode	5mm	105.06s	18@1/1.67s, 5@1/3s, 4@1/15s delayed acq.	rPS, CBV, CBF, TTP	Visual + threshold	Deconvolution